OVERVIEW

We are a leading comprehensive coal mining and excavating equipment manufacturer in the PRC in terms of total sales of coal mining and excavating equipment in 2011, according to the CMIA. We focus on the manufacturing and sale of hydraulic roof supports, and were the largest hydraulic roof support manufacturer in the PRC, with approximately 22.6% of the PRC market share for hydraulic roof supports based on production volume in 2011, according to the CMIA. We are also engaged in the trading of steel and other raw materials primarily through our wholly-owned subsidiary, ZMJ Material Trading, which we established in March 2008. We have commenced manufacturing and selling armored-face conveyors in recent years and intend to commence selling roadheaders by the end of 2012. We are one of the few coal mining and excavating equipment manufacturers in the PRC able to manufacture three of the four components that comprise a complete integrated coal mining and excavating system for underground coal mining, namely, hydraulic roof supports, armored-face conveyors and roadheaders. We currently do not manufacture the fourth component, shearers, but are in the process of developing the related manufacturing technology and capability. Our established operating history, high quality products, strong in-house research and development capabilities, advanced manufacturing processes and extensive sales and service network are the keys to our success and allow us to maintain our leading position in the PRC coal mining and excavating equipment market.

The following is a brief overview of our products and businesses:

- ***Hydraulic roof supports.*** Hydraulic roof supports control the height of, and provide support to, the mine roof of the working face during the coal mining process to form a moveable underground mining area, allowing the armored-face conveyor and shearer to operate underneath. Hydraulic roof supports generally account for over 50% of the total value of a coal mining and excavating system. In addition, we are one of the few manufacturers in the PRC able to design and manufacture high-end hydraulic roof supports. In 2004, we developed the PRC's first set of high-end hydraulic roof supports with electronic hydraulic control systems, which have emerged as a significant domestic alternative to imported high-end hydraulic roof supports. Such hydraulic roof supports have been widely used by domestic coal mining enterprises since their introduction. Moreover, we are one of the few hydraulic roof support manufacturers in the PRC able to independently manufacture such electronic hydraulic control systems, a critical component of high-end hydraulic roof supports. As of June 30, 2012, we had an annual production capacity of 23,400 units of hydraulic roof supports.

- ***Steel and other raw materials trading.*** We trade steel and other raw materials primarily through our wholly-owned subsidiary, ZMJ Material Trading, which we established in March 2008. Due to our large procurement volumes, we are able to leverage on our bargaining power and sourcing network with steel producers to purchase high quality steel in bulk from approximately 20 suppliers at competitive prices for sales to third party customers. Our steel and other raw materials trading business allows us to efficiently manage our overall procurement costs for key raw materials, in particular, steel, used in our manufacturing operations while mitigating the impact of steel price fluctuations.

- ***Spare parts.*** We sell spare parts, such as jacks, hydraulic valves and structural parts for hydraulic roof supports, to third-party coal mining companies, most of which have previously purchased our hydraulic roof supports. Since 2009, we have also sold spare parts to our associate, ZMJ Suda, which focuses on the provision of aftermarket services for the hydraulic roof supports sold by our Company in the PRC. We sell spare parts through bidding or direct ordering processes, and we generally do not enter into long-term sales agreements with our customers for spare parts. Our spare parts are primarily manufactured and sold by our Company, as well as our subsidiaries, ZMJ Comprehensive Equipment and ZMJ Hydraulic Control.

- ***Other coal mining equipment.*** Since 2008, we have manufactured high-powered armored-face conveyors, which are used in mining operations to support shearers and transport coal cut from the working face by shearers. In 2011, we completed production and delivery of one of the largest armored-face conveyors in the PRC, with an operating capacity of 2,000kW and line pans of 1.2 meters. In 2010, we commenced designing and testing of prototype roadheaders which are mobile mining units used to dig tunnels and crush rocks with drill units. We are currently testing five prototype models of roadheaders that are generally classified into light-duty, medium-duty and heavy-duty categories according to their cutting power. We intend to commence selling roadheaders by the end of 2012. We also provide various related mining and excavating equipment that support coal mining operations, including belt conveyors, crushers and loaders.

We have a strong in-house research and development team and have substantially invested in research and development. In 2004, we realized 30 years of research and development by manufacturing the PRC's first set of high-end hydraulic roof supports with electronic hydraulic systems, which were characterized by high support capacity and high reliability. Certain large mining height hydraulic roof supports that we manufactured in 2009 and 2010 had the world's largest support height of 7.0 meters at that time. In recent years, we have developed the technology and capability to produce armored-face conveyors and roadheaders. We have been able to maintain our position as an industry leader in innovation and have continuously improved the function and quality of our products and our manufacturing processes. As a result of our industry-leading products, we have won several awards and received widespread recognition in the PRC, including being designated a National Innovative Enterprise by the MOST, SASAC and the All-China Federation of Trade Unions. In 2007, our technology center was jointly recognized as a nationally-accredited technical center by five separate PRC government departments and authorities, namely the NDRC, MOST, MOF, GAC and SAT.

We have advanced and efficient production processes. Supported by our large, advanced and comprehensive manufacturing facilities located in Zhengzhou, Henan Province, we are able to provide our customers with customized coal mining and excavating equipment within short lead times. In addition, we utilize standardized production processes that incorporate state-of-the-art technologies and equipment such as our large-scale, multi-stage robotic welding systems and advanced hydraulic cylinder production technology and equipment. From time to time, we also selectively outsource the production of certain non-critical parts and components, such as structural parts and rams, to third-party manufacturers and assemble such outsourced parts at our manufacturing facilities. We believe that outsourced manufacturing enhances our manufacturing efficiency and enables us to meet the increasing demand for our products.

Our sales and service network allows us to provide our customers with a broad range of services. Our Company's sales and service network primarily comprises eight domestic sales offices and four overseas sales agents in Russia, India, Turkey and the United States. In addition, we provide aftermarket services through a three-tier system which comprises: (i) joint ventures with our selected strategic customers, focusing on manufacturing coal mining and excavating equipment and providing aftermarket services; (ii) certain of our subsidiaries; and (iii) our associate, ZMJ Suda. See "— Sales and Marketing — Aftermarket Services." Our domestic sales and service network together with those of our joint ventures and ZMJ Suda cover substantially all of the major coal mining provinces and regions in the PRC, and are in close proximity to most of our domestic customers located in Shanxi, Shaanxi, Anhui, Henan, Shandong, Guizhou, Hebei, Heilongjiang, Jilin, Liaoning and Gansu Provinces, as well as Inner Mongolia, Ningxia and Xinjiang Autonomous Regions. Through our overseas sales agents, we have the ability to provide related aftermarket services to international customers. Leveraging on our sales and service network, research and development strengths and high quality products, we have been able to continue to expand our customer base and establish long-term relationships with leading coal mining and energy enterprises in the PRC such as Shenhua Group, Huainan Mining, Henan Coal and Chemical Industry, Yitai Coal and Datong Coal. We have also established long-term relationships with overseas mining companies such as Russia Stark, Russia Belon, Yuzhkuzbassugol and Turkish Coal.

We believe the favorable industry and regulatory environment in the PRC has contributed, and will continue to contribute, significantly to our growth. A majority of the coal reserves in the PRC can be economically extracted only through underground mining. Compared with room-and-pillar mining, longwall mining is fully mechanized and, as a result, is a more efficient and safer method of underground mining. As part of its measures to improve the mechanization rate, operating efficiency and safety of the PRC coal mining industry, the PRC government implements policies, such as the *Twelfth Five-Year Plan* published in 2011, to encourage the consolidation of the PRC coal mining industry. As hydraulic roof supports generally account for over 50% of the total value of an integrated coal mining and excavating system, and are typically considered to be the most important component of an integrated coal mining and excavating system, we believe these industry measures will enable us to increase the sales of our hydraulic roof supports in the future.

We have experienced significant growth in revenue and profit in recent years. For the years ended December 31, 2009, 2010 and 2011, our revenue was RMB4,994.4 million, RMB6,358.3 million and RMB8,060.1 million, respectively, representing a CAGR of 27.0% from 2009 to 2011. Our profit for the same periods was RMB646.8 million, RMB892.8 million and RMB1,213.3 million, respectively, representing a CAGR of 37.0% from 2009 to 2011. For the six months ended June 30, 2011 and 2012, our revenue was RMB3,586.3 million and RMB4,723.6 million, respectively, representing an increase of 31.7%. Our profit for the same periods was RMB598.2 million and RMB832.3 million, respectively, representing an increase of 39.1%. For the six months ended June 30, 2012, revenue generated from our sales of hydraulic roof supports and steel and other raw materials trading accounted for 69.3% and 23.7%, respectively, of our total revenue.

OUR COMPETITIVE STRENGTHS

According to the CMIA, we are a leading comprehensive coal mining and excavating equipment manufacturer in the PRC in terms of total sales of coal mining and excavating equipment in 2011, with strong research and development, manufacturing, sales and aftermarket services capabilities. We believe that the following competitive strengths have contributed to our historical success and will contribute to our future growth:

We are a leader in manufacturing hydraulic roof supports in the PRC.

We are a leader in manufacturing hydraulic roof supports in the PRC. According to the CMIA, we were the largest manufacturer of hydraulic roof supports in the PRC, with approximately 22.6% of the PRC market share for hydraulic roof supports based on production volume in 2011. In addition, we are one of the few manufacturers in the PRC able to design and manufacture high-end hydraulic roof supports.

We manufactured the first hydraulic roof support in the PRC in 1964, and since 2003, have been a leading manufacturer of hydraulic roof supports in the PRC. We developed the ZY10800/28/63D hydraulic roof support, ZY16800/32/70D hydraulic roof support and the ZY18000/32/70D hydraulic roof support in 2006, 2009 and 2010, respectively, all of which were significant achievements in global coal mining equipment industry at those times. As a result of our accumulated experience in utilizing heavy-duty load test beds, we are able to provide our customers with hydraulic roof supports that have an industry-best support capacity of 18,000KN. See "— Our Products and Businesses — Hydraulic Roof Supports." As of the Latest Practicable Date, we had sold more than 150 units in one set of the ZY16800/32/70D hydraulic roof supports and more than 700 units in five sets of the ZY18000/32/70D hydraulic roof supports. We believe that our continued commitment to research and development will allow us to continue to enhance our products and increase our sales and market share.

We have advanced technology and strong research and development capabilities.

Since our establishment in 1958, we have focused on the research and development of hydraulic roof supports in the PRC. We designed and manufactured the first hydraulic roof support in the PRC in 1964 and also designed the world's first top coal caving hydraulic roof support used in the mining of thick coal seams in 1984. In 2004, we independently designed and produced the PRC's first set of high-end hydraulic roof supports, which allowed domestic coal mining enterprises to rely on domestically produced hydraulic roof supports, as opposed to imported hydraulic roof supports. We are one of the few hydraulic roof support manufacturers in the world able to independently produce electronic hydraulic control systems for hydraulic roof supports, a key component to achieve automation of hydraulic roof supports. With approximately 50 years of industry experience and industry-leading research and development capabilities, we have also pioneered technologies to produce a series of specialized products and components which our customers are able to apply to specific coal mining conditions or coal seams. In addition, we have the technology and capacity to develop other key coal mining and excavating equipment, including armored-face conveyors and roadheaders.

We are the only enterprise in the PRC hydraulic roof support industry with a state-level technical research and development center, the State-Accredited Enterprise Technology Center of the PRC. In addition, we have established a post-doctoral research institute and a workshop for research fellows of both the Chinese Academy of Sciences and the Chinese Academy of Engineering to further enhance our

comprehensive research and development platform. Furthermore, we have formed strategic alliances primarily with major academic institutions, steel companies and coal manufacturers in the PRC to bolster our external research and development efforts. See "— Research and Development — Cooperation with Third Parties." We have also entered into strategic alliance agreements with several of our major customers in the PRC to cooperate in a variety of areas, including developing new technologies and products, such as advanced coal mining and excavating equipment. See "— Customers." Benefiting from such cooperation with industry leaders, we have been able to maintain our market leading position in innovation and have continuously improved the function and quality of our products and our manufacturing processes. We have received various recognitions and awards in the PRC for our achievements in research and development. See "— Awards and Recognitions."

As of the Latest Practicable Date, our committed research and development team of 480 members included three professor level senior engineers, 65 senior engineers, 166 engineers and 303 professional technicians. Among our research and development staff, 147 members held master's degrees and above and two members were awarded the special expert allowance by the State Council for their expertise and contributions to the industry.

Our advanced and efficient production facilities and manufacturing process allow us to efficiently produce high quality coal mining and excavating equipment.

Our manufacturing bases are equipped with state-of-the-art production facilities that utilize advanced manufacturing equipment, which enables us to control our labor costs and have high production efficiency. In particular, we started to utilize multi-stage, automated robotic welding systems for linkage welding in April 2009 and started to implement this advanced welding system for manufacturing components such as base frames, canopies, caving shields and lemniscate linkages of hydraulic roof supports in March 2011, which has enabled us to increase our production efficiency, improve our product quality and reduce the number of our production staff while ensuring the safety of our production process. In 2011, we imported skiving and roller burnishing equipment and developed related processing technology, which enables us to efficiently produce refined and precise hydraulic cylinders. We also developed an automated surface treatment process for manufacturing all of our structural parts in 2011, which enables us to improve our production efficiency. In addition, we utilize advanced digitalized control systems in our operations, such as our ERP system and OA system, which enables us to fully automate and integrate our manufacturing processes and order and warehouse management.

We have developed an advanced and efficient production process which allows us to provide our customers with coal mining and excavating equipment within short lead times. From design to mass production, we adhere to a strict product development cycle and manufacturing procedures to ensure the high quality of our products. We are able to design and manufacture key parts and components of hydraulic roof supports such as the electronic hydraulic control systems in-house, which allows us to provide our customers with reliable and high quality products in a timely manner. We have also implemented various computer-aided design and process planning software, such as CAD/CAE and CAPP. As part of our CAD system, we use Pro/Engineer software to facilitate our three-dimensional computer design. We believe these industry-leading technological measures contribute to our advanced and efficient production processes. As our coal mining and excavating equipment is required to operate in complex and challenging environment, which in most cases differs from mine to mine, we are able to leverage on our experience and production management efficiency to quickly customize our products to our customers' specifications. See "— Product Design and Manufacturing." We believe this process allows us to efficiently manufacture high quality and customized products for our customers.

We are able to efficiently control our production costs throughout our manufacturing process.

We have a state-of-the-art, automated and efficient design and manufacturing process. With our in-depth industry experience and strong internal research and development capabilities, we have developed and integrated our own design and manufacturing processes, which enables us to efficiently optimize our comprehensive design solutions and manufacture our products in line with customers' needs.

Our operations are supported by what we believe to be the PRC coal mining equipment industry's largest and most complete manufacturing facilities in Zhengzhou. After expanding the production capacity of our facilities in September 2011, we had an aggregate annual production capacity of 23,400 units of hydraulic roof supports as of June 30, 2012, and our manufacturing facilities had a total GFA of 586,253.08 sq.m. as of the Latest Practicable Date. Our facilities are equipped with highly advanced and versatile production equipment, which allows us to manufacture all of our products as well as most of the parts and components for our products in-house. The scale of our operations provides us with significant bargaining power in our raw materials procurement. In addition, we have entered into strategic alliance agreements, long-term supply contracts and steel technology development agreements with a number of domestic steel manufacturers to maintain stable raw material supplies and develop industry-leading special steel for the manufacturing of high-end hydraulic roof supports. Such agreements enable us to secure a stable supply of quality raw materials at relatively competitive prices.

We have also implemented a lean management model to improve our business and operational efficiency and overall utilization rate. We believe this management system strengthens our commitment to high quality products and enables us to optimize our resource allocation and increase our overall competitiveness. In addition, as a result of our vertically integrated manufacturing process, we are able to minimize raw materials inventory and reduce production costs, as several phases of the supply and production chain are completed by our multi-function and automated production equipment. As such, we are able to capture profits all along the supply and production chain.

We have a professional, efficient and extensive sales and service network and have successfully entered the international markets.

Our sales and service network is supported by our professional team comprising members of the sales and marketing, manufacturing and research and development departments. Through our sales and service network, we provide our customers with effective services, including on-site installation and routine inspection, testing and adjustment of our products, technical and operational training and general troubleshooting, refurbishing and overhaul and spare and replacement parts supply.

We provide aftermarket services through a three-tier system which comprises: (i) joint ventures with our selected strategic customers, focusing on manufacturing coal mining and excavating equipment and providing aftermarket services; (ii) certain of our subsidiaries; and (iii) our associate, ZMJ Suda. See "— Sales and Marketing — Aftermarket Services." Leveraging on the geographic advantage of Zhengzhou, a key transportation center in the PRC in close proximity to domestic coal mining areas, our domestic sales and service network and the service networks of our joint ventures and ZMJ Suda, including two 4S centers of ZMJ Suda, cover substantially all of the major coal mining provinces and regions in the PRC, and are in close proximity to most of our domestic customers located in Shanxi, Shaanxi, Anhui, Henan, Shandong, Guizhou, Hebei, Heilongjiang, Jilin, Liaoning and Gansu Provinces, as well as Inner Mongolia, Ningxia and Xinjiang Autonomous Regions. The 4S centers operated by ZMJ Suda are

distinguished from traditional aftermarket services offices in that 4S centers are sales and service platforms that offer comprehensive aftermarket services including: (i) maintenance and overhaul services; (ii) spare parts and components provision; (iii) technical support; and (iv) customer feedback surveys in key coal mining regions across the PRC. As of the Latest Practicable Date, we had a sales and marketing team of 178 members and ZMJ Suda had 48 well-trained professional aftermarket services engineers. Through our sales and service network, we have been able to continue to expand our customer base and establish long-term relationships with major domestic coal mining enterprises such as Shenhua Group, Huainan Mining, Henan Coal and Chemical Industry, Yitai Coal and Datong Coal, as well as overseas customers such as Russia Stark, Russia Belon, Yuzhkuzbassugol and Turkish Coal.

In addition, we have commenced implementation of our international growth strategy to further expand our global operations and increase our overseas market share. We have customers, and are able to provide related aftermarket services, in Russia, Turkey and India, three of the major coal-rich countries in the world. We also have the capability to provide related aftermarket services in the United States through a third-party sales agent. In June 2011, we established a wholly-owned subsidiary, ZMJ Siberia, to facilitate our provision of aftermarket services in Russia. We entered into contracts with our overseas customers for the sale of approximately RMB700.0 million of coal mining and excavating equipment and sold approximately RMB208.2 million of coal mining and excavating equipment to our overseas customers in 2011.

We are able to provide our customers with customized and comprehensive solutions in their coal mining operations.

In line with international practices, we are committed to providing our customers with customized and comprehensive coal mining and excavating equipment solutions, manufactured in accordance with customers' specifications and the topographies, geologic rock formations and mining conditions where our coal mining and excavating equipment will be used. We maintain close communications with our customers during the entire sales cycle. As a result, we are able to precisely understand and respond to the needs of our customers. We generally conduct on-site inspections to prepare technical proposals detailing the conditions of the coal seam, thickness of the mining wall and other relevant geological conditions of a particular coal mine. In addition, our sales team works closely with our technology and production teams to ensure that our customers' requirements are reflected in our products and to manage production timetables. We believe this allows us to effectively manage our production, inventory levels and raw materials procurement.

Leveraging on our ability to manufacture high quality hydraulic roof supports, our experience in the coal mining and excavating equipment industry and our research and development capabilities, we have become one of the few manufacturers in the PRC with the ability to provide comprehensive coal mining and excavating system solutions, which typically comprise hydraulic roof supports, armored-face conveyors, shearers and roadheaders. We are currently able to manufacture hydraulic roof supports, armored-face conveyors and roadheaders in-house, and are developing the technology and capability to manufacture shearers. We are committed to delivering high quality, reliable, safe and highly efficient coal mining and excavating equipment with consistent performance and minimum downtime for maintenance and overhaul. We also work closely with our customers to develop products and procure components and parts from a broad array of third-party manufacturers inside and outside the PRC to address their specific needs. For example, as a solution provider to certain of our Russian and Turkish customers, we are providing complete sets of hydraulic roof supports and sourcing certain coal mining and excavating equipment from third parties to meet our customers' specified needs.

We have experienced senior management and operations teams and have established a modern and scientific management system.

Our senior management team has extensive industry experience and management skills. In particular, Mr. Jiao Chengyao, Chairman of our Company, and Mr. Shao Chunsheng, Vice Chairman of our Company, each of whom have approximately 27 years of related experience in the coal mining and excavating equipment industry, have been instrumental in our development and achievements to date. Our other senior management personnel have an average of 20 years of experience in the coal mining equipment industry, manufacturing operations and general business management. Members of our senior management provide strong strategic direction, leadership and inspiration to our Company and employees, and invest in our continued development. Our Directors, Supervisors and senior management held approximately 3.05% of the shares of our Company as of the Latest Practicable Date, which we believe has further motivated those involved and facilitated the overall improvement of our business and operational results.

In addition, our day-to-day operations are managed by a capable team with significant operational experience and management ability. We also have a highly skilled work force which we have recruited from reputable colleges and universities in the PRC and receives regular training and related education.

OUR BUSINESS STRATEGIES

Our long-term objective is to become a leading manufacturer of comprehensive coal mining and excavating equipment in the world. To this end, we intend to implement a business strategy with the following key aspects:

Strategically increase our global presence and market share.

We intend to expand our global presence and increase our sales and market share. We expect that our sales to overseas customers will continue to increase and contribute to our total sales. We have customers, and are able to provide related aftermarket services in Russia, Turkey and India. We also have the capability to provide aftermarket services in the United States through a third-party sales agent. See "— Sales and Marketing — Aftermarket Services." These capabilities have laid a solid foundation for implementing our future international strategies and extending our global reach. Building on these capabilities, we intend to expand our market presence in Russia, Turkey and India, and enter additional international markets, including coal-rich countries or countries with mining operations that utilize longwall mining techniques, such as the United States, Australia, Vietnam, Mexico, Colombia, South Africa, Brazil, Ukraine and Kazakhstan. By executing this strategy, we expect to build a strong international brand and expand our business in the global market within three to five years.

We intend to take the following steps to execute our international expansion plans:

- ***Establish our overseas production capacity***. We plan to establish hydraulic roof support manufacturing facilities in Tomsk, Russia and Kolkata, India by 2016, with an estimated annual production capacity of 2,600 and 2,000 units, respectively, of high-end hydraulic roof supports. We also plan to establish an integrated coal mining transport equipment manufacturing base in Novokuznetsk, Russia, focusing on manufacturing armored-face conveyors, loaders and belt conveyors, by 2016, with an estimated annual production capacity of 30 units of both heavy-duty armored-face conveyers and loaders and 80 units of belt conveyors.

- ***Expand overseas sales and marketing coverage***. In addition to our existing wholly-owned subsidiary in Russia, ZMJ Siberia, we plan to increase our international sales and marketing coverage by establishing representative offices in the United States, Russia, Germany, India, Turkey, Australia, Colombia, South Africa, Ukraine and Kazakhstan by 2014.

- ***Establish aftermarket services bases and spare parts centers to provide aftermarket services***. We plan to establish aftermarket service bases and spare parts centers to provide aftermarket services in Russia by the end of 2012 and in the United States, India, Turkey and Australia by 2014.

- ***Establish overseas research and development centers***. We plan to establish research and development centers in Germany and the United States in 2013 to enhance our research and development capabilities.

We have conducted feasibility and sustainability studies for each of our projects that comprise our international expansion plans based on our research, experience in doing business in the relevant overseas countries and on-site visits and meetings with local customers and agents. We have assessed local market conditions, regulations and policies, competition, staff, taxation and other operational and financial factors. In particular, these feasibility studies involve assessing the establishment of manufacturing facilities in Russia and India, and our findings include the following:

- Russia has the world's second largest coal reserves and favorable government policies that facilitate investment by PRC companies in its natural resources, which we believe will enable us to expand our operations in the country;

- India is expected to rely on its domestic coal resources to continue its rapid economic growth due to its lack of oil and natural gas resources; and

- due to the current low mechanization rates of Russian and Indian coal mining industries and the active efforts of Russian and Indian governments to improve mechanization rates in their domestic mining operations, sales of coal mining and excavating equipment to these countries have significant growth potential.

Compared to general manufacturing operations in the PRC, we believe that establishing our manufacturing bases in Russia and India will enable us to: (i) respond to local market conditions and customer demand on a more timely basis; (ii) better utilize our strong research and development capabilities to manufacture products that meet varying local customer requirements; and (iii) reduce the delivery time of our products to the overseas markets. We also seek to achieve rapid market penetration and increase our global presence and market share by identifying and securing potential customers in these overseas markets. However, our international expansion plans are subject to various risks and uncertainties. The overseas markets for coal mining and excavating equipment, particularly in the emerging markets that we are currently targeting, may be volatile for an extended period of time. As such, we intend to remain flexible in implementing our international expansion plans, and adjust our expansion timetable in accordance with our overall performance and market conditions. In addition, due to our lack of overseas manufacturing experience, we may be subject to risks and uncertainties in addition to those associated with manufacturing operations in the PRC. Such additional risks and uncertainties include, but are not limited to, difficulties in obtaining local government approvals, permits and licenses, including

land use rights, and unstable political, regulatory or macroeconomic environments. See "Risk Factors — Risks Relating to Our Business and Operations — We may not be able to successfully execute our international expansion plans."

To manage our international expansion, we will continue to closely monitor overseas markets and take into account overseas regulations and policies, labor safety, quality control, raw materials procurement, production costs and other relevant factors. In addition, we expect to establish specific overseas management measures within a year, which will include further overseas market research, hiring professional local consultants, communicating with local governments and making periodic on-site visits to our targeted overseas countries. We plan to hire additional engineers, technicians and sales and marketing personnel with international experience and offer training programs to such employees through our newly-established overseas representative offices. In addition, to manage our overseas production costs, we intend to procure raw materials and key components, such as high-strength steel, hoses and hydraulic seals, primarily from domestic suppliers with whom we are familiar or have previously worked to ensure the quality and price competitiveness of our products. We believe these efforts will enable us to develop and manufacture customized products and provide maintenance services for our customers in the overseas markets, which will reduce our costs and delivery time and, consequently, enhance our competitiveness and increase our market share in these overseas markets. For the establishment of our existing subsidiary in Russia, ZMJ Siberia, we engaged local consultants and legal counsel to collect market information, assist in the bidding process and to ensure compliance with applicable Russian laws and regulations. We believe that these measures and our experience with ZMJ Siberia will enable us to better manage our expansion in Russia as well as other overseas countries.

We plan to implement our international strategies in an opportunistic way through acquisitions, establishment of joint ventures or formation of strategic alliances with partners that offer complementary research and development, sales network, manufacturing and product enhancement synergies. As of the Latest Practicable Date, we had not identified any overseas acquisition targets or joint ventures and strategic alliance partners.

Expand our product and service offerings to become a provider of comprehensive coal mining and excavating equipment and related services.

We plan to expand our product lines and become a leading manufacturer of comprehensive coal mining and excavating equipment. By increasing our production capacity of roadheaders and armored-face conveyors and extending our product line to shearers in the next few years, we expect to become one of the few manufacturers in the world able to manufacture integrated coal mining and excavating systems. We plan to focus on developing highly reliable heavy-duty shearers and armored-face conveyors, as well as a full range of roadheaders that can operate under diverse working conditions.

At the same time, we plan to provide our customers with other complementary equipment in the coal mining industry such as coal washing equipment, mine safety capsules, underground transport equipment, ventilation systems and related products, which will support our primary coal mining and excavating equipment offerings. We believe we are well-positioned to benefit from the growth of the coal washing equipment industry and supportive PRC government policies in rapidly expanding our coal washing equipment product line. See "Industry Overview — Overview of Coal Washing Equipment Industry of the PRC." In addition, our current coal mining equipment product line and planned coal washing equipment and other coal mining equipment share a common raw material, steel, as well as

substantially similar manufacturing processes including, among others, raw material preparation and processing, machining and welding and surface treatment. As such, we expect to benefit from our extensive manufacturing experience and leading research and development capabilities in developing and manufacturing coal washing equipment and other coal mining equipment. Furthermore, we also intend to improve the vertical integration of our production process and improve our ability to manufacture parts and components for our products to reduce our reliance on third-party manufacturers for those parts and components and ensure the quality and delivery of our products. We believe enhancing our in-house production process and capability will enhance our overall competitiveness. We have selected a site in Zhengzhou for establishing our coal washing equipment manufacturing base, the construction of which is expected to be completed by the end of 2013. We expect to commence operation of this manufacturing base in 2014.

In the future, we also expect to leverage on our experience in manufacturing coal mining and excavating equipment and our sales and service network to expand our operations to provide services such as underground mining exploration advisory, coal mine site planning and design and equipment supply. We believe this will complement our current business and operations and allow us to benefit from the resulting synergies. We have not established detailed production plans, timetables or expenditures schedules for the implementation of our future service offerings. We plan to commence preparations for such service offerings at a later stage, and expect to use our internal working capital as the primary source of funding for these future plans.

Expand the coverage and customer base of our aftermarket services based on the 4S centers service model and through the establishment of joint ventures with our major customers.

Our associate, ZMJ Suda, as a sub-contractor of the Company for the provision of comprehensive aftermarket services in the PRC, currently operates two 4S centers to provide comprehensive aftermarket services to coal mining enterprises. We believe we will be able to efficiently expand the coverage of the aftermarket services for our products by leveraging on the strength of the 4S service model and the expertise that ZMJ Suda has developed through operating its existing 4S centers. In addition, our joint ventures with Huainan Mining and Lu Xin Coal Chemical, have proved to be effective and efficient in providing aftermarket services to our strategic customers. We plan to take the following steps to expand the coverage and customer base of our aftermarket services:

- assist ZMJ Suda in establishing additional 4S centers in the PRC and expanding its service coverage;

- establish joint ventures with major PRC coal mining enterprises to efficiently expand our aftermarket services network by leveraging on their existing maintenance and overhaul workshops; and

- expand our service coverage in Siberia and establish additional service centers in the overseas markets, including India and Turkey.

In addition, we intend to enhance the quality of our existing aftermarket services by recruiting additional technical service personnel and implementing advanced repair evaluation processes for coal mining equipment. Although we had not entered into any definitive agreements as of the Latest Practicable Date to establish new joint ventures, we believe we will be able to successfully identify suitable partners in the industry to expand our aftermarket service network. We believe implementation of this strategy will enable us to expand our customer base, increase our sales and diversify our revenue source.

Continue to establish strategic cooperation relationships with our customers.

We plan to build on the strength of our brand and increase our sales through establishing strategic cooperation relationships with our major customers. As of the Latest Practicable Date, we had entered into strategic alliance agreements with selected major coal mining enterprises in the PRC. Such agreements generally, among other things, allow us to have easy access to such major customers and cooperate with them in developing new technology and products. We plan to continue to enter into similar relationships with additional major customers to strengthen our customer relationships and increase our sales. To this end, we plan to take the following steps:

- establish cooperation relationships with major customers to increase the sales of our new products and provision of aftermarket services. We believe our major customers will continue to be an important revenue source for sales of new products. In addition, as we expand our aftermarket business, our cooperation relationships with our major customers will enable us to achieve rapid penetration in the aftermarket service market and expansion of our aftermarket service network; and

- establish technology cooperation relationships with major customers to jointly develop new technology and products. We believe such cooperation will enable us to develop strong relationship with our customers, develop in-depth understanding of the mining conditions of such customers, efficiently develop mining solutions optimized for the customers and increase our competitiveness.

We believe the implementation of this strategy will enable us to rapidly expand our market share in both new product market and aftermarket services market and efficiently improve our technology and product offering. In addition, we seek to increase the sales of our high-end products by enhancing our marketing and promotion efforts. We will also seek to actively promote the regulated development of the coal mining and excavating equipment industry to facilitate the development of healthy competition in the market.

Grow our operations through acquisitions and joint ventures.

In addition to organic growth, we plan to take advantage of the fragmented nature and rapid growth of the coal mining and excavating equipment manufacturing industry in the PRC to selectively acquire coal mining and excavating equipment manufacturing businesses complementary to our existing business, as well as selected upstream suppliers that provide parts and components for our products. In exploring acquisition opportunities, we plan to target those companies with substantial research and development, manufacturing or sales capabilities, or those companies with substantial growth potential. We believe we can achieve rapid growth, expand our product portfolio and increase our market share through selective acquisitions. In addition, we may establish additional joint ventures in the PRC to: (i) establish additional manufacturing capacity; (ii) develop and produce additional types of coal mining and related equipment; (iii) provide aftermarket services; and (iv) cover additional markets in the PRC. In May 2012, we entered into a joint venture agreement with one of our major customers, the Longmay Group, for the establishment of the Zhenglong Joint Venture. According to the capital contribution agreement dated May 17, 2012 between the Company and Longmay Group, the Company and Longmay Group have each invested RMB38.0 million and hold 47.5% of the equity interest in Zhenglong Joint Venture, which is expected to commence production by the end of 2014 and have an expected annual production capacity of 4,500 units of hydraulic roof supports and 15,000 tonnes of armored-face

conveyors. In addition, Longmay Group will purchase hydraulic roof supports exclusively from Zhenglong Joint Venture and armored-face conveyors from Zhenglong Joint Venture on a priority basis. If Zhenglong Joint Venture is not able to manufacture such hydraulic roof supports for whatever reason, Longmay Group will purchase hydraulic roof supports on a priority basis from the Company.

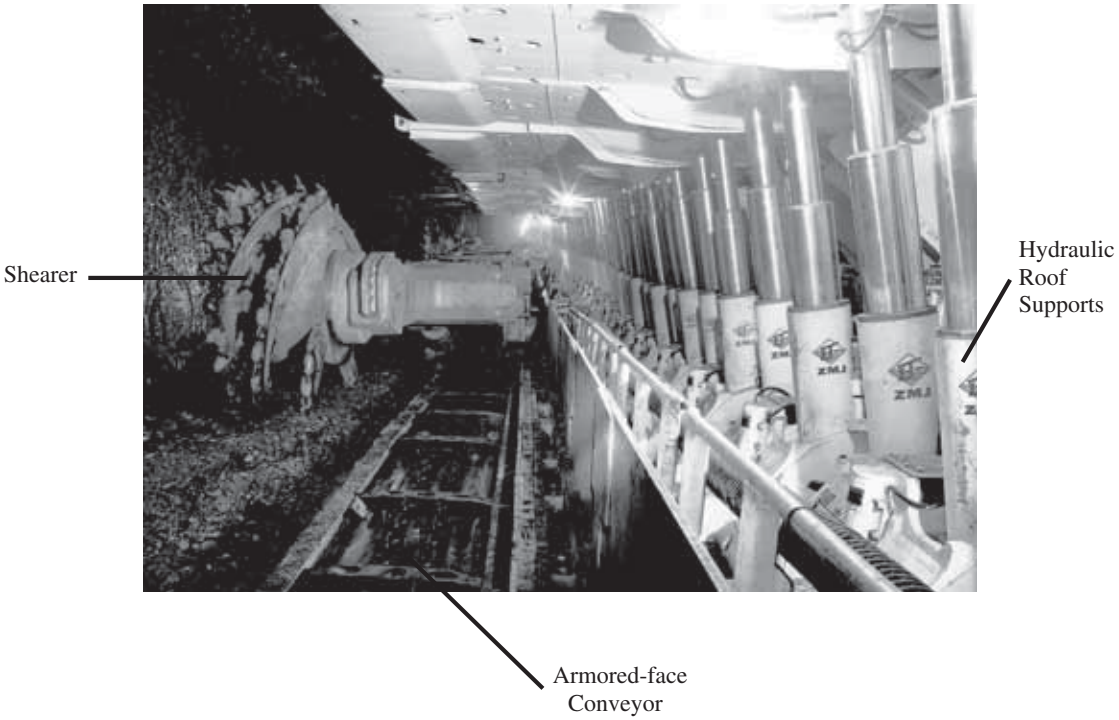
From time to time, we may explore and evaluate further acquisition or joint venture opportunities. As of the Latest Practicable Date, we have not identified specific acquisition plans or targets, and have not entered into any definitive agreements with any potential targets. However, we believe we will be able to identify appropriate acquisition, joint venture and alliance opportunities to grow our business and operations.

OUR PRODUCTS AND BUSINESSES

Introduction

A complete integrated underground coal mining and excavating system consists of four core components: the hydraulic roof supports, armored-face conveyors, shearers and roadheaders. In a typical coal mining operation, a block of coal that is typically 250 meters to 400 meters in width and three km to four km in length is cut from an underground seam that is approximately one to ten or more meters in thickness. This cutting is initially performed by excavating long tunnels using roadheaders. Once the cutting surface, or the working face, of a coal mine is formed, the actual longwall coal mining begins. Working under the hydraulic roof supports, the shearer rides on the armored-face conveyor that runs parallel to the coal face and cuts and spills coal onto the armored-face conveyor for transport out of the mine. When the shearer has traversed the full length of the coal face, it travels back along the face taking the next cut. Hydraulic roof supports allow armored-face conveyors and shearers to operate underneath, as well as provide a power source for the armored-face conveyors to operate.

The following diagram sets forth a typical working face in longwall mining operations.



Founded in 1958, we have accumulated more than 50 years of experience in manufacturing hydraulic roof supports. We commenced:

- designing hydraulic roof supports in the 1960s;
- manufacturing the first hydraulic roof support in the PRC in 1964; and
- designing and manufacturing the first set of high-end hydraulic roof supports with electronic hydraulic control systems in the PRC in 2004, which is suitable for various large mining heights and characterized by high working resistance and high reliability.

We are engaged in the trading of steel and other raw materials primarily through our wholly-owned subsidiary, ZMJ Material Trading, which we established in 2008. Due to our large steel procurement volumes, we are able to leverage our bargaining power and sourcing network with steel producers to purchase high quality steel in bulk from approximately 20 suppliers at competitive prices, for sales to third party customers. Our steel and other raw materials trading business allows us to efficiently manage our overall procurement costs for key raw materials, in particular, steel, while mitigating the impact of steel price fluctuations.

We are also engaged in providing comprehensive aftermarket services including spare parts provision, storage and related services as well as maintenance and overhaul services. Our associate, ZMJ Suda, as a sub-contractor of the Company for the provision of comprehensive aftermarket services in respect of the hydraulic roof supports sold by the Company during the warranty periods of such products in the PRC, currently operates two 4S centers and is in the process of establishing four additional 4S centers in the PRC. In addition, ZMJ Suda has six aftermarket service offices. Our sales and service network primarily comprises eight domestic sales offices in the PRC and four overseas sales agents in Russia, India, Turkey and the United States.

We commenced manufacturing and selling high-powered armored-face conveyors in 2008 and expect to commence manufacturing and selling of roadheaders by the end of 2012. We also manufacture and sell various related mining and excavating equipment that supports coal mining operations including crushers and loaders.

We plan to build on our existing experience to continue diversifying our product portfolio and become one of the few manufacturers worldwide able to design, manufacture and sell all four components that comprise a complete integrated coal mining and excavating system.

The following table sets forth our revenue and revenue percentage by product and business for the periods indicated.

	Year Ended December 31,						Six Months Ended June 30,			
	2009		2010		2011		2011		2012	
	(RMB in millions, except for %)									
							(unaudited)			
Hydraulic roof supports	4,062.7	81.3%	4,593.4	72.2%	5,642.0	70.0%	2,675.2	74.6%	3,272.2	69.3%
Steel and other raw materials trading	583.0	11.7%	1,247.9	19.6%	1,854.7	23.0%	613.8	17.1%	1,120.6	23.7%
Spare parts[(1)]	308.6	6.2%	450.1	7.1%	393.8	4.9%	213.7	6.0%	154.8	3.3%
Other coal mining equipment[(2)]	29.9	0.6%	52.5	0.8%	122.4	1.5%	55.8	1.6%	145.4	3.1%
Others[(3)]	10.2	0.2%	14.4	0.2%	47.2	0.6%	27.7	0.8%	30.6	0.6%
Total	4,994.4	100.0%	6,358.3	100.0%	8,060.1	100.0%	3,586.3	100.0%	4,723.6	100.0%

Notes:

(1) Primarily include jacks, hydraulic valves and structural parts of hydraulic roof supports.

(2) Primarily include armored-face conveyors and belt conveyors.

(3) Primarily include provision of machining services for spare parts and overhaul services for hydraulic roof supports and leasing of equipment and rental properties.

Hydraulic Roof Supports

According to the CMIA, we were the largest manufacturer of hydraulic roof supports in the PRC, with approximately 22.6% of market share for hydraulic roof supports in the PRC based on production volume in 2011. As of June 30, 2012, we had an annual production capacity of 23,400 units of hydraulic roof supports. In addition, we are one of the few manufacturers in the PRC able to design and manufacture high-end hydraulic roof supports. In 2004, we developed the PRC's first set of high-end hydraulic roof supports with electronic hydraulic control systems, which has emerged as a significant domestic alternative to imported high-end hydraulic roof supports and has been widely used by domestic coal mining enterprises since then. Our sales of our high-end hydraulic roof supports accounted for 47.7%, 48.5%, 50.8%, 51.0% and 44.0% of our total revenues from hydraulic roof supports sales for the years ended December 31, 2009, 2010 and 2011 and the six months ended June 30, 2011 and 2012, respectively.

Hydraulic roof supports are the core component supporting a mechanized underground integrated coal mining and excavating system and generally account for over 50% of the total value of a coal mining and excavating system. Hydraulic roof supports control the height of, and provide support to, the mine roof of the working face during the coal mining process, allowing armored-face conveyor and shearer to operate underneath. They also prevent rock fragments and other debris from entering the mining area, which enhances equipment performance and improves overall coal mining efficiency and safety.

We offer a full range of hydraulic roof supports suitable for various mining heights (from 0.55 meters to 13 meters), including, among others, shield roof supports, chock-shield roof supports and top coal caving roof supports, three types of the most commonly used hydraulic roof supports in the coal mining industry. Our hydraulic roof supports can be used in different mining conditions, topographies and geologic rock formations, such as thin coal seam (sedimentary) and thick coal seam (igneous and metamorphic) conditions, and are designed to withstand high pressure. We are able to provide deep incline hydraulic roof supports of up to 60 degrees that are capable of operating on steep coal seam slopes. In addition, we are able to provide our customers with several types of our in-house developed electronic hydraulic control systems and hydraulic valves. At the request of our customers, we may also source specified electronic hydraulic control systems and hydraulic valves from third party suppliers to incorporate in our hydraulic roof supports. Currently, the average product life of our hydraulic roof supports range from five to eight years.

Our hydraulic roof supports are generally classified into high-end and medium-end hydraulic roof supports. High-end hydraulic roof supports are designed, manufactured and tested in accordance with our internal standards that are, in all aspects, higher than the PRC MT312-2000 industry standard established by the PRC Coal Industry Bureau and, in certain aspects, higher than the EU standard EN1804 for hydraulic roof supports established by CEN, CENELEC and ETSI.

Our high-end hydraulic roof supports are more advanced than our medium-end hydraulic roof supports because our high-end hydraulic roof supports:

- incorporate electronic hydraulic control systems that enable mining operators to control automated mining processes and improve mining efficiency and safety;

- have better durability as we use higher-strength special steel, more advanced welding techniques and cutting-edge product designs which allow our high-end hydraulic roof supports to pass more than 31,000 heavy load tests in accordance with EU standard EN1804 standard;

- have greater support heights with a maximum support height of at least 6.0 meters; or

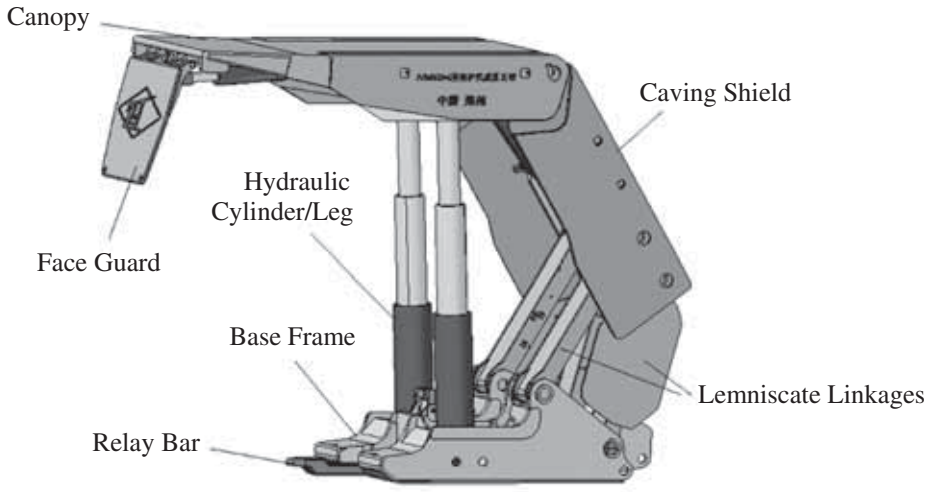
- have a maximum support resistance of at least 10,000 kN in the case of four-leg shield hydraulic roof supports.

Our hydraulic roof supports that meet any of the foregoing standards are classified as high-end hydraulic roof supports, and those that do not are classified as medium-end hydraulic roof supports.

During the Track Record Period, we produced and sold high-end hydraulic roof supports, medium-end hydraulic roof supports and components such as valves. The following table sets forth a breakdown of our hydraulic roof support sales for the periods indicated.

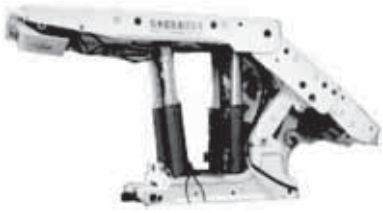
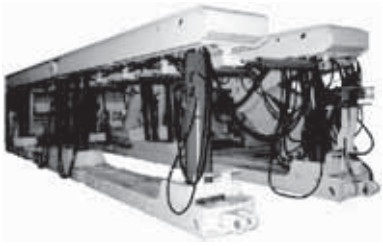
	Year Ended December 31,						Six Months Ended June 30,			
	2009		2010		2011		2011		2012	
	(RMB in millions, except for %)									
							(Unaudited)			
Products										
High-end hydraulic roof supports	1,938.4	47.7%	2,227.1	48.5%	2,864.9	50.8%	1,363.2	51.0%	1,438.5	44.0%
Medium-end hydraulic roof supports	2,124.3	52.3%	2,366.3	51.5%	2,777.1	49.2%	1,312.0	49.0%	1,833.7	56.0%
Total	4,062.7	100.0%	4,593.4	100.0%	5,642.0	100.0%	2,675.2	100.0%	3,272.2	100.0%

A hydraulic roof support generally consists of a canopy, base frame, hydraulic cylinder, caving shield, lemniscates linkages, face guard, relay bar and other related components, which can be classified into three categories: (i) structural parts; (ii) support rams; and (iii) hydraulic valves. The following image provides a general description of the components comprising a shield hydraulic roof support.



The following table sets forth selected hydraulic roof supports that we currently manufacture:

Product Type	Product Description	Product Image
Shield hydraulic roof support.....	Also known as the two-leg shield hydraulic roof support, this product is used to directly support a mine roof that has mid-to-low stability and mild periodic roof pressure. This product operates with two legs. Some of our shield hydraulic roof supports are controlled by electronic hydraulic control systems.	
Hydraulic chock-shield roof support.....	Also known as the four-leg shield hydraulic roof support, this product is used for direct roof support of a mine with medium stability and strong periodic roof pressure. This product can be applied on both soft and hard coal floors. Hydraulic roof supports using four-leg stands can be applied to coal seams with thickness of 1.1 meters to 5.0 meters.	
Large mining height hydraulic roof support.....	Providing shield roof support, this product operates with two legs and is generally controlled by an electronic hydraulic control system. It is primarily applied in one-off, full coal seams with mining height of up to 7.0 meters.	
Medium thickness hydraulic roof support.....	Providing shield roof support, this product operates with two legs and is normally controlled by an electronic hydraulic control system. It is primarily applied in one-off, full coal seams with mining height of 0.55 meters to 2.2 meters.	

Product Type	Product Description	Product Image
Top coal caving hydraulic roof support.....	Providing roof support for a height of up to 4.0 meters, this product provides shield support, with a few operating with two legs. This product is primarily applied in thick coal seams with thickness of 7.0 meters to 13.0 meters.	
Deep incline hydraulic roof support.....	This product is primarily applied in coal seams with an inclined angle of 45° to 60°, and can support roof of up to 4.8 meters high.	
Face-end and tunnel hydraulic roof support.....	This product supports the roof of the coal face from face end through the tunnel of the mine, and is equipped with a pusher jack and loader.	
Transition hydraulic roof support.....	This product provides support between the basic supports of the coal face and the gate end and is primarily applied after the application of the primary hydraulic roof support.	

Steel and Other Raw Materials Trading Business

In order to efficiently manage our overall procurement costs for key raw materials, in particular, steel, used in our manufacturing operations, we established our wholly-owned subsidiary, ZMJ Material Trading, in March 2008, to conduct the trading of steel and other raw materials including welding wires, hoses and hydraulic seals. Due to our large procurement volumes, we are able to leverage on our bargaining power and sourcing network with steel producers to purchase high quality steel in bulk from approximately 20 suppliers at competitive prices for sales to third party customers. Our steel and other raw materials trading business also allows us to efficiently manage our overall procurement costs while mitigating the impact of steel price fluctuations on our manufacturing operations. For example, we may sell excess inventory resulting from the changes in our manufacturing schedules to our customers to mitigate the impact of the fluctuations in the steel prices. Our sales of excess steel inventory accounted for less than 5% of the total revenue of steel and other raw materials trading business during the Track Record Period. We did not incur material losses from disposal of excess inventory during the Track Record Period as we procured raw materials in accordance with our manufacturing schedules and sold steel when we had favorable steel price margins. In addition, we utilize an early warning system to monitor excess inventories of steel and maintain our inventory levels in line with our production. Therefore, we have generally been able to successfully control our inventory levels within acceptable limits.

Our steel suppliers include steel manufacturers and trading companies. We have established long-term relationships with major steel suppliers in the PRC, including Bengang Steel Plates Co., Ltd. ("Bengang Steel") and Anyang Iron & Steel Co., Ltd. ("Anyang Steel"), from which we are able to procure steel at favorable prices. We have also entered into technology development agreements with selected steel producers to develop special steel materials for our products. These contracts enable us to purchase high quality special steel materials in bulk at favorable prices. If we were unable to procure steel materials at favorable prices, the price of our products would generally increase, which could adversely affect our competitiveness in terms of product prices. However, given the nature of, and demand for, our products, we believe we are generally able to pass along substantially all of the steel materials price increases to our customers.

The customers of our steel trading business primarily comprise third-party PRC steel trading companies, heavy machinery companies and welding wire manufacturers. After we receive these purchase orders, we will secure a price quote from our network of steel suppliers. To minimize our inventory and maximize profits, we generally set our sales price of steel based on market prices and our procurement costs, and will generally only enter into direct steel sales and purchase agreements with customers if we are able to generate a profit or, if required, reduce our existing inventory. We generally require payment of the full price before delivery. While we generally deliver steel products to our customers, depending on the specific sales agreement, our sales price may or may not include transportation costs. Due to our cost advantages in procurement as a result of our strategic cooperation with certain steel companies and our bulk purchase volumes, especially the high-quality steel with the same specifications as those we use in our manufacturing of hydraulic roof supports, we have been selling our steel products at competitive prices in the market. We did not experience any customer default during the Track Record Period. In the case of customer default in the steel trading business, we will utilize the steel designated for such defaulting customer to manufacture coal mining and excavating equipment for our other customers.

We also sell scrap steel from our production process to scrap steel recycling companies through a weekly bidding process. Our sales of scrap steel generally have higher gross profit margins than those of our steel products as the costs of such scrap steel are recognized during the production process. As such, while sales of scrap steel constitute a small proportion of our steel and other raw materials trading revenue, such sales account for a significant portion of our profit derived from our steel and other raw materials trading business during the Track Record Period.

As of the Latest Practicable Date, our steel trading business had a team of 17 members, who work closely with the procurement, storage, corporate planning, finance and human resources departments of our Company. During the Track Record Period, ZMJ Material Trading complied with applicable laws and regulations in all material respects, and possessed the relevant necessary government approvals in relation to its operations.

Spare Parts

We sell spare parts, such as jacks, hydraulic valves and structural parts for hydraulic roof supports, to third-party coal mining companies, most of which have previously purchased our hydraulic roof supports. Since 2009, we have also sold spare parts to our associate, ZMJ Suda, which focuses on the provision of aftermarket services for the hydraulic roof supports sold by the Company in the PRC. We sell spare parts through a bidding or direct ordering process, and we generally do not enter into long-term sales agreements with our customers for spare parts. Our spare parts are primarily manufactured and sold by our Company, as well as our subsidiaries, ZMJ Comprehensive Equipment and ZMJ Hydraulic Control.

Currently, the majority of coal mining enterprises in the PRC do not procure spare parts from original equipment manufacturers as large coal mining enterprises typically have internal maintenance facilities, and small and medium-sized coal mining enterprises generally tend to purchase spare parts from local suppliers for cost reasons, as the domestic aftermarket service networks of original equipment manufacturers are generally under-developed. Accordingly, we plan to penetrate the existing aftermarket services market in the following manner:

- We plan to increase our cooperative efforts with the maintenance facilities of large coal mining enterprises to increase sales of our spare parts. These large coal mining enterprises, some of which are our customers, are generally familiar with our high quality standards and internal maintenance service capabilities; and

- We also plan to increase our sales to small and medium-sized coal mining enterprises. According to Heading Century Consulting, as the consolidation of coal mines in the PRC continues, small and medium-sized coal mining enterprises are expected to have the financial resources required to procure high-quality original spare parts. As the use of more advanced coal mining equipment and technologies becomes more widespread, small and medium-sized enterprises will also need to seek spare parts and aftermarket services from professional and original suppliers more frequently.

As we expand our aftermarket services coverage and enhance our cooperative efforts with our existing customers, we believe we will be able to increase our sales of spare parts and market share in the domestic spare parts market. In addition, we believe our provision of professional one-stop, value-added services and technical training for equipment operators will provide us with competitive advantages.

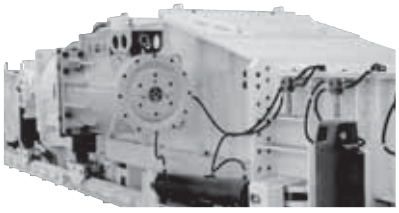
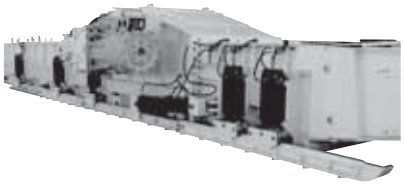
Other Coal Mining Equipment

We are currently able to manufacture armored-face conveyors and prototype roadheaders in-house and are developing the technology and capability to manufacture shearers. We have allocated substantial resources, which include research and development teams and facilities, sales and marketing teams and general working capital, to developing our other coal mining equipment business. While our current sales volumes of other coal mining equipment are low, as we commenced selling armored-face conveyors in 2008 and intend to commence selling roadheaders by the end of 2012, we expect that our sales volumes will increase in the future as a result of our commitment to, and substantial resources allocated for, our other coal mining equipment business.

Armored-face Conveyors and Related Products

Armored-face conveyors are used in longwall mining operations to support the shearers and transport coal, rock fragments and other debris cut from the working face by the shearers. In early 2008, we commenced research and development of high-powered armored-face conveyors and successfully delivered our products to customers by the end of 2008. Our armored-face conveyors product line consists of five product models with power capacities ranging from 2x110kW to 3x1,000kW and line pans ranging from 0.63 meters to 1.25 meters. We are one of the few armored-face conveyor manufacturers in the PRC able to design and manufacture heavy-duty armored-face conveyors that can be used in large coal mines. In 2011, we completed production and delivery of one of the largest armored-face conveyors in the PRC, with an operating capacity of 2,000kW and line pans of 1.2 meters. In addition to armored-face conveyors, our product portfolio also includes crushers, loaders and related products.

The following table sets forth certain key features of selected armored-face conveyors and related products that we currently offer:

Product Type	Product Description	Product Image
Armored-face conveyor	This product covers all series of line pans, with line pan widths ranging from 630mm to 1,250mm, and has an installed power capacity ranging from 2×110kW to 3×1,000kW. This product satisfies transport requirements for coal mines with annual coal production capacities of one million to 10 million tonnes.	
Gate conveyor	This product works with an armored-face conveyor and has an installed power capacity ranging from 90kW to 700kW, with line pan widths ranging from 630mm to 1,400mm.	
Wheel crusher	This product works with a gate conveyor and crushes large-size coal, rock fragments and other debris, and has an installed power capacity ranging from 90kW to 400kW and crushing capability of 800 t/h to 4,500t/h.	
Self-propelled system for gate conveyor	A high-yield and highly-efficient roadway system that propels the movement of conveyor and crusher. This product can be utilized with self-propelled system for belt conveyor and has a distance range of 800mm to 1,200mm.	
Self-propelled system for belt conveyor	This product allows for propelling and adjusting the movement of conveyor and crusher and docking with other units, and has a distance range of 800mm to 1,400mm.	

Roadheaders

Roadheaders are mobile units used to dig tunnels and crush rocks with drill units, while removing rock fragments and other debris. We commenced the designing and testing of prototype roadheaders in 2010, and currently have five prototype models that are generally classified into light-duty, medium-duty and heavy-duty roadheaders based on cutting power. As of the Latest Practicable Date, we had not commenced selling roadheaders. We intend to commence selling roadheaders by the end of 2012. Our roadheaders are expected to operate under diverse mining conditions and be used in other construction applications, such as railway, roadway, subway and other construction settings.

The following table sets forth the prototype models of roadheaders that we are currently testing and expect to offer:

Product Type/ Model Number	Product Description	Product Image
EBZ230	Our heavy-duty roadheader, with a cutting power of 230kW.	
EBZ200	Our heavy-duty roadheader, with a cutting power of 200kW.	
EBZ160	Our medium-duty roadheader, with a cutting power of 160kW.	

Product Type/ Model Number	Product Description	Product Image
EBZ135	Our medium-duty roadheader, with a cutting power of 135kW.	
EBZ120	Our light-duty roadheader, with a cutting power of 120kW.	

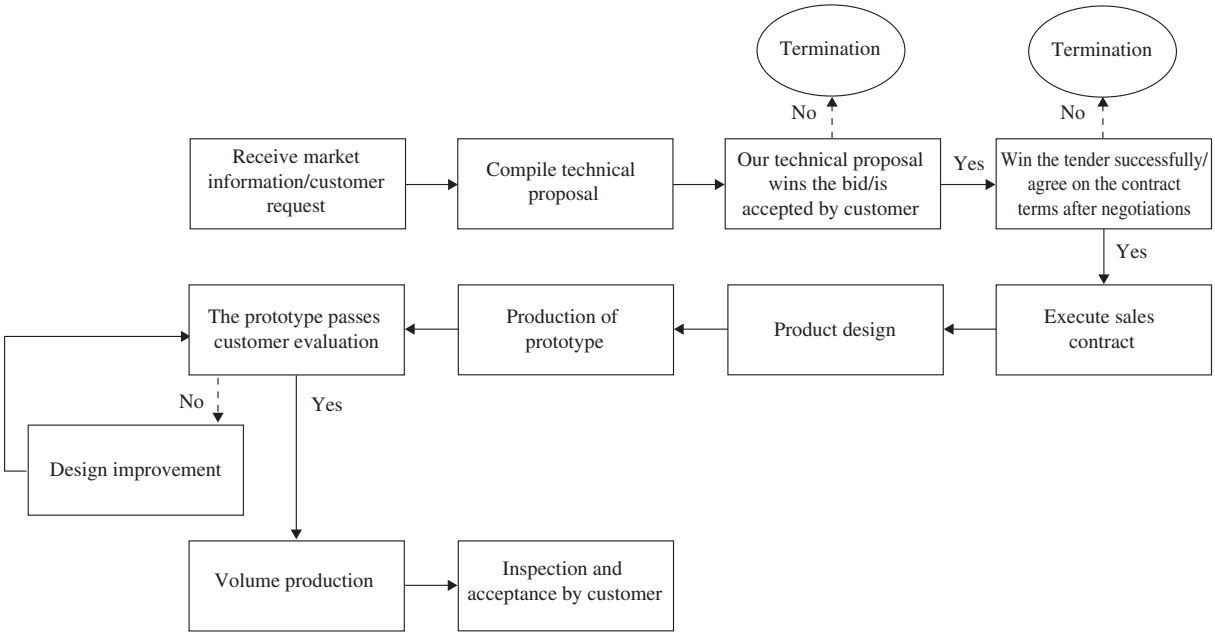
PRODUCT DESIGN AND MANUFACTURING

Consultation and Design Process

We provide a complete set of customized solutions for our customers, including coal mining design solutions and equipment selection in accordance with the different coal mine conditions of each customer. As our products, particularly hydraulic roof supports, operate under different challenging and intensive working environments, they are generally customized based on the specifications of our customers. Our experienced team of engineers and technicians normally visit our customer's proposed project site to study the topography of the site, geologic rock formations, conditions of the coal seam, thickness of the mining wall and other geological conditions to prepare a technical proposal for our discussions of the potential solutions with our customer. Our potential customers may also liaise with third-party experts to develop specific design solutions for their proposed projects. In this regard, our many years of production experience and adoption of various three-dimensional computer-aided design technology enable us to provide practical advice to enhance and optimize their designs.

As part of the inquiry and design process, we invite our customers to visit our production sites. After a technical proposal is agreed to with the customer, we then participate in commercial bidding and tender process or price negotiations. If our bid is successful or if the principal contract terms have been agreed to after negotiations, we will sign a sales contract with the customer. After we sign the contract, we will produce detailed designs pursuant to our customer's specifications and agreed technical requirements which take into account the relevant geological information of the coal mine. After the customer reviews and approves the design specifications, we will produce the product prototype for the customer's review. During this review process, our sales team will assist our manufacturing and technology team in responding to any inquiries that the customer may have, and these two teams will work closely together to ensure that the product meets the specifications. After the customer approves the product prototype, we will then commence volume production. We believe this process allows us to cost effectively manufacture high quality customized products for our customers.

Manufacturing a prototype generally requires approximately 10 to 15 days. Volume production for one set of hydraulic roof supports generally requires approximately 30 to 40 days, depending on the specifications of the product and the number of units in each set. The flow chart below illustrates the general consultation and design process.



Manufacturing Process

As a result of our commitment to research and development and advanced manufacturing processes, we have established vertically-integrated production facilities and processes which allow us to produce most of the parts and components for our products in-house. Our hydraulic roof supports generally have three main categories of parts and components: structural parts, support rams and hydraulic valves. Benefiting from our advanced manufacturing processes, we are able to produce each component in parallel, which allows us to maximize production efficiency and optimize the use of our resources.

The production process for the majority of our products can be broadly categorized into seven steps: raw material preparation, raw materials processing, thermal treatment, machining/welding, surface treatment, general assembly and inspection and testing, which we summarize below:

- ***Raw material preparation.*** We inspect and process raw materials and parts used in our production process according to the applicable technical specifications. Our principal raw material for each of our product lines is steel. Other raw materials include hoses and hydraulic seals. Our procured parts vary depending on our product line:

  - *Hydraulic roof supports.* We are able to manufacture in-house all electronic hydraulic control systems and hydraulic valves used in our hydraulic roof supports. However, pursuant to our customers' requests, we may also procure specified electronic hydraulic control systems and hydraulic valves from third party suppliers. In addition, from time to time, we procure some non-critical parts such as hoses, hydraulic seals and other standard parts that we do not intend to produce from our suppliers.

  - *Armored-face conveyors and related mining and excavating equipment.* We mainly produce structural parts and attaching parts, while standard parts such as power generators and speed reducers are generally procured from our suppliers.

  - *Roadheaders.* We mainly produce structural parts and machining parts, while other parts such as drill heads and power generators are procured from our suppliers.

- ***Raw materials processing.*** We use band saws and cutting machine to shape raw materials into unfinished parts in accordance with our specifications for further processing.

- ***Thermal treatment.*** We use thermal treatment techniques, such as tempering and hardening, to improve the mechanical performance of our unfinished parts so that they can withstand pressure, heat and other external factors.

- ***Machining/Welding.*** The unfinished parts and components become finished parts and components after going through various machining and welding. We currently implement multi-function, automated robotic systems to weld structural parts. We also utilize digital control machine tools for volume production of machining parts.

- ***Surface treatment.*** We treat the finished parts and components with finishing processes, such as spray painting and surface coating, which ensures that the finished parts and components are suitable for general assembly.

- ***General assembly.*** We assemble the finished parts and components to form the finished products.

- ***Inspection and testing.*** We test and adjust each product before it is warehoused or delivered to our customers to ensure that our products meets our rigorous quality control standards and specifications as well as those of our customers.

Manufacturing Facilities

As of the Latest Practicable Date, we had manufacturing facilities located in Zhengzhou, Henan Province, Huainan, Anhui Province and Changji, Xinjiang Autonomous Region. As of the Latest Practicable Date, the manufacturing facilities owned by us had a total GFA of 595,964.20 sq.m. and we had the rights to use the underlying land. Our manufacturing facilities are equipped with highly advanced and versatile production machinery, which allows us to manufacture all of our products, as well as most of the parts and components for our products in-house. Due to our scale of operations and vertically-integrated manufacturing process, we are able to efficiently adjust our production output to quickly respond to changing customer demand and market conditions. We are also able to minimize raw materials inventory and reduce our production costs and logistics expenses as several phases of the supply and production chain are completed in our new Zhengzhou facility through our multi-function production process. As of June 30, 2012, we had an annual production capacity of 23,400 units of hydraulic roof supports. For the year ended December 31, 2011, the weighted average utilization rate of our manufacturing facilities for our hydraulic roof supports was 116.0% and we produced 14,693 units of hydraulic roof supports. For the six months ended June 30, 2012, the weighted average utilization rate of our manufacturing facilities for our hydraulic roof supports was 107.4% and we produced 11,873 units of hydraulic roof supports. See "— Production Capacity."

The following table sets forth the GFA, years of commencement of operations and primary uses of our manufacturing facilities as of the Latest Practicable Date:

	Manufacturing Facility	GFA (sq.m.)	Commencement of Operations	Primary Use/Primary Products Produced
The Company	Zhengzhou (Old manufacturing base)	137,822.69	1960	Medium-end hydraulic roof supports
	Zhengzhou (New manufacturing base, which includes manufacturing bases for high-end hydraulic roof supports and electronic hydraulic control systems and a research and development center)	260,315.13	2011	High-end hydraulic roof supports, high-end and medium-end hydraulic valves and electronic hydraulic control systems

	Manufacturing Facility	GFA (sq.m.)	Commencement of Operations	Primary Use/Primary Products Produced
ZMJ Comprehensive Equipment	Zhengzhou	6,309.03	1994	Medium-end hydraulic roof supports, spare parts and provision of maintenance and overhaul services
	Xingyang, Zhengzhou (Old facility)	31,679.07	2005	Medium-end hydraulic roof supports, spare parts and general assembly of hydraulic roof supports
	Xingyang, Zhengzhou (New facility)	42,414.42	2012	Newly-established production facilities for manufacturing roadheaders, spare parts and general assembly of hydraulic roof supports
ZMJ Longwall Machinery	Zhengzhou	25,545.25	2010	Armored-face conveyors
ZMJ Shun Li Machinery	Huainan	63,046.20	1981	Medium-end hydraulic roof supports and small-sized armored-face conveyors
ZMJ Lu An Xinjiang	Changji	28,832.41	2010	Coal mining equipment components, provision of maintenance and overhaul services and hydraulic roof supports
	Total	595,964.20		

Although we believe our existing manufacturing facilities and capabilities are adequate for our current operational needs, we plan to expand our manufacturing capacity in the future to respond to growing market demand for our products. We plan to commence the construction of a new manufacturing facility in Zhengzhou for the production of coal washing equipment. In addition, we are currently constructing a new manufacturing facility in Huainan, Anhui Province for the production of spare parts of hydraulic roof supports and a new manufacturing facility in Xingyang, Henan Province for the production

of roadheaders and spare parts and the general assembly of hydraulic roof supports. The following table sets forth selected information on our owned manufacturing facilities under construction as of June 30, 2012:

				As of June 30, 2012				
	Manufacturing Facility	Planned GFA (sq.m.)	Expected Year of Commencement of Operations	Estimated Investment Costs	Investment Costs Paid	Unpaid Balances	Source of Funding	Expected Primary Use/Primary Products
				(RMB in millions)	(RMB in millions)	(RMB in millions)		
The Company	Zhengzhou	109,071.0	2013	929.6	97.6	832.0	Proceeds from the Global Offering	Construction of a new manufacturing facility for coal washing equipment
ZMJ Shun Li Machinery	Huainan	29,438.0	2012	126.0	97.1	28.9	Existing working capital	Construction of a new manufacturing facility for the production of spare parts of hydraulic roof supports

In line with our international expansion plans, we also plan to expand our overseas production capacity by implementing selected overseas projects after this Global Offering. See "— Our Business Strategies — Strategically increase our global presence and market share."

Advanced Processes

We utilize industry-leading technology and advanced production processes to improve our manufacturing performance and efficiency. See "— Research and Development." Some of these technologies and production processes include the following.

Robotic Welding Systems

Since 2008, we have collaborated with innovative companies such as Tangshan Kaiyuan Robot System Co., Ltd. ("TKRS") and Cloos Welding Technology (Beijing) Co., Ltd. ("CLOOS"), a PRC subsidiary of Germany-based CARL CLOOS SCHWEISSTECHNIK GMBH, to use their robotic welding systems to weld steel-based structural parts of hydraulic roof supports. Our state-of-the-art manufacturing equipment includes a multi-stage robotic welding system, which we started to utilize in April 2009 for linkage welding. We commenced the implementation of this advanced welding system for manufacturing components such as the base frame, canopy, caving shield and lemniscate linkage of hydraulic roof supports in March 2011.

Each of our robotic welding systems can operate continuously and contains several welding units, each consisting of two or four robots and can be programmed with manufacturing instructions offline to produce high quality steel-based structural parts with high precision. Each of our robotic welding systems is designed to allow technicians to control two or more units simultaneously, increasing our production efficiency. In addition, automated welding is generally safer than manual welding. We expect to broadly implement the robotic welding process, which we anticipate will become a viable alternative to our manual welding processes in our production lines.

Advanced Production Technology for Hydraulic Cylinders

We apply a new processing technology called skiving and roller burnishing technology to machine hydraulic cylinders that we manufacture in-house for our hydraulic roof supports and other coal mining and excavating equipment. Skiving and roller burnishing technology, which is a machining process applied to internal hydraulic cylindrical surfaces, enables us to increase the efficiency of our machining processes for, and the precision of, our hydraulic cylinders. We use boring machines made by Tacchi, an Italian machine equipment company, in conjunction with skiver heads made by EcoRoll, a German company, for our skiving and roller burnishing processes.

Lean Management

In March 2011, we adopted the lean management model to improve our business and operational efficiency and overall utilization rate. According to Heading Century Consulting, we are one of the first PRC enterprises in the coal mining equipment manufacturing industry to streamline our production process through the adoption of assembly lines in the manufacturing of our hydraulic roof supports, which enables us to optimize our resource allocation and effectively control costs. In addition, we are also able to minimize raw materials inventory, reduce production costs and logistics expenses, as our general assembly team regularly provides feedback to our procurement team and other production teams. As such, we are able to capture profits all along the production chain. This management system complements our commitment to high quality products, assists us in maintaining high staff morale and allows us to increase our overall operational efficiency and competitiveness.

Quality Control

We are committed to designing and manufacturing quality products. To this end, we implement rigorous quality control measures throughout our production process. In particular, we implement our Operation Guide Book 2011, which includes internal rules and regulations covering quality control measures, policies and guidelines over product design, technology development, raw materials procurement, product manufacturing, outsourcing manufacturing and product dispatching. As a testament to our commitment to quality control, we have obtained and maintained ISO9001:2008 certification for our quality management system. As of the Latest Practicable Date, we held 300 valid safety certificates of approval for mining equipment products issued by the Mining Products Safety Approval and Certification Center as specified by the SACMS. We have also received and maintained the GOST certificate and DGMS approval for all of our products sold or to be sold in Russia and India, respectively. All of our principal operating subsidiaries have obtained from the SACMS and maintained the relevant product safety certifications for the products that we currently sell.

To ensure the quality of the raw materials we purchase, we implement rigorous selection and screening process for our suppliers. We continuously monitor the quality of the raw materials supplied and conduct periodic evaluations of our suppliers. We regularly inspect our production facilities and carry out performance tests at each stage of the production process. Our quality inspection teams conduct random sample testing of semi-finished and finished products to ensure that our products comply with the relevant product standards. We also conduct regular checks, repairs and maintenance of our manufacturing equipment and facilities to ensure stable, safe and reliable operation. For additional information on quality control measures with respect to outsourced manufacturing process, see "— Outsourced Manufacturing." As of the Latest Practicable Date, the quality control team at our headquarters comprised approximately 143 staff.

During the Track Record Period, we did not experience any sales returns by customers as a result of product defects, nor did we experience any product liability issues. However, due to the nature and usage of our products, we may be subject to product liability claims in the future. See "Risk Factors — Risks Relating to Our Business and Operations — We may be subject to product liability claims, litigation, warranty claims or negative publicity."

Information Technology

Since 2002, we have rapidly improved our information technology to facilitate our product development, manufacturing processes and overall business operations. We implement what we believe to be the industry-leading digitalized management systems, including our ERP system and OA system, which allow us to integrate our manufacturing processes and order and warehouse management. To supplement our ERP system and facilitate efficient manufacturing processes and research and development, we implement the "Collaborative Management Software System for Standardized Design and Documents," a centrally-managed information sharing and resource retrieval system that enables our employees to search and utilize technical data and designs, administrative materials and miscellaneous files, while allowing us to maintain and protect our intellectual property on our internal networks. We also implement various computer-aided design and process planning softwares such as CAD/CAE and CAPP. As a part of our CAD system, we use Pro/Engineer software to facilitate our three-dimensional computer design. We believe these industry-leading technological measures contribute to our advanced and efficient processes and allow us to further grow our business and operations.

We expect to implement additional advanced information technology in our Zhengzhou facilities to improve our research and development, technology, manufacturing and management capabilities. We are currently building a comprehensive digital manufacturing center that utilizes advanced management and planning systems for our product life-cycle management. Our digital manufacturing center is expected to have advanced functions such as production scheduling, logistics management, quality control and remote monitoring. We plan to fund the establishment of the comprehensive digital manufacturing center with our internally-generated capital resources. In addition, we will seek to manage our supply chain and sales cycles through the implementation of a customer relationship management system and a supply chain management system. We also intend to utilize digital data interchange technology to seamlessly exchange data and information with our suppliers and customers to reduce our costs of sales and improve the quality and responsiveness of our customer services.

Production Capacity

The following table sets forth the annual production capacity, production volume and weighted average utilization rate for hydraulic roof supports as of the dates or for the years/period indicated and our estimated production capacity for hydraulic roof supports after our expansion plans.

	As of/for the Year Ended December 31,									As of/for the Six Months Ended June 30,			Post Expansion Plan[3]
	2009			2010			2011			2012			
Hydraulic Roof Supports	Annual Production Capacity[1]	Production Volume	Utilization Rate[2]	Annual Production Capacity[1]	Production Volume	Utilization Rate[2]	Annual Production Capacity[1]	Production Volume	Utilization Rate[2]	Annual Production Capacity[1]	Production Volume	Utilization Rate[2]	Estimated Annual Production Capacity
	(Units)		(%)	(Units)		(%)	(Units)		(%)	(Units)		(%)	(Units)
The Group[4]	10,200	11,522	113.0	10,500	12,943	125.1	20,800	14,693	116.0	23,400	11,873	107.4	23,500

Notes:

(1) Annual production capacity is calculated based on 21.5 working days per month, two shifts per day (or three shifts per day for certain exceptional processes) and eight hours per shift, which includes the production capacity of our outsourced suppliers for the manufacturing of non-critical parts and components to be assembled by us.

(2) The weighted average utilization rate of the production lines of our hydraulic roof supports for a period is calculated by dividing the production volume by the weighted average production capacity for the same period. As we significantly increased our production capacity following the commencement of the operation of our new manufacturing facility in Zhengzhou in September 2011, the weighted average production capacity is calculated by dividing the sum of the annual production capacity as of the end of each quarter during such period by the number of quarters in the period.

(3) Our post expansion plans involve ramping-up and fully utilizing certain production lines at our new Zhengzhou manufacturing facilities which commenced operations in September 2011. As of September 30, 2011, our annual production capacity was 20,800 units of hydraulic roof supports.

(4) Comprises the Company, ZMJ Comprehensive Equipment and ZMJ Shun Li Machinery. See "— Manufacturing Facilities" for details on their respective manufacturing bases and manufactured products.

The production capacity of the Company's hydraulic roof supports has contributed, and will continue to contribute, to a majority of the Group's production capacity of hydraulic roof supports. Before our new Zhengzhou manufacturing facilities commenced operations in September 2011, our production capacity for hydraulic roof supports was derived solely from our old manufacturing base. Since September 2011, we have allocated the manufacturing of each component utilized in the hydraulic roof supports production process between our old and new manufacturing bases, which enables us to maximize the production capacity and utilization rates of our two manufacturing bases as a whole. As such, the production capacity of hydraulic roof supports of the Company is calculated on a combined basis.

The weighted average utilization rates for the production lines of our hydraulic roof supports exceeded 100% during the Track Record Period, primarily because our actual working hours and outsourcing exceeded those we use to calculate our production capacity to meet the increased market demand. The weighted average utilization rate for the production lines of our hydraulic roof supports increased from 113.0% for 2009 to 125.1% for 2010 primarily due to an increase in working hours, as well as improvements in the manufacturing efficiency and transportation logistics. The weighted average utilization rate for the production lines of our hydraulic roof supports decreased from 125.1% for 2010 to 116.0% for 2011, and further decreased to 107.4% for the six months ended June 30, 2012, primarily because our new manufacturing facilities in Zhengzhou commenced operations in September 2011 and required some ramp-up time. We cannot assure you that the weighted average utilization rates for our hydraulic roof support production lines will not exceed 100% in the future. See "Risk Factors — Risks Relating to Our Business and Operations — Our revenue may vary from period to period due to fluctuations in customer purchase orders."

Outsourced Manufacturing

Depending on our production capacity and the product delivery schedule, we selectively outsource the production of certain non-critical parts and components such as structural parts and rams to third-party manufacturers from time to time. As a part of our strict quality control measures, we only work with those manufacturers which we have selected based on their expertise and product quality. Our internal assessment team evaluates and selects third-party manufacturers on an annual basis. Our quality control department assigns staff to supervise the manufacturing on-site as well as conduct random tests to ensure the quality of outsourced parts and components of hydraulic roof supports. In addition, those third-party manufacturers are required to use raw materials in the manufacturing of products that we supply or specify to ensure the quality of our outsourced products. We work with more than 50 manufacturers on a regular basis and have established long-term cooperative relationships with approximately 30 of them. We do not depend on any particular third-party manufacturer for outsourced parts and components. We believe that our supervision of the outsourced manufacturing processes allows us to control production costs and ensure efficient manufacturing processes and product quality.

We are primarily liable for the product defects of our outsourced parts and components. During the Track Record Period, we experienced warranty claims as a result of such product defects, which we believe, individually or in the aggregate, were not material to our business operations or financial condition. We have taken responsive steps to address the claims of our customers and have sought damages from the responsible outsourced partners according to the warranty terms in the relevant supply agreements. As part of our general efforts to prevent product defects, we have established stringent quality assurance standards and an on-site supervision system for our outsourced manufacturing. We have also standardized the selection criteria for our outsourced manufacturers. We will continue to monitor the outsourced manufacturing process and adjust our current procedures and standards when required. See "Risk Factors — Risks Relating to Our Business and Operations — We may be unable to maintain effective quality control or raw materials procurement systems, which may affect the supply and quality of our raw materials."

The table below sets forth our actual output and the outsourced production of non-critical parts and components for the periods indicated:

Items	Year Ended December 31, 2009	2010	2011	Six Months Ended June 30, 2012
Actual output (tonnes in thousands)[(1)]	315.6	338.0	430.0	277.1
Outsourced structural parts (tonnes in thousands)	59.9	43.0	48.9	32.2
Outsourced ram (tonnes in thousands)	8.5	12.3	15.9	7.4
Outsourced total output (tonnes in thousands)	68.4	55.3	64.8	39.6
Outsourced percentage (%)	21.7	16.4	15.1	14.3

Note:

(1) Includes our production output and outsourced parts and components.

RESEARCH AND DEVELOPMENT

Overview

We are strongly committed to continuously enhancing our research and development capabilities, which we believe will allow us to build on our industry-leading position. According to Heading Century Consulting, we are a market leader with respect to research and development in the hydraulic roof support industry and have continued to diversify our product offerings in an efficient and cost-effective manner by improving our existing product portfolio while developing new coal mining and excavating equipment. As of the Latest Practicable Date, we had a research and development team of 480 members including three professor level senior engineers, 65 senior engineers, 166 engineers and 303 professional technicians. Among our research and development staff, 147 members held masters degrees and above and two member were awarded the special expert allowance by the State Council for his expertise and contributions to the industry. Our research and development team is led by our Deputy General Manager and Chief Engineer, Mr. Gao Youjin, who has worked in various capacities with the Group since 1985. Mr. Gao has approximately 27 years of experience in research and development in the coal mining equipment industry. In addition to his participation in many landmark research and development projects of hydraulic roof supports within the Group, Mr. Gao is also a professor-level senior engineer, and holds a doctoral degree in science from Huazhong University of Science and Technology. See "Directors, Supervisors and Senior Management — Senior Management."

During the Track Record Period, our total expenditures for research and development were RMB148.2 million, RMB206.8 million, RMB258.1 million and RMB89.4 million for the years ended December 31, 2009, 2010 and 2011 and the six months ended June 30, 2012, respectively. These total research and development expenditures consist of the aggregate costs that we incur for the design and production of prototype coal mining and excavating equipment, which are accounted for and include: (i) cost of sales when the prototype equipment is sold to our customers; (ii) inventories before the prototype

equipment is sold; or (iii) administrative expenses when expenses are incurred for the improvement of manufacturing processes, internal research and development programs or other related measures (including the payment of our patent registration fees). See "Financial Information — Description of Selected Items of Our Statements of Comprehensive Income — Cost of Sales" and "Financial Information — Description of Selected Items of Our Statements of Comprehensive Income — Administrative Expenses."

Product Development

We have developed several landmark products such as the first hydraulic roof support and first high-end hydraulic roof support in the PRC and the world's first top coal caving hydraulic roof support. In addition, we developed the ZY10800/28/63D hydraulic roof support which had the world's industry-best roof support height of 6.3 meters at the time. We subsequently surpassed this achievement by introducing new models of hydraulic roof supports in 2009 and 2010, both of which had an industry-best support height of 7.0 meters at the time. We believe these and our other products have influenced the PRC coal mining industry and made us the industry leader in manufacturing hydraulic roof supports. Our primary hydraulic roof supports include, among others, the following:

Hydraulic Roof Support	Specifications	Year	Classification
Large mining height hydraulic roof support	ZY10800/28/63D hydraulic roof support, with a support height of 2.8 meters to 6.3 meters.	2006	High-end
	ZY16800/32/70D hydraulic roof support and ZY18000/32/70D hydraulic roof support, each with a support height of 3.2 meters to 7.0 meters.	2009/2010	High-end
Deep incline hydraulic roof support	ZF3600/16/28 hydraulic roof support, with a support height of 1.6 meters to 2.8 meters and a coal seam dip of 45º.	2002	Medium-end
	ZZ6500/22/48 hydraulic roof support, with a support height of 2.2 meters to 4.8 meters and a coal seam dip of 55º.	2011	Medium-end
	ZF5200/17/28 hydraulic roof support, with a support height of 1.7 meters to 2.8 meters and a coal seam dip of 60º.	2011	Medium-end

Hydraulic Roof Support	Specifications	Year	Classification
Top coal caving hydraulic roof support	ZF6200/18/35 lower top coal caving hydraulic roof support, with a support height of 1.8 meters to 3.5 meters.	2002	Medium-end
	ZF15000/27.5/42 lower top coal caving hydraulic roof support, with a support height of 2.8 meters to 4.2 meters.	2009	High-end
Hydraulic roof support for thin coal seams	ZZ5200/08/18 hydraulic roof support, with a support height of 0.8 meters to 1.8 meters.	2006	Medium-end
	ZY4000/7.5/17 hydraulic roof support, with a support height of 0.75 meters to 1.7 meters.	2011	Medium-end
Hydraulic roof support for "three soft" coal seams	ZY3300/15/33 hydraulic roof support, with a support height of 1.5 meters to 3.3 meters.	2002	Medium-end
	ZF2800/15/24 hydraulic roof support, with a support height of 1.5 meters to 2.4 meters.	2004	Medium-end
Hydraulic roof support for sub-vertical dipping coal seams	ZFQ3600/16/28 hydraulic roof support, with a support height of 1.6 meters to 2.8 meters.	2003	Medium-end
	ZY4800/16.5/37 hydraulic roof support, with a support height of 1.65 meters to 3.7 meters.	2005	Medium-end

Research Capabilities and Facilities

Our research and development efforts focus on analyzing data such as those related to the topography of the mining site, geologic rock formations, conditions of the coal seam, thickness of the mining wall and other geologic conditions to design customized products for customers and enhance the overall productivity of our coal mining and excavating equipment. We focus on enhancing the automation and mechanization of our product manufacturing processes and developing parts and components that can be easily integrated into complete underground coal mining systems.

We have a leading research and development institution in the industry, with our in-house research capabilities dating back to the 1980s. Within the hydraulic roof support industry in the PRC, we are the only enterprise with a state-level technical research and development center, the State-Accredited Enterprise Technology Center of the PRC. This technology center includes departments and institutes for technology development, standardization, design research and technical collaboration and introduction, as well as a specific research and development center dedicated to the research and development of electronic hydraulic control systems. We have also established a post-doctoral research workshop and a workshop for research fellows of both the Chinese Academy of Sciences and the Chinese Academy of Engineering to further enhance our comprehensive research and development capabilities.

We implement a number of computer-aided design and process planning softwares, such as CAD/CAE and CAPP. As part of our CAD system, we use Pro/Engineer software to facilitate our three-dimensional computer design. To enhance our efficient manufacturing processes and our research and development capability, we also implement the internal "Collaborative Management Software System for Standardized Design and Documents", a centrally-managed secure content-sharing and resource retrieval system to search and utilize technical data and designs and administrative files.

In line with our international expansion plans, our research and development team is developing products for the overseas market that meet international coal mining and related local standards. We are also enhancing our manufacturing processes so that they meet or exceed international quality control standards. In addition, we plan to establish research and development facilities in Germany and the United States in the future. We believe these efforts will enable us to build on our industry-leading research and development team, improve our technology, expand our product portfolio, streamline our manufacturing process and compete successfully in a number of international markets.

Cooperation with Third Parties

We cooperate with major academic institutions, steel companies, robotic welding companies and coal producers from the PRC and Germany to improve research and development capabilities. The following table sets forth our selected external cooperative efforts for research and development as of the Latest Practicable Date:

Entity(ies)	Scope of Cooperation	Year of Commencement	Ownership of Intellectual Property Rights
Pangang Group Chengdu Steel & Vanadium Co., Ltd. ("Pangang")	Research and development of advanced seamless steel pipes.	2008	Jointly owned by our Group and Pangang
TKRS.....	Application of multi-stage, robotic welding systems.	2008	TKRS
Harbin Welding Institute	Development of welding techniques in relation to 1,100MPa high strength steel.	2010	Our Group
CLOOS	Application of multi-stage, robotic welding systems.	2010	CLOOS

Entity(ies)	Scope of Cooperation	Year of Commencement	Ownership of Intellectual Property Rights
China University of Mining and Technology.....	Research on the safety techniques for the working faces of super large mining height hydraulic roof supports.	2011	Our Group
Huazhong University of Science and Technology	Research on the test-bed of large flow hydraulic roof components. Research on the reliability and durability of super large mining height hydraulic roof supports.	2011	Our Group
Shandong University of Science and Technology	Research on the correlation of the hydraulic roof support and surrounding rocks.	2011	Our Group
Shanxi Lu'an Mining (Group) Co., Ltd.....	Development of large mining height hydraulic roof supports.	2011	Our Group

CUSTOMERS

We have established a stable customer base in the PRC. Our domestic customer base primarily consists of coal producers, including leading coal mining enterprises, such as Shenhua Group, Huainan Mining, Henan Coal and Chemistry Industry, Yitai Coal and Datong Coal, and coal mining enterprises under major power generation enterprises in the PRC. In addition, we have entered into strategic alliance agreements with selected major coal mining enterprises in the PRC. Our strategic alliance agreements, which are legally binding, generally do not have fixed terms. Such agreements enable us to access our major customers and cooperate with them in developing new technologies and products and prioritizing our provision of coal mining and excavating equipment and related aftermarket services. Under such agreements, we are obligated to supply our products to such major customers at favorable prices on a priority basis. If we sell our products to third-party customers at more favorable prices with other terms being the same, we could be subject to liabilities under such agreements. We generally do not have fixed purchase commitments from our customers. Most of our domestic customers are located in Shanxi, Shaanxi, Anhui, Henan, Shandong, Guizhou, Hebei, Heilongjiang, Jilin, Liaoning and Gansu Provinces, as well as Inner Mongolia, Ningxia and Xinjiang Autonomous Regions. During the Track Record Period, approximately 97% of our customers were based in the PRC.

We are expanding into the international markets and have international customers located in Russia, Turkey and India. These customers include mining companies such as Russia Stark, Russia Belon, Yuzhkuzbassugol and Turkish Coal, all of which are engaged in coal mining operations. For the years ended December 31, 2009, 2010 and 2011 and the six months ended June 30, 2011 and 2012, our revenues from the international markets represented 0.3%, 1.3%, 2.6%, 3.2% and 5.9%, respectively, of our total revenues. We plan to enter additional international markets, including coal-rich countries and countries with mining operations that utilize longwall mining techniques, such as the United States, Australia, Vietnam, Mexico, Colombia, South Africa, Brazil, Ukraine and Kazakhstan. Going forward, we expect our international sales to increase and comprise a larger portion of our total revenue.

Our sales to our largest customer accounted for 20.9%, 8.6%, 16.5% and 11.1% of our total revenue for the years ended December 31, 2009, 2010 and 2011 and the six months ended June 30, 2012, respectively. Sales to our five largest customers collectively accounted for 40.6%, 23.3%, 35.7% and 29.6% of our total revenue for the years ended December 31, 2009, 2010 and 2011 and the six months ended June 30, 2012, respectively.

The following table sets forth our revenue by geographic location for the periods indicated.

	Year Ended December 31,			Six Months Ended June 30,	
Location	**2009**	**2010**	**2011**	**2011**	**2012**
			(RMB in millions)		
				(unaudited)	
Domestic	4,977.4	6,274.6	7,851.9	3,472.9	4,443.2
International[(1)]	17.0	83.7	208.2	113.4	280.4
Total	4,994.4	6,358.3	8,060.1	3,586.3	4,723.6

Note:

(1) Primarily includes revenue from customers located in Russia.

During the Track Record Period, our top five customers included Henan Coal and Chemistry Industry and a subsidiary of Yongcheng Coal & Electricity. Our Controlling Shareholder, Henan SASAC, directly and/or indirectly controls the shareholding interest in them. Save as disclosed, and to the best knowledge of our Directors, none of our Directors, Supervisors, their respective Associates or shareholders of our Company holding more than 5% of our issued share capital had any interest in any of our top five customers as of the Latest Practicable Date.

AWARDS AND RECOGNITIONS

In recognition of our products, services and business, we have received several significant awards since our incorporation. These following table sets forth the major awards and certifications that we have received in recent years.

Year of Grant	Award/Award/Recognition	Awarding Body
Comprehensive Capabilities		
2010	MECHPOST 500 CHINA	China Machinery Enterprise Management Association
2010	National Innovative Enterprise	MOST, SASAC and All-China Federation of Trade Unions
2009	Special Contribution Prize to the Industrial Sector of Henan Province	The Industrial Economy Association of Henan Province and the Organizing Committee of Special Contribution Prize to the Industry of Henan Province
Brand		
2010	ZMJ branded hydraulic roof supports receive the title of "Well-Known Brand Products of Henan Province"	Henan Provincial Well-known Brand Strategic Promotion Committee
Product Quality		
2010	Zhengzhou Mayor's Quality Prize	Zhengzhou Municipal Government
2009	ISO9001:2008 certification for our quality management systems	China National Accreditation Service for Conformity Assessment and International Accreditation Forum
Research and Development		
2011	Outstanding Execution Team for the "Eleventh Five-Year" National Technology Plan	MOST
2010	First Prize for Science and Technology Advancement for research on electronic hydraulic control systems	Zhengzhou Municipal Government

Year of Grant	Award/Award/Recognition	Awarding Body
2009	First Prize for Science and Technology Advancement for research on our hydraulic roof support with a support height of 6.3 meters	Henan Provincial Government
2009	Workshop for research fellows of both Chinese Academy of Sciences and Chinese Academy of Engineering	Zhengzhou Municipal Government
2008	Certification of ZMJ's post-doctoral research facility as a Post-doctoral Research Center	Ministry of Human Resources and Social Security of the PRC and National Post-doctoral Management Committee
2008	National High-tech Enterprise	Department of Science & Technology of Henan Province, Finance Department of Henan Province, Henan Provincial Office SAT and Henan Local Tax Bureau
2007	Henan Provincial Engineering & Technical Research Center for Coal Mine Support Equipment	Department of Science & Technology of Henan Province
2007	Certification of ZMJ's technology center as a State-Accredited Enterprise Technology Center	NDRC, MOST, MOF, GAC and SAT
2007	First Prize for Science and Technology Advancement for our hydraulic roof support with a support height of 6.2 meters	China National Coal Association and China Coal Society

SALES AND MARKETING

Sales and Services Channels

Our entire senior management team is involved in the sales process and is responsible for maintaining relationships with the management of our major customers, especially large state-owned enterprises. Our sales headquarters in Zhengzhou is responsible for managing our sales and service network and overall planning for, and coordination of, the sales and marketing activities of our sales offices in the PRC and our overseas sales agents.

At the initial sales stage, we conduct proactive and constructive pre-sales marketing activities that include market research, product introduction and technical advisory services. Due to the customized nature of our products and the varied conditions of our customers' mining operations, we believe it is critical for us to understand and respond to the needs of our customers. As such, our dedicated team is well-trained and experienced in providing personalized pre-sales advisory services to our potential customers so that we may better understand their needs and provide cost-effective and customized products. In addition, our sales services also include on-site installation, testing and adjustment of our products and technical and operational training for our customers' operating staff.

We sell our hydraulic roof supports and other coal mining and excavating equipment primarily to coal mining enterprises which are the end users of our products in the PRC and overseas countries through bidding and direct ordering. The following table sets forth the percentages of orders obtained through bidding and direct ordering processes for the periods indicated:

	Year Ended December 31,			Six Months Ended June 30,	
	2009	2010	2011	2011	2012
Bidding	63.4%	57.5%	54.9%	55.4%	63.8%
Direct Ordering	36.6%	42.5%	45.1%	44.6%	36.2%
Total	100.0%	100.0%	100.0%	100.0%	100.0%

The method of purchase is a purely commercial decision of each individual customer and customers determine whether to purchase coal mining and executing equipment through bidding or direct ordering on a case-by-case basis. Therefore, there is no particular purchasing pattern with respect to our particular customer in this regard. The sales orders obtained through bidding processes are not recurring in nature. See "Risk Factors — Risks Relating to Our Business and Operations — Our revenue may vary from period to period due to fluctuations in customer purchase orders." However, with our industry reputation, advanced technology and high quality products, we have been able to secure winning bids in the public bidding processes involving our major customers. The percentage of sales obtained through direct ordering processes increased from 36.6% in 2009 to 42.5% in 2010 and further to 45.1% in 2011. The percentage of sales obtained through direct ordering processes decreased from 44.6% for the six months ended June 30, 2011 to 36.2% for the six months ended June 30, 2012, primarily as a result of our increased international sales. Due to the uncertainty associated with the results of the public bidding processes, we have enhanced our marketing efforts to sell our products to our repeat customers through direct ordering rather than public bidding. As we continue to expand our sales and service network and enhance our technology and product quality, we expect our sales through direct ordering processes will increase in the future. The use of either the bidding or direct ordering by our customers to purchase our products does not affect our business or results of operations.

We rely on direct sales to our customers in the PRC. For our international sales, we also enter into sales contracts directly with customers but engage agents to assist us in sales in major export markets such as Russia, Turkey, the United States and India. Pursuant to our agency agreements, our overseas sales agents advise us on sales strategy, assist us in collecting overseas market information and preparing proposals and act as a liaison between our existing and prospective customers and us in their respective markets. For our international sales, we provide products that meet the local industry standards and customers' specifications. The sales prices of our products in a particular overseas market are generally determined based on such local factors as market competition, technical requirements and the cost of production. Our domestic sales prices and international sales prices include transportation expenses and related charges.

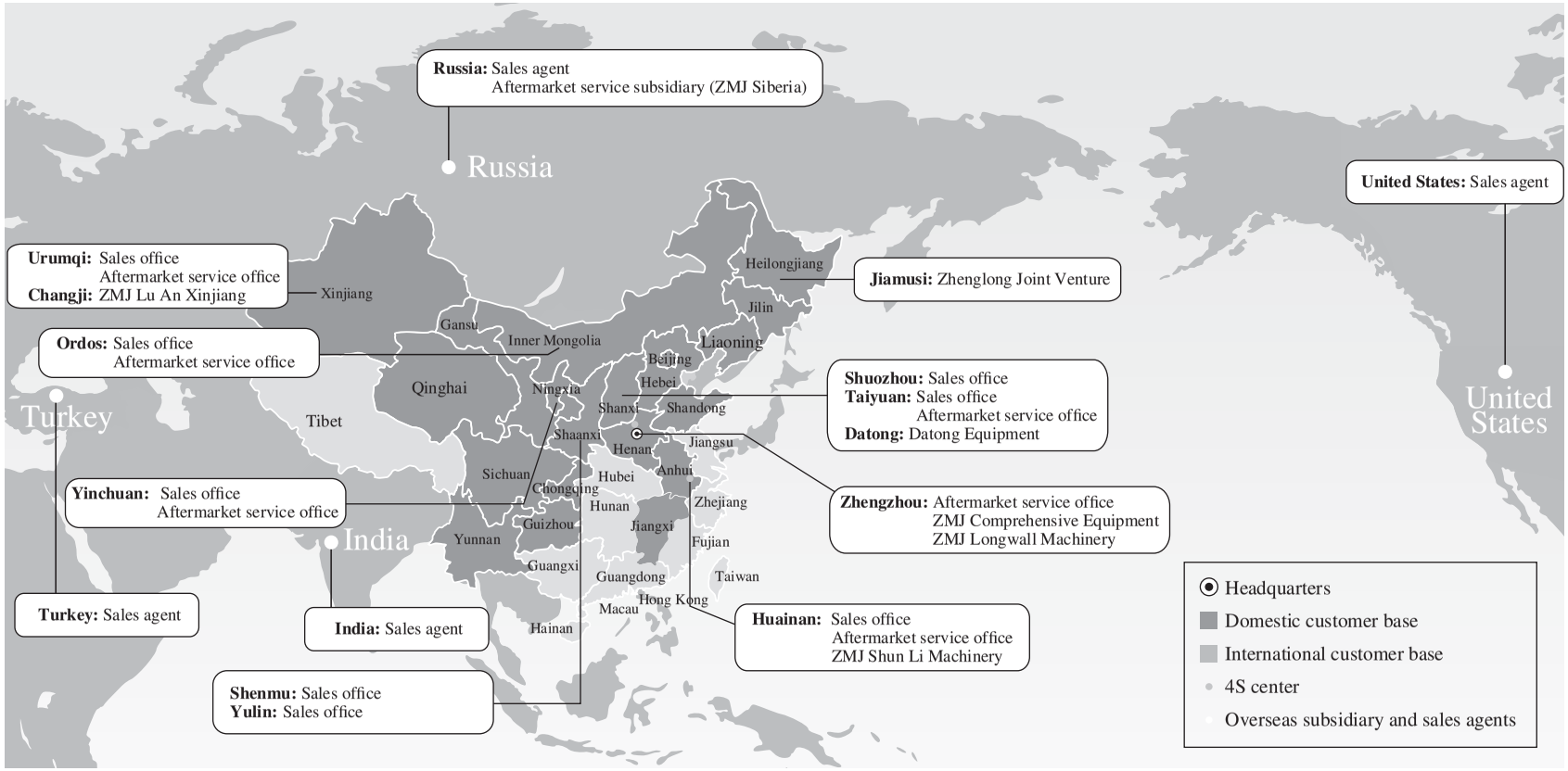
The following table sets forth our revenue by sales channel for the periods indicated:

	Year Ended December 31,						Six Months Ended June 30,			
	2009		2010		2011		2011		2012	
	Revenue	%	Revenue	%	Revenue	%	Revenue	%	Revenue	%
	(RMB in millions, except for %)									
							(Unaudited)			
Direct sales	4,977.4	99.7%	6,274.6	98.7%	7,851.9	97.4%	3,472.9	96.8%	4,443.2	94.1%
Sales agents	17.0	0.3%	83.7	1.3%	208.2	2.6%	113.4	3.2%	280.4	5.9%
Total	4,994.4	100.0%	6,358.3	100.0%	8,060.1	100.0%	3,586.3	100.0%	4,723.6	100.0%

Sales Network

As of the Latest Practicable Date, the Company had eight domestic sales offices located in Ordos, Inner Mongolia Autonomous Region, Yulin and Shenmu, Shaanxi Province, Taiyuan and Shuozhou, Shanxi Province, Huainan, Anhui Province, Urumqi, Xinjiang Autonomous Region and Yinchuan, Ningxia Autonomous Region to facilitate our sales and marketing in these regions. As of the Latest Practicable Date, we had a sales and marketing team of 178 members. In addition, as of the Latest Practicable Date, we had four overseas sales agents located in Russia, India, Turkey and the United States assisting us in collecting overseas market information and promoting our products. Our overseas sales agents also act as a liaison between our Company and existing and prospective customers in their respective markets.

The following map shows the coverage of our sales and service network and the service networks of our joint ventures and ZMJ Suda as of the Latest Practicable Date:



Note: Our associate, ZMJ Suda, owns and operates the aftermarket service offices and 4S centers as a sub-contractor of the Company for the provision of aftermarket services in respect of the hydraulic roof supports sold by the Company during the warranty periods of such products. See "— Sales and Marketing — Aftermarket Services."

Sales Cycle

Our sales cycle may vary significantly from product to product, generally ranging from four to six months, and primarily consists of the following stages:

- ***Identifying potential orders and pre-sales services.*** Our customers generally purchase coal mining and excavating equipment through either bidding or direct ordering processes. The bidding process generally begins with a potential customer publishing a public notice requesting from various manufacturers, or notifying us directly of, the product to be procured and its technical requirements. We will then prepare and submit both the technical bid and commercial bid in accordance with these product requirements, which together with other manufacturers' bids will be evaluated by the customer. The customer will then select the winning bid from a particular manufacturer. The direct ordering process generally begins with a potential customer liaising with us for a specified technical proposal. If our technical proposal is accepted by a customer, we will negotiate the principal terms of the sales contract with the potential customer. When required, we typically provide pre-sales services, which include on-site visits to understand the technical requirements and product introduction and technical advisory services. The potential customer may also visit our facility to further discuss our technical proposal or review our qualifications and capacity.

- ***Signing of sales contracts.*** If our bids are accepted or if the principal contract terms are agreed on, we generally enter into a sales contract with the customer.

- ***Production.*** Our production process generally consists of design, preparation, processing, assembly, testing and installation. When requested by the customer, we will procure certain parts and components from third-party manufacturers or outsource the production of non-critical parts and components.

- ***Delivery.*** We generally deliver our products to our customer's coal mine. Depending on the terms of our sales contract, we may arrange shipment by truck or rail to the customer's designated destination.

Material Sales Contracts

The material terms of our material sales contracts, all of which are for the sales of high-end hydraulic roof supports, are set forth below:

- ***Duration.*** Consistent with industry practice, we generally do not enter into long-term sales contracts with our customers. The sales contracts for the majority of our products typically have delivery terms ranging from four to six months after execution of the sales contracts. From time to time, we may be requested to deliver our products in accordance with our customers' accelerated or delayed project schedules.

- ***Pricing.*** High-end hydraulic roof supports are typically priced on a per unit basis. However, if the actual product weight deviates from the design product weight, we may price our hydraulic roof supports on a per tonne basis according to our customers' requirements. In comparison, our medium-end hydraulic roof supports are typically priced on a per tonne basis, which is consistent with industry practice. We set the price of our hydraulic roof supports based on a

variety of factors, including customer specifications, cost and type of raw materials (in particular, steel, parts and components) to be used, domestic and international competition and other market factors. When determining the contribution of raw materials costs to the overall contract price, we refer to the spot market prices of the raw materials and our expectation of future price trends. Due to our strong research and development capabilities and our advanced production processes, the prices of our high quality products are generally higher than those of our competitors. However, to remain competitive, we also take into account market factors and our relationship with our customer in setting the prices of our products. Our domestic sales prices and international sales prices include transportation expenses and related charges.

- ***Payment and Credit Terms.*** We generally require our customers to make installment payments based on certain production or delivery milestones. The following table sets forth our standard payment schedule:

Timeline	Percentage of Installment	Description of Accounting Treatment
At the signing of the sales contract	30% of the total contract price	We receive advances from customers in the amount of 30% of the contract price.
Before volume production or delivery	30% of the total contract price	We receive accumulated advances from customers in the amount of 60% of the contract price.
Upon completion of installation of our products on our customers' mining sites (normally two months after delivery)	nil	We recognize revenue in its entirety and record trade receivables in the amount of 40% of the contract price.
Upon expiration of the credit period granted to customers (normally 90 days after completion of installation of our products in the case of our third party customers)	30% of the total contract price	We settle trade receivables in the amount of 30% of the contract price.
Upon expiration of warranty period (typically one year after commencement of operation of our products)	10% of the total contract price	We receive the trade receivable in the amount of 10% of the contract price.

However, as we seek to develop long-term relationships with our customers, we attempt to accommodate our customers' requests and, as such, the payment schedule of our sales contracts may vary on a case-by-case basis. For long-term and/or large customers with positive credit profiles, or selected customers with whom we intend to develop long-term relationships, we may reduce the percentage of the initial installment or extend their payment terms. Due to our strong bargaining power, which arises from our strong research and development capabilities and efficient production processes, our customers generally seek to develop long-term relationships with us and hence provide significant prepayments up-front. In addition, consistent with international practice, our international customers may provide

prepayment of up to 90% of the contract price before delivery of our products. Payments by our domestic and international customers are typically settled in RMB and US$ or Euro, respectively, and generally via wire transfer or banknotes. We generally allow an average credit period of 90 days to our customers. In the case of our related party customers, the credit period is normally shorter than 90 days. The credit period provided to our customers can vary significantly based on a number of factors, including our relationship with the customer, the customer's credit profile and payment history, total contract value and market conditions. We regularly review the status of our accounts receivables to determine their recoverability and the adequacy of our provisions for accounts receivables.

- ***Warranties.*** Our warranty policies are aligned with our strategy of engaging the customers at every stage of the coal mining supply chain. Our warranty period varies with the products and the parts and components of the products and is typically a period of one year after the commencement of operation of our products. In certain cases, the warranty period may be up to 18 or 24 months after delivery and acceptance of our products at our customers' mining sites. We typically allow our customer to withhold up to 10% of the total contract price until the expiration of the warranty period provided in our sales contract. After the expiration of the warranty period, we are generally able to collect in full all such amounts withheld by our customers, although we have experienced delays in such payments from time to time. If our hydraulic roof supports and other coal mining equipment products do not meet the quality standards set forth in the sales contract, we are contractually obligated to replace or repair such hydraulic roof supports and other mining equipment products at our expenses within the warranty period until our products meet the relevant product quality tests. Following the expiration of the warranty period, we provide maintenance and overhaul services and supply parts to our customers for fees. During the Track Record Period, we did not experience any product returns or recalls as a result of product defects, except for certain warranty claims from our customers, which we confirm were not material to our business, results of operations and financial condition. Because these warranty claims were immaterial, we did not record during the Track Record Period, and will not record in the future, any provisions for these warranty claims.

Aftermarket Services

We offer a complete range of aftermarket services including products testing and adjustment upon delivery to the customers' mines, installation guidance and monthly routine inspection on our customers' coal mines as well as general troubleshooting, refurbishing and overhaul and spare and replacement parts supply. In addition, we also provide training to the operating staff of our customers in relation to operation and maintenance of equipment. We provide aftermarket services in the PRC through a three-tier system: (i) the Company establishes joint ventures with our selected strategic customers to manufacture coal mining and excavating equipment and provide aftermarket services to such customers; (ii) certain of our subsidiaries provide aftermarket services for their products such as hydraulic roof supports and armored-face conveyors through their own sales and service networks; and (iii) the Company engages our associate, ZMJ Suda, as a sub-contractor of the Company, to provide comprehensive aftermarket services in respect of hydraulic roof supports sold by the Company within the warranty periods of such products. We also provide aftermarket services in the overseas market.

We intend to expand our aftermarket services to capture the significant growth potential of the coal mining and excavating equipment aftermarket services and spare parts sales markets in the PRC. See "Industry Overview — Coal Mining at Excavating Equipment industry Overview — Overview of the Coal Mining and Excavating Equipment Industry of the PRC — Development Trends of the PRC Coal Mining and Excavating Equipment Industry — Upgrades, Replacement and Aftermarket Services" and "— Our Products and Businesses — Spare Parts."

Joint Ventures with Selected Strategic Customers

- In November 2009, we acquired 44.00% and 10.00% of the equity interest in Lu Xin Coal Mine (Group) Machinery Manufacturing Company from Lu Xin Coal Chemical and Shanxi Lu An Machinery Company, respectively, and changed the company's name to ZMJ Lu An Xinjiang. We and Lu Xin Coal Chemical currently hold 54.00% and 40.00%, respectively, of the equity interest in ZMJ Lu An Xinjiang. The remaining 6.00% of the equity interest is held by seven individuals, including two directors of ZMJ Lu An Xinjiang. ZMJ Lu An Xinjiang focuses on manufacturing hydraulic roof supports and coal mining equipment components and providing maintenance and overhaul services to Lu Xin Coal Chemical and other coal mining companies in the region.

- In October 2010, we acquired approximately 44.94% of the equity interest in ZMJ Shun Li Machinery from Anhui Guoyuan Trust Co., Ltd. Following a share capital increase of ZMJ Shun Li Machinery in November 2011, we and Huainan Mining currently hold approximately 57.97% and 37.40%, respectively, of the equity interest in ZMJ Shun Li Machinery. The remaining approximately 4.63% of the equity interest is held by nine individuals, including a director of ZMJ Shun Li Machinery. ZMJ Shun Li Machinery focuses on providing coal mining equipment and related aftermarket services to Huainan Mining and other coal mining companies in the region.

- In April 2011, we established Datong Equipment as a joint venture with Datong Coal and Shanxi Pingyang Industry Machinery Co., Ltd. ("Shanxi Industry"), in which Datong Coal, Shanxi Industry and we currently hold 44.00%, 20.00% and 31.00%, respectively, of the equity interest. The remaining 5.00% of the equity interest is held by a director of Datong Equipment. Datong Equipment focuses on providing coal mining equipment and related aftermarket services to Datong Coal.

- In July 2012, we established the Zhenglong Joint Venture as a joint venture with Longmay Group, in which Longmay Group and we currently each hold 47.50% of the equity interest. The remaining 5.00% of the equity interest is held by six individuals who are directors and senior management members of the Zhenglong Joint Venture. Zhenglong Joint Venture focuses on providing coal mining equipment and related aftermarket services to Longmay Group. Zhenglong Joint Venture is expected to commence production by the end of 2014 and is expected to have an expected initial annual production capacity of approximately 4,500 units of hydraulic roof supports and 15,000 tonnes of armored-face conveyors. In addition, Longmay Group will purchase hydraulic roof supports exclusively from the Zhenglong Joint Venture and armored-face conveyors from Zhenglong Joint Venture on a priority basis. If Zhenglong Joint Venture is not able to manufacture such hydraulic roof supports for any reason, Longmay Group will purchase hydraulic roof supports on a priority basis from our Company.

We plan to continue to enter into similar arrangements to efficiently penetrate the coal mining and excavating equipment aftermarket services market in the PRC. See "— Our Business Strategies — Expand the coverage and customer base of our aftermarket services based on the 4S centers service model and through the establishment of joint ventures with our major customers."

Our Subsidiaries

Our subsidiaries, ZMJ Comprehensive Equipment and ZMJ Longwall Machinery, also provide aftermarket services for hydraulic roof supports and armored-face conveyors, respectively, through their own service networks in the PRC.

ZMJ Suda

In July 2009, we established our associate, ZMJ Suda, with certain Independent Third Parties, to provide comprehensive aftermarket services. See "History, Development and Corporate Structure — History and Development — Establishment of ZMJ Suda in 2009." Following its establishment, we entered into an outsourcing agreement with ZMJ Suda for an unlimited duration, pursuant to which ZMJ Suda agrees to provide aftermarket services to our PRC customers within the warranty periods of the hydraulic roof supports that we sell. In return, ZMJ Suda is allowed to provide original spare parts that we manufacture, or it sources from specified suppliers to our customers. We sell spare parts to ZMJ Suda based on purchase orders at market prices. ZMJ Suda generally sells the spare parts sourced from us and provide value-added services to our customers through its 4S centers and aftermarket services network. Our headquarters in Zhengzhou assists ZMJ Suda in improving its domestic aftermarket services through monthly evaluation and customer surveys, as well as providing technical support and comprehensive repair and overhaul services to customers that receive such services, most of which have previously purchased our hydraulic roof supports.

To deliver aftermarket services in a timely manner, ZMJ Suda has also established a national service network with six aftermarket services offices nationwide and two 4S centers in the key coal mining regions across the PRC. ZMJ Suda has an experienced aftermarket services team that is on call 24 hours a day, seven days a week, and is required to respond to customers' requests within one hour or undertake inspections of our customers' mining sites within four to 48 hours, depending on the locations of the mine sites.

Overseas Aftermarket Services

We established a wholly-owned subsidiary, ZMJ Siberia in Russia in June 2011 to facilitate our provision of aftermarket services in Russia. ZMJ Siberia enables us to respond to our customers' requests and inspect their mining sites in Russia within four to 48 hours after receiving such requests. Our headquarters routinely assigns aftermarket services engineers to provide on-site technical support and various aftermarket services, including product testing and general troubleshooting after delivery of our products to our customers in Russia. We also assign coal mining experts to provide on-site coal mining technology training to the operating staff of our customers. We have engaged a third party agent to provide aftermarket services in the United States once we begin to sell our products in the United States. In addition, we plan to assign aftermarket services engineers to work on-site during the warranty periods of our products and establish local warehouse systems for the provision of spare parts in Turkey and India.

4S Centers

To supplement the sales and service network of the Company, ZMJ Suda currently operates two 4S centers located in Zhengzhou and Huainan, respectively. ZMJ Suda is also in the process of establishing four additional 4S centers in Yinchuan, Ordos, Shuozhou and Lvliang. These 4S centers are sales and service platforms that offer comprehensive aftermarket services, including: (i) maintenance and overhaul services; (ii) spare parts and components provision; (iii) technical support; and (iv) customer feedback surveys. We plan to expand our sales network through establishing overseas sales offices, manufacturing facilities and 4S centers.

RAW MATERIALS, SUPPLIERS AND INVENTORY

Steel, hydraulic parts and other ancillary materials are the main raw materials for our coal mining and excavating equipment manufacturing operations.

Raw Materials and Suppliers

Steel, which accounts for the largest portion of our purchased raw materials, is mainly purchased directly from steel producers. Cost of steel constituted 45.9%, 51.1%, 58.1%, 57.1% and 59.8% of our total cost of sales for the years ended December 31, 2009, 2010 and 2011 and the six months ended June 30, 2011 and 2012, respectively. Medium and thick plate (20mm) steel and other steel products of higher thickness account for a large portion of our annual steel purchase volume as we require such steel plates to ensure the structural strength, durability and support heights of our hydraulic roof supports. According to the China Iron & Steel Association, the domestic steel price of medium and thick plate (20mm) fluctuated between RMB3,311 and RMB4,928 per tonne from January 1, 2009 to June 30, 2012, and the average price of domestic medium and thick plate (20mm) in the PRC was RMB3,572 per tonne, RMB4,297 per tonne, RMB4,841 per tonne and RMB4,292 per tonne for the years ended December 31, 2009, 2010 and 2011 and the six months ended June 30, 2012, respectively. Although the price of steel fluctuated during the Track Record Period, we were able to minimize the impact of market fluctuations by adjusting our production process and procurement policies to secure a continuous supply of steel and other raw materials at competitive prices.

We have also generally maintained long-term, stable relationships with our steel suppliers to ensure timely delivery and quality of steel supply and control our procurement costs. As of the Latest Practicable Date, we had entered into a strategic alliance agreement with Anyang Steel and separate long-term supply contracts with Anyang Steel and Bengang Steel. We entered into these contracts to procure high quality steel at favorable prices, which allows us to mitigate the impact of steel price fluctuations. Our strategic alliance agreement with Anyang Steel is for a term of three years and is legally binding on both parties. Under this agreement, Anyang Steel is obligated to supply steel products to us on a priority basis at favorable prices. Each of our long-term supply contracts with Anyang Steel and Bengang Steel is for a term of one year and is legally binding on both parties. Our long-term supply contracts with Anyang Steel and Bengang Steel operate as framework contracts, pursuant to which we and our suppliers agree to enter into separate monthly purchase contracts in the month before delivery. Such monthly purchase contracts confirm, among other things, the prices and volumes of the products to be supplied, product specifications and time of delivery. The prices under these monthly purchase orders are determined by reference to the monthly offer prices of a number of major steel suppliers and we generally purchase steel materials at favorable offer prices of, or obtain rebates from, these suppliers if our purchase volumes reach certain monthly and annual thresholds stipulated in the long-term supply contracts. We are also

entitled to additional discounts if we purchase certain specified high quality steel products. In addition, we have entered into technology development agreements with selected steel producers to develop special steel materials for our products.

Currently, we are able to produce most of the parts and components of our hydraulic roof supports in-house. However, from time to time, pursuant to our customers' request, we may procure certain parts and components, such as electronic hydraulic control systems and hydraulic valves, and other ancillary materials such as hoses and hydraulic seals, from customer-specified international and domestic third-party manufacturers. We may also secure certain parts and components at market prices from various suppliers from time to time when such procurement complements our manufacturing schedules and product designs.

The energy we consume in manufacturing our products is primarily electricity and, to a lesser extent, diesel oil, coal, natural gas and industrial gases for metal cutting. We consume a significant amount of electricity transmitted by the Zhengzhou Power Supply Company, which is a major and reliable industrial enterprise in Zhengzhou. The water supplies used in our operations are sourced from public water utilities. We did not experience any material electricity or water shortages during the Track Record Period.

For the years ended December 31, 2009, 2010 and 2011 and the six months ended June 30, 2012, the purchases from our five largest suppliers, all of which are our steel suppliers, collectively accounted for 20.2%, 30.4%, 30.9% and 43.0%, respectively, of our total cost of sales, and the purchases from our largest supplier for the same periods accounted for 8.5%, 10.7%, 11.4% and 19.0%, respectively, of our total cost of sales. The percentage of purchases from our largest suppliers significantly increased from 2011 to the six months ended June 30, 2012, primarily as a result of our enhanced cooperation with Huainan Mining in the first quarter of 2012, which enabled us to efficiently procure steel products from a subsidiary of Huainan Mining through its comprehensive steel sourcing network. In line with our business expansion, we plan to continue seeking such business opportunities, which will enable us to strengthen our cooperation with other major suppliers.

Our Controlling Shareholder, Henan SASAC, is the controlling shareholder of one of our top five suppliers, Anyang Steel, during the Track Record Period. Save as disclosed, and to the best knowledge of our Directors, none of our Directors, Supervisors, their respective Associates or any shareholders of our Company holding more than 5% of our issued share capital had any interest in any of our top five suppliers as of the Latest Practicable Date.

Raw Materials Quality Control

Our raw materials supply department is mainly responsible for purchasing steel and other metal materials, parts and components. We evaluate and select our steel suppliers on a monthly basis and our selection process for suppliers of other raw materials is relatively flexible. Our raw materials supply department is responsible for organizing the evaluation and selection process. Typically, our raw materials supply department surveys and collects information on supplies from various raw materials suppliers to provide senior management with a raw materials procurement report on a monthly and annual basis. Based on our raw materials procurement report, our senior management responsible for procurement regularly examine the prices and quality of procured raw materials, and prepare a monthly procurement plan and an inventory management plan based on our production plans, customer orders and market factors.

Raw Materials Inventory Control

We procure and maintain a stock of steel and other parts and components used in our production to ensure timely delivery of our products. We also maintain this stock in anticipation of our customers' needs for aftermarket services during or beyond the warranty periods and to hedge against increased product orders. As a result, during the Track Record Period, we did not experience any material interruptions to our key raw materials supply. As an integrated part of our ERP system, we have established an early warning system for excessive steel materials inventories, through which we are able to monitor and manage our inventory levels based on our production volume and procurement cycles. In addition, we implement two management models, the consignment sale model and purchase-to-order model, with the aim of achieving zero inventory for parts, components and other ancillary materials used to produce our coal mining and excavating equipment.

COMPETITION

The coal mining equipment industry in the PRC is relatively fragmented but currently undergoing consolidation. According to CMIA, as of the Latest Practicable Date, there were over a hundred sizable PRC coal mining equipment manufacturers in the PRC, excluding a large number of small manufacturers, component producers and repair entities. We compete on the basis of performance, reliability, suitability and compatibility of our products with other longwall mining equipment as well as pricing, technology and the quality of aftermarket services. In the future, we expect manufacturers to compete on the basis of ability to provide complete coal mining system solutions. See "Risk Factors — Risks Relating to Our Industry — We operate in a highly competitive industry."

The table below sets forth our significant domestic and international competitors by product:

Product	Domestic Manufacturer	International Manufacturer
Hydraulic roof support systems	• ChinaCoal Beijing Coal Mining Machinery • Pingdingshan Coal Mine Machinery • Zhengzhou Siwei Mechanical & Electrical Equipment Manufacturing • Shanxi Pingyang Industry Machinery • Chongqing Dajiang Xinda Vehicle	• Caterpillar • Joy Global
Armored-face conveyors and related products	• ChinaCoal Zhangjiakou Coal Mining Machinery • Tiandi Science & Technology • Shanxi Coal Mine Machinery Manufacturing	• Caterpillar • Joy Global • KOPEX
Roadheaders and other coal excavating equipment	• SANY Heavy Equipment International • International Mining Machinery • Tiandi Science & Technology • ChinaCoal Shijiazhung Coal Mining Machinery	• Caterpillar • Joy Global

Our competitors may have better track records, longer operating history, larger operations, larger customer bases, more well-known brand names, stronger industry reputation and developed market profiles, more extensive sales network coverage or greater financial resources than we do. Some of our competitors may be publicly-listed companies on foreign stock exchanges and therefore, may have better access to financing from international capital markets than we do. Certain of our international competitors benefit from the familiarity of their home jurisdictions and developed customer relationships with international coal mining companies. Furthermore, our international competitors may also benefit from the perception that products of international manufacturers are better than PRC-manufactured products in terms of technology and quality. However, we believe we are narrowing the gap between our products and those offered by our international competitors in terms of technology and quality. In addition, we have implemented certain pricing strategies with respect to the international markets which provide us with certain competitive advantages. As such, we believe we are able to remain competitive on the basis of our reputation, strong research and development capabilities, high quality products and solid relationships with our customers.

INTELLECTUAL PROPERTY

Our intellectual property rights and know-how are critical to our business and we rely on patents and trademarks laws, as well as technology confidentiality agreements and non-competition agreements, to protect our intellectual property rights and know-how.

Patents

As of the Latest Practicable Date, we held 163 patents registered in the PRC, including 129 utility model patents, 13 innovation patents and 21 design patents. We believe the following selected patents are material to our business, operations and competitive position as the advanced technology and processes protected by these patents distinguish us from our competitors and allow us to design and manufacture high quality hydraulic roof supports and related coal mining equipment.

The following table sets forth our material patents registered in the PRC as of the Latest Practicable Date:

Patent	Registration Date	Expiry Date	Significance
Welding method for high strength low-alloy steel	December 19, 2006	December 18, 2026	This patented process enables us to improve certain welding techniques to produce stronger structural parts incorporated into our hydraulic roof supports to improve their reliability and enable our hydraulic roof supports to operate in harsh working environments.

Patent	Registration Date	Expiry Date	Significance
Electronic hydraulic control system of the hydraulic roof support on mining working face	November 22, 2011	November 21, 2031	This patent is a testament to our commitment to research and development, as we are one of the few manufacturers in the PRC able to mass produce electronic hydraulic control systems. The electronic hydraulic control system controls the automated operation of integrated coal mining and excavating systems, particularly the hydraulic roof supports, which are the key component to ensure safe and efficient coal mining operations.
Manufacturing method for the fuel tank of hydraulic cylinder	October 9, 2009	October 8, 2029	This patented method improves the manufacturing efficiency of fuel tanks while reducing hydraulic fuel leakage. The fuel tank is a key component of a hydraulic roof support as it allows the hydraulic roof support to reliably operate under harsh working environments.
Large mining height shield hydraulic roof support	December 16, 2008	December 15, 2018	This patented hydraulic roof support had the industry's largest support height and resistance at the time.
Three-level face guard of the hydraulic roof support	December 16, 2008	December 15, 2018	This patented three-level face guard is an important safety mechanism on a hydraulic roof support. This technology enables us to prevent rock fragments and other rib spalling debris that are separated from the working face from entering the working area, thus ensuring safer and more efficient mining operations.
Deep incline face-end and tunnel hydraulic roof support	June 5, 2009	June 4, 2029	The technology related to this patent enables us to improve the stability of a 30° to 55° deep incline mining working face, while resolving certain maintenance difficulties related to this type of equipment installation.

As of the Latest Practicable Date, we had been granted international patents from Rospatent, the agency for patents and trademarks of the Russian Federation, including:

Patent	Registration Date	Expiry Date	Significance
Two-leg lower shield top caving hydraulic roof support	August 10, 2007	August 9, 2027	Our shield top caving hydraulic roof support is an advanced hydraulic roof support that can be used in coal mining operations in Russia. The patent for this product will enable us to protect our intellectual property as we expand our sales and business operations in the Russian market.
Four-leg lower chock-shield top caving hydraulic roof support	August 10, 2007	August 9, 2027	Our four-leg lower chock-shield top caving hydraulic roof support is an advanced hydraulic roof support that can be used in coal mining operations in Russia. The patent for this product will enable us to protect our intellectual property as we expand our sales and business operations in the Russian market.

From time to time, to actively protect our intellectual property rights, we submit additional patent applications for products, technologies and processes that we have developed. As of the Latest Practicable Date, we had 218 patent applications that are pending approvals from the relevant intellectual property authorities in the PRC.

Trademarks

As of the Latest Practicable Date, we had registered 19 trademarks in the PRC, and believe the following trademarks are significant to our operations:

Trademark	Registrant	Registration Date	Expiry Date
	Our Company	September 21, 2006	September 20, 2016
郑煤机	Our Company	May 7, 2009	May 6, 2019
ZMJ	Our Company	May 7, 2009	May 6, 2019

As of the Latest Practicable Date, we had submitted applications for registration of the following trademarks in Hong Kong in classes 6, 7, 8, 9, 17, 35, 37, 40 and 42:

"  ", "郑煤机" and "ZMJ"

We were not a party to any material litigation or legal proceedings for the violation of intellectual property rights, nor are we aware of any violation of the same during the Track Record Period.

INSURANCE

We maintain property insurance for our manufacturing facilities located at our headquarters in Zhengzhou and for those of ZMJ Shun Li Machinery. As of the Latest Practicable Date, we had RMB1.7 billion of such insurance coverage for losses of and damages to our facilities and equipment of the Company and facilities, equipment and inventory of ZMJ Shun Li Machinery. We also carry pension, medical, unemployment insurance, occupational injury and maternity insurance for our employees in compliance with the relevant PRC laws and regulations.

Although we believe we maintain all necessary insurance coverage mandated under PRC law and in an amount consistent with what we believe to be industry practice, we have not obtained fire, liability and other property insurance for our property, equipment or inventory for most of our subsidiaries. In addition, consistent with what we consider the customary practice in the PRC, we do not carry any insurance for business interruption or loss of profit arising from accidents at any of our production facilities, or insurance for other disruptions of our operations, nor do we carry any product liability insurance for any of our products. Moreover, as of the Latest Practicable Date, we did not carry key-man insurance for our directors and senior management. Therefore, we are subject to risks associated with the scope of our insurance coverage. See "Risk Factors — Risks Relating to Our Business and Operations — Our insurance coverage may be insufficient to cover all risks of loss associated with our business operations."

We will continue to review and assess our risk portfolio and make necessary and appropriate adjustments to our insurance coverage in line with our needs and with industry practice in the PRC. We did not receive any material claims from our customers regarding any of our products during the Track Record Period. During the Track Record Period, we were not required under PRC laws to maintain, and we do not have plans to maintain after the Listing Date, general product liability insurance for any of our products.

OCCUPATIONAL HEALTH AND SAFETY

The PRC government imposes a number of regulatory requirements on occupational health and safety. See "Regulation — Principal Coal Mining Equipment Industry Laws and Regulations of the PRC — Occupational Safety." We regard occupational health and safety as one of our important social responsibilities and believe that adopting safe practices is the best way to ensure employee safety. We require each of our employees to undergo equipment operation and safety training, pass a test on safety operations and obtain an occupation certificate issued by the relevant authorities before such employee is permitted to handle specialized equipment such as pressure vessels, hoisting equipment and welding machines.

We also impose safety measures and conduct regular and random internal safety inspections at all stages of our operations in order to minimize the occurrence of work-related accidents and injuries. We provide various healthcare benefits and insurance to our employees in accordance with applicable laws and regulations. We have established safety standards in connection with various aspects of our operations such as purchasing, installation and operation of new manufacturing equipment, construction of new facilities and renovation of existing facilities. In addition, we post safety reminders throughout

our production facilities, require the use of protective gear in our workshops and conduct regular training sessions for employees on accident prevention and safe operation. We have also purchased advanced respiratory devices for our technicians working in welding workshops and offer them annual health examinations to prevent potential occupational diseases.

During the Track Record Period, we did not experience any material production accidents caused by individual error during our operations.

EMPLOYEES

As of December 31, 2009, 2010 and 2011 and June 30, 2012, we had 5,619, 7,968, 8,561 and 8,476 directly and indirectly-employed employees, respectively, based in the PRC and abroad. The majority of our employees are directly-employed full-time employees. When necessary, we source indirectly-employed employees from domestic staffing agencies for certain labor-intensive and semi-skilled job functions. As of December 31, 2009, 2010 and 2011 and June 30, 2012, we had 1,437, 1,988, 2,857 and 2,963 full-time, indirectly-employed employees, respectively. These indirectly-employed employee remain employees of the relevant domestic staffing agency.

The following table sets forth the relevant information with respect to our directly-employed employees and their roles with us as of June 30, 2012.

Department	Number of Employees	% of Total
Manufacturing	3,423	62.1
Technical (including R&D and IT)	787	14.3
Sales and marketing	178	3.2
Procurement	68	1.2
General and administrative	748	13.6
Finance	60	1.1
Others	249	4.5
Total	5,513	100.0

Our senior management team has adopted a lean management model to streamline our business and operations, which has improved the overall utilization rates and efficiencies of our human resources. As a result, we have gradually enhanced our staff morale, corporate culture and leadership skills, which we believe has improved our overall competitiveness.

To support our manufacturing operations, we have a well-trained and professional team of engineers, technicians and production staff, comprising 3,423 full-time, directly-employed employees as of June 30, 2012. Our production staff work closely with our research and development team and operations management to facilitate the manufacturing process and ensure the high quality of our products.

We are required under PRC law to make contributions to employee benefit plans in the amount equivalent to a fixed percentage of the salaries, bonuses and certain allowances of our employees. As of the Latest Practicable Date, our employees received pension insurance, medical insurance, occupational

injury insurance, unemployment insurance and maternity insurance in compliance with the relevant PRC laws and regulations. According to our PRC Legal Advisers, during the Track Record Period, we were in compliance with all applicable social security insurance laws and regulations in all material respects, and have made all required contributions to our social security fund for our employees. We also provide our employees with employee public housing reserve contributions. Our total salaries and related employee benefits for the years ended December 31, 2009, 2010 and 2011 and the six months ended June 30, 2012, was RMB320.9 million, RMB388.9 million, RMB411.3 million and RMB219.1 million, respectively.

All our directly-employed employees are employed under employment contracts which set out, among other things, the employees' responsibilities, remuneration and grounds for termination of employment. We believe we have maintained good working relationships with our employees and have not encountered material difficulties with respect to recruitment and retention of staff. We did not experience any interruption to our operations as a result of labor disputes or other industrial actions during the Track Record Period.

ENVIRONMENTAL MATTERS

Our operations in the PRC are subject to the relevant environmental protection standards under PRC environmental laws and regulations, including: (i) the *Environmental Protection Law of the PRC*; (ii) the *Law of the PRC on Prevention and Control of Water Pollution*; (iii) the *Law on the Environmental Impact Appraisal of the PRC*; (iv) the *Prevention and Control of Atmospheric Pollution Law of the PRC*; (v) the *Prevention and Control of Environmental Pollution by Solid Waste Law of the PRC*; and (vi) the *Prevention and Control of Environmental Pollution by Noise Law of the PRC.*

Our operations affect the environment by generating waste water and solid waste and producing dust and noise pollution. We have installed in our plants: (i) isolators and damping devices to minimize the noise; and (ii) dust-removal systems to discharge dust and other pollutants. We discharge industrial waste water to the Zhengzhou municipal sewage system after internal sewage treatment. Under the guidance of the Zhengzhou Environmental Protection Bureau, we have established a temporary storage site for hazardous waste to be delivered to, and disposed in, a professional hazardous waste treatment center in Henan Province. As of the Latest Practicable Date, our Company had 12 employees conducting regular inspections on our plants to ensure compliance with our internal measures for environmental protection.

We conduct environmental feasibility studies and environmental impact assessments for all of our new production or expansion projects, and establish pollution control facilities whenever necessary to ensure our compliance with applicable environmental protection standards and requirements. Our total expenditures for environmental compliance for the years ended December 31, 2009, 2010 and 2011 and six months ended June 30, 2012, were approximately RMB1.5 million, RMB8.5 million, RMB22.0 million and RMB4.8 million, respectively. These costs mainly comprises expenditures and charges associated with: (i) water resources treatment; (ii) sewage treatment; (iii) greening of urban spaces/industrial environment; (iv) environmental assessment and protection; (v) hazardous waste treatment; and (vi) purchases of other environmental protection equipment. The significant increase in our environmental expenditures in 2011 was primarily due to increased investment in the greening of our urban spaces and industrial environment in Zhengzhou, as well as purchases of environmental protection equipment during the construction of our new manufacturing facility in Zhengzhou which commenced operation in 2011. We expect that our costs for compliance with applicable environmental rules and regulations for the year ended December 31, 2012 will be more than RMB10.0 million.

We are currently in compliance in all material respects with applicable national, provincial and municipal environmental laws and regulations, and have obtained the relevant necessary government approvals in relation to our operations. As of the Latest Practicable Date, we had not been the subject of any material environmental violation or complaint or administrative penalty. In this regard, our PRC Legal Advisers has confirmed that we were in compliance with all applicable environmental laws and regulations in all material respects during the Track Record Period.

REAL PROPERTY

Overview

We are headquartered in Zhengzhou, Henan Province, PRC. According to a due diligence report issued by Jones Lang LaSalle Corporate Appraisal and Advisory Limited, our independent property valuer and consultant, as of the Latest Practicable Date, the Company and its subsidiaries occupied 12 parcels of land (including one parcel in respect of which the application for the relevant land use right certificate is pending) and leased four parcels of land, together having a total site area of approximately 1,867,684.05 sq.m. in aggregate, and occupied 241 completed buildings or units with a total GFA of approximately 613,590.52 sq.m., all in the PRC which are or will be mainly used for production, office and ancillary purposes. Certain details of these properties are set forth below:

No.	Location	Property	Description and Tenure	Purpose
	Henan Province			
1.	Zhengzhou	No. 105 Huashan Road, Zhongyuan District	Three parcels of land with a total site area of approximately 411,392.60 sq.m. leased from the State-owned Resources Bureau of Zhengzhou to the Company and ZMJ Comprehensive Equipment expiring on February 17, 2029 and March 10, 2029, respectively, for industrial use, and 131 buildings with a total GFA of approximately 144,131.72 sq.m. erected thereon.	Production, ancillary
2.	Zhengzhou	No. 167 9th Street, Econ-Tech Development Zone	Two parcels of land with a total site area of approximately 413,813.45 sq.m. granted to the Company expiring on June 2, 2059 and August 9, 2060, respectively, for industrial use, and 20 buildings with a total GFA of approximately 260,315.13 sq.m. erected thereon.	Production, ancillary
3.	Zhengzhou	South of Jingnan San Road and east of 9th Street, Econ-Tech Development Zone	One parcel of land with a site area of approximately 176,248.69 sq.m. granted to the Company expiring on May 31, 2062, for industrial use, and various buildings under construction with a total planned GFA of approximately 109,071 sq.m. to be erected thereon.	Production
4.	Zhengzhou	No. 123 10th Street, Econ-Tech Development Zone	One parcel of land with a site area of approximately 45,769.90 sq.m. granted to ZMJ Longwell Machinery expiring on May 3, 2060, for industrial use, and two buildings with a total GFA of approximately 25,545.25 sq.m. erected thereon.	Production, ancillary

No.	Location	Property	Description and Tenure	Purpose
5.	Xingyang	Zhongyuan Road, Huaixi Village, Yulong Town	Three parcels of land with a total site area of approximately 113,621.39 sq.m. granted to ZMJ Comprehensive Equipment expiring on August 25, 2056, July 11, 2059 and October 24, 2061, respectively, for industrial use, and 18 buildings with a total GFA of approximately 72,203.49 sq.m. erected thereon; and one parcel of land, of which the land use right certificate is being applied for by ZMJ Comprehensive Equipment, for industrial use, with a site area of approximately 17,679.71 sq.m., and one building with a GFA of approximately 1,890.00 sq.m.	Production, ancillary
6.	Zhengzhou	Gangpo Road and Qinling Road	Two retail units and eight buildings with a total GFA of approximately 12,783.09 sq.m.	Lease, ancillary
7.	Zhengzhou	Ruhe Community, Nan Duan of Funiu Road, Zhongyuan District	Two residential buildings with a total GFA of approximately 4,122.00 sq.m.	Residential
	Anhui Province			
8.	Huainan	Jixing Road East, Datong District	One parcel of land with a site area of approximately 83,563.00 sq.m. granted to ZMJ Shun Li Machinery expiring on May 9, 2061, for industrial use, and two buildings under construction with a total planned GFA of approximately 29,437.95 sq.m. to be erected thereon.	Production, ancillary
9.	Huainan	Tianji Town, Panji District	One parcel of land with a site area of approximately 181,493.31 sq.m. granted to ZMJ Shun Li Machinery expiring on March 9, 2053, for industrial use, and 38 buildings with a total GFA of approximately 59,822.66 sq.m. erected thereon.	Production, ancillary
10.	Huainan	Dongshan Xi Road, Wangfenggang, Xiejiaji District	One parcel of land with a site area of approximately 189,465.46 sq.m. leased from Huainan Mining to ZMJ Shun Li Machinery expiring on December 31, 2014, for industrial use, and 10 buildings with a total GFA of approximately 3,223.54 sq.m. erected thereon.	Production, ancillary

No.	Location	Property	Description and Tenure	Purpose
	Xinjiang Autonomous Region			
11.	Changji	Hi-Tech Industry Development Zone, Yushugou Town	Two parcels of land with a total site area of approximately 234,636.54 sq.m. granted to ZMJ Lu An Xinjiang expiring on January 14, 2059, for industrial use, and expiring on November 8, 2078, for residential use, respectively, and five buildings with a total GFA of approximately 28,832.41 sq.m. erected thereon.	Production, ancillary
	Shanxi Province			
12.	Shuozhou	Block 3, Yu Long Yuan	One unit with a GFA of approximately 174.64 sq.m.	Office
	Beijing Municipality			
13.	Haidian District	Xiaoying Dong Road	One unit with a GFA of approximately 207.38 sq.m.	Office
	Inner Mongolia Autonomous Region			
14.	Ordos	Yili City Huating, Yihua South Road	One unit with a GFA of approximately 159.80 sq.m.	Office
15.	Ordos	Wanbo Square, Tianjiao North Road	One unit with a GFA of approximately 179.41 sq.m.	Office

Self-owned Properties

- As of the Latest Practicable Date, the Company and its subsidiaries had been transferred land use rights in respect of 11 parcels of self-owned land of a total site area of approximately 1,249,146.28 sq.m. where the relevant land use right certificates were obtained, and had obtained the building ownership certificates in respect of 189 buildings which they own and occupy with a total GFA of approximately 588,438.89 sq.m. Our PRC Legal Advisers are of the opinion that in respect of the land parcels owned and occupied by our Group where the relevant land use right certificates have been obtained, our Group has valid legal title to those land parcels and has the right to own and occupy and use those land parcels in accordance with the relevant land use right certificates within the specified time period; and in respect of the buildings and units with building ownership certificates situated in the land parcels where the relevant land use right certificates have been obtained, our Group has the legal right to transfer, mortgage or otherwise dispose of those buildings and units.

- As of the Latest Practicable Date, the Group had applied for the land use right certificate in respect of one parcel of land with a site area of approximately 17,679.71 sq.m. for which the relevant state-owned land use rights grant contract had been signed and the land-granting fee had been paid. Our PRC Legal Advisers are of the opinion that in respect of that land parcel occupied by our Group but pending the relevant land use right certificate being obtained, there is no legal impediment for our Group to obtain such certificate, and after such certificate has been obtained, the legal right of our Group to own and occupy that land parcel will be protected in accordance with such certificate.

- As of the Latest Practicable Date, the Company and its subsidiaries had not obtained the building ownership certificates in respect of 52 buildings or units which they occupy with a total GFA of approximately 25,151.63 sq.m. Out of such area, around 25.52% of the area (the "Relevant Premises") is being used for production, while the remaining spaces are mainly used for provision of facilities and residence. If we are required to relocate those Relevant Premises, we may consider relocating to our properties under construction near such Relevant Premises when the construction is completed. This may incur relocation costs of an amount that we believe, based on current information available to and estimates made by us, would not be significant to or have a material adverse impact on our business or financial condition as a whole.

As of the Latest Practicable Date, buildings or units occupied by our Group without relevant building ownership certificates accounted for around 4.10% of the total GFA of the buildings and units occupied by our Group, and the Relevant Premises accounted for around 1.05% of the total GFA of the buildings and units occupied by our Group. Furthermore, we may relocate the Relevant Premises to our properties under construction near such Relevant Premises when the construction is completed. On this basis, and because we have obtained valid building ownership certificates in respect of a vast majority of our owned properties, our Directors believe that the owned properties without relevant building ownership certificates are not crucial to, and will not have a material adverse impact on, our overall business operations, and therefore, no substantive steps are being taken to obtain the relevant building ownership certificates in respect of those properties.

Leased Properties

As of the Latest Practicable Date, the Group leased the land use rights in respect of three parcels of land located at No. 105 Huashan Road, Zhongyuan District in Zhengzhou, with a total site area of approximately 411,392.60 sq.m., from the State-owned Land Resource Bureau of Zhengzhou Municipality, for a term expiring in 2029 at an annual rent of RMB13 per sq.m. The Group also leased the land use rights in respect of one parcel of land located at Dongshan Xi Road, Wangfenggang Town, Xiejiaji District in Huainan, with a site area of approximately 189,465.46 sq.m., from Huainan Mining. Further details of this lease with Huainan Mining are contained in the section headed "Connected Transactions — Exempt Continuing Connected Transactions — Transactions with Huainan Mining — Lease of Land from Huainan Mining" of this prospectus.

Our PRC Legal Advisers are of the opinion that in respect of the leased land parcels, the relevant land lease agreements are legal, valid and binding on the parties to the agreements, and our Group has the right to occupy and use those land parcels in accordance with the relevant land lease agreements within the stipulated time period.

Other Properties-related Matters

Our PRC Legal Advisers have further confirmed that, save as disclosed above, none of the above properties is subject to:

- third party rights such as encumbrances, liens, pledges or mortgages; and

- investigations, notices, pending litigations, breaches of law or other title defects in the PRC.

Save as disclosed in this prospectus, our Group currently has no plan to carry out significant construction, renovation or development work, or to dispose of or change the use, in respect of the above properties.

Having considered all relevant circumstances of our Group including the information and results identified in the due diligence report from our independent property valuer and consultant, Jones Lang LaSalle Corporate Appraisal and Advisory Limited, our Directors take the view that the properties numbered 1, 2, 4, 5 and 8 to 11 in the table set out under "— Overview" above constitute material properties of the Group. This is mainly because these properties are used for production and ancillary purposes, and they together form the principal or major production sites of the Group. The Directors believe that such properties contribute a considerable portion of revenue to our Group.

For the purpose of Chapter 5 of the Hong Kong Listing Rules, according to our latest audited consolidated balance sheets in the accountants' report set forth in Appendix I to this prospectus, the total carrying amount of our owned property interests and of our total assets as of June 30, 2012 were RMB1,193.6 million and RMB11,362.7 million, respectively, and that as of that date:

- no single property interest that formed part of our property activities (as defined in Rule 5.01 of the Hong Kong Listing Rules) had a carrying amount of 1% or more of our total assets, and the total carrying amount of all such property interests did not exceed 10% of our total assets; and

- no single property interest that formed part of our non-property activities had a carrying amount of 15% or more of our total assets,

and on this basis, we are not required by Chapter 5 of the Hong Kong Listing Rules to value or include in this prospectus any valuation report of our property interests.

Accordingly, pursuant to section 6(2) of the *Companies Ordinance (Exemption of Companies and Prospectuses from Compliance with Provisions) Notice*, this prospectus is exempted from compliance with the requirements of section 342(1)(b) of the Companies Ordinance in relation to paragraph 34(2) of the Third Schedule to the Companies Ordinance, which requires a valuation report with respect to all our Company's interests in land or buildings.

LEGAL PROCEEDINGS AND COMPLIANCE

We may from time to time be involved in contract disputes or legal proceedings arising from the ordinary course of business. During the Track Record Period and up to the Latest Practicable Date, we were not a party to any material legal or administrative proceedings. In addition, we have not received any notice of any threatened or pending proceedings by any government or other administrative authorities or third parties which, if adversely determined, would have a material adverse effect on our business and operations.

Save as disclosed, the Directors and the Joint Sponsors have confirmed that we have complied with all applicable regulations in the PRC in all material respects and have obtained all material licenses, permits and certificates necessary to conduct our operations from the relevant governmental bodies in the PRC. These include our compliance with the applicable PRC laws and regulations and, in particular, export regulations in relation to our sales in major export markets. For our export business, pursuant to

the overseas sales contracts that are generally under DAP (Delivered at Place) terms or DDU (Delivered Duty Unpaid) terms, the title of goods and associated risks and responsibilities pass to the overseas buyers when we deliver the goods to the relevant border points or locations that are stipulated in the relevant sales contracts. In these overseas transactions, the buyers are generally responsible for compliance with local laws and procedures, which include import clearance. Accordingly, under such contracts, we are not responsible for compliance with the laws and procedures of the overseas markets for the export of its products to such markets. We can legally export our products if we are in compliance with the applicable PRC laws and regulations (including export regulations) and possess the requisite product certifications.

So far as we are aware, during the Track Record Period, we did not conduct any business with or within any countries which are targets of economic sanctions imposed by the United States, the European Union or the United Nations. It is our current intention that we will not conduct business with or within countries which are currently targets of such economic sanctions that have been imposed. As elaborated in the "Summary" section and in this "Business" section of this prospectus, we have plans to expand our operations in Russia, Turkey and India. We also plan to enter additional international markets, including coal-rich countries or countries with mining operations that utilize longwall mining techniques, such as the United States, Australia, Vietnam, Mexico, Colombia, South Africa, Brazil, Ukraine and Kazakhstan.

Our Directors, to their best knowledge and the information available to them, have confirmed that save as disclosed, our overseas subsidiary, ZMJ Siberia, has complied with applicable Russian laws and regulations in operating its business in Russia in all material respects and it is not required to obtain any regulatory approval or license to conduct its current operations in Russia.

For additional information on our identified matters of non-compliance, which we believe will not materially affect our operations or the Global Offering, see "Risk Factors — Risks Relating to Our Business and Operations — We may not be able to successfully execute our international expansion plans", "— Real Property — Self-owned Properties" and "Financial Information — Indebtedness."