

## **OVERVIEW**

Hilong is a leading PRC-based non-state owned integrated oilfield equipment and service provider with a focus on drill pipes, line pipe and OCTG coatings and oilfield services. According to the Spears' Report, we are the market leader in the supply of drill pipes in China with a 30% market share, and the second largest supplier of drill pipes globally with a 13% market share, both based on 2009 sales. According to the Spears' Report, we are the market leader in the supply of OCTG coating materials and services, with a 67% market share in China, and the second largest globally with a 12% market share, both based on 2009 sales. We are also the largest supplier of line pipe coating materials in China with a 60% market share based on 2009 sales, according to the same source. We recently expanded into the oilfield services business with an initial focus on drilling services, which we expect to become an increasingly significant revenue stream in the future.

We have attained our leading market positions by focusing on building capabilities in key components of the drilling equipment value chain: steel pipes (which are the principal raw material in manufacturing drill pipes and are supplied from our joint venture), drill pipe products, coating materials and services as well as hardbanding materials and services. Furthermore, we believe these capabilities help us derive benefits such as better control over product quality, greater ability to expedite delivery and provision of one-stop after-sales services, which contribute to more attractive pricing and greater ability to maintain profit margin. We believe that the quality, deliverability, service and price of our products provide a unique value proposition for our clients and further contribute to our ability to maintain our leading market positions.

Our major customers include China's largest oil and gas companies such as CNPC and Sinopec. We are also a qualified supplier to many of the major international oil and gas companies, including Schlumberger, Gazprom and Weatherford. In 2008, 2009 and 2010, to our knowledge of our customers' information, sales to CNPC and its affiliates accounted for 44.4%, 28.6% and 25.5% of our revenue, respectively; sales to Sinopec and its affiliates accounted for 5.9%, 7.6% and 9.6% of our revenue, respectively; and sales to Schlumberger, Weatherford and Gazprom, directly and through distributors, in the aggregate accounted for 14.9%, 1.8% and 3.1% of our revenue, respectively. We have established overseas sales offices strategically located in some of the most active regions in the oil and gas industry, including Russia, the United Arab Emirates and Canada. As our recently established oilfield services business continues to gain momentum, we expect our profile and recognition in the international markets to continue to grow. We believe that the diversity of our customer base and the balanced mix between our PRC sales and international sales contribute to our ability to manage through industry cycles.

Our supplier qualification from the major international oil and gas companies is also testament to the quality of our products. To ensure our product quality, we seek to utilize advanced equipment in our production. Our production techniques developed in-house have been continuously refined through years of experience and enhance our product quality. As a reflection of our product and service quality, our drill pipe and hardbanding products as well as coating services have been certified to meet the Fearnley Procter NS-1 quality and inspection requirement, which is a quality standard recognized by major oil and gas companies, such as Shell, Weatherford and Schlumberger. According to the Spear's Report, we are one of only three drill pipe manufacturers in the PRC with the Fearnley Procter NS-1 certification. See "—Our Products and Services—Drill Pipes and Related Products—Drill Pipes."

We have built our research and development capabilities based on our objective of designing, developing and commercializing new products using advanced technology. In particular, our research and development activities for drill pipe products are primarily conducted through our Shanghai Hilong Tubular Goods Research Institute, which also serves as an independent testing centers for drill pipes in China. Through this institute, we have developed and commercialized a number of high-end drill-pipe products, such as sour service and high-torsion drill pipes. See "—Research and Development." Our in-house research and development team has also developed advanced coating materials, such as extreme temperature and high corrosion coating materials. Our current research and development focus includes "intelligent" drill pipes and aluminum alloy based drill pipes.

Our operating results during the Track Record Period have been affected by the recent global financial crisis and the resulting changes in oil and gas drilling activity levels. See "Risk Factors—Risks Relating to Our

## BUSINESS

**Business and Industry**—The recent global financial crisis has had and may continue to have material adverse effect upon our business, financial condition and results of operations.” In addition, we entered the coating business in 2002, the drill pipe manufacturing business in 2005 and the oilfield services business in 2008. As a result, we have a limited operating history for potential investors to evaluate our business prospects. See “Risk Factors—Risks Relating to Our Business and Industry—It is difficult to evaluate our results of operations and future prospects due to the significant fluctuation in our historical performance and our limited operating history.” In 2008, 2009 and 2010, our revenue totaled RMB1,701.4 million, RMB1,006.7 million and RMB1,356.5 million, respectively. In 2008, 2009 and 2010, our net profit totaled RMB495.4 million, RMB110.0 million and RMB229.9 million, respectively.

### COMPETITIVE STRENGTHS

We believe the following strengths of our company distinguish us from our competitors and enable us to compete effectively in the oilfield equipment and services industry.

#### **Market leadership in key oilfield equipment products and services**

We are a leading PRC-based non-state owned integrated oilfield equipment and service provider with a focus on drill pipes, line pipe and OCTG coatings and oilfield services. According to the Spears’ Report, we are the market leader in supplying drill pipes in China with a 30% market share, the leading foreign supplier of drill pipes in Russia with a 20% market share, and the second largest supplier of drill pipes globally with a 13% market share, all based on 2009 sales. In particular, we are the leading qualified supplier of drill pipes to CNPC and Sinopec, two of the largest oil and gas companies in China, which collectively account for over 90% of Chinese drill pipe market, according to the same source. In 2008, 2009 and 2010, to our knowledge of our customers’ information, sales to CNPC and its affiliates accounted for 44.4%, 28.6% and 25.5% of our revenue, respectively; and sales to Sinopec and its affiliates accounted for 5.9%, 7.6% and 9.6% of our revenue, respectively. Also within our drill pipes and related products segment, we are a major participant in hardbanding in China, which is a key component in drill-pipe manufacturing.

In addition, we are a leading PRC-based supplier of coating materials and services for line pipes and OCTG products. The quality of the coating materials and services is critical to optimizing the lifespan of the oilfield equipment. Coating provides protection against corrosion and mechanical failure caused by harsh underground geological environments. We entered the coating business in 2002. Through the development of proprietary coating formulae and production techniques, we have become the market leader in the supply of OCTG coating materials and services, with a 67% market share in China, and the second largest globally with a 12% market share, both based on 2009 sales, according to the Spears’ Report. We are also the largest supplier of line pipe coating materials in China with a 60% market share based on 2009 sales, according to the same source. Our line pipe coating business has helped us reduce fluctuations in our operating results as a result of changes in drilling activity levels.

#### **Established relationships with major international oil and gas companies supported by proven product quality**

In addition to our leading market positions at the leading PRC oil and gas companies, we have increasingly qualified as suppliers to many major international oil and gas companies, including Weatherford, Gazprom and Schlumberger. We have established overseas sales offices strategically located in some of the most active regions in the oil and gas industry, including Russia, the United Arab Emirates and Canada. As a result of our efforts, international sales as a percentage of our total revenue amounted to 38.5%, 15.8% and 42.6% in 2008, 2009 and 2010, respectively. In particular, sales to Schlumberger, Weatherford and Gazprom, directly and through distributors, in the aggregate accounted for 14.9%, 1.8% and 3.1% of our revenue, respectively, during the same period. The decline in international sales as a percentage of total revenue in 2009 was primarily attributable to the impact of the global financial crisis. As our recently established oilfield services business continues to gain momentum, we expect our profile and recognition in the international markets to continue to grow. We believe that our established customer base in the PRC, coupled with a growing international presence, will contribute to increasing diversification of our revenue streams, and as a result, enhance our ability to manage through industry cycles.

## BUSINESS

Our supplier qualification from major international oil and gas companies is testament to the quality of our products. We are among a highly select number of companies in the PRC to have drill pipe products, hardbanding materials and coating services certified to meet the Fearnley Procter NS-1 quality and inspection requirement, which is a quality standard recognized by major oil and gas companies, such as Shell, Weatherford and Schlumberger. To ensure our product quality, we seek to use advanced equipment. For instance, our welding machines are purchased from Manufacturing Technology, Inc. in the United States; and our 30-channel ultrasonic automatic inspection machine was purchased from GE Inspection Technologies. Our production techniques developed in-house have been continuously refined through years of experience and enhance our product quality. For example, our proprietary drill pipe upsetting technique helps us ensure that the internal surface of the drill pipe is thickened evenly and smoothly, thereby reducing likelihood of breakdown during the drilling process.

### **Significant benefits derived from a vertically integrated business model**

We have attained our leading market positions by focusing on building capabilities in key components of the drilling equipment value chain:

- steel pipes, the principal raw material in manufacturing drill pipes, are increasingly supplied from Nantong Hilong Steel Pipe Co., Ltd., our associate in which we hold a 41% interest;
- drill pipe products are developed and manufactured in-house;
- coating materials, which require proprietary know-how, are developed and manufactured in-house, and applied through in-house coating services; and
- hardbanding materials and services, which is a key component in the drill-pipe manufacturing process, are manufactured and processed in-house.

As a result of these capabilities, we believe that we are able to derive the following key benefits:

- ability to deliver a wide spectrum of drill pipes that will have incorporated coating and hardbanding based on specific requirements from our customers;
- more attractive pricing and greater ability to maintain and improve our profit margin by capturing value along the value chain;
- better control over the quality of our products through in-house manufacturing;
- greater ability to expedite and prioritize delivery through management of production schedules; and
- greater ability to provide “one-stop shop” after-sales services to customers.

Our experience, capabilities and market positions in drill pipe products position us to expand into oilfield drilling services, which is a key area in the next phase of our growth strategy and is expected to drive sales further for our drill pipe products.

### **Innovation-driven research and development capabilities**

Our research and development capabilities have been built based on our objective of designing, developing and commercializing new products based on advanced technologies. In particular, our research and development activities for drill pipe products are primarily conducted through our Shanghai Hilong Tubular Goods Research Institute, which also serves as an independent testing centers for drill pipes in China. Through this institute, we have developed and commercialized a number of high-end drill-pipe products, such as sour service and high-torsion drill pipes. See “—Research and Development.” Our in-house research and development team has also developed advanced coating materials, such as extreme temperature and high corrosion coating materials. Our

## BUSINESS

current research and development focus includes aluminum alloy based drill pipes which can be operated at depths greater than 6,000 meters, and “intelligent” drill pipes. Aluminum alloy based drill pipes are significantly lighter than steel drill pipes, which help reduce the overall burden on the drilling rig, facilitating drilling to greater depth, and are highly resistant to sour corrosion. “Intelligent” drill pipes are capable of collecting and transmitting underground drilling information back to the control system, which enables the drilling crew to promptly adjust the drilling process in accordance with specific underground conditions.

Our dedicated research and development team, with 61 members as of December 31, 2010, has developed a series of proprietary technology and drill pipe products based on 37 patents as well as a full suite of chemical formulas for coating materials. Senior members of this team consist of industry veterans. For example, Mr. Yuan Pengbin (袁鹏斌), the chief of our Shanghai Hilong Tubular Goods Research Institute, has been involved in various projects sponsored by National Innovation Fund and participated in the development of intelligent drill pipe. Mr. Gao Zhihai (高智海), the vice-chief of our Shanghai Hilong Tubular Goods Research Institute, is a senior engineer who has been involved in various oil and gas pipe related research and development projects and has obtained three patents. Mr. Fang Junfeng (方军锋) has been involved in various research and development projects in connection with the coating and anticorrosion of oil pipes and developed a number of our coating material products.

### **Experienced management team with a proven track record**

We are led by a management team with a track record of successfully expanding existing businesses and penetrating new segments along the value chain. In particular, Mr. Zhang, our founder, chief executive officer and chairman of our board, has 20 years of experience in the oil and gas equipment industry, and is responsible for the development and implementation of our growth strategy and the overall operations of our company. The remaining members of our management team also have strong technical backgrounds and in-depth experience in their respective sectors, with an average of 18 years of experience in the relevant fields. We believe that their extensive experience and in-depth knowledge of the oilfield equipment and services industry will continue to contribute to our future growth.

## **BUSINESS STRATEGY**

Our long-term objective is to become a leading integrated global oilfield equipment and service provider focusing on high-end products and services. We intend to achieve this objective by implementing a business strategy with the following key aspects:

### **Continue to focus on higher-end products in existing product categories**

We intend to continue to develop and commercialize new and advanced drill pipe and coating products to increase revenue from higher-end products. To this end, we plan to focus on the following types of products:

- *High-end drill pipes.* We expect to commercialize, by 2012, a number of high-end drill pipes that are capable of operating at greater depth and more complex geological environments, including S165 high torsion-resistance drill pipes series, SS120 sour service drill pipes series and intelligent drill pipes;
- *New materials.* We are developing new materials for drill pipes, such as aluminum alloy, which are significantly lighter than steel drill pipes, which help reduce the overall burden on the drilling rig, and are highly resistant to corrosion; we expect to commercialize aluminum alloy drill pipe products by 2012;
- *High-performance coating.* We are also focusing on the development of high performance coating materials that operate under severe conditions, such as extreme temperature, pressure and highly corrosive environments, and more advanced coating techniques to enhance environmental-friendliness; and
- *New coating materials.* We are developing coating material products for oil refinery pipelines. We expect the market for these products to be significant, and we believe that our expansion into these products represents a natural extension of our current capabilities and product portfolio.

## BUSINESS

### Further expand into drilling and other oilfield services areas

We believe that oilfield services will be a key growth area in the next phase of our expansion. Our expansion into this area represents a natural extension along the drilling products and services value chain, and enables us to drive sales of drilling pipes and related products and enhance our ability to manage the cost of drilling services. In addition, drilling services provides a natural platform to collect first-hand data on the performance of our drill pipes and related products and coating materials, which enhances our ability to drive innovation and quality improvement efforts. We intend to expand into oilfield services by implementing the following initiatives:

- *Expand drilling services capacity.* We plan to increase capacity for drilling services through (i) purchases of additional drilling rigs, (ii) increase in hiring of employees, and (iii) strengthening of our global presence in the oilfield services segment.
- *Upgrade drilling capabilities.* We plan to develop capabilities to operate at greater depths and in more complex geological environments.
- *Develop comprehensive service capabilities.* As our drilling services capabilities mature, we intend to expand our services offering into well completion services, production services and field services to become a “one-stop shop” oilfield service provider for customers.

The following table sets forth the number of our existing drilling rigs as of the Latest Practicable Date, our planned rig count after the Global Offering, the respective year of realization and the planned capital expenditure.

	<u>Existing rigs count</u>	<u>Planned rig count</u>	<u>Year of realization</u>	<u>Planned capital expenditure</u>
650HP .....	1	1	N/A	N/A
750HP .....	2	2	N/A	N/A
1500HP .....	2	4	2011–2012	RMB100 million
2000HP .....	3	7	2011–2013	RMB270 million

### Solidify leadership in the PRC market through capacity upgrades and vertical integration

We will seek to maintain and strengthen our domestic market leadership positions in drill pipes and related products and coating materials and services. In this effort, we plan to focus on the following:

- *Upgrade drill pipe capacity.* We plan to upgrade and expand our existing drill pipe production capacity, with a focus on capacity for high-end products, including drill pipes with larger outside diameter, sour service and high-torsion drill pipes, as well drill pipes featuring new materials such as aluminum alloy.
- *Upgrade coating capacity.* We also plan to upgrade coating materials manufacturing and coating services capacity for higher-end products, such as extreme temperature and high-corrosion coating materials.
- *Continue vertical integration.* In our coating materials and services business, we are actively seeking opportunities to vertically integrate into raw material supply through the acquisitions of technologies in manufacturing processes of key ingredients such as resin and chemical initiators, which will help us in our product development efforts and enhance our ability to manage product quality and cost efficiency.

## BUSINESS

The following table sets forth, by product and service, our current production capacity, our planned annual capacity after the Global Offering, the respective year of realization and the planned capital expenditure.

	<u>2010 annual actual capacity</u>	<u>Planned annual capacity</u>	<u>Year of realization</u>	<u>Planned capital expenditure</u>
Drill pipe .....	40,600 tons	40,600 tons	N/A	N/A
Drill pipe coating materials .....	1,000 tons	2,000 tons	2012	RMB11 million
Line pipe coating materials .....	20,760 tons	28,000 tons	2012	RMB14 million
Drill pipe coating services .....	2.15 million meters	2.6 million meters	2011	RMB54 million
Line pipe coating services .....	3.1 million sq. meters	4.8 million sq. meters	2011	RMB42 million

### Expand international footprint at strategic locations

We believe that international sales will represent the key growth driver for drill pipes and coating materials and services. Accordingly, we are seeking opportunities to expand into the following regions:

- *Sales offices.* We currently have overseas sales offices in Russia, Kazakhstan, the United States, Canada, Ecuador and United Arab Emirates, and plan to set up additional overseas sales offices in regions such as South America and North Africa, which are in closer proximity to some of our key end-customers, thereby increasing our exposure to these international oil and gas companies and enabling us to provide better after-sales support to these customers.
- *Drill pipe manufacturing plants.* We currently have a joint venture drill pipe manufacturing facility in Abu Dhabi, which recently commenced operation. We intend to construct additional plants in strategic overseas locations, including in Russia and Central Asia, to capture a greater share of this market.
- *Coating services plants.* We plan to build new coating services plants in closer proximity to drilling pipe manufacturers and end-customers in order to expand the adoption of our coating materials and services abroad, and have identified regions in North America, Russia, Central Asia and North Africa as potential markets.

### Actively seek strategic acquisitions and alliances

We intend to actively seek acquisition and alliance opportunities along our value chain that enable us to gain access to new technology and customers and expand our production capacity. To this end, we are seeking to leverage our relationship with UMW to further promote the use of our products and services on UMW's oilfield projects, although no agreements or letters of intent have been entered into to date. In addition, we are actively exploring opportunities to enter into strategic relationships that are expected to significantly increase our oilfield services presence in Kazakhstan. We believe that the capturing of these and other opportunities will build on our strengths and enhance our market competitiveness.



## BUSINESS

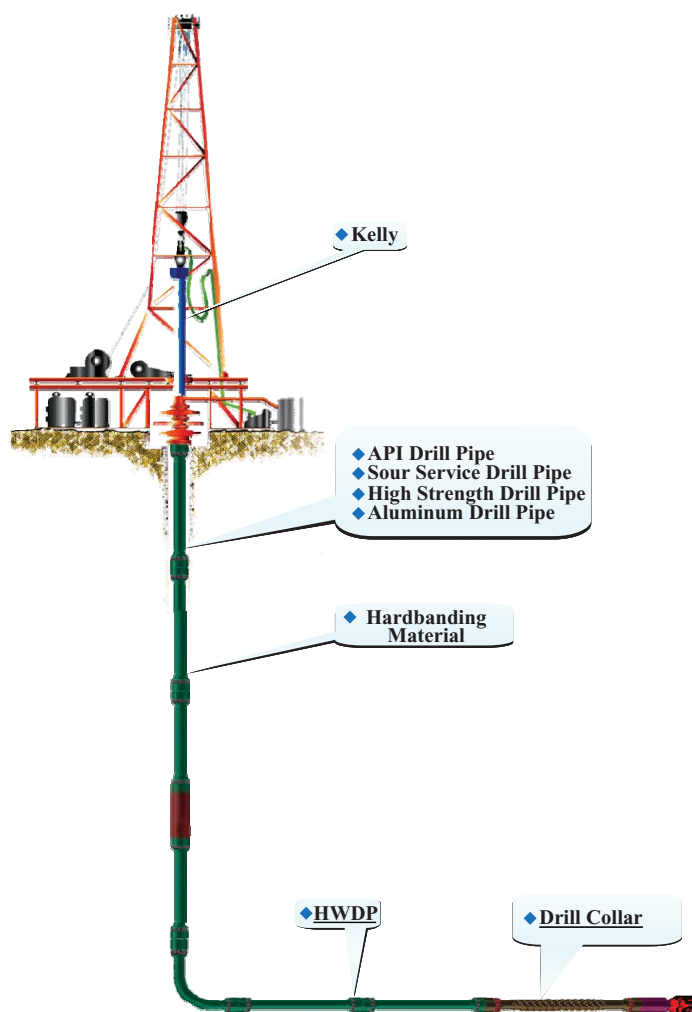
### OUR PRODUCTS AND SERVICES

We are a leading PRC-based non-state owned integrated oilfield equipment and service provider with a focus on drill pipes, line pipe and OCTG coatings and oilfield services. The following table sets forth our historical revenue by business segment for the period indicated:

	For the year ended December 31,					
	2008		2009		2010	
	RMB	%	RMB	%	RMB	%
(In thousands, except for percentages)						
Drill pipes and related products .....	1,261,262	74.1	518,586	51.5	713,068	52.6
Coating materials and services .....	415,934	24.4	435,026	43.2	371,856	27.4
Oilfield services .....	24,184	1.5	53,044	5.3	271,538	20.0
<b>Total revenue</b> .....	<u>1,701,380</u>	<u>100.0</u>	<u>1,006,656</u>	<u>100.0</u>	<u>1,356,462</u>	<u>100.0</u>

### Drill Pipes and Related Products

The following diagram illustrates the positions of our drill pipes and drill pipe related products within a drilling rig:



## BUSINESS

Our drill pipes and related products offered under this segment primarily consist of drill pipes, hardbanding, equipment and other related products. The following table sets the components of our revenue for our drill pipes and related products segment for the period indicated:

	For the year ended December 31,					
	2008		2009		2010	
	RMB	%	RMB	%	RMB	%
	(In thousands, except for percentages)					
Drill pipes .....	1,205,940	95.6	414,637	80.0	633,797	88.9
Hardbanding .....	13,684	1.1	13,730	2.6	25,263	3.5
Equipment .....	18,006	1.4	34,093	6.6	970	0.1
Others .....	23,632	1.9	56,126	10.8	53,038	7.5
<b>Total segment revenue</b> .....	<u>1,261,262</u>	<u>100.0</u>	<u>518,586</u>	<u>100.0</u>	<u>713,068</u>	<u>100.0</u>

### *Drill Pipes*

We are the market leader in the supply of drill pipes in China, with a 30% market share based on 2009 sales, according to the Spears' Report. Drill pipe is a hollow, thick-walled, steel piping used on drilling rigs to facilitate the drilling process. As it functions as the connection between the drilling rig surface equipment and the bottom hole assembly, including the drill bit, the drill pipe needs to support its own weight to depths that often exceed one mile down into the earth's crust. Generally, for an oil well of 4,000 meters in depth, drill pipes would consist of approximately 90% of the length of the drilling rig. The drill pipe is a key drilling equipment in raising, lowering or rotating the bottom hole assembly during the drilling process, and is often designed to withstand severe external and internal pressure as well as significant forces of distortion, bending and vibration. The drill pipe also carries drilling fluid in its metal tube component from the drill bit back up the annulus, and is designed to withstand extremely corrosive environments, such as highly acidic or alkaline fluids.

Our drill pipe products are manufactured through a vertically integrated production process. A significant and increasing portion of the steel pipes required for our production is supplied by Nantong Hilong Steel Pipe Co., Ltd., our associate in which we hold a 41% interest, thereby further contributing to our ability to manage our cost structure and ensuring the quality of our products. Furthermore, our drill pipe products are coated with coating materials we developed in-house, and hardbanded using welding wires manufactured in-house. We have also developed a proprietary drill pipe internal upsetting technology to reduce down time during the drilling process.

Our drill pipe products are supplied to the major oil and gas companies in PRC, including CNPC and Sinopec. We are also a qualified supplier to many of the well-recognized international oil and gas companies such as Schlumberger, Weatherford and Gazprom. In particular, we are the leading qualified supplier of drill pipes to CNPC and Sinopec, two of the largest oil and gas companies in China, which collectively account for over 90% of Chinese drill pipe market, according to the Spears' Report. In 2008, 2009 and 2010, to our knowledge of our customers' information, sales to CNPC and its affiliates accounted for 44.4%, 28.6% and 25.5% of our revenue, respectively; sales to Sinopec and its affiliates accounted for 5.9%, 7.6% and 9.6% of our revenue, respectively; and sales to Schlumberger, Weatherford and Gazprom, directly and through distributors, in the aggregate accounted for 14.9%, 1.8% and 3.1% of our revenue, respectively.

We are one of only three drill pipe manufacturers in the PRC with Fearnley Procter NS-1 certification, according to the same source. Fearnley Procter's approval for its NS-1 certification generally requires several months to complete a process that consists of several stages, including preliminary review of an audit questionnaire and supporting documents, on-site facility audits by Fearnley Procter's engineers, corrections of non-conformance detected during the audit, approval by each member of the NS-1 technical review committee as well as a majority of the NS-1 technical review panel. See "Risk Factors—Risks Relating to Our Business and Industry—Loss of or failure to renew the API Monogram, NS-1 certifications or other licenses certifying that our products meet benchmark quality standards could materially and adversely affect our business."



## BUSINESS

In 2008 and 2009 and 2010, we have sold 39,021 tonnes, 15,275 tonnes and 25,019 tonnes of drill pipes, respectively.

We offer a wide range of drill pipe products to meet the demands of our customers. Our portfolio of drill pipe products can be largely categorized into (i) API drill pipes and (ii) non-API drill pipes.

### *API Drill Pipes*

We offer a full range of drill pipe products based on the industry specifications of API. Our products cover all sizes and steel grades under API specifications. Our API drill pipes have an outside diameter ranging from 2.375 inches to 6.625 inches, and are manufactured in E, X, G and S grade steel. In addition, our API drill pipe product offering includes heavy weight drill pipes, or HWDP, which is a type of drill pipe with a thicker metal tube wall and longer collar. Compared to other drill pipes, this type of drill pipe is longer and has higher tensile strength. Our HWDP products are also offered under a broad range of sizes, from 3.5 inches to 6.625 inches in outside diameter.

### *Non-API Drill Pipes*

In addition to API drill pipes, we have successfully developed a number of non-API drill pipe products, including sour service drill pipes, double-shoulder drill pipes, low-temperature drill pipes and high torque-resistant drill pipes. In addition to meeting API standards, non-API products are made with qualifications or specifications developed to meet customers' special needs, such as higher strength, higher corrosion resistance or premium connectors. Non-API products are generally made to a higher standard than API products, and therefore more stringent technical standards and complex manufacturing techniques are required.

- *Sour service drill pipe*, or SSDP, is a type of drill pipe with capability of resistance to hydrogen sulfide stress corrosion to facilitate the oil and gas drilling activities in sulfur-rich terrains. This type of drill pipe has been developed based on a combination of proprietary technologies, including hydrogen sulfide resistant steel, special heat treatment and hydrogen sulfide resistant coating, and is manufactured using imported special steel with high purity and low sulfur and phosphorous components. SSDPs are suitable for special drilling process under sulfuric condition and unbalancing environment. Our series of sour service drill pipes, namely HL95SS and HL105SS, cover all specifications ranging from 2 3/8 to 6 5/8 inches.
- *Double-shoulder drill pipe*, or DSDP, is a type of drill pipe with two tool joints on each side of the pipe. It provides 20% to 50% higher torsional yield strength as compared to API drill pipes. Its reduced outer diameter and increased inner diameter makes it suitable for horizontal drill wells, wells with significant depth, smaller diameter wells or wells with sulfuric conditions.
- *Low-temperature drill pipe*, or LTDP, is a type of drill pipe with capability to perform under extreme low temperature to facilitate oil and gas drilling activity in low temperature regions. This type of drill pipe is produced using low-carbon steel alloy with low sulfur, phosphorous and nonmetallic components and treated with a special heat treatment that involves improved heating and spray quenching devices and a more stringent control over the treatment process.
- *High torque-resistant drill pipe*, or HTDP, is a type of drill pipe with specially designed tool joints which help to enhance the torque resistance of the drill pipe. It provides 65% higher torsional yield strength as compared to API drill pipes. It is suitable for horizontal drill wells, wells with significant depth or wells with sulfuric conditions.

## BUSINESS

The following table sets forth our historical revenue from our API drill pipes and non-API drill pipes for the period indicated:

	For the year ended December 31,					
	2008		2009		2010	
	RMB	%	RMB	%	RMB	%
(In thousands, except for percentages)						
API drill pipes	1,108,094	91.9	353,708	85.3	529,655	83.6
Non-API drill pipes	97,846	8.1	60,929	14.7	104,142	16.4
<b>Total drill pipe revenue</b>	<b>1,205,940</b>	<b>100.0</b>	<b>414,637</b>	<b>100.0</b>	<b>633,797</b>	<b>100.0</b>

Revenue derived from sales of API drill pipes as a percentage of total drill pipe revenue decreased during the Track Record Period, which was associated with an increasing trend of non-API drill pipe sales percentages during the same period. Such trend reflected a combination of (i) our increasing focus on development and marketing of non-API drill pipe products, which are generally made to a higher standard than API products and are generally sold at a higher price compared to API products; and (ii) the increasing customers' demand for non-API drill pipes with higher strength, higher corrosion resistance or premium connectors, as a result of the increasing development of non-conventional oil and gas reserves needing premium oil and gas production equipment operating in harsh environment.

### ***Hardbanding***

We manufacture hardbanding materials and services for drill pipes to enhance their wear-resistance and reduce friction between drill pipes and casings. Hardbanding materials are welding wires, which are solid, soft steel wires used for welding onto the tool joint of a drill pipe to enhance its wear performance. When the steel wires solidify after being welded onto the tool joint, a process which is known as hardbanding, they leave a raised, hard surface above the tool joint that reduces the wear and tear of the tool joint during the drilling operation thereby prolonging the service life of the drill pipe. Hardbanding materials also serve as a protective layer between drill pipes and casings, reducing the friction between the two types of pipes during the drilling process.

Our hardbanding products primarily consist of two models, BoTn 1000 and BoTn 3000, for both of which we have obtained Fearnley Procter NS-1 certification. We have designed these two models of hardbanding products with different levels of wear resistance and friction reduction:

- *BoTn 3000.* Our BoTn 3000 hardbanding materials are chrome-free and are designed for well-balanced wear resistance and friction reduction. They offer a high level of hardness which enhances the protection provided for drill pipes. They also have high friction-reduction which reduces friction between the drill pipe and the casing and effectively reduces the wear of the casing string and drilling string.
- *BoTn 1000.* Our BoTn 1000 hardbanding materials are designed primarily to reduce friction between drill pipes and casing. They provide relatively lower wear resistance for drill pipes and higher protection to casing as compared to our BoTn 3000 series. They are also crack-resistant with no visible cracks after being welded onto the surface of the drill pipes.

### ***Equipment***

We sell coating services equipment designed and manufactured in-house to our associates and jointly controlled entities. These coating services equipments offer an integrated design, which, through a continuous flow of pipes through the entire coating process, significantly improves efficiency and prevents air and dust from mixing into the coating material during the coating process.

## BUSINESS

### *Others*

We sell a variety of other products used in the oil and gas industry to our customers and affiliates, such as casing and drill collars, either manufactured in-house or purchased from third parties. In addition, we provide a number of services, including technology support services, warehousing and heat treatment services, to our associates and jointly controlled entities.

### **Coating Materials and Services**

Our coating business consists of the development, manufacturing and sale of coating materials as well as providing coating services on (i) oil and gas line pipes; and (ii) OCTG (which includes drill pipes as well as tubing and casing):

- *Oil and gas line pipes.* Oil and gas line pipe coating is primarily designed to help prevent corrosion from open-air or underground environment by providing a protective cover that separates the line pipe from soil particles and water. We sell oil and gas line pipe coating materials manufactured in-house to third parties, as well as, occasionally, provide coating services on these oil and gas line pipes.
- *Drill pipes.* Drill pipe coating helps prevent corrosion of the drill pipe by forming a rugged shield to isolate the steel from corrosive oilfield fluids such as carbon dioxide, hydrogen sulfide and brine. We provide drill pipe coating services using in-house manufactured coating materials to third party manufacturers.
- *Tubing and casing.* Tubing and casing coating helps prevent corrosion from oilfield fluids and increases the oil flow rate through line pipes by decreasing or eliminating scale build-up, which can reduce or block oil flow in producing oil wells. The smooth inner surfaces of coated tubing often increase the fluid through-put on certain high-rate oil and gas wells by reducing friction and turbulence. We provide tubing and casing coating services to third party manufacturers using in-house manufactured coating materials and coating materials sourced from third party suppliers.

In addition to external sales of coating materials and services, we also engage in intra-group sales through the provision of coating materials and services on in-house manufactured drill pipes.

The following table sets forth the components of our revenue from our coating materials and services segment for the period indicated:

	For the year ended December 31,					
	2008		2009		2010	
	RMB	%	RMB	%	RMB	%
	(in thousands, except for percentages)					
Oil and gas line pipe coating .....	217,728	52.3	334,675	77.0	242,707	65.3
Drill pipe coating .....	192,461	46.3	80,618	18.5	78,740	21.2
Tubing and casing coating .....	5,745	1.4	19,733	4.5	50,409	13.5
<b>Total segment revenue .....</b>	<b>415,934</b>	<b>100.0</b>	<b>435,026</b>	<b>100.0</b>	<b>371,856</b>	<b>100.0</b>

### *Oil and Gas Line Pipe Coating*

We are the largest supplier of oil and gas line pipe coating materials in China with a 60% market share based on 2009 sales, according to the Spears' Report. We manufacture and sell corrosion control external coating materials and provide coating services for oil and gas line pipes. We have developed various types of special anticorrosion coating materials that are resistant to antiseptic, acid and alkali, and are stable under high temperature, which facilitate the improvement of hydraulic efficiency, reduce wear and tear and prevent corrosion of oil and gas line pipes and other steel pipes and structures.

## BUSINESS

Demand for our oil and gas line pipe coating materials has increased significantly in recent years. In 2008, 2009 and 2010, we sold 11,973 tonnes, 17,102 tonnes and 12,699 tonnes of coating materials for oil and gas line pipes, respectively.

We provide coating services for oil and gas line pipes primarily using our coating materials manufactured in-house, and, occasionally at our customers' request, coating materials manufactured by third parties. In 2008, 2009 and 2010, we coated 1.16 million square meters, 2.9 million square meters and 2.4 million square meters of oil and gas line pipes, respectively.

### *Drill Pipe Coating*

We are the market leader in the supply of OCTG (including drill pipe as well as tubing and casing) coating materials and services, with a 67% market share in China, and the second largest globally with a 12% market share, both based on 2009 revenue, according to the Spears' Report. Our capabilities in the drill pipe coating business cover the entire value chain, from research and development to manufacturing of coating materials, to provision of coating services as well as design and development of coating equipment. Our drill pipe coating materials have been developed based on our proprietary know-how. Our coating equipment is primarily designed and manufactured in-house, and we have established an integrated quality control system to oversee the coating process and ensure coating quality. As a reflection of our coating quality, our Shanghai Tube-Cote coating plant has received the Fearnley Procter NS-1 certification for its coating services.

We have established coating plants at major oilfields and other strategic locations, including Shanghai, Jiangsu, Shandong, Shanxi, Shaanxi, Liaoning and Tianjin, to meet customers' demand for faster services. A number of coating plants has been established as joint ventures with our customers in the oil and gas industry. See "—Associates and Jointly Controlled Entities".

In 2008, 2009 and 2010, we coated 2.3 million meters, 1.4 million meters and 2.4 million meters of drill pipe, respectively.

### *Tubing and Casing Coating*

We manufacture and sell coating materials and provide coating services for tubing and casing. We have developed various types of anticorrosion coating materials that facilitate the improvement of hydraulic efficiency, reduce pile-up of debris in the tubing casing and improve resistance to abrasion and corrosion. In addition to sales of coating materials, we also provide coating services for tubing and casing.

### **Oilfield Services**

Capitalizing on our experiences and capabilities in coating and drill pipe manufacturing, we have expanded into the oilfield services business in 2008, currently focusing on the overseas markets. Our services currently primarily consist of drilling services and engineering services. Our drilling capabilities include directional drilling, horizontal drilling and unbalanced drilling. We also offer other oil and gas well services, such as cementing, coring and well testing. We own a variety of onshore drilling rigs ranging from 650 horsepower to 2,000 horsepower, which can conduct drilling under various geological conditions, such as mountain, highland, desert and wetland. Clients of our oilfield services generally include large scale oilfields and well-recognized local oil and gas companies.

Our oilfield services contracts can be largely categorized as day-rate contracts and turnkey contracts. Turnkey contracts typically provide for a lump sum payment on a well-by-well basis for drilling and drilling-related services for a specified number of wells regardless of actual costs incurred. Day-rate contracts specify fixed day rates for the operating equipment and service crew and are generally entered for a specified period of time. See "—Customers—Major Contractual Terms—Oilfield Services".

## BUSINESS

The following table sets forth all of our current and historical material oilfield service projects under turnkey contracts:

<u>Clients</u>	<u>Rig Type</u>	<u>Location of Project</u>	<u>Contracted Wells</u>	<u>Total Drilling Area</u>	<u>Date of Actual/Expected Commencement</u>	<u>Date of Actual/Expected Completion</u>	<u>Contract Value</u>	<u>Scope of Services</u>
Xi Bu-Kyzylorda Engineering Drilling Company Ltd (“PetroChina”)	ZJ-30C 750hp	Kazakhstan	3 wells	3,995 meters	August 2009	September 2009	USD220,000	Drilling, casing running
KOR Oil Company (“KOR”)	ZJ-30C 750hp	Kazakhstan	18 wells	21,248 meters	October 2009	November 2010	USD8,500,000	Drilling, mud, coring, cementing, casing running, road and well site construction
	ZJ-30C 750hp	Kazakhstan	7 wells	9,040 meters	April 2010	July 2010	USD3,500,000	Drilling, mud, coring, cementing, casing running and well site construction
Zhalgiztobe Oil Ltd. (“ZTM”)	ZJ-30C 750hp	Kazakhstan	8 wells	3,850 meters	July 2009	October 2009	USD1,760,000	Drilling, mud
	ZJ-20 650hp	Kazakhstan	8 wells	3,602 meters	August 2009	October 2009	USD1,760,000	engineering, coring, cementing, casing running and well site construction
KMK Oil JSC (“KMK”)	ZJ-30C 750hp	Kazakhstan	10 wells	3,500 meters	September 2010	January 2011	USD2,900,000	Drilling, mud engineering, coring, cementing, casing running and well site construction

The oilfield services we provided for the KOR, ZTM and KMK projects include oil well drilling, mud engineering, coring, cementing, casing running and well site infrastructure construction which demonstrated our strong capability to complete turnkey drilling projects. For our KOR project, we also successfully completed the drilling of an oil well with a depth of 1,850 meters within a month which significantly distinguished us from the local drilling service providers who generally need more than two months to drill an oil well with similar depth.

The following table sets forth all of our material oilfield service projects under day-rate contracts:

<u>Client</u>	<u>Rig Type</u>	<u>Location of Project</u>	<u>Contracted Period</u>	<u>Date of Actual/Expected Commencement</u>	<u>Date of Actual/Expected Completion</u>	<u>Contract Value</u>	<u>Scope of Services</u>
Andes Petroleum Ecuador Limited	XJ-650 650hp	Ecuador	3 years	June 2009	March 2012	USD6,984,500	Oil well workover
	Swabbing Unit	Ecuador	1 year	December 2010	December 2011	USD774,000	Oil swabbing
	ZJ-70D 2000hp SCR	Ecuador	1 year	January 2011	December 2012	USD9,735,000	Drilling
Talisman Energy	ZJ-70D 2000hp SCR	Iraq	3 wells	January 2011	December 2011	USD8,390,000	Drilling

The oil well workover project for Andes Petroleum Ecuador Limited involves the application of dual tubing for oil production in a single oil well, which is the first dual tubing project in the region. We worked closely with

## BUSINESS

Schlumberger and Weatherford and improved our rig equipment to meet the requirement for dual tubing operation. The improvement work was completed in 2010 and we do not expect to incur any additional material costs in this regard. We successfully completed the oil well workover and help to increase the daily output of such oil well from 1,000 barrels per day to 2,000 barrels per day.

Our oilfield services business experienced significant growth during the Track Record Period. Our subsidiary in Ecuador, Hilong Oil Service & Engineering Ecuador CIA, Ltda, or Hilong Ecuador, commenced commercial operation and began generating revenue through the provision of oilfield services in 2009. In 2009 and 2010, revenue generated by Hilong Ecuador amounted to RMB11.1 million and RMB168.4 million, representing 1.1% and 12.4% of our total revenue, respectively. The significant increase in such revenue derived from our Ecuador operations reflected the sale of tubing and casing products purchased from third parties to an oilfield services client in Ecuador in 2010. Our subsidiary in Kazakhstan, Hilong Petroleum Technology & Engineering Co., Ltd, or Hilong Kazakhstan, commenced commercial operation and began generating revenue through the provision of oilfield services in 2009. In 2009 and 2010, revenue generated by Hilong Kazakhstan amounted to RMB36.6 million and RMB91.9 million, representing 3.6% and 6.8% of our total revenue, respectively. As of the Latest Practicable Date, we had 27 employees in Ecuador and 25 employees in Kazakhstan.

Our oilfield services business is susceptible to severe weather conditions. Although historically, we have not suffered from severe weather conditions that could have a material and adverse impact upon our oilfield services business and operations, there can be no assurance that we would not be materially and adversely affected by severe weather conditions in the future. See “Risk Factors—Risks Relating to Our Business and Industry—Severe weather conditions may affect our operations.”

## ASSOCIATES AND JOINTLY CONTROLLED ENTITIES

### Drill Pipe Manufacturing

#### *Almansoori Hilong Petroleum Pipe Company*

In 2006, we entered into a joint venture agreement with Almansoori Specialized Engineering LLC and established Almansoori Hilong Petroleum Pipe Company in Abu Dhabi, United Arab Emirates. Almansoori Specialized Engineering LLC is a regional oilfield service provider and oil and gas industry equipment producer in the Middle East. It holds 51% equity interest in the joint venture while we hold the remaining 49% equity interest in the joint venture through Hilong Investment Ltd, our Malaysian investment holding company. We recognize Almansoori Hilong Petroleum Pipe Company as a jointly controlled entity. The joint venture mainly provides coating services and manufactures API drill pipes which are targeted to be sold in Middle East and European markets.

The following summarizes the key terms of the joint venture agreement:

- *Preemptive rights.* Pursuant to the joint venture agreement, both parties to the joint venture have the preemptive right in the event of any increase to the share capital of the joint venture. However, the equity interest of Almansoori Specialized Engineering LLC in the joint venture may not be reduced to lower than 51%.
- *Board of directors.* The board of directors of the joint venture consists of five members, three of which, including the chairman, are appointed by Almansoori Specialized Engineering LLC and the remaining two are appointed by us.
- *Shareholders' resolution.* The resolution of the shareholders' meeting is generally valid if approved by shareholders representing no less than 75% of the equity interest of the joint venture. Certain material corporate matters, including amendment to the joint venture agreement, change in share capital of the joint venture, making loans or granting guarantees on behalf of the joint venture, employment or



## BUSINESS

discharge of the general manager and establishment of subsidiaries or branch offices of the joint venture, require unanimous approval by all the parties to the joint venture.

- *Operational arrangements.* Hilong Group of Companies is required to source and supply raw materials to the joint venture. The joint venture has the exclusive right to manufacture and supply drill pipes in the United Arab Emirates, countries of the Arab Gulf Countries Council, the Middle East and North Africa. During the term of the joint venture, none of the parties to the joint venture may engage in any business that competes with the joint venture in United Arab Emirates, countries of the Arab Gulf Countries Council, the Middle East or North Africa.

### Drill Pipe Coating Services and Others

To facilitate customers' demand, we have established various drill pipe coating service joint ventures with our major customers in PRC, in close proximity to the oilfields where customers operate and the major ports of PRC. In addition, Nantong Hilong Steel Pipe Co., Ltd., our associate in which we hold a 41% equity interest, processes and provides steel pipes to us. The following table set forth the key information on these joint ventures engaged in these services (some of which are treated as associates or jointly controlled entity for accounting purposes):

Name	Date of Establishment	Location	Term of Joint Venture	Directors	Equity Interest Structure		Treated as (for accounting purpose)
Shanghai Tube-Cote Petroleum Pipe Coating Co., Ltd.	March 2002	Shanghai	50 years	Seven (four to be appointed by us and three to be appointed by UMW Petropipe (L) Ltd.)	Our Group	51%	Subsidiary
					UMW Petropipe (L) Ltd.	49%	
Tangrong Tube-Cote (Shanxi) Petroleum Pipe Coating Co., Ltd.	January 2008	Shanxi	20 years	Five (three to be appointed by us, and the remaining two shall be appointed by each of the other third party joint venture parties)	Our Group	65%	Subsidiary
					Shanxi Tangrong Automobile Component Manufacturing Group Co., Ltd.	25%	
					Houma City Longwei Venture Capital Co., Ltd.	10%	
Taichang Hilong Anti-Corrosion Technology Engineering Co., Ltd	September 2010	Jiangsu	30 years	Five (to be appointed by the shareholders meeting)	Our Group	55%	Subsidiary
					Shanghai Jiafang Steel Pipe (Group) Co., Ltd.	45%	
Jiangsu Tube-Cote Shuguang Coating Co., Ltd.	October 2003	Jiangsu	20 years	Seven (four to be appointed by us, two to be appointed by Jiangsu Shuguang Group Co., Ltd. and one to be appointed by UMW Petropipe (L) Ltd.)	Our Group	58.18%	Subsidiary
					Jiangsu Shuguang Group Co., Ltd.	33.78%	
					UMW Petropipe (L) Ltd.	8.04%	

# BUSINESS

Name	Date of Establishment	Location	Term of Joint Venture	Directors	Equity Interest Structure		Treated as (for accounting purpose)
Shandong Shengli Oilfield Wuhua Tube-Cote Pipe Coating Co., Ltd.	February 2007	Shandong	20 years	Five (three to be appointed by Shengli Oilfield Wuhua Industrial Development Co., Ltd. and two to be appointed by us)	Our Group	45%	Associate
					Shengli Oilfield Wuhua Industrial Development Co., Ltd.	55%	
Xi'an Changqing Tube-Cote Petroleum Pipe Coating Co., Ltd.	November 2004	Shaanxi	20 years	Five (two to be appointed by us and three to be appointed by Qingyang Changqing Juli Industrial Co., Ltd.)	Our Group	45%	Associate
					Qingyang Changqing Juli Industrial Co., Ltd.	55%	
CNOOC Tube-Cote Tianjin Pipe Co., Ltd.	September 2006	Tianjin	10 years	Five (three to be appointed by CNOOC Energy Development Co., Ltd. and two to be appointed by us)	Our Group	40%	Associate
					CNOOC Energy Development Co., Ltd.	60%	
Panjin Liaohe Oilfield Pipe Tube-Cote Coating Co., Ltd.	January 2009	Liaoning	15 years	Five (three to be appointed by us and two to be appointed by Panjin Liaohe Oilfield Pipe & Drilling Tools Manufacturing Co., Ltd.)	Our Group	50%	Jointly Controlled entity
					Panjin Liaohe Oilfield Pipe & Drilling Tools Manufacturing Co., Ltd.	50%	
Anshan Haidelong Anti-Corrosion Engineering Co., Ltd.	November 2010	Liaoning	10 years	One (to be appointed by the shareholders meeting)	Our Group	30%	Associate
					Yang Zengzhou	70%	
Nantong Hilong Steel Pipe Co., Ltd.	April 2007	Jiangsu	20 years	Five (to be appointed by the shareholders meeting)	Our Group	41%	Associate
					Zhongxing Energy Equipment Co., Ltd.	49%	
					Shaanxi Ante Technology Engineering Co., Ltd.	10%	

## SALES AND MARKETING

We sell our products in China principally through direct sales by our sales and marketing team, which as of December 31, 2010, consists of 18 employees. Members of our sales and marketing team in PRC are located in our headquarters in Shanghai as well as six regional distribution centers nationwide designed to cover, among others, 20 major oilfields in China. The following map illustrates the geographical distribution of our sales presence in PRC:



## BUSINESS

We currently have overseas sales offices in six countries, including Russia, Kazakhstan, the United States, Canada, Ecuador and United Arab Emirates. The following map illustrates the geographical distribution of our sales offices in the international markets:



Members of our sales and marketing team are primarily responsible for collecting customer feedback and market information, bidding or negotiating orders, identifying business opportunities, promoting our products and pre-sales marketing in their respective geographic regions. In particular, we believe that our pre-sales marketing efforts are critical to increasing customer loyalty. Accordingly, our sales and marketing team often work with our research and development teams to determine both the anticipated demand for a new product and whether the product can be developed with our current production facilities, technologies and resources. We also occasionally sell our products through sales agents on a transaction-by-transaction basis. Historically, revenue derived from sales through sales agents represented 3.7%, 0.5% and 5.3% of our total revenue in 2008, 2009 and 2010.

We are highly dependent upon the transportation systems we use to deliver our products, which include train, truck and ocean shipping. Most of our production facilities are located in Shanghai city and Jiangsu and Shanxi provinces with convenient access to local railway and highway networks linking to our domestic customers in the PRC market as well as major ports for international transportation to our international customers. Our sales in the PRC are generally delivered by truck and rail, and our international sales are generally delivered by a combination of ocean shipping and road transportation. During the Track Record Period, there had been no instance of transportation disruption or costs increases which could have a material and adverse impact upon our business and operations. However, there can be no assurance that we would not suffer from any material transportation interruption or costs increases. See “Risk Factors—Risks Relating to Our Business and Industry—If disruptions in our transportation network occur or our transportation costs substantially increase, we may be unable to deliver our products in a timely manner and our cost of sales could increase.”

In the PRC market, we generally require one to four months after the date of sales contract to make delivery of our drill pipes, and transportation cost is normally borne by the customers. For the international market, a longer period of time is generally required before delivery, and either we or the customers bear the transportation cost depending on the terms of the sales contract. Insurance cost arrangements with our international customers, and occasionally with our domestic customers, vary depending on our practice with individual customers.

## BUSINESS

In 2008, 2009 and 2010, our transportation expenses amounted to RMB43.3 million, RMB44.9 million and RMB48.9 million, respectively, representing 2.5%, 4.5% and 3.6%, respectively, of our revenue during the same period.

### CUSTOMERS

Our customers primarily include a number of major PRC and international oil and gas companies as well as sales distributors engaged by our end users. We maintain well-established relationships with CNPC and Sinopec, which are the largest two PRC oil and gas companies. In 2008, 2009 and 2010, to our knowledge of customer information, CNPC and its affiliates accounted for 44.4%, 28.6% and 25.5% of our revenue, respectively; and Sinopec and its affiliates accounted for 5.9%, 7.6% and 9.6% of our revenue, respectively. For our coating materials and services segment, our major customers also include BaoSteel, which to our knowledge of customer information accounted for 2.6%, 17.0% and 11.4% of our total revenue in 2008, 2009 and 2010, respectively. For our international sales, we are also a qualified supplier to many of the major international national oil and gas companies, such as Schlumberger, Weatherford and Gazprom. In 2008, 2009 and 2010, to our knowledge of customer information, sales to Schlumberger, Weatherford and Gazprom, directly and through distributors, in the aggregate accounted for 14.9%, 1.8% and 3.1% of our revenue, respectively.

We primarily conduct direct sales to end users for our drill pipes and related products segment in China, as well as for our coating materials and services segment and oilfield services segment. For our international sales of drill pipes and related products, in particular in Russia and Central Asia region, Middle East region and North America region, to our knowledge of customer information, some of our customers are distributors purchasing our products for the purposes of resale to end users. For example, some of our customers in Russia and Central Asia are distributors engaged by Gazprom. During the Track Record Period, we have not experienced any material deterioration in or termination of business relationship with our major customers, or any legal proceeding or material dispute with our major customers arising from the performance of obligations under sales contracts or settlement of outstanding balances of trade receivables, which would have a material adverse impact upon our financial condition and results of operations. Historically, we have been able to renew our certifications as a supplier of CNPC, Sinopec or other key customers, as necessary. However, there can be no assurance that renewal for such certifications will continue to be successful. See “Risk Factors—Risks Relating to Our Business and Industry—We may fail to renew our certification as a supplier of CNPC, Sinopec, or our other key customers.”

In 2008, 2009 and 2010, our five largest customers accounted for approximately 35.8%, 27.2% and 32.7% of our revenue, respectively. Revenue attributable to our largest customer during the Track Record Period represented 14.9%, 15.0% and 10.3% of our revenue for the same period, respectively. These amounts are calculated based on the contract party. Accordingly, the affiliates of, among others, CNPC and Sinopec that are different contract parties are treated as different customers. If calculated based on customer group including affiliated companies under the same control or ownership, to our knowledge of customer information, in 2008, 2009 and 2010, (i) our five largest customer groups accounted for approximately 74.8%, 59.2% and 57.5% of our revenue, respectively, and (ii) revenue attributable to our largest customer group represented 44.4%, 28.6% and 25.5% of our revenue, respectively. During the Track Record Period, save as otherwise disclosed in this subsection, none of our Directors, senior management members, associates or shareholders holding more than 5% of our issued share capital had any interest in any of our five largest customers for the Track Record Period.

Beijing Huashi Hailong Petroleum Machinery Equipment Co., Ltd., or Huashi Hailong, an entity controlled by our Controlling Shareholder, Mr. Zhang, held the qualification certificates for the supply of drill pipes, hardbanding materials, coating materials and other related products to CNPC and Sinopec since 2005. In 2008, we completed our corporate restructuring of Huashi Hailong and Huashi Hailong transferred these certificates to us. See “History and Reorganization.” Accordingly, we historically provided these products to Huashi Hailong which in turn sold these products to our end customers. For accounting purposes, the end customers of these sales through Huashi Hailong were deemed as our customers. We recognized revenue derived from such sales based on the consideration our end customers paid to Huashi Hailong, and the 2%-3% mark-up Huashi Hailong charged based on our sales price was recognized as our selling and marketing expenses.

In addition, in 2009, we began to procure steel pipes from our associate, Nantong Hilong Steel Pipe Co., Ltd., or Nantong Steel, in which we held 41% equity interest. To ensure the quality of the steel pipes procured, as

## BUSINESS

part of our arrangement with Nantong Steel, we would purchase raw steel from third parties to be processed by Nantong Steel into steel pipes. From 2009 to early 2010, we sold the raw steel that we purchased from third parties to Nantong Steel and purchased finished steel pipes from it. In early 2010, as the purchase of raw steel from us placed significant strain on the liquidity and cash flow of Nantong Steel, we modified our arrangement from a sale-and-purchase relationship to a provision of outsourced processing services by Nantong Steel. As a result of our strategic investment in Nantong Steel, we have been able to obtain outsourced processing services on steel pipes at prices lower than the prevailing market price, and enjoy priority in processing capacity to meet our demand. Such strategic investment was negotiated on an arm's length basis.

The following table sets forth our revenue by geographical location of our customer for the periods indicated:

	For the year ended December 31,					
	2008		2009		2010	
	RMB	%	RMB	%	RMB	%
	(In thousands, except for percentages)					
China .....	1,045,955	61.5	847,583	84.2	778,903	57.4
South America .....	—	—	14,238	1.4	193,195	14.3
Russia and Central Asia .....	484,431	28.5	116,648	11.6	209,186	15.4
Middle East .....	58,800	3.5	10,052	1.0	99,876	7.4
North America .....	52,949	3.1	4,607	0.5	57,606	4.2
Others .....	59,245	3.5	13,528	1.3	17,696	1.3
<b>Total revenue</b> .....	<b>1,701,380</b>	<b>100.0</b>	<b>1,006,656</b>	<b>100.0</b>	<b>1,356,462</b>	<b>100.0</b>

Historically, a majority of our revenue was derived from the PRC market. We primarily derive revenue from the PRC market through direct sales of drill pipes and related products and coating materials to end users as well as provision of coating services in China. For our international market, we primarily derive revenue from sales of drill pipe and related products and provision of oilfield services. We started to focus on developing international market and entered oilfield services business in 2008, and our revenue derived from the international market increased significantly and represented 38.5% of our total revenue in 2008.

We primarily sell drill pipes and related products to Russia and Central Asia region, North America region and Middle East region. Some of our customers in these regions are distributors engaged by end users for the purposes of sourcing such products. We aim to continue to expand our oilfield services business globally and intend to continue to enter new markets where we see sound business opportunities. In 2010, our revenue derived from South America increased significantly, resulting from our sale of tubing and casing products purchased from third parties to an oilfield services client in Ecuador as part of our oilfield services engagement. For a more detailed discussion, see "Financial Information—Description of Selected Income Statements Line Items—Revenue—Revenue by Geographic Market."

### Major Contractual Terms

#### *Drill Pipes and Related Products*

The following summarizes the major contractual terms of our typical drill pipe sales contracts:

- Pricing.** Our drill pipe contracts for domestic sales are generally produced through invitational bidding and subsequent price negotiations. As is customary in our industry, a bidding process is used by oil well project operators to solicit bid proposals from qualified suppliers. Qualified suppliers submit non-binding bid proposals to indicate their available production capacity and price levels. After the contract is awarded, the prices for drill pipes are finalized through negotiations among the successful bidders and the project operator. Generally, prices of our drill pipe products sold to CNPC and Sinopec and their respective affiliates are subject to pricing guidelines adopted by CNPC or Sinopec each year. These prices may be re-negotiated during the course of the year due to significant fluctuations in steel prices or other factors. However, parties enter into these price re-negotiations based on their business relationships rather than their contractual rights. Export prices for our drill pipes are generally set



according to the market prices in the relevant markets, subject to fluctuations depending on local market conditions, exchange rates and other factors. We seek to price our products to reflect the expected fluctuations in raw material prices to the extent possible and to pass increases in raw material prices to our customers through re-negotiating with our customers or seeking to enter into sales contracts with price-adjustment mechanism based on our business relationship with them. However, there can be no assurance that we could precisely estimate the raw material prices increase or effectively pass on such increase to our customers. Historically, our business and results of operations have been affected by the fluctuations in raw material prices. See “Financial Information—Factors Affecting Our Results of Operations—Raw Material Prices” and “Risk Factors—Risks Relating to Our Business and Industry—We may experience shortages or price increases of raw materials and components.”

- *Payment terms and credit policy.* Our payment and credit terms may vary significantly depending on a variety of factors, including our prior dealings with the customer, volume of sales, current financial position of the customer and the prevailing market conditions. Under our contracts, customers generally agree to pay 90% to 95% of the contract price in lump sum or by installments within nine months upon acceptance of our products and the balance as warranty retention money. We will review our credit policy as necessary based on market conditions and customer’s credit profile.
- *Delivery.* In the PRC market, we generally require one to four months after the date of sales contract to make delivery of our drill pipes. For the international market, a longer period of time is generally required before delivery. Delivery and insurance cost arrangements vary depending on our practice with individual customers.
- *Warranty.* We generally enter into a warranty arrangement with the customer in the sales contract. The warranty arrangement provides that the customer may withhold a portion of the purchase price, normally 5% to 10% of the total purchase price, as retention money which will only be released after the expiration of a warranty period. This retention money will be paid to us only if our product does not have any major quality problem during the warranty period. Our warranty period varies depending on our practice with individual customers, which are generally extended for one year to 18 months after delivery or acceptance of our products by our customers or after our products have been installed or put in operation by our customers. During the Track Record Period, we did not incur any material warranty expenses or experience any product return in connection with our sales of drill pipes and related products.

### ***Coating Materials and Services***

Under our coating material sales contracts, our customers generally make payments in installments depending on our arrangement with individual customers. We are generally required to make delivery of coating materials upon written notice by our customers. We also enter into a warranty arrangement with the customer for certain sales contracts, which provides that the customer may withhold 10% of the purchase price as retention money which will only be released after the expiration of the warranty period which normally extends for one year after the delivery and acceptance of the coating materials. As of December 31, 2008, 2009 and 2010, the balance of our retention money amounted to RMB1.1 million, RMB2.8 million and RMB7.0 million, respectively.

For our coating services for drill pipes, our customers generally agree to pay the contract price in a single lump sum within ten days to 120 days upon the delivery and acceptance of the coated drill pipes. We also entered into a master coating service arrangement with Baosteel, pursuant to which we will provide drill pipe coating services to Baosteel, and Baosteel will make monthly payments for the drill pipes processed by us based on pre-agreed prices for our coating service.

For our coating service contracts for oil and gas line pipes, our payment and credit terms may vary significantly depending on our arrangement with individual customer. Under these contracts, customers paying in one lump sum payment generally agree to pay the contract price within 40 days upon the delivery and acceptance of the coated oil and gas line pipes; customers paying in installments, such as CNPC and Sinopec, generally

## BUSINESS

agree to pay up to 90% to 95% of the contract price in installments and the remaining portion as warranty retention money. Our warranty arrangement with CNPC and Sinopec provides that CNPC and Sinopec may withhold the balance of the contract price as retention money which will only be released after expiration of the warranty period which normally extends for one year after the delivery and acceptance of the coated oil and gas line pipes.

### *Oilfield Services*

Our oilfield services contract can be largely categorized as follows:

- *Day-rate contracts.* We enter into day-rate contracts with our customers to provide drilling and other oilfield service equipment and service crew for fixed day rates. The customers generally agree to make monthly payment of the contract price. Our day-rate contract with Andes Petroleum Ecuador Ltd. for oil swabbing equipment requires us to provide a performance bank guarantee in favor of the customer for an amount equaling 10% of the total contract price, which will be released one month after the termination of such day-rate contract.
- *Turnkey contracts.* We enter into turnkey contracts with our customers to provide drilling and drilling related services for a lump sum payment calculated on a well-by-well basis for a specified number of wells. Our payment and credit terms may vary significantly depending on our arrangement with each individual customer. Under our turnkey contracts, customers paying a lump sum payment generally agree to pay the contract price upon the delivery and acceptance of each completed oil well; customers paying in installments generally agree to pay from 30% to 50% upon commencement of drilling and the remainder upon the delivery and acceptance of each completed oil well.

## RAW MATERIALS AND SUPPLIERS

The principal raw materials we use for our drill pipe manufacturing operations are steel based components such as steel pipes. We source the raw materials used in our drill pipe manufacturing primarily within PRC. Historically, we relied significantly on third party steel pipe suppliers to supply us with steel pipes for our production needs. In 2009, Nantong Hilong Steel Pipe Co., Ltd., or Nantong Steel, our associate in which we hold a 41% equity interest, began processing steel raw material supplied by us into steel pipes. The production of steel pipes by Nantong Steel allows us to better manage our cost structure, control the quality of our principal raw materials and streamline our in-house production process to shorten the production cycle of our drill pipes. The principal raw materials for our coating materials are polyethylene and various other types of petrochemicals the prices of which are subject to the fluctuation of oil price. We generally source these petrochemicals raw materials within PRC.

In 2008, 2009 and 2010, purchases from our largest five suppliers accounted for 61.8%, 39.1% and 29.5% of our total raw material purchases respectively. During the same period, our largest supplier accounted for approximately 32.4%, 10.3% and 11.4% of our total raw material purchases respectively. None of our Directors, senior management members, associates or shareholders holding more than 5% of our issued share capital had any interest in any of our five largest suppliers for the Track Record Period. We have not experienced any material shortage of raw materials or components, and currently we anticipate no material difficulty in procuring raw materials and components from alternative suppliers.

## RESEARCH AND DEVELOPMENT

Our technological expertise and in-depth industry knowledge enable us to develop new products that have practical applications. Our research and development teams work closely with our sales and marketing personnel to determine both the anticipated demand for a new product and whether the product can be developed with our current production facilities, technologies and resources.

We established our own research institute in Shanghai to develop products and technologies related to our drill pipe products. The institute currently has approximately 40 research professionals consisting of academics from the Chinese Academy of Engineering, senior engineers and experts in the oil and gas line pipes industry.

## BUSINESS

Major research subjects of the institute include development of new drill pipe products, oil and gas line pipe coating technologies, coating materials and hardbanding materials. The institute successfully developed a variety of new products and technologies, including sour services drill pipes, double-shoulder tool joint and drill pipe upsetting technologies. In addition, to the institute, our in-house research and development team has also developed advanced coating materials, such as extreme temperature and high corrosion coating materials, as well as high-strength fusion epoxy powder coating technology.

We are in the process of developing new drill pipe products, including aluminum alloy drill pipes and intelligent drill pipes:

- *Aluminum alloy drill pipes.* This type of drill pipes includes steel drill pipes with internal and external aluminum alloy upsetting, as well as drill pipes and heavy weight drill pipes made entirely of aluminum alloy. Aluminum alloy drill pipes are significantly lighter than steel drill pipes, which help reduce the overall burden on the drilling rig and prolong the service life of drill pipes. They are also highly resistant to sour corrosion, which facilitates drilling to greater depths, offshore oil wells and wells with high sulfuric conditions.
- *Intelligent drill pipes.* This type of drill pipe has electric cables embedded in the pipe body which connect to the power source and control system on the ground. Through electrical cables, the intelligent drill pipe transmits data from downhole sensors with high information transmission speed, in contrast to conventional technology that transmits data at lower rates. The bidirectional information transmission capability of the intelligent drill pipe can transmit real time drilling data and information from downhole operations to ground control system, as well as send commands or signals to operate downhole tools and sensors. The intelligent drill pipe enables the drilling crew to promptly adjust the drilling process in accordance with specific underground conditions.

Our dedicated research and development team, with 61 members as of December 31, 2010, has developed a series of proprietary technology and drill pipe products based on 37 patents as well as a full suite of chemical formulas for coating materials. Senior members of this team consist of industry veterans. For example, Mr. Yuan Pengbin (袁鹏斌), the chief of our Shanghai Hilong Tubular Goods Research Institute, has been involved in various projects sponsored by National Innovation Fund and participated in the development of intelligent drill pipe. Mr. Gao Zhihai (高智海), the vice-chief of our Shanghai Hilong Tubular Goods Research Institute, is a senior engineer who has been involved in various oil and gas pipe related research and development projects and has obtained three patents. Mr. Fang Junfeng (方军锋) has been involved in various research and development projects in connection with the coating and anticorrosion of oil pipes and developed our TC series of coating materials.

Our expenditure on research and development for 2008, 2009 and 2010 totaled approximately RMB17.4 million, RMB22.3 million and RMB27.6 million, respectively. We believe the amount of resources that we allocate to our research and development activities is consistent with the industry norm and our development strategy.

## MANUFACTURING AND QUALITY CONTROL

### Overview

#### *Drill Pipe Manufacturing Process*

Our drill pipes manufacturing process can generally be divided into the following stages:

- *Upsetting.* In order to produce drill pipes, steel pipes are initially upsetted to thicken the walls that connect with the tool joints.
- *Heat treatment.* The pipes are then threaded and receive a strength-enhancing heat treatment including quenching and tempering.

## BUSINESS

- *Initial Inspection.* After the upsetting and heat treatment process, a measurement and non-destructive test of the pipes is conducted through our laser measurement system and ultra-sonic testing equipment to ensure the upsetting quality.
- *Welding and related heat treatment.* The pipes are then welded to tool joints and undergo a heat treatment to enhance the strength of the welding area and a weld finishing process to remove welding stress.
- *Final testing.* Various testing and inspections are then carried out on the finished drill pipes before hardbanding, final coating and packaging.

### **Coating Process**

Our coating service process can generally be divided into the following stages:

*Cleaning.* The drill pipes are initially cleaned through sandblasting to remove oxide particles on the surface of the drill pipes. An initial inspection is carried out upon completion of this cleaning process.

*Primer coating.* The drill pipes are then coated with primer coating materials and baked to form a layer of primer coating on the surface of the drill pipes. Inspections are carried out after the coating and baking process to ensure that the primer coating is free of bubbles and other defects.

*Surface coating and curing.* The drill pipes are then coated with surface coating materials upon the primer coating and further baked to become the final solid coating, which is known as curing process. Final inspections are carried out after the surface coating and curing process.

### **Engineering**

We apply different heat treatment process to drill pipes and related products according to their material and steel grade. In order to develop a proper heat treatment process for a type of product, we carry out heat treatment experiments to test the result of the heat treatment and gradually expand the application of such heat treatment process if the results of the experiments meet with the technical specifications of such products. Through these experiments, we are able to reduce the scrap rate during the manufacturing process and therefore reduce our production costs. In addition, our heat treatment also enhances the mechanical performance of our non-API products, such as improving the resistance to hydrogen sulfide stress corrosion and high torsion stress.

In addition, through years of research and experiments, we successfully developed our unique drill pipe upsetting technique and process. By applying this technique, we are able to monitor the formation of the transitional zone during the upsetting process, and therefore ensure the internal surface of the drill pipe is thickened evenly and smoothly. This upsetting technique helps to reduce the chance of drill pipe break down during the drilling process.

During the Track Record Period, there had been no customer claim, complaint or litigation for product flaw, defect or product liability which could have a material and adverse impact upon our business and reputation. However, there can be no assurance that our products are manufactured without undetected flaws or defects. See “Risk Factors—Risks Relating to Our Business and Industry—Our products may contain undetected flaws or defects. Our business and reputation may be affected by product liability claims, litigation, complaints or adverse publicity in relation to our products.”

### **Quality Certifications**

We have implemented stringent quality control measures throughout our production processes in accordance with national standards as well as ISO9001:2000 standards. Our primary manufacturing facilities and coating facilities have been ISO certified. Drill pipes manufactured in our facilities in Shanghai and Wuxi have obtained API certification. Our drill pipe products, hardbanding products and coating services have received Fearnley Procter NS-1 certification, which qualifies us to supply such products and services to major international oil and gas companies.

## BUSINESS

### PRODUCTION FACILITIES AND REAL PROPERTIES

#### Manufacturing Facilities

##### *Drilling Tools and Related Products*

As of the Latest Practicable Date, we own and operate four drill pipe manufacturing facilities and one hardbanding materials manufacturing facility. We have installed advanced equipment and instruments for the production and inspection of our drill pipes, including friction welding machines and heavy-load upsetting machines at our drill pipe manufacturing plants in Shanghai, Jiangsu and Shanxi.

The following table sets forth selected key information on our principal drill pipe and welding wire manufacturing facilities currently in operation:

<u>Manufacturing facility</u>	<u>Equity interest</u>	<u>Current location</u>	<u>Gross floor area (square meters)</u>	<u>Lease/own</u>	<u>Main products/services</u>
Shanghai Hilong Drill Pipe Co., Ltd.	100.0%	Shanghai, China	22,266	Owned <sup>(1)</sup>	Drill pipes and drill collars
Hilong Drill Pipe (Wuxi) Co., Ltd.	100.0%	Wuxi, Jiangsu, China	6,478	Leased <sup>(2)</sup>	Drill pipes and tool joints
Jiangsu Hilong Drill Pipe Co., Ltd.	100.0%	Jiangyan, Jiangsu, China	5,267	Owned	Drill pipes
Shanxi Tangrong Hilong Drilling Pipe Co., Ltd.	51.0%	Shanxi, China	13,742	Owned <sup>(3)</sup>	Drill pipes and drill collars
Shanghai BoTeng Welding Consumables Co., Ltd.	100.0%	Shanghai, China	864	Owned <sup>(1)</sup>	Hardbanding materials

(1) This facility is leased from Hilong Group of Companies, which is a member of the Group and holds the land use right to the facility's land. The current lease expires in December 2011.

(2) The current lease expires in November 2016, with an option to renew for an additional period as mutually agreed by the parties.

(3) Our joint venture partner, Shanxi Tangrong Automobile Component Manufacturing Group Co., Ltd., holds the land use right to the facility's land.

The following table sets forth our actual production capacity and utilization rate for our drill pipe facilities for the Track Record Period:

		<u>For the year ended December 31,</u>		
		<u>2008</u>	<u>2009</u>	<u>2010</u>
		<u>(In tonnes, except percentages)</u>		
Production capacity <sup>(1)</sup>		42,600	42,600	42,600
Drill pipes and related products . . . . .	Utilization rate	90%	38%	69%

(1) Actual production capacity is estimated based on designed capacity discounted by the effect of, among other things, interruption, stoppage and maintenance.

##### *Coating Materials and Services*

As of the Latest Practicable Date, we have one coating material manufacturing facility, one oil and gas line pipes coating facility and three drill pipe coating facilities. We have installed advanced coating testers and inspection instruments, including coating mechanical property tester and trial production equipment at our coating material manufacturing plant in Shanghai. We equipped our coating service facilities primarily with coating machines we manufactured in-house, and supplemented this with equipment purchased from third parties.

## BUSINESS

The following table sets forth selected key information on our coating materials and services facilities currently in operation.

<u>Manufacturing facility</u>	<u>Equity interest</u>	<u>Current location</u>	<u>Gross floor area (square meters)</u>	<u>Lease/own</u>	<u>Main products/services</u>
Shanghai Hilong Shine New Material Co., Ltd.	100.0%	Shanghai, China	7,048	Owned <sup>(1)</sup>	Coating material manufacturing
Shanghai Hilong Anti-Corrosion Technology Engineering Co., Ltd.	100.0%	Shanghai, China	4,608	Owned <sup>(1)</sup>	Oil and gas line pipes coating service
Shanghai Tube-Cote Petroleum Pipe Coating Co., Ltd.	51.0%	Shanghai, China	8,284	Owned	Drill pipe and tubing and casing coating service
Jiangsu Tube-Cote Shuguang Petroleum Pipe Coating Co., Ltd.	58.2%	Jiangyan, Jiangsu, China	29,988	Leased <sup>(2)</sup>	Drill pipe and tubing and casing coating service
Tangrong Tube-Cote Petroleum Pipe Coating (Shanxi) Co., Ltd.	65.0%	Houma, Shanxi, China	4,212	Owned <sup>(3)</sup>	Drill pipe coating service

(1) The current lease expires in December 2011. This facility is leased from Hilong Group of Companies, which is a member of the Group and holds the land use right to the facility's land.

(2) The current lease expires in September 2023, with automatic extension for additional one-year periods upon advance notice.

(3) Our joint venture partner, Shanxi Tangrong Automobile Component Manufacturing Group Co., Ltd., holds the land use right to the facility's land.

The following table sets forth our actual production capacity and utilization rate for our coating material manufacturing and coating service facilities for the Track Record Period:

		<u>For the year ended December 31,</u>		
		<u>2008</u>	<u>2009</u>	<u>2010</u>
Drill pipe coating material manufacturing ( <i>in tonnes</i> ) . . . . .	Production capacity <sup>(1)</sup>	1,000	1,000	1,000
	Utilization rate	82%	52%	95%
Oil and gas line pipe coating material manufacturing ( <i>in tonnes</i> ) . . . . .	Production capacity <sup>(1)</sup>	13,000	20,760	20,760
	Utilization rate	92%	82%	61%
Drill pipe coating services ( <i>in thousands of meters</i> ) . . . . .	Production capacity <sup>(1)</sup>	1,850	1,850	2,150
	Utilization rate	112% <sup>(2)</sup>	70%	113%
Oil and gas line pipe coating services ( <i>in thousands of square meters</i> ) . . . . .	Production capacity <sup>(1)</sup>	1,800	3,100	3,100
	Utilization rate	64%	98%	77%

(1) Actual production capacity is estimated based on designed capacity discounted by the effect of, among other things, interruption, stoppage and maintenance.

(2) The utilization rate exceeded 100%, primarily because interruption, stoppage and maintenance occurred less frequently during the period than the level used for estimating the actual production capacity, reflecting high demand for drill pipe coating services during the period.

### ***Oilfield Services***

As of the Latest Practicable Date, we owned eight onshore drilling rigs ranging from 650 horsepower to 2,000 horsepower. We entered oilfield services business in 2008, and our revenue from this operating segment in 2008 was primarily derived from trading of drilling-related products. We owned three drilling rigs in 2009 and 2010, and leased one drilling rig from an independent third party in 2009. Based on estimated number of workable days taking into account interruption, maintenance and stoppage due to weather or other conditions, the utilization rate of our drill rigs was 81% in 2009 and 89.5% in 2010.



## **Real Properties**

Our headquarters is located in Shanghai, China. We hold the land use rights to the underlying parcels of land for our facilities located in Shanghai and Jiangsu. As of February 28, 2011, the total site area of the properties that we owned and have valid ownership certificates was approximately 256,086 square meters, of which, our existing facilities in Shanghai, and Jiangyan occupy approximately 226,166 square meters and 29,920 square meters, respectively, with a total GFA of approximately 53,813.28 square meters and 4,992.47 square meters, respectively. We occupy our owned properties for purposes of production, warehouses, offices and others. As of February 28, 2011, we leased 15 properties with a total GFA of approximately 63,701.24 square meters.

We are in the process of obtaining the land use right for a parcel of land with a gross land area of 29,752 square meters in Sichuan Province. We won the bid of land use right with respect to such land in February 2011 and have duly paid the premium required to obtain such land use right. We expect to obtain the land use right of such land in June 2011. We commenced construction of coating service facilities and office spaces with a gross floor area of 15,075 square meters on the land in November 2009, and have not commenced production at such facilities. We have obtained the consent from competent local authorities in Sichuan Province with respect to our commencement of construction on such land. Although such consent was given prior to the local authority's issuance of approval for construction commencement, the local authority has agreed to issue the relevant approvals after the construction is completed. We have been advised by King & Wood, our PRC legal adviser, that (i) there is no material legal impediment for the Group to obtain the land use right certificate with respect to such land in Sichuan Province; and (ii) the likelihood for the local authority to impose any fine or penalty as a result of such lack of land use right certificate or commencement of construction on such land in Sichuan Province is remote.

In addition, we leased (i) the production facility used by Shanxi Tangrong Hilong Drilling Pipe Co., Ltd. in Shanxi Province with a gross floor area of 13,742 square meters and production capacity of 2,000 tons per annum; (ii) the production facility used by Tangrong Tube-Cote Petroleum Pipe Coating (Shanxi) Co. Ltd. in Shanxi Province with a gross floor area of 5,577 square meters; and (iii) the production facility used by Jiangsu Tube-Cote Shuguang Petroleum Pipe Coating Co., Ltd. in Jiangsu Province with a gross floor area of 29,988 square meters and production capacity of 0.5 million meters per annum, from our joint venture partners to these entities. As of the Latest Practicable Date, these joint venture partners were in the process of obtaining property titles to such facilities. We have been advised by the lessors that there is no material legal impediment for them to obtain property titles to these facilities from relevant PRC governmental authorities. In addition, our joint venture partners to these entities have agreed to indemnify us against or otherwise hold us harmless from any loss as a result of our use of such leased properties.

We believe that the likelihood for us to relocate the related operations as a result of such lack of property titles is remote. However, to the extent that any material fines or penalties are imposed by the governmental authority, or that any other loss sustained by us as a result of our usage of such properties is not fully indemnified by the lessors, our business, financial condition and results of operations could be materially and adversely affected. See "Risk Factors—Risks Relating to Our Business and Industry—We face certain risks relating to the real properties that we own, use or lease." Save as otherwise disclosed above, we or our lessors held valid title to all material properties that we own or lease, as applicable, as of the Latest Practicable Date.

## BUSINESS

### COMPETITION

#### Major Participants

Our competitors vary significantly based on business segments and geographical markets. The following table sets forth our key competitors by product and service category and market.

Product	PRC market	International markets
Drill pipe products	NOV Grant Prideco; DP Master; Long Bright	NOV Grant Prideco; Vallourec & Mannesmann; Tenaris
Line pipe coating materials	3M, SK Group, Dupont;	3M, SK Group, Dupont; Socotherm; Borealis/Borouge
OCTG coating materials and services	NOV Tuboscope	NOV Tuboscope; Shawcor; Schlumberger;
Oilfield services	N/A	Local oilfield service providers

#### Competitive Landscape

The following summarizes the competitive landscape in each of these product and service category:

- Drill pipe products.* The selection of a drill pipe supplier is typically made by a contract drilling firm's operations department and procurement department following a competitive bid process. The most important selection criteria are typically quality, price, and availability. Outside China and Russia the market is dominated by three large multinational firms (the Grant Prideco division of NOV, Tenaris, and Vallourec & Mannesmann), each with significant financial resources and a long-established track record. The Russia and Chinese drill pipe markets are not as highly concentrated as other markets; in both Russia and China the leading drill pipe competitor is estimated to hold about 30% of the market. In the Russian market, OAO TMK, a domestic drill pipe manufacturer, competes with a number of primarily China-based importers, while approximately 20 firms compete in the Chinese drill pipe market. In China, based on 2009 sales, we are the leading drill pipe manufacturer. Other significant suppliers to the Chinese drill pipe market include Grant Prideco, DP Master and Long Bright. In all approximately 20 firms are believed to compete in the Chinese drill pipe market.
- Line pipe coating materials.* The line pipe coating materials market is supplied by a number of large, diversified multinational firms with significant technical expertise, proprietary technology, extensive manufacturing networks, and proven records of performance. Most of these companies are focused on addressing critical service applications (either due to operating conditions or construction constraints) requiring innovative technology solutions. Many of these multinational line pipe coating materials companies have developed close working relationships with coating applicators, pipeline construction firms, and pipeline operators in many countries through training and certification programs. In addition, local or regional coating materials vendors supplying low-cost coating products such as FBE will also compete in non-critical service applications. In China, based on 2009 sales, we are the leading line pipe coating materials manufacturer. Other significant players in the Chinese line pipe coating materials market include 3M, SK Group, and Dupont. These line pipe coating materials companies have developed close working relationships with coating applicators, pipeline engineering and construction firms and pipeline operators in China through training and certification programs.
- OCTG coating materials and services.* The most important vendor selection factors are local market presence, quality of service, technology, and price. Over time, oil and gas companies (which own casing and tubing) and drilling contractors (who purchase drill pipe) are increasingly requiring sophisticated tubular tracking and management skills from their OCTG coating and inspection suppliers as they seek to maximize the useful life of their OCTG assets. The OCTG coating materials and services industry is a mature market served by well-established vendors. Most firms that provide coating services also provide inspection services and some will also provide tubular maintenance

## BUSINESS

services. The OCTG coating materials and services market is highly consolidated, particularly outside North America, Russia, and China. Tuboscope dominates this market with approximately 50% of the North American market and approximately 80% of the international (excluding Russia and China) market. Based on 2009 sales, the Group is the leading Chinese OCTG materials and coating service firm, followed by NOV Tuboscope which competes in China through its joint ventures with domestic partners.

- *Drilling services market.* The selection of a drilling services firm is typically made by the oil company's drilling department and procurement department following a competitive bid process. The most important selection criterion is typically price, although other factors do come into play including past experience/reputation, technical sophistication, condition of equipment, and experience of personnel. In most markets in China and elsewhere in the world, competitors include: (i) large multinational oilfield service firms with significant financial and technical resources focused primarily on high-risk "critical service" projects, (ii) local or regional firms with detailed knowledge about local surface or downhole drilling conditions which allows them to more precisely estimate operating time/costs and thus underbid competitors that have less local knowledge, and/or (iii) the in-house drilling service subsidiaries of national oil companies which tend to compete on price on low-risk projects for their parent company.

### Entry Barriers

The following summarizes the entry barriers in each of these product and service category:

- *Drill pipe products.* The drill pipe market is highly capital intensive on both a capital and operating cost basis, and the qualification process to become an approved vendor can be time-consuming and expensive. In addition, the drill pipe manufacturing process requires sophisticated metallurgical skills and experience. As a result, firms entering the drill pipe market must have significant financial and technical resources.
- *Line pipe coating materials.* The primary barrier to penetrating the line pipe coating materials market is the time and cost required to establish a proven track record necessary for general market acceptance. Products designed to address the critical service segment of the market will require considerable technical expertise and significant research and development budgets.
- *OCTG coating materials and services.* The primary barrier to penetrating the OCTG coating materials and services market is the time and cost required to establish a proven track record necessary for general market acceptance with both pipe mills and their customers (oil and gas companies and drilling contractors). In addition, the cost of and operating expertise associated with inspection technology acts as an entry barrier to the inspection segment of the OCTG market.
- *Drilling services.* Barriers to entering the drilling services market are very high. The drilling services market is capital intensive and requires both well-maintained equipment and experienced personnel in order to be competitive. In addition, it takes time for drilling services firm to establish a proven track record in order to find wide acceptance in the market. Developing proprietary technology is often critical in order to be able to compete for high-risk "critical service" assignments.

For further information on market share data and other industry information on the product and service category in which we compete, see "Industry Overview" and "Industry Consultant Report" in Appendix IV of this prospectus.

### INTELLECTUAL PROPERTY

We rely on a combination of patents, trademarks and contractual rights to protect our intellectual property rights. As of the Latest Practicable Date, we owned 35 registered patents and 98 registered trademarks in the PRC and elsewhere in the world. We also have 21 patents and 49 trademarks pending approval for registration in

## BUSINESS

the PRC and elsewhere in the world. Our intellectual properties also include tradenames, software, project references, technical data such as test results and operating data from projects, drawings, designs, and machinery and manufacturing techniques we developed in-house. We enter into confidential agreements or employment agreements with confidentiality provisions with our management employees and engineers. In particular, we primarily rely on such confidential agreements for the protection of our key technologies in coating materials. See “Appendix VI—Statutory and General Information” for more information on our intellectual property rights. We are not involved in any litigation or legal proceedings for violation of intellectual property rights, nor are we aware of any violation of the same.

### EMPLOYEES

As of December 31, 2008, 2009 and 2010, the total number of full-time employees employed our Group was 1,405, 1,315 and 1,314, respectively. The following table sets forth the number of our full-time employees by business segment and area of responsibility as of December 31, 2010:

	<u>Headquarters</u>	<u>Drill pipes and related products</u>	<u>Coating materials and services</u>	<u>Oilfield services</u>	<u>Total</u>
On-site workers .....	14	430	300	136	880
Administrative .....	37	97	91	32	257
Research and development .....	4	26	25	6	61
Sales and marketing .....	19	5	18	11	53
Company management .....	9	5	3	4	21
After-sales services .....	3	2	9	2	16
Overseas representatives .....	10	0	0	16	26
<b>Total</b> .....	<u><b>96</b></u>	<u><b>565</b></u>	<u><b>446</b></u>	<u><b>207</b></u>	<u><b>1,314</b></u>

We have not had any labor strikes or other labor disturbances that have interfered with our operations, and we believe that we have maintained a good working relationship with our employees. As advised by King & Wood, our PRC legal adviser, we have been in compliance in all material respects with applicable employment laws during the Track Record Period.

We provide various healthcare benefits and insurance to our employees in accordance with applicable laws and regulations. As of the Latest Practicable Date, we have not experienced any material work related injuries or fatalities.

### OCCUPATIONAL HEALTH AND SAFETY

Our operations involve welding, handling of heavy machinery and components and hazardous chemicals. As a result, our employees may face the risk of various work-related injuries and accidents. Moreover, the occurrence of any of the foregoing events could result in damage to, or destruction of properties or manufacturing facilities, business interruption and possible legal liability. See “Risk Factors—Risks Relating to Our Business and Industry—We are required to comply with various environmental, safety and health laws and regulations which are extensive and the compliance of which may be onerous or expensive.”

We are subject to the relevant rules and regulations on occupational health and safety, such as the Safe Production Law of the PRC, the Law of the PRC on the Prevention and Treatment of Occupational Diseases and Regulations on the Reporting, Investigation and Handling of Work Safety Accidents. For further details, see “Regulations.” We have established work safety policies or procedures to ensure that all parts of our operations are in compliance with existing laws and regulations. During the Track Record Period, there had been no instance of major work related injuries or casualties which could have a material and adverse impact upon our business and operations. However, there can be no assurance that we would not suffer from any loss or injury resulting from inherent occupational hazards. See “Risk Factors—Our business operations involve risks and occupational hazards.”

## **ENVIRONMENTAL MATTERS**

Our production processes primarily involve the manufacture and assembly of components, and we do not operate in a highly-polluted industry. Our operations in the PRC are subject to a number of environmental laws and regulations. See “Regulations.” During the Track Record Period, we were in compliance in all material respects with applicable environmental laws, and did not incur any material cost in complying with such laws. Although we do not expect to incur any material cost in this regard in the future, any additional or more onerous environmental laws or regulations may cause us incur significantly increased costs, which we may not be able to pass on to our customers. See “Risk Factors—Risks Relating to Our Business and Industry—We are required to comply with various environmental, safety and health laws and regulations which are extensive and the compliance of which may be onerous or expensive.”

## **INSURANCE**

Based on the industry practice and our experience, we believe that we have maintained insurance coverage we consider necessary and sufficient for our operations and customary for the industry in which we operate. In particular, we maintain insurance coverage for our assets, including production facilities, machinery, equipment and vehicles. We also purchase logistic insurance for transportation of our products based on need and our negotiation with our customers. We maintain statutorily required insurance for our employees, including work-related injury insurance, medical insurance, maternity insurance, unemployment insurance and pension insurance. We also maintain property and casualty insurance for our oilfield service business overseas. Consistent with what we believe to be customary practice in the PRC, we do not maintain and do not expect to maintain any product liability insurance or business interruption insurance. As of the Latest Practicable Date, we had not received any material product liability or third party liability claims from our customers or any other third parties and have not experienced any material business interruptions during the Track Record Period. Although we maintain insurance that we consider customary for our industry and our operations, we may still be subject to losses resulted from the risks that are not covered by the insurance we currently carry on. See “Risk Factors—Risks Relating to Our Business and Industry—We may not maintain sufficient insurance coverage for the risks associated with our business operations.”

## **ACTIVITIES SUBJECT TO U.S. ECONOMIC SANCTIONS LAWS**

The U.S. Department of the Treasury’s Office of Foreign Assets Control, or OFAC, administers certain laws and regulations, or U.S. Economic Sanctions Laws, that impose restrictions upon U.S. persons and, in some instances, foreign entities owned or controlled by U.S. persons, with respect to activities or transactions with certain countries, governments, entities and individuals that are the subject of U.S. Economic Sanctions Laws, or Sanctions Targets. U.S. persons are also generally prohibited from facilitating such activities or transactions. In 2008, we generated turnover of approximately Euro 3.0 million in sales of products to Sanctions Targets in Iran. Since January 1, 2009, we have not had any direct sales to Sanctions Targets, including those in Iran. As of December 31, 2010, our accounts receivable on sales to Iran was nil. We have not been subject to any penalties in connection with our sales to Iran, and do not expect any penalties to be imposed in connection with such sales. In addition, we sell a portion of our products in the international markets through independent non-U.S. distributors which are responsible for interacting with the end customers of our products. To our knowledge, such distributors have not resold any of our products to Sanction Targets during the Track Record Period. None of the proceeds of the Global Offering will be used to fund transactions or activities which would, if undertaken by a U.S. person as defined in U.S. Economic Sanctions Laws, be prohibited by U.S. Economic Sanctions Laws. To ensure ongoing compliance with U.S. Economic Sanctions Laws, we have recently commenced an OFAC training program for those employees whose job responsibilities implicate OFAC compliance in order to promote awareness of our obligations under the U.S. Economic Sanctions Laws and to help employees understand their roles and responsibilities. In addition, we have recently implemented an independent review program by our internal audit department as part of which it will conduct periodic independent reviews of our OFAC compliance efforts and report findings to our senior management.

<b>BUSINESS</b>
-----------------

**LEGAL PROCEEDINGS AND COMPLIANCE**

We are involved in legal proceedings arising from the ordinary course of our operations from time to time. To the knowledge of our Board of Directors, we are not involved in or threatened by any litigation or other legal matters which, if decided adversely against us, could reasonably be expected to have a material adverse impact on our business or operations. As advised by King & Wood, our PRC legal adviser, we have been in compliance in all material respects with applicable laws of the PRC during the Track Record Period. In addition, with respect to our operations in Kazakhstan and Ecuador, we have been advised by Salans LLP, our Kazakhstan legal adviser, and Pérez Bustamante & Ponce, our Ecuador legal adviser, that we have not had any instance of material non-compliance with applicable laws of Kazakhstan and Ecuador, respectively, or otherwise failed to obtain any material governmental permit or license, as applicable, which could have a material and adverse impact on our overall business and operations during the Track Record Period.