Large Diameter Pipe in China

China Industry Study with Forecasts to 2009 & 2014

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Particularly strong growth is forecast in drainage, water distribution and sewer applications, where concrete is the leading large diameter pipe material.

**Demand in China to grow 8.8% yearly through 2009**

Demand for large diameter pipe in China is forecast to advance 8.8 percent per annum through 2009 to over 60 million meters, valued at ¥51.5 billion. Gains will be supported by a continuation of the rapid economic growth achieved over the past decade and by initiatives to upgrade and expand the infrastructure in China. Among the various applications for large diameter pipe in China, particularly strong growth will be recorded in drainage, water distribution and sewer applications. Road building efforts, such as the “7918 Network” national highway system, will generate demand for large diameter pipe trunk lines to convey runoff from the roads and distribute it to existing bodies of water.

Robust building construction activity, both in residential and nonresidential markets, will also support demand for large diameter pipe. Improvements to storm sewer networks will be required to deal with runoff from newly developed land, while expanded water treatment facilities will require large diameter pipe for effluent intake. A concerted effort by the national government to improve potable water supplies will also aid large diameter pipe demand. For example, in November 2005, the Ministry of Water Resources launched a water supply project to ensure that safe drinking water reaches a significant fraction of the estimated 300 million rural inhabitants of China who do not have access to water that is suitable for consumption.

**Concrete pipe to remain dominant material**

Measured by length, concrete was the leading material for large diameter pipe in China in 2004, with demand of 17.3 million meters, accounting for 43 percent of the total. Concrete pipe is used in sewer and drainage applications and in trunk lines to distribute water. Concrete provides the highest crush resistance at the lowest cost of all pipe materials, with a potential service life of 100 years or more. The Chinese government is promoting prestressed concrete cylinder pipe in water distribution applications as a means to increase the efficiency of water transport. Through 2009, demand for concrete large diameter pipe is forecast to rise 9.8 percent per year to 27.5 million meters. Gains will be fueled by strong performance in drainage and sewer applications.

Demand for plastic large diameter pipe is expected to advance 9.7 percent per annum through 2009 to nearly twelve million meters. High density polyethylene pipe will gain applications in drainage and natural gas transportation. Large diameter pipe made from reinforced thermoset plastics will benefit from the manufacturing boom in China, as it is used in process industries such as chemicals.
Demand for large diameter pipe in the Northwest region is expected to increase just 3.3 percent per year through 2009 to 3.4 million meters. Double-digit annual growth is expected for large diameter pipe used in sanitary sewers, storm sewers, and drainage applications. Efforts to reduce the pollution of bodies of surface water and initiatives to improve potable water delivery will spur demand for large diameter pipe. Increased road building activity in the Northwest region will assist demand for large diameter pipe in drainage applications. Demand for large diameter pipe in gas transmission uses is expected to fall outright from the elevated 2004 level. In that year, the final phase of construction of the West-East Gas Pipeline boosted pipe demand. Going forward, pipelines will face competition from liquified natural gas, an alternative technology that allows for road transport of the natural gas deposits in Xinjiang province.

Measured by length, steel was the leading large diameter material in the Northwest region in 2004, based on the strength of demand in gas transmission applications. With a contraction expected in gas transmission demand for large diameter pipe, concrete will supplant steel as the leading material in 2009. Demand for large diameter concrete pipe in the region is expected to grow more than ten percent per annum through 2009 to 1.5 million meters. Growth will be supported by installations in storm sewers and sanitary sewers.

Suppliers -- Yongchang Composites, a manufacturer of reinforced thermoset plastic large diameter pipe, is based in Xinjiang. In April 2005, Sekisui Chemical acquired a majority stake in Xinjiang Yongchang Composite Company Limited (China) as part of a strategy to expand Sekisui’s presence in the Chinese water supply infrastructure market. Subsequent to the acquisition, the company operates as Xinjiang Yongchang-Sekisui Composites Company Limited.
“Through 2009, high density polyethylene will remain the leading resin for large diameter plastic pipe in China, with particularly good opportunities projected in water distribution and drainage applications. Demand for HDPE large diameter pipe is expected to reach 7.8 million meters in 2009 on annual growth of 9.4 percent. Even faster advances, however, are anticipated for ...”

--Section V, pg. 87
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