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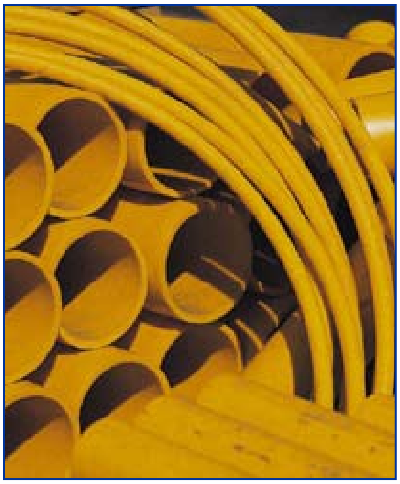

Plastic & Competitive Pipe

US Industry Study with Forecasts to **2011 & 2016**

Study #2172 | March 2007 | $4600 | 336 pages

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US Industry Study with Forecasts to ***2011 & 2016***

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Advances US pipe demand will be driven by heightened energy demands, growing obsolescence of sewer and drainage systems, and needs to upgrade municipal water systems.

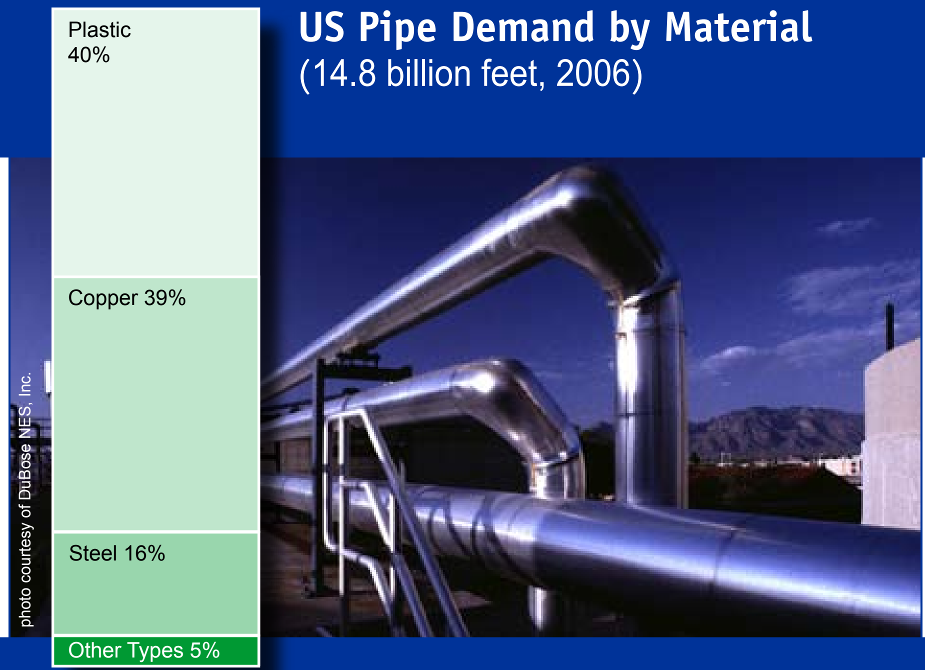
Steel pipe to be fastest growing product segment

US pipe demand is projected to increase 2.4 percent annually to 16.7 billion feet in 2011. Advances will be driven by heightened energy demands, growing obsolescence of sewer and drainage systems, and needs to upgrade municipal water systems. Steel pipe demand will exhibit the fastest gains, rising 3.2 percent annually through 2011 based on opportunities in energy and potable water markets. Oil and gas pipe demand will be fueled by opportunities in line pipe, used in the transmission of natural gas and petroleum, as well as oil country tubular goods used in drilling activity. Potable water pipe demand for steel will be fostered by steel's high pressure tolerance and strength, and by the aging of water distribution pipelines.

Plastic pipe to remain most common material

Plastic pipe demand is expected to expand 2.4 percent yearly through 2011. Polyvinyl chloride (PVC) will account for 65 percent of all plastic pipe demand with growth stimulated by improved joining technologies and resins such as molecularly oriented PVC. High density polyethylene pipe will exhibit the fastest plastic pipe growth based on opportunities in potable water and corrugated pipe. Advances will reflect performance enhancements, including greater use of bimodal polyethylene. Reinforced thermosets and other resins will expand at a slower pace due to mature markets and more specialized uses.

US Pipe Demand by Material
(14.8 billion feet, 2006)



Copper pipe demand will increase at a below average pace due to declining single family housing starts and subsequent diminished opportunities in bedrock service and distribution applications. Aluminum pipe demand will present its best opportunities in light poles and other bridge, street and highway products, with overall growth constrained by cost disadvantages compared to other materials. Storm sewers will remain the leading concrete pipe application, with water distribution exhibiting better growth. Cast iron pipe demand will remain almost flat due to mature applications and competition from plastic pipe.

Energy pipe to present best market opportunities

Construction pipe demand is forecast to rise 2.1 percent per annum through 2011. Advances will be fostered by a rebound in nonresidential building construction, with further expansion threatened by declines in single-family housing starts. Refrigeration demand will be bolstered by good growth in beverage refrigeration, display cases and cryogenic equipment. Energy pipe demand will present the best growth and expand 3.7 percent yearly to 3.0 billion feet in 2011, benefitting from continued drilling activity, as well as the replacement and expansion of energy transmission pipelines.

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Sample Text, Table & Chart

TABLE XII-9

ALUMINUM PIPE DEMAND BY MARKET (million pounds)

Item	1996	2001	2006	2011	2016
Gross Domestic Product (bil 2000$)	8320	9891	11400	13200	15300
lbs pipe/mil $ GDP					
Aluminum Pipe Demand					
Structural, Mechanical & Misc:					
Motor Vehicles					
Refrigeration & Related					
Bridges, Streets & Highways					
Other S/M/M					
Electrical & Other Conduit					
Irrigation					
Process Industries					
% aluminum					
Total Pipe Demand	50500	60360	67210	73300	83800

SAMPLE TABLE

POTABLE WATER PIPE

Municipal Water Pipe

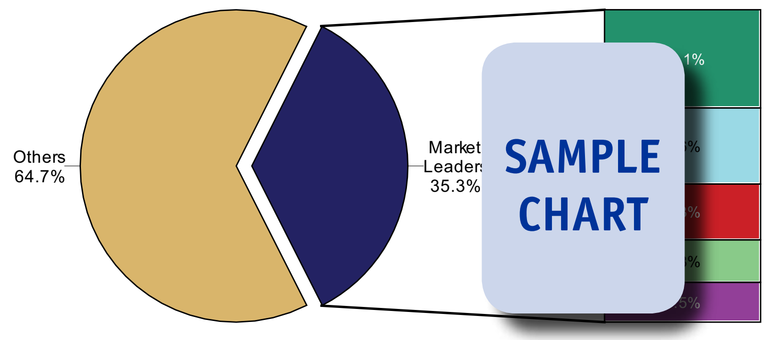
Municipal water pipe demand will grow million feet in 2011, spurred by an aging infra and capacity expansion requirements. Pipe ne tan areas are over a century old and in urgent upgrading. Cast iron pipe, the dominant mater 2001 and 2006 due to drops in real nonresider expenditures. Rebounds are anticipated throug ... d growth and expand nearly ... in 2011. Enabling advances ...'s pressure and deflection re- ... These attributes are necessary to compete with cast iron and concrete pipe in demanding underground, pressurized applications. Growing code approvals and increasing plastic pipe specification by engineers and contractors will also assist growth. Concrete pipe demand will rise at a slightly above average p million feet in 2011, mainly in larger diameter applications. growth will be threatened by competition from improved gra plastic pipe. Steel pipe will mainly be used in high pressure further growth constrained by the cost and corrosion resistan tages of plastic and concrete pipe.

Municipal water pipe requirements vary according to in Main high pressure utility lines generally use cast iron and c although plastic is making inroads. Large diameter applicati require excellent crush resistance and joint integrity, favor co Plastic pipe has historically been used in diameters of less th since cost advantages rapidly fade in larger diameters becaus

SAMPLE TEXT

TABLE XIV-1

PLASTIC PIPE INDUSTRY MARKET SHARE, 2006 ($9.9 billion)*



* market share figures include resins, additives & processing

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Sample Profile, Table & Forecast

TABLE VIII-1

PIPE DEMAND BY MARKET
(million feet)

Item	1996	2001	2006	2011	2016
Bldg Construction Expend (bil 2000$)	5				05
feet pipe/000$ construction					.2
DWV Pipe Demand					70
Plastic					97
Cast Iron					63
Copper					9
Steel					1
% DWV					.7
Total Pipe Demand	12				50

SAMPLE TABLE

COMPANY PROFILES

Charlotte Pipe & Foundry Company
2109 Randolph Road
Charlotte, NC
704-348-6450
http://www.cha

Annal Sales: 2/07)
Employment:

Key Products: chloride,
acrylonitrile-bu

SAMPLE PROFILE

Charlotte Pipe & Foundry Company (CPFC) is a privately held manufacturer of plastic pipe and fittings, and cast iron soil pipe and fittings. The Company operates through three divisions: Industrial, Plastics and Cast Iron.

The Company is active in the US plastic and competitive pipe industry via all three divisions. Through the Industrial division, CPFC is primarily engaged in the production of heavy-wall polyvinyl chloride (PVC) pipes and fittings with plain or bell ends in Schedule 40 and 80 dimensions for pressure-rated applications. Both Schedule 40 and 80 pipes are manufactured in sizes ranging from 1/4 inch to 16 inches in diameter. Schedule 40 pipes are supplied in 10- and 20-foot lengths, while Schedule 80 pipes are available in 20-foot lengths.

In addition, the Industrial division's range of pressure piping also includes CORZAN chlorinated PVC (CPVC) and FLOWGUARD GOLD CPVC pipe products, both of which CPFC licenses from Noveon Incorporated (Cleveland, Ohio), a subsidiary of Lubrizol Corporation (Wickliffe, Ohio). As part of Noveon's Corzan Industrial Systems

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"Demand for plastic drain, waste and vent pipe is forecast to rise 2.4 percent per annum to 1.4 billion pounds in 2011, reaching more than 900 million feet. Fostering growth will be plastic's cost and performance advantages over cast iron, copper and steel, as well as attributes such as light weight and installation ease for do-it-yourself projects. Polyvinyl chloride (PVC) and acrylonitrile-butadiene-styrene (ABS) are the two resins used in drain, waste and vent applications. PVC pipe will remain dominant based on its low cost and easy processing. Annual growth of ..."
--Section VIII, pg. 100

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Other Studies

Gutters & Downspouts

US gutter and downspout demand will reach $4.2 billion in 2011. Gutters will remain the dominant segment while gutter guards grow the fastest. Aluminum will stay the largest material type, with plastic growing the fastest from a small base. The much smaller nonresidential market will outpace the residential sector. This study analyzes the US gutter and downspout industry, with forecasts for 2011 and 2016 by product, material, market and region. It also evaluates market share and profiles major players.

#2226 .... 08/2007..................... $4400

World Plumbing

Global demand for plumbing products will rise 5% annually through 2010. Growth factors include surging building construction in developing countries and plumbing modernization in developed regions. Bathtub and shower fittings will lead gains while automatic lavatory faucets will benefit from water conservation concerns. This study analyzes the $42.8 billion world plumbing industry to 2010 and 2015 by type, material, world region and for 22 countries. It also details market share and profiles major firms.

#2165 .... 04/2007..................... $5500

Large Diameter Pipe

Large diameter pipe demand in the US will reach $8.7 billion in 2010 based on needs to expand and modernize an aging pipe infrastructure. Concrete pipe will remain the dominant type due to material advantages, while plastic pipe will present the best growth as a result of resin and machinery improvements. This study analyzes the 191 million foot US large diameter pipe industry to 2010 and 2015 by market and material. It also evaluates company market share and profiles leading industry participants.

#2136 .... 12/2006..................... $4400

World Plastic Pipe

Global demand for plastic pipe will grow 4.4% annually through 2010 based on better prospects in developed nations coupled with continued strong growth in many developing countries, particularly China. Plastic pipe used for potable water delivery, drainage and sewage applications, and natural gas distribution will support growth. This study analyzes the 6.2 billion meter world plastic pipe industry to 2010 and 2015 by material, world region and for 23 countries. It also details market share and profiles major firms.

#2127 .... 11/2006..................... $5400

PVC in China

China leads the world in both production and consumption of polyvinyl chloride (PVC), and demand will rise 8% annually through 2010. Extruded PVC will gain market share. Construction will remain the largest application while packaging uses will surpass the consumer and institutional segment to become the second largest PVC market. This study analyzes the ¥44.5 billion Chinese PVC industry to 2010 and 2015 by product, market and region. It also profiles major players and evaluates company market share.

#2131 .... 12/2006..................... $4900

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