

Although the general regional consumption data shown in this report include only the valves produced by the sand and shell mold processes, the industry is showing a heavy trend toward the use of investment castings in the smaller sizes of corrosion resistant, carbon, and low alloy valves and valve components.

The size range of steel castings supplied to the valve market varies from fractions of one pound to tens of thousands of pounds. The majority of the tonnage and pieces falls within the range of the 2 inch valve covers and bonnets between 2 and 4 pounds up to 24 inch balls, discs, and bodies between 400 and 1,000 pounds. Recent Knight studies show approximately 50% of the total pieces produced weigh less than 50 pounds.

It is forecast that domestic supply is to exceed demand by 15% to 20% in 1985 for medium and high volume castings up to 1,000 pounds. Larger valves for low volume orders show a potential 5% short supply by 1985.

#### Mill Machinery (6th Largest Steel Castings Market)

The demand for new roll Mill Machinery is continuing to decline with raw steel production and growth of the continuous casting processes. The greatest loss is in large steel back-up rolls. It is forecast that the use of continuous cast steel is to increase to 40% by 1989 and decrease the use of steel rolls to a ratio of .31 (roll shipments/raw steel shipments). Steel castings consumption in this market presently is dominated by repair and spare parts replacement of Mill Machinery castings and mill rolls.

Maintenance repair parts typically are one piece or very low volume orders and are currently being produced by the mill captive foundries or low volume commercial jobbing foundries with long-term customer/supplier relationships.

This market has been difficult to penetrate in the past except when major rebuilding programs were involved and unusually high volumes necessitated expanded sourcing. Despite the closing of three roll foundries - Bethlehem, Wear-United (Vandergrift), and Mesta - this supply is forecast to exceed the demand by nearly 20%.

#### Oil Field Equipment (7th Largest Steel Castings Market)

The recent decline in exploratory and production drilling in the U.S. has greatly affected the consumption of steel castings used in this industry. The oil production market responds to the Mideast political situation, spot market prices, domestic supply/demand, conservation programs, and utilities emission policies, among others.

Even though it is estimated that less than 10% of the Oil Field machinery is manufactured in the subject six states addressed in this report, it has been reviewed because of its total share of the steel castings market.

The total steel castings market, as stated earlier, is little affected by the geographic relationship between producer and consumer. The Oil Field Equipment market, however, seems to be the exception. Casting producers for this market are generally located close to the consuming regions of the South, Southwest, and West.