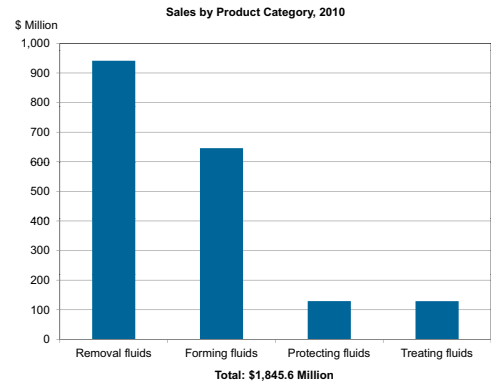


Metalworking Fluids Global Series 2010: Americas Market Analysis and Opportunities

Fact Sheet

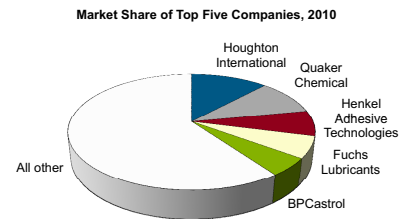
The Market

Total consumption of metalworking fluids in the North American industry is estimated at 612,900 tonnes in 2010, valued at Kline's estimate of \$1,845.6 million. Removal fluids represent the largest category with 279,000 tonnes, valued at \$941.3 million. This represents 46% of the total volume and 51% of the total value. Forming fluids rank second with 225,500 tonnes, or 37% of total volume.



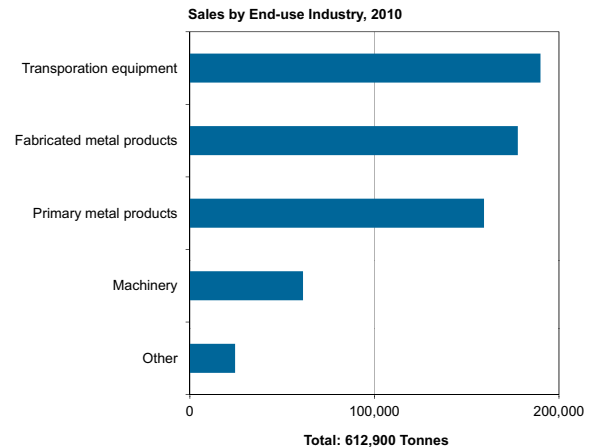
Companies

The leading North American suppliers of metalworking fluids on a volume basis are Houghton International and Quaker Chemical, with 12% and 10% of the total volume, respectively. Both companies are broad-based suppliers, with especially strong positions in forming fluids. Henkel and Fuchs follow at 7% and 6%, respectively.



End-use Industry

The end-use industries for metalworking fluids are highly fragmented, with more than 160,000 metalworking establishments. However, the number of establishments with more than 20 employees is considerably less. Of the four end-use industries detailed in this study, the transportation equipment industry is the leading consumer of metalworking fluids in North America in 2010, accounting for an estimated 190,000 tonnes, valued at \$565.0 million. This represents 31% of the total.



Outlook

The metalworking fluids market will experience growth as various country markets recover from the recession and achieve "pre-recession" position. As a result, consumption of metalworking fluids in North America is expected to increase by 2.1% annually from 612,900 tonnes, valued at \$1,845.6 million in 2010, to 680,500 tonnes, valued at \$2,043.2 million in 2015.

