

most important of these is the use of iron ore for civil and defense purposes.

We are now confronted with the following facts first, that the domestic supply of high-grade iron ore is limited and is already insufficient to supply our needs; second, that our blast furnaces are concentrated in Ohio and western Pennsylvania, removed from the eastern seaboard and served by Great Lakes traffic routes; and third, that these furnaces must soon be supplied with large tonnages of ore from new sources.



The Lake Superior District provides about 82% of the domestic supplies of iron ore and produces the bulk of the requirements of the furnaces in the Lower Lakes area. The Mesabi Range in this District is the source of about 63% of the country's production. Less than half a billion tons of the reserve in the Lake Superior District is in the form of high-grade, open-pit, direct shipping ore.

The diminution in the relative availability of high-grade iron ore has been accompanied by great increases in the demand for this mineral. In the peak war year 1942, the total production of iron ore in the United States was 106 million tons. Currently, with a steel capacity of 117.5 million net tons a year, the industry requires about 130 million long tons of iron ore. By 1960, with a steel capacity approximating 130 million tons, the industry will need 150 million tons of ore, assuming adequate scrap supply is available.

It is possible to provide 100 million tons per year from the Lake Superior District for several more years. Then the mining difficulties will increase. Output will decline, and it will be necessary to supply between 40 and 50 million tons annually from underground mines, concentrating plants, and imports. Underground mining and ore concentration are slow, costly, and relatively inflexible. It follows therefore that the greatly expanded importation of high-grade ore is inevitable.

For nearly 20 years the iron and steel industry has been aware that the economic growth of the United States would eventually require quantities of iron ore that could not be supplied from domestic sources. As early as 1935 some of the large steel producing firms sent geologists and engineers to foreign countries in search of high-grade iron ore deposits