

Birdsboro Corp., Birdsboro, Pa.

Birdsboro has built three of the Demag-designed machines now operating in the U.S. While maintaining interest in continuous casting under direction of Robert Miller, Birdsboro at the present time does not have any machine in fabrication.

Blaw-Knox Co., Aetna-Standard Division, Pittsburgh, Pa.

Blaw-Knox continues casting activity is carried out by its Aetna-Standard Division. Blaw-Knox is the machine builder for National Steel's Weirton dual twin slab caster (start-up 1968) which has the largest productive capacity of any unit made by a U.S. machine builder. The Weirton unit was designed by Schloemann AG of Dusseldorf, Germany under license by Concast, Inc. of N.Y.

Other machinery builders

A sixth machinery builder, Dominion Engineering Works Ltd., a Canadian General Electric affiliate, is now fabricating the Great Lakes Steel continuous casting machine to Concast designs. This machine is a 4-strand Concast curved mold unit, designed to cast 7¼ in. blooms. Approximate cost of the machinery contract held by Dominion Engineering is \$2½ million.

Both small and large steel companies, notably Tennessee Forging Steel and U.S. Steel, have independently designed and built their own casting machines. These units were fabricated either in company shops or in various contract machine shops. One such shop is the Gladwin Corporation in Detroit, Michigan area. This company has fabricated both continuous casting molds and casting machine assemblies.

Where does a U.S. steelman go?

The most important companies in the continuous casting field are those with basic design know-how which usually includes patent ownership or rights and varying degrees of originality in machine design. In addition, particularly for smaller steel companies, it is useful if the casting machine design and engineering company can also provide fabrication and erection services. Surprisingly few companies in the casting machine field can supply a turnkey job from A to Z. In the U.S., Koppers Co. is the largest company that has been doing this. Koppers now has nine machines operating (or soon to start) in the U.S. Babcock and Wilcox has also been involved in continuous casting for many years. Concast, which has the most machines in the field, is a U.S. based operation with international affiliations. As noted earlier, United and Mesta are two U.S. machine builders with their own casting machine designs. All other basic idea companies are based outside the U.S. working in the country through direct sales representatives, or U.S. affiliates.

U. S. continuous casting machines now on line or to go on within a year

Company (Concept basis) :	Number of machines
Concast, Inc.-----	13
Koppers Co.-----	8
Demag Group-----	5
Babcock & Wilcox-----	3
Designed by steel company user-----	2
Mesta-Koppers -----	1
Gamma Engineering-----	1
Olsson/Western Gear-----	1
United Engineering & Foundry-----	1
Total -----	35
Production unit deactivated-----	1
Developmental units-----	6
Total in U.S.-----	42

The following brief description of these conceptual continuous casting companies outlines their activities primarily as they affect developments of the process in the U.S., and to some extent, in North America.