

Searching for Value

BY TABITHA S. STINE, P.E., LEED AP

In today's economic climate, pricing and availability are more important than ever when purchasing steel.

AS WE CONTINUE TO WORK in some of the most trying economic times in recent construction history, every piece of a project is being scrutinized in an attempt to save both time and money. In the last 12 months, steel prices have risen at record rates, flattened out, and have now started to fall. This requires specifiers to be more in-tune than ever in the "science" of shape selection so that the chosen shape not only works structurally but is also the most economical section.

On any given project, there are a number of options for how best to acquire the steel. The steel fabricator makes the decision on how the material will be purchased. Fabricators can purchase steel directly from a producer or from a steel service center (warehouse). The factors that contribute to how and where the steel will be acquired vary based on project schedule, material costs, and the fabricator's relationships with both the producers and service centers.

Contact Information for Rolled Shape Producers

ArcelorMittal
www.arcelormittal.com

Bayou Steel
www.bayousteel.com

CMC Steel - Alabama
www.cmcsteel-al.com

Corus
www.corusgroup.com

Gerdau AmeriSteel
www.gerdauameristeel.com

Nucor Bar Mills
www.nucor.com

Nucor-Berkeley
www.nucorsteel.com

Nucor Steel Kankakee
www.nucorbar.com

Nucor-Yamato Steel Co.
www.nucoryamato.com

Steel Dynamics
www.steeldynamics.com

Steel Dynamics Roanoke Bar Division
www.roanokesteel.com



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Today, about 70% of all project steel is being purchased from steel service centers. It is always best to talk with a fabricator early on about prospective material that will be used on a given project. Before you specify a particular size, it is best to work both with the fabricator and their prospective service center and/or mill contacts to discuss various size range availabilities. Also, steel service centers are currently storing approximately three months of inventory that is produced from the mills. Similarly, not all producers manufacture a full range of shapes and sizes.

In the end, material *can* be acquired... but in what time frame, from where, and at what price? In today's unusual economic climate, everyone involved in a project, including the engineer, needs to be aware of these contributing factors so that one can best anticipate any costs or schedule impacts that may arise, particularly from shape selection.

The AISC website is a great resource for checking on shape production by various mills. If you go to www.aisc.org/steelavailability, you can view current sizes that are produced by mills in addition to contact information for that mill for specific questions about their production and rolling schedules. For example, if you type in "W18x35" and select "A992" as the grade and then press "search," you can immediately see a list of steel mills that produce that particular size.

The most important thing to understand in general about specifying and selecting sizes is to always remember that least weight is not always least cost. The early involvement of a steel fabricator is critical in evaluating the economic tradeoffs between weight, quantity purchase opportunities, and the number of shop hours required to fabricate the section. For example, sometimes ordering bundles of a particular size at a consistent length can bring cost savings to a

job because the least-weight solution may result in low quantities of too many shapes. Selecting members with thicker webs or flanges to handle particular connections (eliminating web stiffeners and doubler plates) should also be considered. In the end, the fabricator can answer many questions early that will help you specify the best shapes for—and bring value to—your next project.

MSC



Contact Information for AISC Member Steel Service Centers

Alro Steel Corporation	www.alro.com	517.787.5500
Azco Steel Company	www.azcosteel.com	908.754.8700
CCC Steel, Inc. (subsidiary of Reliance)	—	310.637.0111
Chatham Steel Corp. (subsidiary of Reliance)	www.chathamsteel.com	912.233.5751
Delta Steel, LP	www.deltasteel.com	713.623.8080
DuBose Steel Inc. of NC	www.dubosesteel.com	910.525.4161
IMS Steel Company (subsidiary of Reliance)	—	310.637.0111
INFRA-Metals Co.	www.preussag.com	770.641.6460
Intsel Steel Distributors (subsidiary of Triple-S)	www.intselsteel.com	713.937.9500
Lampros Steel	www.lamprossteel.com	503.285.6667
Macsteel Service Centers USA	www.macsteelusa.com	219.933.1000
Metals Supply Company, Ltd.	www.metalsupply.com	713.330.8080
Metals USA - Plates and Shapes Group	www.metalsusa.com	800.523.3340
O'Neal Steel	www.onealsteel.com	205.599.8000
PDM Steel Service Centers, Inc. (subsidiary of Reliance)	www.pdmsteel.com	209.943.0513
R & S Steel (subsidiary of Triple-S)	www.rssteel.com	303.321.9660
Reliance Steel & Aluminum Co.	www.rsac.com	323.582.2272
Saginaw Pipe Co.	www.saginawpipe.com	205.664.3670
Smith Pipe & Steel, Inc. (subsidiary of Delta Steel)	www.deltasteel.com	602.257.9494
Triad Metals International	www.triadmetals.org	215.784.0240
Triple-S Steel Supply & Subsidiaries	www.sss-steel.com	713.697.7105