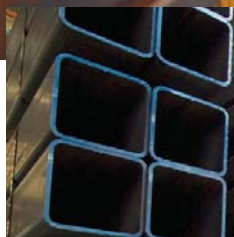
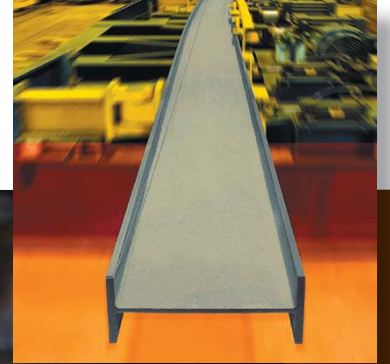




Structural Steel Service Centers

A Guide for Developers, Architects,
Contractors, and Engineers



A reference and guide to the vital role **service centers** play in the **structural steel construction industry**.



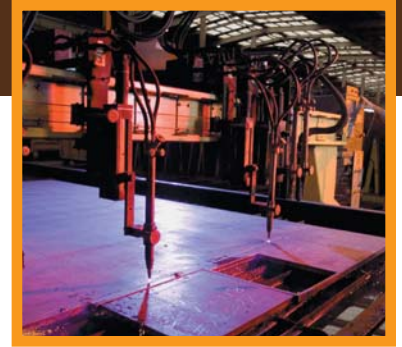
a concise guide to steel service centers

Service centers are a crucial and central member of the structural steel supply chain. They play a vital role in the delivery, availability, and fabrication of structural steel throughout the United States.

They can provide an up-to-the-minute insight on the steel construction industry at any time and have access to a wide variety of information, such as pricing trends, availability issues, backlogs, and activity levels.

- What is the availability of structural steel?
- What is the material price currently, what is the trend, and what is the outlook?
- What bottlenecks in delivery or availability can be expected?
- Who are the steel fabricators in my area?
- How busy are those fabricators?
- What projects are being done in structural steel right now that relate to me?
- What section sizes are commonly stocked in my area and are preferred by designers?
- What are commonly stocked lengths and how can I take advantage of that information to optimize the design of my project?

Knowing who your local service center is, what they do, and what value they provide helps every member in the construction team make informed decisions.



benefits provided by service centers

- Ready availability of material—service centers stock material to handle the needs of most construction projects.
- Deliveries are less impacted by fluctuating mill rolling schedules.
- Earlier steel delivery provides earlier occupancy resulting in earlier revenue generation for the project owner.
- Costs are known and fixed. Price volatility is minimized as prices are typically based on already purchased inventory.
- Allows final order and delivery from detailed drawings, minimizing mistakes and wasted material.
- Fabricators can buy exact quantities of what they need and have it delivered as they need it—reducing material handling costs and assisting with schedule efficiency.
- Reduce or eliminate the requirement for fabricators to invest in infrastructure for material storage and handling.
- Help fabricators reduce the amount of time each piece spends in their shop, increasing efficiency and lowering project costs.
- Improve cash flow management as materials are invoiced only as they are delivered on an as-needed basis.



what is a steel service center?

An estimated 70% of all the structural steel used in construction projects in the United States flows through service centers. Service centers buy large amounts of structural steel directly from the producing mills and hold this material in inventory until it is sold for a project. Service centers act as a warehouse for the structural steel industry, not only supplying steel as it is needed but also working in collaboration with their customers to provide value-added, specialized services such as cutting to length, cambering, tee-splitting, plate burning and miter cutting.

pre-processing capabilities

Each service center has a different and unique set of capabilities it can perform according to their customers' requirements. These requirements can range from straight forward supply and delivery to full pre-processing of the steel prior to fabrication. Service centers offer some or all of the following:

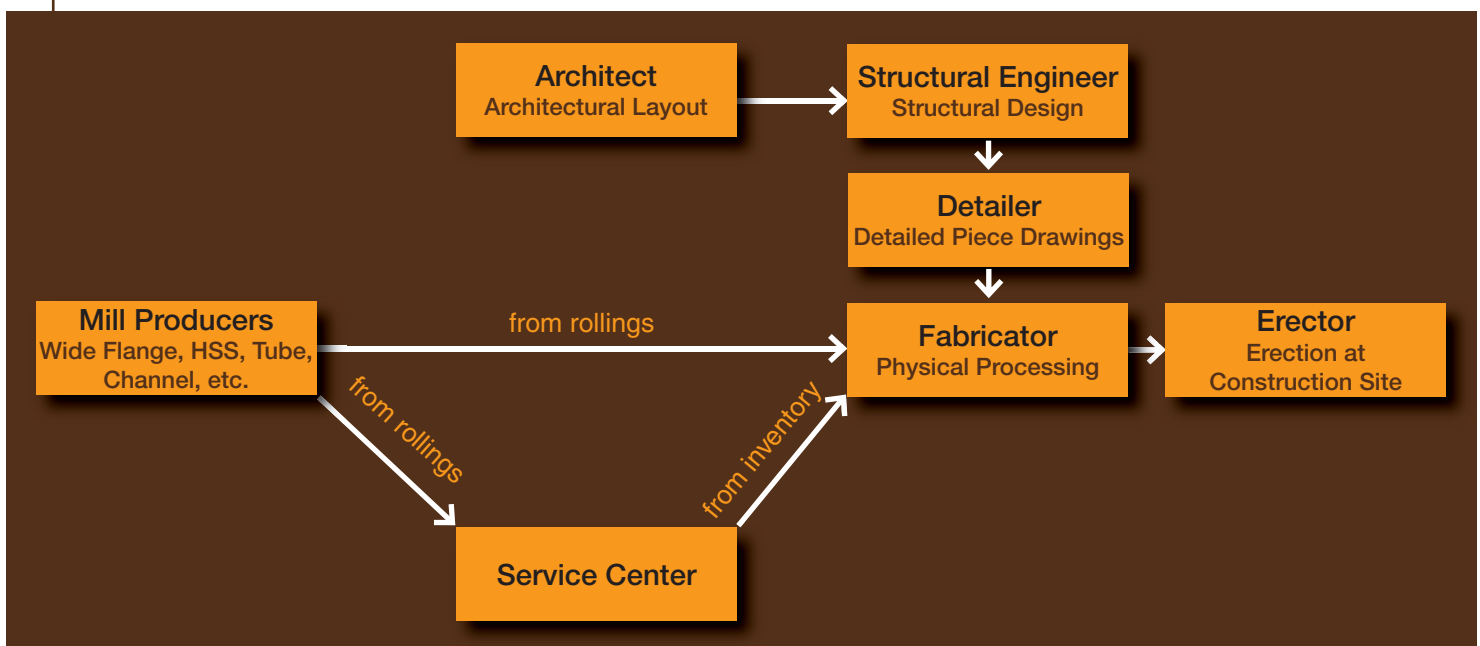
- Basic supply and delivery
- Sequential and just-in-time delivery schedules
- Material order nesting—linear and shape nesting
- Cutting to length, cambering
- Miter cutting and tee-splitting
- Plate shearing, forming, or shape burning

Service centers buy large amounts of structural steel directly from the producing mills and act as a warehouse for structural steel fabricators.

who buys steel from service centers?

Every steel fabricator in the country will buy at least some steel from a service center. The majority of service center fabricator customers are focused in the under five-story building market. Typically, these projects range from less than 200 tons up to 1,000 tons, but it's worth remembering that this is the area that represents nearly 80% of the overall building market. That's over 6 million tons of structural steel consumed annually.

structural steel supply chain



why do fabricators work with service centers?

Service centers charge for each of the value-added services they perform for their clients. This cost is in addition to the actual material costs from the mill but the difference can be easily offset by the overall value added for the fabricator and the project.

Depending on the fabricator's size, they have different capabilities, customers, and purchasing power. As a result, the reasons why a fabricator might buy from a service center differ greatly. Service centers understand this and offer flexible services according to the needs of the specific customer.

creating availability of material

In general, mills do not keep significant material in stock and produce material according to pre-planned rolling cycles. (A rolling cycle is the time before the same size product is again produced by the same mill and varies between mills based on the mill's product mix and equipment.) A rolling schedule can vary between four and fourteen (or more) weeks, depending on the product and market requirements at the time. Mill buyers must have steel ordered before the rolling actually begins in order to secure material.

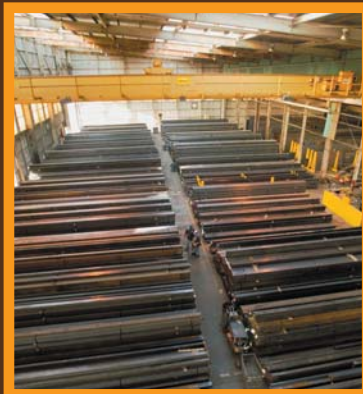
Service centers buy very large quantities of material from multiple producers during each rolling cycle and typically hold about three to four months of their sales volume in inventory. It's not uncommon for a local service center to have in excess of 10,000 tons of structural wide flange, hollow structural sections, angles, channels, and plate in stock at any time and available for immediate delivery.

Fabricators who do not typically buy from mills rely on this service. Service centers can deliver one truck with a mix of shapes for the project from multiple producers just when it's needed.

Fabricators who buy steel from mills and maintain a high level of inventory as part of their normal business cycle also utilize service centers when project lead times are tight, quantities are less than mill order minimums, or for items not produced domestically.

Having a variety of shapes readily available and the convenience of having a service center act as a fabricator's "extended inventory warehouse" justifies the charges for value-added services. This service is transparent to owners and developers and critical in the successful execution of their projects.

Service centers increase the availability of material, reduce the risk and cost associated with keeping high levels of inventory, and enable steel to be delivered earlier, generating revenue for the project owner sooner.



examples

early occupancy, early revenue generation

The price premium for material acquired through a service center can be easily offset by the opportunity of early occupancy of the building. For a typical 30,000 sq. ft office building, just being able to lease three weeks earlier will absorb the additional material cost. Owners and developers fully comprehend the advantages of early revenue generation.

on time, on schedule delivery

Financing, other trades, weather, or a multitude of other reasons often mean that the early delivery of a project is not possible or desired. By purchasing steel from a service center, a more accurate material order can be placed much later in the design schedule.

Service centers allow preliminary reservations to be made early in the project although final material requirements may be much different. Changes to the order can be made up until the trucks are loaded and delivered. This provides the design schedule with more available time and more flexibility. It also reduces errors and minimizes waste.



Service centers enable material to be ordered later in the design phase, reducing errors and minimizing waste.

what you want, when you need it

When buying directly from producing mills, fabricators must purchase minimum quantities of steel in terms of either weight or bundles (number of pieces). The practicality of this varies from fabricator to fabricator depending on the fabricator's cash flow, material handling capabilities, storage facilities, and order books. For many fabricators buying "in bulk" can simply prove too expensive and inefficient.

Service centers can supply any quantity of steel and any mix of sections required for a project. The requirement of purchasing more material than necessary is removed along with the risk and cost associated with keeping that extra material in inventory.

Service centers fundamentally support and enable lean construction techniques and processes. Often, they work closely with their customers to provide reliable just-in-time or staged delivery schedules, maximizing efficiency and minimizing material handling costs and waste. Cost overheads are also minimized as payment may be spread over the delivery schedule. Many service centers provide preprocessing to further enhance project productivity.

In lean construction, owners, designers, general contractors, specialty contractors, and suppliers work together to produce a value-adding, constructible, usable, and maintainable facility.

Service centers support lean construction assuring value for the overall project. They allow fabricators to buy only what they need and have it delivered only when they need it. This can also help ease cash flow because invoices are only issued as steel is delivered.




inventory and material handling costs

Both service centers and larger fabricators have a need to handle huge quantities of steel. It's a part of their business and part of the added value each provides to their clients. They have invested in storage facilities, material handling equipment, and the machinery to efficiently manage and process the material that flows through their facilities.

Many fabricators, however, have not chosen to make the capital investment in this kind of equipment. For these smaller fabricators, service centers act as a virtual extension of their facility, delivering material when needed, pre-processed as required. Service centers provide fabricators access to large inventories of structural steel without the need for stocking it themselves. Service centers also reduce the costs associated with carrying inventory and material handling.

preprocessing advantages



Service centers help fabricators reduce the amount of time each piece spends in their shop, lowering costs.

Reducing the man hours spent for each ton delivered to the construction site represents a highly visible cost savings and is of maximum concern for all steel fabricators. As a result, this is an area where many fabricators have already invested in machinery and equipment to minimize the amount of time each piece spends in the shop.

Service centers can help maximize this efficiency, not only by using staged delivery, but also by offering pre-processing services. Many fabricators fully rely on these services but others with investments in material handling equipment, larger storage areas, and sophisticated production lines, often use service centers as a way to expedite material on fast-track projects.

Pre-processed steel, whether a base plate cut to size or a beam mitered and cut to length, minimizes the amount of time a fabricator takes to finish fabrication of the piece.

In addition to reducing the handling and storage costs by ordering from a service center, fabricators can also reduce the shop hours per piece by taking a cut-to-length beam directly from the delivery truck to their drill line eliminating the time needed at the saw. These services allow fabricators to manage their shop capacity on a dynamic basis.

financing and cash flow



Service centers provide fabricators with commercial payment terms for the material they purchase. They also provide fabricators with the opportunity to secure future material.

Service centers invoice for material as material is delivered to the fabricator. This allows the fabricator to better manage cash flow during the life cycle of the project by receiving staged and just-in-time deliveries.

Service centers often allow fabricators to secure material for future purchases from mill rollings. This means fabricators can be assured they can obtain the material they need and enables them to actively pursue projects with reduced exposure to risk. Reduced risk for the fabricator translates to security for the project owner.



Structural Steel Service Centers

getting to know your local service center

There are numerous service center locations throughout the United States, each with its own unique offering of stock and services. For a complete list of AISC service center members who are committed to improving the flow of material to your project, visit www.aisc.org/servicecenter.

An active member of the American Institute of Steel Construction, Inc.



There's always a solution in steel.

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