

# HSS: DESIGNS FOR THE 21<sup>st</sup> CENTURY



Telescoping sections make *SpaceSaver* storage racks made of HSS unique.

# STRENGTH, UNIFORMITY, TELESCOPING ABILITIES MAKE HSS IDEAL CHOICE FOR UNIQUE STEEL STORAGE RACK



When you're designing a storage rack to hold several hundred thousand pounds of steel, the strength, durability and uniformity of steel Hollow Structural Sections give HSS a decided advantage over other materials.

For Denver-based Steel Storage Systems, Inc., HSS offered another benefit—the ability to use it in telescoping sections. That's key to the easy accessibility of the company's *SpaceSaver* modular, vertical storage racks which allow users to make optimum use of their storage area.

A *SpaceSaver* rack is a series of double-sided, vertically-stacked receptacles in

levels up to eighteen feet high. The receptacles roll out like drawers so they can be easily accessed for loading or retrieving the contents with an overhead crane.

The racks can be structured to accommodate bars, tubing or other steel products up to 60 feet in length. They're the first practical means to store steel products that long except flat on the floor.

## Drawers Slide Out for Easy Loading, Retrieval

"HSS provides us with several advantages from a design and cost standpoint,"

says Brian McCallin, President of Steel Storage Systems. "A basic feature of the *SpaceSaver* is a telescoping tube that creates a storage drawer for steel bars, tubes and shapes. It's a tube-within-a-tube design that allows the drawer to be cranked out for convenient loading or retrieval.

"Accessibility is the greatest selling point of the *SpaceSaver*," McCallin says.

"There are many racking systems that are less expensive, but not nearly as accessible. *SpaceSaver* works hand-in-hand with the overhead cranes used in most service centers and manufacturing plants."



## Superior Load-Bearing Capacity an Advantage

McCallin says that the strength and uniformity of HSS are also significant reasons for its use in *SpaceSavers*. “The exceptional strength-to-weight ratios of HSS is the reason our racks can have such a great load-bearing capacity. HSS also offers uniform straightness and flatnesses which make it easy fabricate and weld together.”

McCallin says the company developed the *SpaceSaver* in 1970 to meet the needs of a sister company, a steel service center.

“Steel distributors still are the largest market for this product,” he says, “but manufacturing industries and steel fabricators also represent significant markets. Anyone with an inventory of steel who uses overhead cranes is a potential customer.” Steel Storage Systems has more than 1,100 *SpaceSaver* installations in service.

## HSS Forms Most of Racks' Structure

About 80% of the steel used in a *SpaceSaver* rack is HSS. Steel Storage Systems uses a variety of sizes of square and rectangular HSS ranging from 2" x 2" x 1/4" to 12" x 4" x 1/4", as well as NPS 1-1/2 and 2-1/2 Schedule 10 Round HSS. The company uses about 800 tons of HSS a year in its rack products.

About half of Steel Storage Systems' business comes from *SpaceSaver* racks and a companion product, introduced in 1994, the *Sheet Rack*, which provides drawer storage for sheet metal and other flat products. It, too, relies predominantly on HSS.

