



VALAST® 450

Application Story



Customer:

Trailer Manufacturer

Application:

Side Dump Trailer Tub

SCENARIO:

A manufacturer of dump trailers, and a long-time Steel Warehouse customer, was using AR400 discrete plate to build its side dump tub trailers in a variety of sizes. Although this abrasion resistant plate was well-suited for the trailer applications, it created scrap waste on many of the models where the long plate size had to be trimmed to shorter lengths.



When Valast®450 became available, Steel Warehouse made the customer aware that this abrasion resistant steel stock was available in coil, which meant they would have the flexibility to cut the product into required plate lengths for the build schedule. In 2020, they engaged Steel Warehouse on an initial order of Valast 450 for trial production runs.

The trial results were excellent. The customer reported that “... the Valast 450 surface, shape, and dimensional control is excellent and the plate performs well in our press brake. Additionally, it receives paint very well and provides a superior glossy finish over the previously used discrete plate product.” Steel Warehouse now cuts various lengths to meet the customer’s production demand for specific trailer models and sizes, helping the company achieve a 12% reduction in scrap, as well as speeding up the production process.

“Since Steel Warehouse provides us the exact lengths we need, we no longer have to spend time trimming plates to size on our burning tables,” commented the customer. “Eliminating this step from the production process saves us both time and money.”

The positive experience influenced the company to completely switch to Valast 450 for all its side dump trailer tub needs. They also use Tata Steel’s Ympress 100XF high strength steel, cut to length and distributed by Steel Warehouse, for the structural support beam flanges.

If you make any of these truck bodies... then you need to know about this.



Valast 450 **strip**

VS

AR450 **plate**

You can order Valast 450 in customized lengths, for maximum efficiency.



Custom Lengths



AR450 plate is typically supplied in lengths to a maximum of around 472.444"

A lighter scale jacket gives Valast 450 a superior surface quality.



Surface Quality



Considerable oxidation can lead to an inferior surface quality.

Valast 450 has a very low CET of max 0.33 (CEV 0.45)



Weldability



AR450 plate is available from a CET of max 0.37 (CEV 0.48)

Every sheet from a coil of Valast 450 will have consistent chemical and mechanical properties.



Product Consistency



Each plate is rolled individually, which can lead to inconsistency.

Quality and consistency make it more cost effective.



Cost



AR450 plate can have higher yield loss and levels of waste, impacting cost.

Guaranteed impact performance of $\geq 20\text{ft.lbs}$ at -40°F .



Impact Properties



Products given 'typical' performance rating, not guaranteed.

TATA STEEL

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VALAST® 450