

**HARDOX®**  
WEAR PLATE

# THE NEW GENERATION HARDOX® WEAR PLATE



LIGHTER TIPPER BODIES



HIGHER LOAD CAPACITY



EXTENDED SERVICE LIFE



REDUCED FUEL CONSUMPTION



# THE BEAST HAS DONE IT AGAIN

**Hardox® 500 Tuf is the latest upgrade in the Hardox® range. It delivers high strength, extreme hardness and guaranteed toughness in one and the same wear plate.**

Hardox® 500 Tuf combines the best properties from the Hardox® 450 and Hardox® 500 grades. The result is a wear plate with no real competition on the market.

It has the toughness necessary to perform as a structural material in heavy-duty tipper bodies, containers and buckets. It also works in freezing conditions as the impact energy values indicate.

Superior wear and dent resistance gives extended service life and the ability to endure heavy impact.

Typical working conditions include loading and unloading of heavy and sharp rocks in quarries and mines, handling large and heavy steel scrap, and in demolition when pieces of concrete with rebar are loaded or dropped into tippers.

Hardox® 500 Tuf has a guaranteed impact energy of 27 J at -20°C (20 ft-lb at -4 °F), and a typical value of 45 J at -40°C (33 ft-lb -40 °F). It has an unusually narrow Brinell hardness window of 475-505 HBW. The estimated relative service life for Hardox® 500 Tuf is 85-100% longer than for Hardox® 400 according to WearCalc.\*

### WORKSHOP-FRIENDLY

Hardox® 500 Tuf can be processed by the same kind of machinery used for other Hardox® grades. Bendability recommendations are similar to those for Hardox® 450.

\*The calculations are based on sliding wear with granite.

| Hardox® 500 Tuf            |                      |  |  |  |                              |                             |
|----------------------------|----------------------|--|--|--|------------------------------|-----------------------------|
| Product                    | Hardness nominal HBW | Impact toughness CVT guaranteed J at -20 °C (ft-lb at -4 °F) | Impact toughness CVL typical J at -40 °C (ft-lb at -40 °F) | Relative service life interval (relative to Hardox® 400) | CEV/CET                      | Thickness range mm (inches) |
| Hardox® 500 Tuf wear plate | 490                  | 27 J (20 ft-lb) for 20 mm (0.787")                           | 45 J (33 ft-lb) for 20 mm (0.787")                         | 1.3-2.1  | 0.53/0.37 for 20 mm (0.787") | 4-25.4 mm (0.157-1")        |
| Hardox® 500 Tuf wear sheet | 490                  |  | 45 J (33 ft-lb)  | 1.3-2.1  | 0.52/0.35                    | 3-6.5 mm (0.118-0.256")     |

| Hardox® 500 Tuf wear plate |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Width                      | 1000- | 1351- | 1500- | 1601- | 1701- | 1801- | 1901- | 2001- | 2101- | 2201- | 2301- | 2401- | 2501- | 2601- | 2701- | 2801- | 2901- | 3001- | 3101- | 3201- | 3301- |
| Thickness                  | 1350  | 1499  | 1600  | 1700  | 1800  | 1900  | 2000  | 2100  | 2200  | 2300  | 2400  | 2500  | 2600  | 2700  | 2800  | 2900  | 3000  | 3100  | 3200  | 3300  | 3350  |
| 3.0-3.7                    |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 3.8-4.7                    |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 4.8-5.7                    |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 5.8-6.7                    |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 6.8-7.7                    |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 7.8-8.7                    |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 8.8-10.0                   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 10.1-24.0                  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 24.1-25.4                  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 25.5-26                    |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |

| Hardox® 500 Tuf wear sheet |      |       |       |       |       |       |       |       |       |       |       |  |
|----------------------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|
| Width                      | 950- | 1001- | 1201- | 1251- | 1301- | 1501- | 1526- | 1551- | 1576- | 1601- | 1626- |  |
| Thickness                  | 1000 | 1200  | 1250  | 1300  | 1500  | 1525  | 1550  | 1575  | 1600  | 1625  | 1650  |  |
| 2.50-2.99                  |      |       |       |       |       |       |       |       |       |       |       |  |
| 3.00-3.09                  |      |       |       |       |       |       |       |       |       |       |       |  |
| 3.10-3.19                  |      |       |       |       |       |       |       |       |       |       |       |  |
| 3.20-3.99                  |      |       |       |       |       |       |       |       |       |       |       |  |
| 4.00-4.49                  |      |       |       |       |       |       |       |       |       |       |       |  |
| 4.50-4.79                  |      |       |       |       |       |       |       |       |       |       |       |  |
| 4.80-4.99                  |      |       |       |       |       |       |       |       |       |       |       |  |
| 5.00-5.99                  |      |       |       |       |       |       |       |       |       |       |       |  |
| 6.00-6.40                  |      |       |       |       |       |       |       |       |       |       |       |  |
| 6.41-6.50                  |      |       |       |       |       |       |       |       |       |       |       |  |

- Some restrictions, contact your local sales representative for information
- Outside the range of dimensions

The data in these tables may be subject to change without notice. Please download the latest version of the respective Hardox® wear plate product data sheet at [www.ssab.com](http://www.ssab.com).