

## Wear: The inside story

Your choice of wear plate has consequences for your business. Hardox® maximizes the wear performance of your equipment and machines, reducing workshop lead times and increasing the overall productivity of your operations.

Thanks to its consistent properties, Hardox's performance remains invariable across its lifetime. That also makes its service life very predictable, allowing you to rationalize your repair schedule.

With its combination of high hardness, high strength and good toughness, Hardox can be used in a variety of applications, from forest harvesting and ground preparation to asphaltting work.

What's the secret of Hardox's top performance? The production processes include the state-of-the-art metallurgical cleaning of steel and a unique hardening process, resulting in wear plates with outstanding hardness, toughness and workshop friendliness.

### Expertise at your service

In addition to plate, SSAB Plate provides you with expertise. We share our knowledge with you through our Technical Managers, Conceptual Design Group™ and Wear Technology Group™.

The Conceptual Design Group consists of experts that can help optimize your product from a design perspective.

The Wear Technology Group is committed to developing the technical knowledge of wear. We offer you access to Ph.D's and experts with decades of experience in solving wear challenges. You can get applied support and information on wear-critical components.

### Information about wear

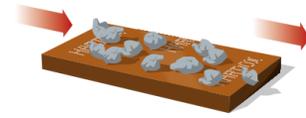
Wear comes in different forms and each has a different impact on the service life of your application.

The most common wear types are sliding wear and impact wear. Abrasive particles trapped in a narrow gap between two rigid surfaces causing squeezing wear is also a common wear type.

Each variety of rock is composed of a unique set of minerals and these also contribute to the specific type of abrasive wear damage.

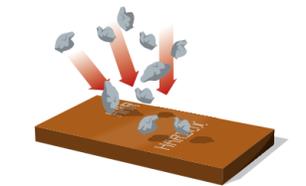
WearCalc software, available from our Technical Managers, describes and calculates the relative differences between materials. It allows you to predict relative wear life and compare different wear solutions.

Whatever your application and wear situation, Hardox is your ticket to outstanding wear performance.



#### SLIDING

In sliding wear, abrasive bodies such as aggregate rocks are free to slide and roll. By selecting a harder Hardox grade, service life can be improved considerably.



#### IMPACT

In impact wear, the aggregate rocks hit the surface of the wear component at various angles. A harder grade of Hardox will deliver a longer service life here as well.



#### SQUEEZING

With squeezing wear, the improvement in service life of wear components is more difficult to quantify. However, an increased Hardox plate hardness often improves the service life significantly.

### Hardox – Complete product program

You'll always find a Hardox plate to fit your wear challenge. With a wide range of hardness grades, thicknesses and widths to choose from, you'll always be able to maximize your application's performance.

Hardox 400 and 450 are versatile wear plates with high toughness, good bendability and excellent weldability.

Hardox 500 is a tough, bendable and weldable abrasion resistant plate used in applications requiring high resistance.

Hardox 550, with a hardness of 550 Brinell and a toughness equal to Hardox 500, is designed to increase wear life but not at the expense of reduced resistance to cracking.

Hardox 600 has a hardness of 600 Brinell but can still be cut and welded—an excellent plate for high performance applications.

Hardox HiTuf is a wear resistant plate with extra high toughness intended for heavy section wear parts requiring extraordinary wear and crack resistance.

Hardox Extreme is intended for applications requiring extremely high abrasion resistance. It can replace costly wear products like hard-faced overlay plates and high chrome white iron. Despite its hardness, it can be welded, cut, milled and drilled using standard workshop practices.

SSAB is a global leader in value added high strength steel. SSAB offers products developed in close cooperation with its customers to reach a stronger, lighter and more sustainable world.

SSAB employs over 9 200 people in over 45 countries around the world and operates production facilities in Sweden and the US. SSAB is listed on the NASDAQ OMX Nordic Exchange, Stockholm.

For more information, contact us or visit [www.ssab.com](http://www.ssab.com)

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**HARDOX®**  
WEAR PLATE

# HARDOX ON SITE

## Roadbuilding

A Part of Your Success



**SSAB**

**SSAB**

# Breaking the ground for roadbuilding makes tough demands on machines and materials...



## ROAD BUILDING CYCLE

1. Hydraulic hammer
2. Excavator bucket
3. Bucket
4. Excavator bucket
5. Crusher
6. Bucket
7. Bucket
8. Asphalt Plant
9. Tipper (asphalt)
10. Tipper (gravel)
11. Bulldozer
12. Motor Grader
13. Asphalt Roller
14. Asphalt Paver
15. Tipper (asphalt)
16. Asphalt milling machine



### HYDRAULIC HAMMER

Hardox 400/450 in the housing of the hydraulic hammer exposed to wear from rocks.



### EXCAVATOR BUCKET

Hardox 450/500/550 in the excavator bucket. Hardox may be used in the entire bucket or just in the cutting edge and sides depending on the wear situation.



### BUCKET

Hardox 450/500/550 in the entire bucket or cutting edge and sides depending on the wear situation.



### CHUTE

In the chute that leads into the crusher Hardox 500/550/600 is the obvious choice in the tough environment.



### CRUSHER

Hardox 500/550 used as liner plates in the interior in areas with high wear.



### ASPHALT PLANT

Hardox 450/500/550 as liner plates and in gravel chutes. Hardox 450/500 in the wings of the drum. Hardox 450/500 in the transport container from the drum to the truck delivery shaft.



### TIPPER BODY

Hardox 450/500 in the body of the tippers and dumpers. Hardox is an outstanding wear fighter in these applications. Hardox also has great impact resistance, making it an excellent design solution.



### BULLDOZER

Hardox 450/500/550 in the blade of the bulldozer.



### MOTOR GRADER

Hardox 450/500/550 in the blades of the motor grader.



### ASPHALT PAVER

Hardox 450/500/550 in the screed plates.