



**ABRASAPLATE<sup>®</sup>**  
WELD OVERLAY WEAR PLATE



# WHAT IS IT?

AbrasaPlate® is a highly wear resistant chromium carbide weld overlayed onto a mild steel backing. It provides excellent solutions to wear areas subject to low and high stress abrasion. The High level of Chrome in the overlay ensures a corrosion resistant deposit which polishes to a high finish in service.



Cross Section of AbrasaPlate



## AbrasaPlate® AP-3000

AP-3000 is a versatile wear plate for use in applications involving abrasion, erosion and impact. With abrasion resistance 13 times higher than 400HB plate, this plate is a common choice for applications such as chutes, ducts, hoppers, rock-boxes, elbows, deflector plates, screens and buckets. Like all AbrasaPlate®, it can be rolled and welded.

For easily replaceable liners, stud-welding is a convenient method of fastening to chutes and ducts.

## AbrasaPlate® AP-7000

AP-7000 is a complex carbide wear plate, incorporating high levels of niobium carbides along with the chrome carbide. The addition of niobium results in a finer M7C3 carbide structure, which results in higher abrasion resistance.

## FABRICATION

AbrasaPlate® can be:

- Welded
- Cut (Plasma, laser, water jet)
- Rolled
- Affixed with studs

For welding the mild steel side to the hardfacing we recommend Al-1707 stainless wire.

For capping joint lines in hardfacing we recommend Al-1568 hardfacing wire.

## APPLICATIONS

### COMMON INDUSTRIES

- Power generation
- Pulp & Paper
- Wood chip
- Coal
- Cement
- Mining
- Steel
- Refinery

### COMMON APPLICATIONS

- Chutes/ducts
- Pump/fan casings
- Liners
- Truck beds
- Screen plates
- Transition segments
- Elbows
- Buckets

DESCRIPTION	HARDNESS	APPLICATION
<b>AP-3000</b>	62-64HRC	High quality general purpose plate designed for medium impact and high abrasion. A high volume of hexagonal chrome carbides in a tough austenitic and martensitic matrix.
<b>AP-7000</b>	60-62HRC	Complex carbide wear plate with niobium, designed for extreme abrasion.
<b>Abrasaplate®-X</b>	62-64HRC	A 2-3mm thick cross hatch weld overlay on top of any standard plate. Increases impact resistance, and allows the plate to become self protecting using a "rock box" effect.
<b>Abrasaplate®-CF</b>	62-64HRC	A revolutionary plate with high hardness yet absolutely no cracks. Perfect for applications where a smooth surface finish and preventing hangup are important.
<b>AbrasaPipe®</b>	62-64HRC	Internally hardfaced pipe designed for abrasion resistance. Prevents wear against fine particle slurries and dust.

## AbrasaPlate®-CF (Crack Free)

AbrasaPlate®-CF is a high quality compound weld-overlay hardfaced plate. The chrome carbide overlay is applied in a unique fashion which results in a hard, wear-resistance cladding, despite being crack free. The extremely smooth surface finish results in reduced hang up from sticky ores. ASTM G65 wear resistance test results exceed that of AP-3000 AbrasaPlate®.

## AbrasaPlate®-X (Cross Hatch)

AbrasaPlate®-X is a unique plate offered in the Australian market, for use in specific applications. In addition to the hardfacing overlay, the plate includes a cross-hatch weld-bead overlay in a diamond pattern, raised above the plate surface. This pattern assist in wear resistance by reducing crack propagation through the hardfacing. An additional benefit is found in applications where the transferred product can be compressed into the voids between cross hatches. This causes the product to provide its own protective layer in addition to the AbrasaPlate®.

## AbrasaPipe®

AbrasaPlate® is also available in pipe form. For larger diameters, it is common to roll plate, but AbrasaPipe® enables both internal and external hardfacing of pipes by overlaying direct onto pipe. This process is also economical as it removes the processing step to roll and join plate. Internally hardfaced pipe is available to diameters as small as 2.5" NB pipe.

### COMMON SIZES

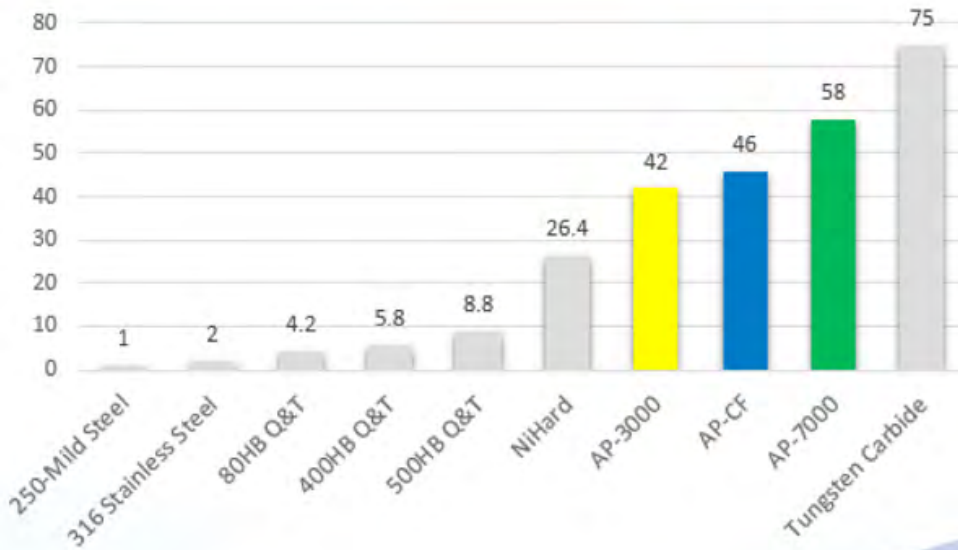
- 3/3      ○ 8/8      ○ 6/6-CF (Crack Free)
- 4/4      ○ 9/10      ○ 4/4-X (Cross Hatch)
- 4/6      ○ 9/16      ○ 4/6-X (Cross Hatch)
- 5/8      ○ 12/12      ○ 6/8-X (Cross Hatch)
- 6/6      ○ 17/12      ○ 9/10-X (Cross Hatch)
- 6/8      ○ 20/10      ○ 12/12-X (Cross Hatch)
- Other sizes on request

### STANDARD SHEET SIZES

- 1.5m x 3.0m
- 2.2m x 3.0m
- 1.0m x 3.0m (Crack Free only)



## WEAR RESISTANCE RATING



**AbrasaPlate®** outperforms all competing plate products, and offers a more affordable alternative to tungsten carbide.



ISO 9001  
BUREAU VERITAS  
Certification



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