



ABRASAPLATE[®]
WELD OVERLAY WEAR PLATE

AVWELD
Leadership in Life Extension

 **Alloys**
INTERNATIONAL

AbrasaPlate is a composite wear plate, consisting of a wear resistant chromium carbide overlay clad to a mild steel backing. It is manufactured in sheet form, providing economical solutions for large and small areas requiring resistance to abrasion. It is available with various chemistries and thicknesses for specific applications.



Cross Section of 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.

AP-6000

The hardness of AP-6000 remains elevated at high temperatures due to the addition of various alloying elements, including tungsten, vanadium, niobium and molybdenum. It resists sliding abrasion at up to 800°C. Applications include distribution chutes in steel mills, coke sizing screens, sinter bars, furnace discharge wear plates, single roll crusher in sintering plants.

AP-7000

AP-7000 AbrasaPlate is a high quality compound weld-overlay hardfaced plate. The unique submerged arc production process allows for precision control and much higher alloy content than standard wear plates. This results in life extension of ~25% compared to AP-3000 grade in applications involving high abrasion and low-medium impact

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 AI-1707 stainless wire.

For capping joint lines in hardfacing we recommend AI-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	MAX TEMP	MICROSTRUCTURE & PROPERTIES
AP-3000	60-62HRC	400°C	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.
AP-6000	62-64HRC	800°C	Uniformly distributed hexagonal chromium and complex carbides imbedded in tough austenitic and martensitic matrix for high temperature applications.
AP-7000	62-64HRC	400°C	Increased chrome carbide content is achieved through the submerged arc welding process, resulting in higher abrasion resistance.
AP-X	60-62HRC	400°C	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.
AbrasaPipe	60-62HRC	400°C	Internally hardfaced pipe designed for abrasion resistance. Prevents wear against fine particle slurries and dust.
AP-CF	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.

AbrasaPlate®-CF (Crack Free)

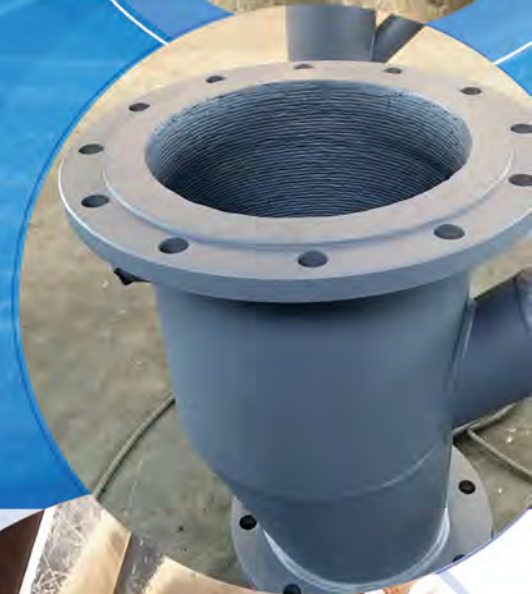
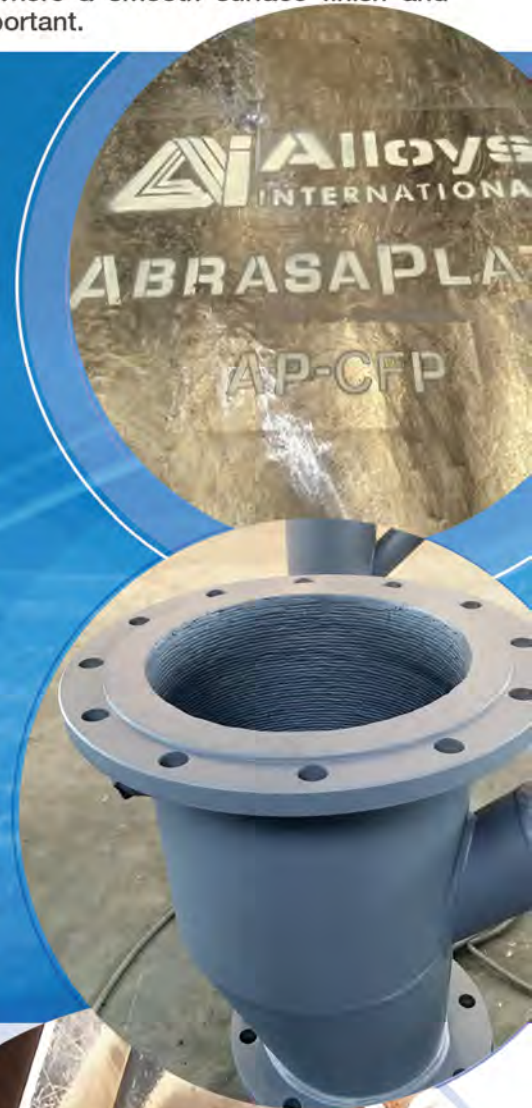
AbrasaPlate®-CF is a high quality compound weld-overlay hardfaced plate. The chrome carbide overlay is applied in a unique fashion which results in a hard, wear-resistance cladding, despite being crack free. The extremely smooth surface finish results in reduced hang up from sticky ores. ASTM G65 wear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

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.

AP-X (Cross-Hatch)

AP-X is a unique plate offered in the Australian market, for use in specific applications where impact and wear resistance is critical. 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 assists in wear resistance by allowing the abrasive media to be compressed into the voids between the cross hatch and become self-protecting.



COMMON SIZES

- 3/3
- 4/4
- 4/6
- 5/8
- 6/6
- 6/8
- 8/6
- 8/8
- 9/10
- 9/16
- 12/12
- 17/12
- 20/10

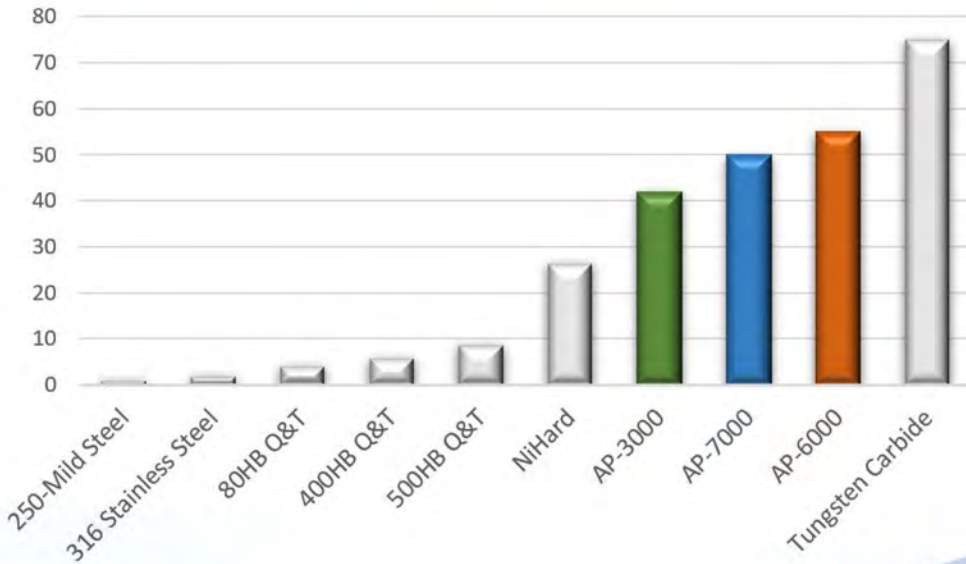
Other sizes available on request

STANDARD SHEET SIZES

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



WEAR RESISTANCE RATING



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



ISO 9001
BUREAU VERITAS
Certification



Aweld Australasia Pty Ltd
25 Raymond Road, Laverton North,
VIC 3026 Australia
T +61 3 9369 0088

E sales@aweld.com
W www.aweld.com.au

Alloys International Australasia Pty Ltd
25 Raymond Road, Laverton North,
VIC 3026 Australia
T +61 3 8368 2222

E sales@alloysint.com.au
W www.alloysint.com.au