



Applications:

IP600 is suited for applications experiencing sliding abrasion, with low to medium impact.

Typical applications include:

- Earthmoving Buckets & Dozers
- Chute Liners
- Dredge / Slurry Pipes
- Crushers

Specifications

IP600 Chromium Carbide Overlay Plate is manufactured in accordance with Australian

Standard AS/NZS 2576:2005 specifications for hard facing alloys and is compliant with the microstructure, chemistry and hardness requirements of grade 2355 alloy material, as per Group 2 Alloys (Table 2.2) Type 23 alloy material.

Microstructure

IP600 Chromium Carbide Overlay Plate consists of between 20% to 40% primary M_7C_3 complex carbides in a eutectic matrix of austenite and carbide.

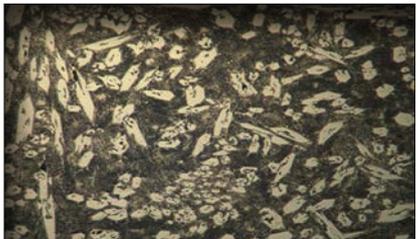
Technical Notes:

Within the standard the grade designation, for example 2355, indicates the alloy type "23", and the hardness in Rockwell HRC "55". Therefore, a "55 HRC" grade must have a minimum of 55 HRC, and a maximum of 59 HRC as an average hardness, and 2360 must have an average hardness ranging between 60 to 64 HRC.

All hardness testing within our Metallurgical laboratory is performed on a Vickers Hardness tester; therefore, all HRC values are a conversion from HV50 to HRC.

Due to the nature of the welding process actual hardness and volume fraction of primary carbides can vary across and throughout a plate. The above properties are typical for all plates with an undiluted overlay.

Chemistry*		
	%C	%Cr
Range (Top layer)	3.5 - 7.5	18 - 35
* - Mn & Si added as minor elements.		
Hardness		
	Vickers HV50	Rockwell HRC
Typical Range (average)	620 - 690	55 - 59
Backing Plate AS/NZS 3678-250 (ASTM A36)		



Inter-plate IP600 AS/NZS 2576:2005 Austenitic Chromium Carbide Overlay x 100 magnification