

Unique Process

Premium Chromium Carbide

Overlay Plate - **SUPERFUSE**



Your reliable workhorse for
combating high abrasion
and impact



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CHROMIUM CARBIDE OVERLAY (CCO) PLATE

FIX PROBLEM IN WEAR ABRASION, CORROSION, IMPACT & TEMPERATURE

REDUCE DOWNTIME AND COST, CARRY MORE BENEFIT

SUPERFUSE plate is a chromium carbide overlay (CCO) plate, consisting of highly wear resistant chromium carbide overlay deposited to a mild steel plate, large carbides M7C3 reach to 25-40% suspended in a tough matrix. Typically, It is manufactured in standard sheet form in 1 layer to multi-layers according to different thickness, providing economical solutions for requiring resistance to abrasion, corrosion, impact and temperature. It is available with various chemical composition and thickness for specific application.

Available In The Following Grades

Superfuse 100 - General application with high abrasion, low or moderate impact, and heat of up to 450°C;

Superfuse 300 - General application with very high abrasion, moderate impact, and heat of up to 450°C;

Chemical Composition

Chemical Composition	Grade	C	Cr	Mn	Si	Others	Bal
	Superfuse 100	4.0-5.5%	25-32%	1.0-2.0%	0.5-1.0%	0.5-1.0%	Fe
	Superfuse 300	4.2-6.0%	30-40%	1.0-2.0%	1.0-2.0%	0.5-1.0%	

Standard Thickness Range

Standard plate (mm): 1500 × 3000, 2200 × 3000

Tailored chemical composition, plate size and thickness are available on request

Overlay	mm	3*	4*	4	6	6	8	8	10	10	12	17	20
	Inch	1/8	3/16	3/16	1/4	1/4	5/16	5/16	3/8	3/8	1/2	2/3	5/6
Backing Plate	mm	3*	4*	6	6	8	8	10	10	12	12	12	12
	Inch	1/8	3/16	1/4	1/4	5/16	5/16	3/8	3/8	1/2	1/2	1/2	1/2

ASTM G65 Procedure: Superfuse 100 in 0.17-0.19g, Superfuse 300 in 0.13-0.15g

Hardness & Tolerance: 58-64HRC, -0.5mm, +1.5mm

Fabrication: Flame cutting, Plasma cutting, Saw cutting, Laser cutting, Water jet cutting, line cutting
EDM, Gouging, Countersink, Stud bolt, Joint weld

Rolling and bending: Minimum Radius 15 times of overall thickness (overlay inside)

Typical Applications

Fixed Plant Liners - Load out bins, discharge chutes, deflector plates, transfer chutes, crushers liners, sizing screens, feed bins, surge bins, chute & hopper liner, classifier, ore chute, fan blade, cyclone and so on.

Mobile Equipment Lines – truck body, dozer, blades, excavator buckets, dragline buckets, grader blades, skid plates.