"ARMADUR" Wear Plate



✓ Design Ideas ✓ Engineering ✓ Precision ✓ Proven Quality
✓ Quick Deliveries ✓ Trusted name over 25 years

Introduction

Valency Compounds Services Pvt. Ltd. is an ISO 9001:2008 accredited organisation and has been engaged in the service of Industries in India & abroad for two decades.

Valency, through its in-house R & D set up, has developed an extensive range of maintenance specific low heat input welding alloys and cold metal compounds designed with the aid of computer simulated field test data on wear factors in various industrial applications due to friction, abrasion, impact, heat, corrosion, erosion, cavitation etc.

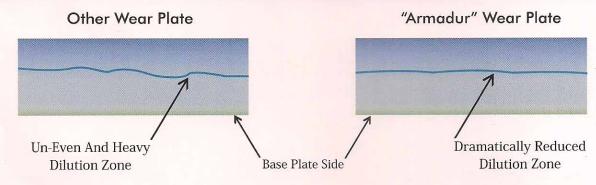
Valency also has in its range a number of special consumables designed to meet the critical requirements of joining fit fabrication. Valency products are backed by an elaborate quality assurance set up and a highly qualified technical support team supplemented by an widespread dealer network to provide pre and after sales service.

Valency range of products are widely established in almost all industries viz. Defence, Steel, Power, Cement, Foundry, Oil Drilling, Mining, Paper, Automobiles, Railways, Sugar etc. Products are exported also.

Characteristics of "Armadur' Wear Plate

- ✓ World class PLC controlled welding machine to ensure lowest heat input during welding
- ✓ Minimum dilution ensuring consistency in hardness throughout the overlay
- ✓ Unique chemistry for different grades to resist variable wear factors
- ✓ Controlled and even distributions of primary and secondary carbides
- ✓ Lowest heat input to avoid losses of important carbides during welding
- ✓ Even dilution across the section increases base plate support for consistent strength across the area
- ✓ Rapid cooling restricts propagation of stress relieving cracks in base plate

Based on Our in-House Laboratory Acid Etching Test Following Consequence Observed for Dilution



- ✓ Lean Chemistry Results in fewer total carbides
- Slow cooling rate results in large carbides that dislodge upon wear and impact, thereby accelerating wear.
- ✓ Lower alloyed overlay deposited with high input results in soft, diluted interfacial zone.
- ✓ Decreased base metal support for reduced impact loading

- ✓ Deposit chemistry with increased chromium and carbon results in more carbides.
- ✓ Faster cooling rate results in smaller, finely dispersed carbides, prolonging wear life.
- Higher alloyed overlay deposited with low heat input resulting in minimum dilution and greatest interfacial hardness.
- ✓ Increased base metal support for greater impact loading

Applications

- ✓ Primary crusher liners
- ✓ Secondary crusher liners
- ✓ Mill liners
- ✓ Clinker cooler pan liners
- ✓ Deflector blades
- ✓ Cyclones and impellers
- ✓ Clinker hooper liners
- ✓ Louver ring segments
- ✓ Grizzely bars
- ✓ Air separator liners
- ✓ Rawmil slurry pipes and chutes
- ✓ Elbows, ducts, reducers and chutes
- ✓ Classifier guide vanes & liners
- ✓ Furnace part for sponge iron
- ✓ Iron ore inlet cone
- ✓ Screens for sinter plants
- ✓ Feed pipes and chutes
- ✓ BLT chutes
- ✓ De-dusting pipe lines
- ✓ Distribution chutes
- ✓ Funnels
- ✓ Flap gate liners
- ✓ Vibratory feeder liners
- ✓ Rawmil slurry pipes and chutes
- ✓ Elbows, ducts, reducers and chutes
- ✓ Classifier guide vanes & liners
- ✓ Burner tip
- ✓ Screw conveyor
- ✓ I.D. fan
- ✓ P.A. fan
- ✓ Transition piece
- ✓ Coal crusher liners
- Handling crusher liners
- Pulverizer classifier cones
- ✓ Ash hopper lines
- ✓ Housing liners
- ✓ Coal mill wear plates (detectors)
- ✓ Inner cones
- Bucket wheel excavator
- ✓ Bucket liners
- Mining machines
- Bucket chain excavators
- ✓ Dozzer components
- ✓ Dumper body
- ✓ Wear liners for concrete mixers
- ✓ Fan blades & impellers
- ✓ All types of screens

CEMENT SECTOR



STEEL SECTOR



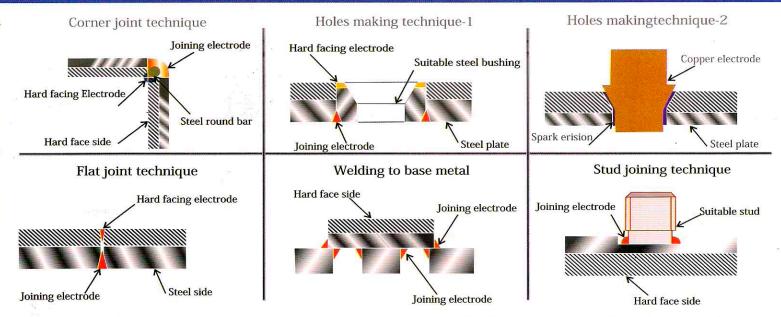
Power Sector



OTHER SECTORS



Guidelines for fabricaton



Cutting is only possible using air plasma carbon arc process, abrasive grinding or and cutting electrode

WEAR Plates Selection Matrices

- ✓ Size Availability: Maximum L -3000 mm × W -1300 mm
- ✓ Thickness : Starting from 5 mm (Base plate) + 3 mm (Armadur Layer) upto as required

Apart from above we also specialize in manufacturing of all types of chutes, line screens, casing, cones, pipes or parts of an application

GRAde Selection

Grade	Alloying	Properties	Hardness	Application
Armadur 58	C, Cr, B	High Abrasion & Moderate Impact	RC 56 - 58	Chutes, Crushers in Coal Mining, Cement, Power and Mineral Processing
Armadur 45 MN	C, Mn, Cr, Nb	Impact resistant and Work hardening	Deposited RC 24 Work hardening RC 48	Liners, Dumpers Blow Bars
Armadur 60 HWR	C, Cr, Mo, Va	Very High Wear Resistance	RC 60 - 62	Chutes, Liner For Ash Handling
Armadur 64 HT	C, Cr, Mo, Va, Nb, W	Resistance to Severe Wear at High Temperature	RC 60 - 65	Sinter Screens, ID Fan, Coal Burner Nozzle
Armadur 58 (P)	C, Cr, Mn, Mo, B	High Wear Resistance to Slurry, Fluid, Powder Flow	RC 58 - 62	For Cladding of Pipes, Tubes to Carry Ash, Clinker, Flue Gas and Slurry in Power, Cement, Steel, Concrete, Mine & Mineral Industry.

• Special grades can be provided on request.

Recommended minimum bending diameter in mm.

Plate Thickness	Hard facing inside	Hard facing outside	Plate Thickness	Hard facing inside	Hard facing outside
5 + 3	600	1200	6 + 5/6	400	1200
5 + 4	400	1000	10/12 + 3/4	400	1200
6+6	500	1200	10/12 + 5/6	600	1500
8 + 3/4	200	800	16 + 4/5/6	500	2000

Contact Details

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