**SMAW** For Hard Surfacing

## **HARDFACING ARC 33**

CLASSIFICATION: JIS Z3251 DFCrA-700B

WELDING POSITIONS :	<b>B</b> —
---------------------	------------

- Hard, Wear Resistant Chromium Carbide Iron Deposit
- For Hard Surfacing Components Subject To Severe Abrasion And Heavy Impact

## DESCRIPTION AND APPLICATIONS

HARDFACING ARC 33 is a hard surfacing electrode that deposits very hard chromium carbides in an austenitic matrix. It is suitable for a wide range of surfacing applications where resistance to heavy abrasion and impact are required. The high chromium content (33%) make these electrodes deposits resistant to sea water corrosion and oxidation / spalling at elevated temperature up to 900°C. Typical applications are in the earth moving and mining industries and include surfacing quarry screen plates, screen butt straps, chutes and shovel teeth / lips.

## **DEPOSIT PROPERTIES**

HARDFACING ARC 33 deposit are non-machinable, grindable, non-heat treatable and prone to relief checking. The high chromium carbide, iron deposit is ideal for all types of abrasion under high impact loading. For maximum wear resistance two layers may be required.

TYPICAL ALL WELD METAL COMPOSITION (Wt%)						
С	Mn	Cr	Fe			
5.0	1.5	32.5	Bal			

DEPOSIT HARDNESS					
SINGLE-LAYER ONTO MILD STEEL•	TYPICAL HARDNESS 53 - 58 HRC				
MULTI-LAYER	TYPICAL HARDNESS 60 - 65 HRC				

• Single layer deposit hardness may vary depending on base metal type and degree of dilution.

OPERATIONAL AND PACKAGING DATA						
ELECTRODE	ELECTRODE LENGTH (mm)	WELDING CURRENT	PACKAGING (kg)			
SIZE (mm)		RANGE • (amps)	PKT	CTN		
3.2	350	110 - 140	5	20		
4.0	400	140 - 185	5	20		

<sup>•</sup> Recommended for DC + or AC (minimum 70 OCV) operation

Liability: This document is intended to assist the user in choosing the product. It is up to the user to verify that the chosen product is suitable for applications for which it is intended. The compnay Leeden Powerweld Sdn Bhd reserves the right to alter specifications without prior notice of its products. The descriptions, illustrations, and specifications are for reference only and cannot be held liable for Leeden Powerweld Sdn Bhd.