# **Tube Alloy 255-O**

Tube Alloy 255-O is a self-shielded flux cored wire depositing an extra high chrome carbide alloy steel. It can be used to overlay surfaces subject to extremely severe abrasion. Some stress relief cracking will occur and is not detrimental to the wear properties.

Tube Alloy 255-O can be run submerged arc by using a neutral flux such as Afrox MK-N item 071406

#### **APPLICATIONS**

Tube Alloy 255-O is suitable for use on ammonia knives, augers, bucket teeth and lips, bulldozer end bits and blades, cement chutes, coal feeder screws, coal pulveriser hammers and tables, coke chutes, coke pusher shoes, conveyor screws, crusher jaws and cones, crusher rolls, cultivator chisels and sweeps, dragline buckets, dredger cutter heads and teeth, dredge pump inlet

nozzle and side plates, grizzly bars and fingers, manganese pump shells, muller tyres, ore and coal chutes, pipeline ball joints, pug mill paddles, ripper shanks, road rippers, scraper blades, screw conveyors, sheep's foot tampers and sizing screens, sub soiler teeth.

## **SPECIFICATION**

DIN 8555 MF10-GF-55-G

## **TYPICAL WELD METAL DATA**

%C	%Mn	%Si	%Cr
4.5	0.9	0.5	26.5

Abrasion resistance Excellent Impact resistance Poor

Machinability Grinding is difficult
Flame cutting Cannot be flame cut
Thickness 3 layers max

Microstructure Massive Chrome carbide in an austenite-carbide matrix

Deposit will relief check crack Maintains hot hardness to 675°C

## **TYPICAL HARDNESS RANGE HRc**

Layer	1020 Steel	Mn Steel
I	54	48
2	56	50
3	58	53

#### **RECOMMENDED WELDING DATA**

Tube Alloy 255-O can be used on DCEP

Dia mm	Current	Volts	Electrode Stickout	Deposition Rate
				Kg/hr
1.6	275-350	24-27	25-38	4.5
2.8	400-450	26-29	38-51	6.4

#### **PACKING DATA**

Dia mm	Item Number	Spool Mass Kg	Spool Type
1.6	077074	11.3	Spool
2.8	077075	27.2	Coil

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