



## Iron Powder Coated Electrode for Mild Steels

### Classification

EN ISO 2560-A : E 46 0 RR 74  
AWS A5.1 : E7024

### General Description

AS DT-180 is a heavily coated, high efficiency rutile iron powder electrode. It gives a metal recovery of about 180 % due to high iron powder content in its coating. It is particularly suitable for GRAVITY WELDING of thick plates. It gives smooth weld bead appearance with a soft arc. The slag is easy to remove. As the electrode length is 700 mm, it enables uninterrupted welding with large and long welding beads.

### Chemical Composition (w%), Typical, All Weld Metal

C	Si	Mn
0.08	0.45	0.90

### Mechanical Properties, Typical, All Weld Metal

Yield Strength	: 500 N/mm <sup>2</sup>
Tensile Strength	: 560 N/mm <sup>2</sup>
Elongation (L=5d)	: 25 %
Impact (ISO-V)	: 60 J (0°C)

### Approvals

CE, GOST, SEPRO, TSE

ABS	BV	DNV	LRS	TL
2	2	2	2m	2

### Welding Parameters / Packing and Diameter Informations / Welding Positions

Current Type and Polarity : AC min 70 V ; DC (-)

Diameter [ mm ]	Length [ mm ]	Current [ A ]	Electrode Weight [ g/100 pcs ]	Box Weight [ kg ] Quantity [ pcs/box ]
4.00	700	180 - 230	16900	10.1 / 60
5.00	700	240 - 270	25530	10.2 / 40



1G/PA



2F/PB

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### Applications and Materials to be Welded

It is used for the welding of mild steels having a maximum tensile strength of 440 N/mm<sup>2</sup> and for ordinary ship's plate of A- and D-quality. AS DT-180 is an ideal electrode particularly used for fillet and butt joints in flat and horizontal positions. Machinery fabrication and ship building where smooth weld beads are required; boiler and pressure vessel manufacturing; automotive bodies and steel and bridge constructions are among some application areas where AS DT-180 is extensively used. It brings high efficiency as it is a very fast electrode with a very high deposition rate.

	<u>DIN</u>	<u>EN</u>
<b>General Structural Steels</b>	St 33, St 34, St 37, St 44, St 44-2, St 44-3, St 52* C 10 - C 22	S185, S235, S275, S355 C10 - C22
<b>Fine Grained Steels</b>	StE 255 - StE 420 WStE 255 - WStE 420	S255N - S420N P255NH - P420NH
<b>Pipe Materials</b>	StE 210-7 - StE 360-7 X42, X46, X52, X60 (API 5LX)	L210 - L360NB -
<b>Boiler and Pressure Vessel Steels</b>	17 Mn 4, 19 Mn 6 H1, H11, H111	P295GH, P355GH P235GH, P265GH, P285NH
<b>Elevated Temperature Steels</b>	St 35-8, St 45-8	P235G1TH - P255G1TH
<b>Ship Plates</b>	A, B, C, D*, E* AH32 - EH36	- -
<b>Cast Steels</b>	GS-38, GS-45, GS-52*	GE200, GE240, GE260

(\*) It is recommended to use a basic coated electrode in the root pass.