



Ferromaxx® 15

For faster, cleaner welding of steel

Purpose-designed for MAG welding of carbon, carbon manganese and low-alloy steels, the Ferromaxx® gases give superb weld quality and excellent penetration, together with minimal spatter and low fume levels.

The reliable all-rounder

Ferromaxx® 15 is a ternary mixture (of argon, CO₂ and oxygen) used to weld carbon steels of all thicknesses. The action of oxygen on the transfer of metal allows for greater arc stability.

- Improves weld quality and reduces spatter, excellent penetration characteristics.
- Excellent weld control.
- Protects the work environment, minimal ozone generation.



Approved welding procedure

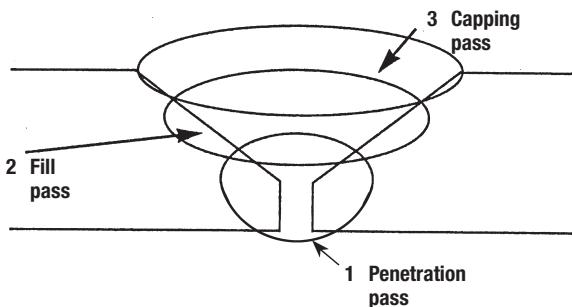
Ferromaxx® 15

Manufacturer:	Air Products PLC Air Products Ireland Ltd
Welding process:	MAG 135
Root welding process:	MAG 135
Joint type:	Butt

Torch angle	15° in the direction of welding
Nozzle bore diameter	18 mm

*n/a: not applicable

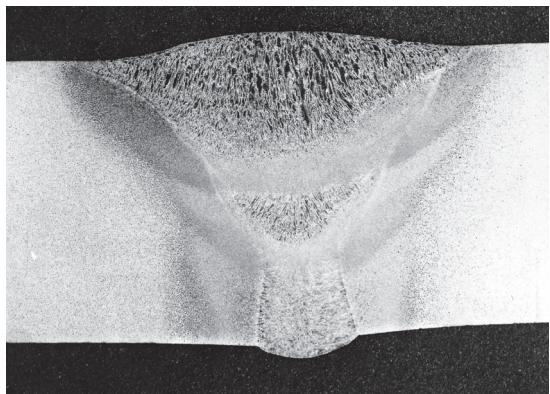
Welding sequence



Joint design

Preparation of parts	Machined preparations Sandblasting and solvent cleaning
Parent material and specifications	BS 970 : Part 3 Grade 080A15
Composition	C - 0.13 / 0.18% Si - 0.10 / 0.40% Mn - 0.60 / 1.0% P - 0.050% max. S - 0.050% max.
Material thickness	12 mm
Outside diameter	n/a
Welding position	Flat (PA)

Macrography



Welding details

Run	Process	Diameter of filler metal (mm)	Current (A)	Voltage (V)	Type of Current & Polarity	Wire feed Speed (m/min)	Travel Speed (mm/min)	Heat Input (kJ)
1	MAG	1.0	194	26	DC+	9	266	1.1
2	MAG	1.2	256	27	DC+	8.8	314	1.3
3	MAG	1.2	270	28.5	DC+	8.6	400	1.1
4								
5								
6								

Filler metal and specification AWS-A5.18 ER 70S-6 (SG3Si)

Filler metal composition C - 0.12% max. - Si - 0.70 / 1.2%
Mn - 0.9 / 1.6% - P - 0.040% max.
S - 0.040% max. - Cu - 0.040% max.

Shielding gas Ferromaxx® 15

Classification of shielding gas EN 439 - M24

Gas flow rate

- Shield gas 15 l/min

- Purge gas n/a

TIG electrode type n/a

Underside protection n/a

Preheat temperature Ambient

Interpass temperature n/a

Heat treatment n/a

Stand off distance 15 mm

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