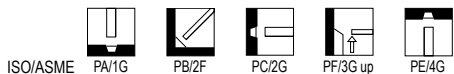


Outershield® MC700**CLASSIFICATION**

AWS A5.18/A5.18M : E70C-6M H8
 EN ISO 17632-A : T 46 2 M M 2 H10

GENERAL DESCRIPTION

All position high efficiency gas shielded metal cored wire
 Excellent arc characteristics give outstanding operator appeal
 Very few silicates, virtually no spatter, fast travel speed, excellent wire feeding
 Superior product consistency with optimal alloy control

WELDING POSITIONS

ISO/ASME

**CURRENT TYPE**

DC +
 M21 : Mixed gas Ar+ (>15-25%) CO₂
 Amount : 15-25 l/min

CHEMICAL COMPOSITION (W%), TYPICAL, ALL WELD METAL

Shielding gas	C	Mn	Si	P	S	H _{DM} ml/100 g
M21	0.05	1.35	0.6	0.015	0.023	5

MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

	Shielding gas	Condition	Yield strength (N/mm ²)	Tensile strength (N/mm ²)	Elongation (%)	Impact ISO-V(J)	
						-20°C	-30°C
Required: AWS A5.18			min. 400	min. 480	min. 22		min. 27
EN ISO 17632-A			min. 460	530-680	min. 20	min. 47	
Typical values	M21	AW	475	560	24	75	45

PACKAGING AND AVAILABLE SIZES

Diameter (mm)	1.2
Unit : 15 kg spool B300	X

Outershield® MC700: rev. EN 05

Outershield® MC700

MATERIALS TO BE WELDED

Steel grades/Standard	Type
General structural steel	
EN 10025	S185, S235, S275, S355
Ship plates	
ASTM A131	Grade A, B, D, AH32 to EH36
Cast steel	
EN 10213-2	G P 240R
Pipe material	
EN 10208-1	L210, L240, L290, L360
EN 10208-2	L240NB, L290NB, L360NB, L360QB, L240MB, L290MB, L360MB, L415MB, L415NB
API 5LX	X42, X46, X52, X60
EN 10216-1/	P235T1, P235T2, P275T1
EN 10217-1	P275T2, P355N
Boiler & pressure vessel steel	
EN 10028-2	P235GH, P265GH, P295GH, P355GH
Fine grained steel	
EN 10025 part 3	S275, S355, S420
EN 10025 part 4	S275M, S275ML, S355M, S355ML, S420M, S420ML

CALCULATION DATA

Diameter (mm)	Arc mode	Electrical stick-out (mm)	Wire Feed		Current (A)	Arc Voltage (V)	Deposition rate (kg/h)	kg wire/ kg weldmetal
			Speed (cm/min)					
1.2	Short arc	15	230	100	15	1.1	1.10	
			320	120	16	1.4	1.10	
			400	150	17	1.9	1.10	
1.2	Spray arc	20	635	180	28-30	2.7	1.10	
			940	275	31-34	4.8	1.10	
			1420	340	35-38	6.8	1.10	

WELDING PARAMETERS, OPTIMUM FILL PASSES IN SHIELDING GAS Ar + (>15-25)% CO₂

Diameter (mm)	Welding positions				
	PA/1G	PB/2F	PC/2G	PF/3Gup	PE/4G
1.2	230-280A	230-380A	230-300A	130-170A	140-175A
	26-36V	26-36V	26-30V	15-17V	16-17V