

# Outershield® 555CT-H

## CLASSIFICATION

AWS A5.29/A5.29M : E81T1-W2M-JH4  
 EN ISO 17632-B : T555T1-1MA-NCC1-UH5

## GENERAL DESCRIPTION

All position gas shielded 0.6% Ni, 0.5Cr and 0.5% Cu alloyed flux cored wire, for welding weather resistant steel (CorTen)  
 For welding in all positions  
 Superior weldability, low spatter, good bead appearance  
 Outstanding operator appeal  
 Exceptional mechanical properties (CVN >47J at -50°C)  
 Very low hydrogen ( $H_{DM}$  <5 ml/100g)  
 Superior product consistency with optimal alloy control  
 Excellent wire feeding

## WELDING POSITIONS



## CURRENT TYPE

DC +  
 M21 : Mixed gas Ar+ (>15-25%) CO<sub>2</sub>  
 Amount : 15-25 l/min

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

Shielding gas	C	Mn	Si	P	S	Cr	Ni	Cu	$H_{DM}$ ml/100 g
M21	0.03	1.1	0.4	0.015	0.015	0.55	0.60	0.55	4

## MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

	Shielding gas	Condition	Yield strength (N/mm <sup>2</sup> )	Tensile strength (N/mm <sup>2</sup> )	Elongation (%)	Impact ISO-V(J)	
						-30°C	-50°C
Required: AWS A5.29			min. 470	550-690	min. 19	min. 27	
EN ISO 17632-B			min. 460	550-740	min. 17		min. 47
Typical values	M21	AW	600	680	20	140	100

## PACKAGING AND AVAILABLE SIZES

Diameter (mm)	1.2
Unit : 4.5 kg plastic spool S200	X
15 kg spool B300	X

Outershield® 555CT-H: rev. EN02

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## MATERIALS TO BE WELDED

Steel grades/Standard	Type
<b>Weather Resisting Steel</b>	
EN 10025 part 5	S235 J0W, S235 J2W, S355 J0WP, S355 J2WP, S355 J0W, S355 J2W, S355 42W
ASTM A242	Type 1
ASTM A580	Grade A
ASTM A595	Grade C
ASTM A709	Grade HPS 50W & HPS 70W
ISO 5952	HSA 355W1 & W2
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Weather resistant steels like Cor-Ten®, Patinax®-F, Patinax®-37 and similar Ni, Cr and Cu-alloyed steels

## CALCULATION DATA

Diameter (mm)	Electrical stick-out (mm)	Wire Feed Speed (cm/min)	Current (A)	Arc Voltage (V)	Deposition rate (kg/h)	kg wire/kg weldmetal
1.2	20	445	130	20-22	1.6	1.20
		700	180	23-25	2.5	1.20
		950	220	25-27	3.4	1.20
		1270	265	27-29	4.5	1.20
		1590	305	30-32	5.9	1.20

## WELDING PARAMETERS, OPTIMUM FILL PASSES IN SHIELDING GAS Ar + (>15-25)% CO<sub>2</sub>

Diameter (mm)	Welding positions				
	PA/1G	PB/2F	PC/2G	PF/3Gup	PE/4G
1.2	230-280A	230-280A	200-240A	200-240A	160-220A
	26-32V	26-32V	25-32V	25-28V	23-28V