

Cor-A-Rosta® 4462

CLASSIFICATION

AWS A5.22	E2209T0-1/-4	A-Nr	8	Mat-Nr	1.4462
ISO 17633-A	T 22 9 3 N L R C/M 3	F-Nr	6		
		9606 FM	5		

GENERAL DESCRIPTION

Gas shielded flux cored wire electrode for duplex stainless steel welding in downhand position

Excellent weldability

Applicable up to a service temperature of 250°C

High resistance to general corrosion, pitting and stress corrosion conditions

High yield strength > 500 N/mm²

M21 shielding gas is recommended

WELDING POSITIONS (ISO/ASME)



PA/1G



PB/2F



PC/2G

CURRENT TYPE / SHIELDING GAS (ISO 14175)

DC +

M21 : Mixed gas Ar+ (>15-25%) CO₂

C1 : Active gas 100% CO₂

Flow rate: 15-25 l/min

APPROVALS

Shielding gas	DNV
C1	+

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

Shielding gas	C	Mn	Si	Cr	Ni	Mo	N	FN (acc.WRC 1992)
M21	0.03	1.2	0.7	23	9.2	3.1	0.12	40

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	-50°C
Required: AWS A5.22			not required	min. 520	min. 25		
ISO 17633-A			min. 450	min. 550	min. 25		
Typical values	M21/C1	AW	630	800	29	50	40

PACKAGING AND AVAILABLE SIZES

Diameter (mm)	1.2
15 kg spool S300	X

Cor-A-Rosta® 4462 : rev. C-EN28-19/05/16

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EXAMPLES OF MATERIALS TO BE WELDED

Steel grades	EN 10088-1/-2	Mat. Nr	ASTM/ACI A240/A312/A351	UNS
Duplex stainless steels				
	X2CrNiMoN22-5-3	1.4462		S31803
		1.4417		S31500
	X3CrNiMoN27-5-2	1.4460		S31200
	X2CrNiN23-4	1.4362		S32304
	X2CrMnNi21-5-1	1.4162		S32101

Dissimilar joints such as un- and low alloy steel to duplex stainless steel

WELDING PARAMETERS, OPTIMUM FILL PASSES

Diameter (mm)	Welding positions		
	PA/1G	PB/2F	PC/G
1.2	100-250A	100-250A	100-200A

REMARKS/APPLICATION ADVICE

For positional welding, use Cor-A-Rosta P4462
 Welding with Heat-Input max. 2.5 kJ/mm
 Interpass temperature max. 150°C