Cor-A-Rosta® P4462

CLASSIFICATION

AWS A5.22	E2209T1-1/-4	**A-Nr**	8	**Mat-Nr**	1.4462
ISO 17633-A	T 22 9 3 N L P M 2	**F-Nr**	6		
		9606 FM	5		

GENERAL DESCRIPTION

Gas shielded flux cored wire electrode for positional welding of duplex stainless steel
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

WELDING POSITIONS (ISO/ASME)

PA/1G **PB/2F** **PC/2G** **PF/3Gu** **PE/4G**

CURRENT TYPE / SHIELDING GAS (ISO 14175)

DC +
M21 : Mixed gas Ar+ (>15-25%) CO_2
Flow rate : 15-25 l/min

APPROVALS

Shielding gas	LRS
M21	+
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/mm²)	Tensile strength (N/mm²)	Elongation (%)	Impact ISO-V(J) -20°C	Impact ISO-V(J) -50°C
Required: AWS A5.22			not required	min. 690	min. 25		
ISO 17633-A			min. 450	min. 550	min. 25		
Typical values	M21	AW	630	800	29	65	55

PACKAGING AND AVAILABLE SIZES

Diameter (mm)	**1.2**
15 kg spool S300	X

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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	PF/3G up
1.2	100-250A	100-250A	100-200A	130-180A

REMARKS/APPLICATION ADVICE

For downhand welding, use Cor-A-Rosta 4462
Welding with Heat-Input max. 2.5 kJ/mm
Interpass temperature max. 150°C