

2205XKS

MMA (SMAW)

BASIC PIPE-WELDING MMA ELECTRODE FOR 22%Cr DUPLEX STEELS

PRODUCT DESCRIPTION

MMA electrode made on duplex stainless core wire with a special basic flux to give optimum all-positional operability. Recovery is about 105% with respect to core wire, 65% with respect to the whole electrode. The electrode has a basic flux system and is recommended where the highest sub-zero toughness is required, and for the most demanding positional welding applications such as fixed pipework in the ASME 6G position.

CLASSIFICATIONS

AWS A5.4M E2209-15
ISO 3581 E 22 9 3 N L B 4 2
Approvals ABS, DNV, TÜV

ASME IX QUALIFICATION

QW432 F-No 5
QW442 A-No 8

WELDING POSITIONS (ISO/ASME)



PA/1G



PB/2F



PC/2G



PF/3Gu



PE/4G

CHEMICAL COMPOSITION (WELD METAL WT %)

	C	Mn	Si	S	P	Cr	Ni	Mo	Cu	N	PRE _N
Min.	--	0.5	--	--	--	22.0	8.5	3.0	--	0.15	35
Max.	0.04	2.0	0.90	0.02	0.03	23.5	10.0	3.5	0.75	0.20	38
Typical	0.03	1	0.6	0.01	0.02	23	9	3.2	0.1	0.17	36

ALL-WELD MECHANICAL PROPERTIES

As welded	Min.	Typical	1120 – 1135°C +WQ
Tensile strength [MPa]	690	750-870	790
0.2% proof strength [MPa]	450	630-700	480
Elongation [%] 4d	20	28	41
5d	20	26	37
Reduction of area %	--	45	64
Impact ISO-V(J) +20°C	--	> 85	--
-50°C	47	> 60	> 75
-75°C	--	> 30	--
Hardness [HV]	--	260-290	240

TYPICAL OPERATING PARAMETERS, DC +VE ONLY

Diameter (mm)	2.5	3.2	4.0	5.0
min. A	50	70	100	130
max. A	75	95	155	190

PACKAGING DATA

	Diameter (mm)	Length (mm)	Item number	No of pieces		Weight (kg)	
				can	box	can	box
METAL CAN	2.5	300	2205XKS-25	223	669	3.8	11.4
	3.2	350	2205XKS-32	130	390	4.3	12.9
	4.0	350	2205XKS-40	88	264	4.4	13.2
	5.0	350	2205XKS-50				

Redrying : 200 – 300°C/1-2h to restore to as-packed condition. Maximum 380° C, 3 cycles, 10h total.

FUME DATA (WT % TYPICAL)

Fe	Mn	Cr	Ni	Mo	Cu	F *	OES (mg/m³)
7	6	6	1	0.2	<0.2	16	0.8

* F = 28% for basic coated 2205XKS but this does not affect OES.