

EPRI P87

MMA (SMAW)

BASIC MMA ELECTRODE FOR HIGH TEMPERATURE APPLICATIONS

PRODUCT DESCRIPTION

MMA electrode with a special basic flux covering on a nickel-iron alloy core wire.

The electrode is optimised for DC+ welding in all positions including fixed pipework in the ASME 5G/6G positions.

Recovery about 115% with respect to core wire, 65% with respect to whole electrode.

CLASSIFICATIONS

No current national standards but covered by U.S Patent 7,562,807.

ASME IX QUALIFICATION

QW432 F-No --

WELDING POSITIONS (ISO/ASME)



PA/1G



PB/2F



PC/2G



PF/3Gu



PE/4G

COMPOSITION (WELD METAL WT %)

	C	Mn	Si	S	P	Cr	Ni	Mo	Nb	Fe
Typical	0.1	1.5	0.3	0.008	0.008	9	Bal	2	1	38

ALL-WELD MECHANICAL PROPERTIES

Typical values	Ambient as-welded	Hot strength 593°C	
		as-welded	N+T
Tensile strength (MPa)	575	530	440
0.2% proof strength (MPa)	375	340	225
Elongation [%] 4d	28	21	25
Reduction of area [%]	30	24	33
Impact ISO [J] +20°C	80	--	--

OPERATING PARAMETERS, DC +VE

Diameter (mm)	2.5	3.2	4.0
min. A	60	70	90
max. A	80	110	150

PACKAGING DATA

	Diameter (mm)	Length (mm)	Item number	No of pieces		Weight (kg)	
				can	box	can	box
METAL CAN	2.5	300	EPRI P87-25	228	684	4.2	12.6
	3.2	350	EPRI P87-32	140	420	5.0	15.0
	4.0	350	EPRI P87-40	88	264	4.9	14.7

Redrying: 200-250°C/1-2h to restore to as-packed condition. Maximum 350°C, 3 cycles, 10h total

FUME DATA (WT % TYPICAL)

Fe	Mn	Ni	Cr	Cu	F	OES (mg/m³)
9	5	6	2.5	<0.5	12	2