



6010 PM

AWS E6010

REPLACES 020215

100-A, INDEX: 060116

DESCRIPTION:

McKay's **6010 PM** is an iron powder E6010 electrode. It has strong operator appeal through excellent welding characteristics that include smooth arc action and deep arc penetration. 6010 PM produces X-ray quality welds and is particularly outstanding when welding in the vertical-down position.

APPLICATIONS:

Excellent for pipes, plates, construction, shipbuilding, and general purpose fabrication and maintenance welding.

FEATURES	BENEFITS
<ul style="list-style-type: none"> All-position Light slag Excellent vertical down Quick-starting efficiency Superior arc drive Excellent wash-in Excellent arc stability 	<ul style="list-style-type: none"> Welds in flat, horizontal, vertical and overhead positions Quick and easy cleaning of weld bead Faster travel speeds Easy arc striking and increased welding Excellent penetration Easy weld lay-in and smooth bead appearance Welding accuracy and efficiency

TYPICAL WELD METAL PROPERTIES* (CHEM PAD):

WELD METAL ANALYSIS		AWS Spec
Carbon (C)	0.06	Not required
Silicon (Si)	0.20	Not required
Manganese (Mn)	0.40	Not required

TYPICAL MECHANICAL PROPERTIES* (AS WELDED):

		AWS Spec
Tensile Strength	76,000 psi (524 MPa)	60,000 psi
Yield Strength	61,000 psi (421 MPa)	48,000 psi
Elongation % in 2"	26%	22%
Reduction of Area	64 %	Not required

TYPICAL CHARPY V-NOTCH IMPACT VALUES*(AS WELDED):

Avg. at -20°F (-29°C)	34 ft•lbf (46 J)	20 ft•lbf
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CONFORMANCES AND APPROVALS:

- AWS Spec A5.1, Class E6010
- ASME SFA5.1, F-3, A-1, Class E6010
- ABS

*The information contained or otherwise referenced herein is presented only as "typical" without guarantee or warranty, and McKay expressly disclaims any liability incurred from any reliance thereon. Typical data are obtained when welded and tested in accordance with AWS A5.1 specification. Other tests and procedures may produce different results. No data is to be construed as a recommendation for any welding condition or technique not controlled by McKay.



RECOMMENDED WELDING PROCEDURES:

- GENERAL:** Electrode positive, work negative (DCEP)
ARC LENGTH: Average length (1/8" to 1/4")
FLAT: Stay ahead of puddle and use slight whipping motion
VERTICAL-UP: Slight whipping or weaving technique
VERTICAL DOWN: Use higher amperage and faster travel, staying ahead of puddle
OVERHEAD: Use similar technique as for vertical-up; multi-pass for build-up
PIPE: Use downhill travel
STORAGE: Dry at room temperature
RECONDITIONING: Not recommended

RECOMMENDED OPERATING PARAMETERS:

DIAMETER		TYPE OF POWER	MINIMUM AMPS	OPTIMUM* AMPS	MAXIMUM AMPS
INCHES	MM				
3/32	2.4	DCEP	40	60	70
1/8	3.2	DCEP	65	100	130
5/32	4.0	DCEP	90	140	175
3/16	4.8	DCEP	140	170	225

*For out of position welding, reduce amperages shown by 15%.

TYPICAL DEPOSITION DATA (AT OPTIMUM):

DIAMETER		TYPE OF POWER	AMPS	VOLTS	DEPOSITION RATE LBS/HR	DEPOSITION EFFICIENCY*%
INCHES	MM					
3/32	2.4	DCEP	60	26-29	1.30	53
1/8	3.2	DCEP	110	26-27	1.60	54
5/32	4.0	DCEP	140	26-28	1.90	55
3/16	4.8	DCEP	180	26-28	2.60	54

*Allowance made for 2" stub loss included.

AVAILABLE DIAMETERS AND PACKAGES:

DIAMETER		LENGTH		50-LB. CAN
INCHES	MM	INCHES	MM	
3/32	2.4	14	355	S116532-Z35
1/8	3.2	14	355	S116544--Z35
5/32	4.0	14	355	S116551-Z35
3/16	4.8	14	355	S116558-Z35

Material Safety Data Sheets on any McKay product may be obtained from McKay Customer Service.

Because McKay is constantly improving products, McKay reserves the right to change design and/or specifications without notice.