

APPROVED



مشخصات فنی خرید

دستگاه جوشکاری لوله های پلی اتیلن (الکتروفیوژن)

P.E. Welding Machines , Electrofusion type

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1- Scope ,

This standard **cancels and replaces IGS-M-PL-016(1) : 2000** and specifies NIGC requirements for Electrofusion welding machine for use with PE Electrofusion fittings, portable, manual and auto setting with barcode detection system , suitable for Electrofusion weld of P.E pipes and fittings SDR 11, P.E 80 or SDR 13.5 , P.E 100 for dimension range of 25- 225 mm and temperature range of -10 °C to +45 °C , ± 2 °C.

2- Normative References ,

Throughout this standard specification the following standards and codes that are in effect at the time of issues of this specification (2007) shall, to the extent specified herein, form part of this specification.

The applicability of changes in standards and codes that occur after the date of standards that referred shall be mutually agreed upon by the purchaser and supplier and/or manufacturer.

- ISO 12176-2: 2000; *plastics pipes and fittings-Equipment for fusion jointing polyethylene systems-part 2: Electrofusion.*
- EN 1555 Parts 2,3 : 2002 ; *Plastic piping system for gaseous fuels supply P.E.*
- ISO 8085-3 : 2001; *Polyethylene fitting for use with polyethylene pipes for the supply of gaseous fuel-Metric series- Specifications- Part 3 : Electrofusion fittings.*
- IEC 60529 :1989; *Degrees of protection provided by enclosures (IP Code).*
- ISO 12508 :1994, *Safety of earth-moving machinery-Part 18 : Specification for bluntness of edges at the operator station and in maintenance areas.*

3- Definitions

3-1- Standard Dimension Ratio (SDR),

The ratio of outer diameter of pipe to wall thickness of pipe.

3-2 – PE 80,

Material having minimum required strength (MRS) 8 N/mm² .

3-3- PE 100,

Material having minimum required strength (MRS) 10 N/mm² .

4 – Requirements

4-1 General requirements,

An Electrofusion welding machine comprises a control panel and the regulation system which shall be integrated in a single unit.

The required accuracy of operation shall be maintained within -10 °C to +45 °C , ± 2 °C for at least 12 months without the need for adjustment of the control unit.