

Polyethylene pipe butt fusion welding machine

McElroy Manufacturing MegaMc 1236

Butt fusion machine capable of welding polyethylene pipes between 500mm and 900mm in diameter.

Features and benefits

- Capable of welding PE pipe sizes from 500mm to 900mm with a four-jaw carriage to the three welding procedures defined in ISO 21307 (single low-pressure, dual low-pressure and single high-pressure)
- Allows for butt fusion of most fittings without special holders or removal of the outer jaw
- Semi-automatic control system requires only one operator
- Hydraulic power assists all fusion functions including the complete operation of the jaws, pipe lifts, heater, and facer

Some applications

- Development of butt fusion welding procedures for large-diameter PE pipes
- Comparison of UK, European and US welding parameters on the short-term integrity of butt fusion welds in large-diameter PE pipes
- Comparison of results from mechanical tests specified in PPI TR-33 with the short-term tests recommended by TWI for butt fusion welds in large-diameter PE pipes
- Development of planar flaw and fine particulate acceptance criteria for butt fusion welds in PE pipes up to 800mm diameter, made according to WIS 4-32-08, DVS 2207-1 and PPI TR-33

Technical specification

- 20,000W heater
- Hydraulic system operating at up to 158 bar pressure
- Hydraulically operated jaw clamps
- Rugged outriggers for stability and to allow levelling of the machine
- On wheels with an articulating front axle and lockable wheels
- Data logging system capable of recording welding parameters such as pressure, temperature and time

