Advantages of electrofusion jointing over butt welding

Butt welding causes the formation of internal beads (see pic above). It’s much bigger when done with local made heating plates, as in India. It results in the restriction of flow by 30 to 40%. Also results in deposits. Whereas electrofusion gives smooth, inside of the pipe, which remains throughout the life of the pipe.
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Butt welding machines are heavy and costly. Also for different sizes different machines are required. As its heavy needs machinery support to handle the welding jacks. Chances of failure are more. Hence for gas applications electrofusion is compulsory. For example government of India has issued gazette notification to use electrofusion jointing for gas pipes.

Electrofusion machines are comparatively cheaper. Moreover, one single machine can weld all sizes of pipes from 20mm to 1200mm. Advantages are high tensile strength; the fusion unit is not tied up with the fusion process, hence fast progress of the work; simple to do installation; the machine is very light and compact, gives unfailing joints, etc.