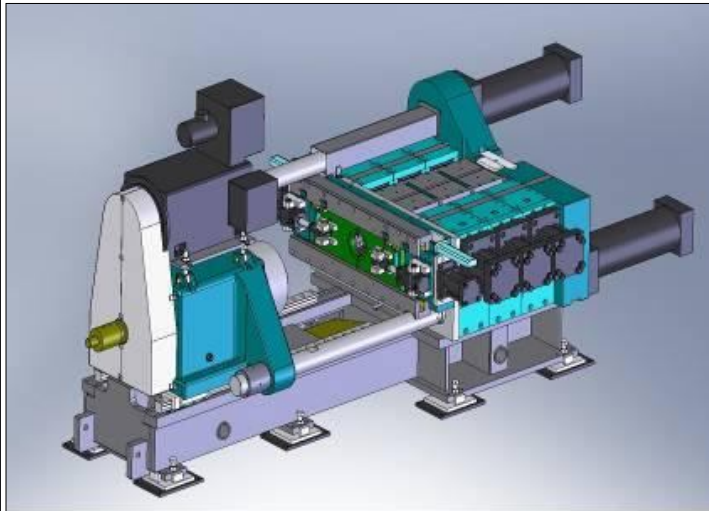


GATWICK FULLY AUTOMATIC DRILL PIPE FRICTION WELDING MACHINE



NC175,000 Specification

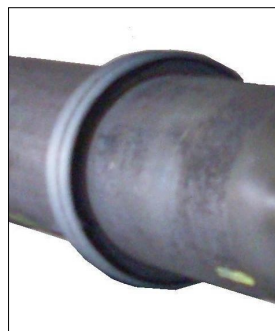
Pipe Diameter Range 2 3/8" – 6 5/8"
 (Drill Pipe API Spec D)
 Pipe length Range Unlimited
 Typical production rate 10 –20 parts per hour
 Max Weld Area 12,260 sq mm
 (Drill Pipe Steel)
 Total Connected Power 200 kW
 Spindle Speed 1-800 rpm (Variable)
 Max. Depth Spindle
 Backstop 750mm
 Spindle Travel Head
 Stroke 900 mm
 Pump Hydraulic pressure 210 bar
 Maximum Forge Force 1,740 KN
 Maximum Clamp Force 6,312 KN
 Machine Weight 55 tonnes
 Part Feeding End loading
 via automation
 or Robot or manual

Advantages of Friction Welding:

- No filler material, flux or shield gas
- Environmentally clean; no arcs, sparks, smoke or flames
- Surface impurities burn through during process
- Narrow heat affected zones
- Ability to weld dissimilar metals
- Weld strength usually as strong or stronger than the weaker material being joined
- Operators do not require manual operating skills
- Simple integration into the manufacturing area
- Easily automated for mass production
- Minimal plant requirements to install



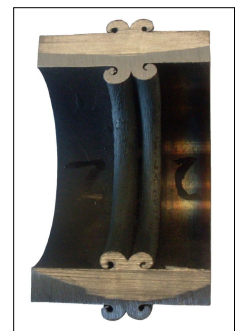
Weld and Forge



Before Flash removal



After Flash removal



Example Component
Cut-Through

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