COLD CUTTING EQUIPMENT

Excalibur

Model 210

OVERVIEW

The Excalibur is able to cut pipe wall up to 50 mm (2”) bevel high tensile stainless steel pipes, and work in the most extreme temperatures. It will cut and bevel most machinable materials, including carbon steel, stainless steel, ductile iron, cast iron and most other alloys without spark or flame. The heavy duty chain tensioning mechanism encased in a high strength alloy frame provides the necessary rigidity and strength for cutting the pipe at the highest travel speed possible. The frame of the Excalibur has six wheel positions to better follow the radius of the pipe and allow tracking accuracy on a 914.4 mm (36”) pipe of better than 0.5 mm. The Excalibur is equipped with a two-speed drive gearbox, which provides positive movement of the machine around the pipe in all kinds of pipe cutting conditions.

FEATURES AND BENEFITS

• Suitable for pipe from 15.24 cm (6”) to 7 m (50’) diameter and beyond
• Cuts pipe up to 50 mm (2”) thickness
• Available in Hydraulic, Pneumatic or Electric driven options
• Pneumatic and Hydraulic versions are suitable for use in no-spark environments
• Two speed drive gearbox; cuts at speeds up to 60 mm/min. (2.35”)
• Out-of-round compensation is unnecessary
• Accurate to +0.5 mm when used with optional guide band

ACCESSORIES

Power Pack
• For the 210H Hydraulic Driven Excalibur
• Diesel or electric driven options are available

Milling Cutters
• Durable cutters for the Excalibur - blades to fit other manufacturers’ machines are also available
• High speed steel is standard; ASP30 or ASP60 optional

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Hydraulic Driven

- For use in explosive environments
- Driven by 2 hydraulic motors
- A 4 KW hydraulic motor coupled with the transmission rotate the cutting blades up to 76 RPM
- A 1 KW motor connected to the 2-speed transmission powers the machine
- Requires use of a Power Pack

The hydraulic-driven Excalibur machine is designed for cutting heavier wall, high alloy pipes, or particularly tough carbon steel applications. The closed loop hydraulic system ensures proper lubrication is applied to the drive motors, which extends the life of the machine. The dual hydraulic motors are infinitely adjustable and deliver consistent horsepower to the cutting blades and drive motors. Due to the extreme performance of the Excalibur machine, the hydraulic-driven version must be used with a power pack capable of delivering 72 ltrs./min. at 100 bar pressure for maximum results. To cut very thick walled pipes, multiple passes may be required, and a guide band kit must be used in these situations to maintain the same degree of accuracy. These can be supplied (as standard) up to 182.88 mm (72”). For larger pipes, we can manufacture specific sized kits to suit your requirements.

Pneumatic -Low Pressure Variant

- For use in explosive environments
- Driven by 2 pneumatic air motors
- A 2.75 KW motor coupled with the transmission rotate the butting blades up to 71 RPM
- A 56 KW motor connected to the 2-speed transmission powers the machine
- Beveling blades are available in various configurations such as 30°, 37.5° beveling angle, as well as ‘U’ joint and ‘J’ prep
- Requires use of a compressor

The pneumatic-driven Excalibur machine is an excellent tool for both field and shop work. It is best used for cutting pipes in explosive environments such as refineries, or pipelines conveying natural gas, crude oil or crude oil by-products. Machine speed and blade RPM are controlled by two metering valves located on the machine’s control block. Airflow to the main drive motor and the blade motor can be shut off simultaneously with the start/stop control valve located on the control block. The Pneumatic Excalibur low pressure variant can be operated by a compressor delivering 7 bars at 4000l/min.

Electric Driven

- For use in non-explosive environments
- 3-phase electric supply powered by 3 KW and 3.5 KW motors
- Capable of cutting pipe of 25,4 mm (1”) wall thickness
- 30 mm per minute cutting speed

The electric-driven Excalibur machine is designed for use in non-explosive environments. This machine has been extensively redesigned for better performance. When being used in a fab shop environment or on pipes with no explosive content such as large diameter water pipes, the electric driven Excalibur machine offers unbeatable performance and affordability.