Fortress Energy

Spiral welding & In-situ Machining

Metal Recycling

THE STRENGTH TO PROTECT

Background

We were delighted to work closely with a new client in the metal recycling industry. Our client specialise in supporting organisations to turn their waste into a valuable resource including international automotive companies, government bodies, blue chips, plus hundreds of businesses across demolition, construction, electronics and wider industrial sectors.

With facilities across the globe and a team of over 3,000 people, their operations alone, returns 10 million tonnes of material back into the supply chain every year.

Scope

We were contacted to urgently support an emergency brake down on one of their hoppers. A large roller bearing with a weight of approximately 2T had failed.

Unfortunately, the new bearing had an internal diameter marginally wider than the original, which meant the shaft had to be made bigger – 139mm to 140mm.

Solution

Due to the restricted time scale, size, and location of the shaft, the most efficient solution identified was to weld overlay the shaft in-situ. The Fortress Energy Fabrication team completed the weld overlay, and then our specialist onsite machining team proceeded to tap an M16 hole in the centre of the shaft.

A Climax single bolt attachment Journal Squirrel machine was used by our onsite machining technicians to turn down the shaft to the required final diameter by machining down the weld overlay until the critical final diameter was achieved.

CLIMAX
Portable Machining & Welding Systems

Local and skilled. Global and strong

Results

Once the shaft was machined down to the required diameter followed by NDT and client approval, the new bearing was offered in to position.

The bearing was successfully fitted, and the hopper was back in operation with minimal down time and within schedule.

Another excellent example of quality workmanship delivered by our experienced, multi-disciplined fabrication and onsite machining team to reduce costs and time involved for the client – resulting in a satisfied customer.

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