Slinden Services Ltd

Cast Iron Welding & Metal Stitching Repairs

Barring Engine Restoration

We were approached in June 2024 by an engineer in charge of finding a company who were able to take on an

industrial heritage project of a barring engine, once used in the Welsh copper industry, which had been badly neglected over the years. We would need to use many repair techniques including welding and stitching repairs to various cast iron components, along with making castings of missing pieces!

"In all of these cases, the missing pieces are gone and new sections will need to be cast...the crosshead slide – one half broken away due to a sledge hammer blow! The main cylinder flange, badly broken...crankshaft bearing tower, again smashed off with a sledge

hammer! Also, the engine end slot is another victim of hammer blows, though less critical to the



Breathing new life into damaged Cast iron components

L3 Olympic House, Westminster Industrial Estate, Measham, Derbyshire, DE12 7DS

Telephone: + **44** (0) **1530 274646 Email: info@slinden.co.uk**

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After much deliberation, the barring engine, cog wheel, main cylinder and second cylinder were brought along to our workshop in late Autumn (along with many drawings, together with critical measurements), and we were ready to begin the process of inspection, making

the patterns for the missing parts which were taken to our foundry of choice for the new castings, welding repairs by way of our Lloyds approved procedures for cast iron, and also stitching repairs where welding would not have been suitable.

All repaired areas were NDT inspected to ensure sound repairs were undertaken, before machining of the weld/repaired areas as needed.

The barring engine, cylinders and cog wheel were collected and transported to the newly refurbished engine house where it will be rebuilt, before being put on display to the public.

For any Industrial Heritage repairs, contact us for an initial survey / quotation.



• Metal Stitching Repairs

• Lloyds Welding Procedures

• Full Crack Detection

• Casting of Parts if Required

• Machining as Needed

• 24 months Guarantee



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