



Lovemore Bros.

MACHINE MOVING AND RIGGING CONTRACTORS

October 2011

Simply getting on with it.

LOVEMORE BROS' MECHANICAL DIVISION REBUILDS DIFFUSER HEAD IN ZIMBABWE

The diversity of Lovemore Bros' Mechanical and Projects Division was called upon to strip out and rebuild the drive head of a diffuser at Hippo Valley Sugar Estate Mill in Zimbabwe. The main columns and support structure had rusted and were in danger of collapsing from both its own weight and the forces imposed when in operation.

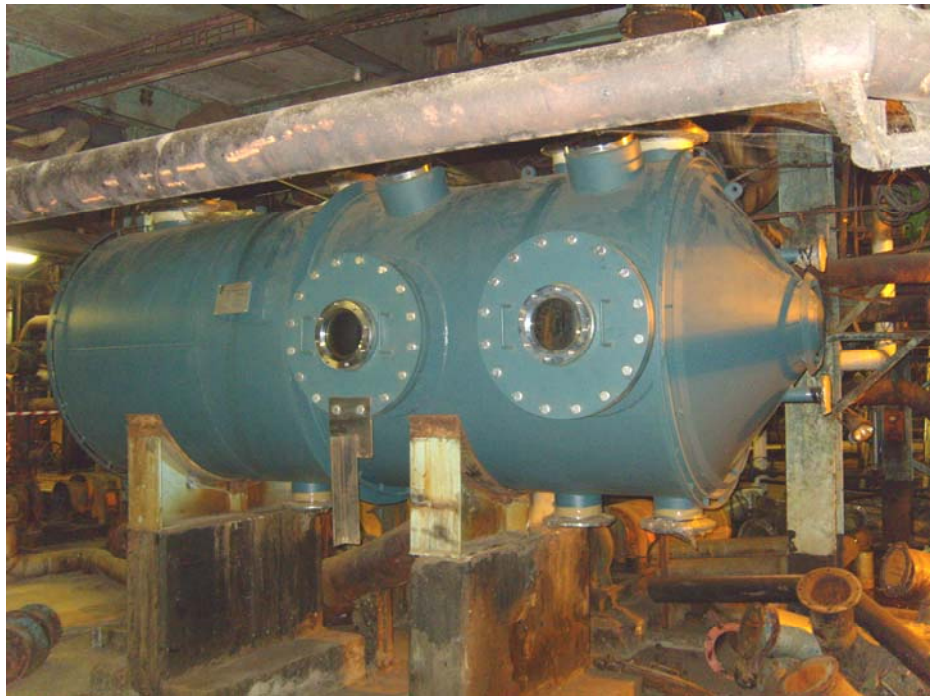
The mill had been undergoing an extensive refurbishment programme to rehabilitate it to its former productive form.

The support structure is required to carry the loads of the 12,6 ton press water drum, 5,8 ton kicker and 25 ton headshaft as well as the steel body and chains. The initial option was to rig out these three large objects, using a minimum 200 ton crane which would need to be brought in from South Africa.

This would have required two separate site establishments, one for the removal and one for the reinstallation. Lovemore Bros proposed the cost saving option of supplying and building a permanent overhead gantry structure, capable of supporting the loads individually.

This alternative method and assessment was put forward to Hippo Valley Estates and SiVEST, a Durban based project management company, who at the time were project managing the refurbishment programme.

"The decision was made to build and suspend from the gantry structure, which we supplied and built as a per-



Working in a cramped environment, the support structure had to be restored

manent structure so that it could be used for future maintenance projects.

Using the chain blocks and standard rigging gear, we raised the PWD, headshaft and kicker, cut out and removed all side walls, internals and support skeleton structure, then replaced and rebuilt the entire drive end," said Hugh de Borchgrave who heads the Mechanical and Projects Division.

Replacement steel was supplied in green form, from both South Africa and Zimbabwe, and together the team comprising SiVest Eng, Hippo Valley Estates Machine Shop and Lovemore Bros Rigging and Boiler Making, a new diffuser structure was developed, profiled and built on site.

Special mention must be made to the joint team effort of all personnel involved, resulting in the completion of a job that required imagination, planning and commitment, and huge cost savings.

The diffuser was started up again after completion and ran continuously from the initial start-up without any problems.



Lovemore Bros supplied and built a permanent overhead gantry structure capable of supporting the loads

Rigging

Machine Moving

Abnormal Loads

Mechanical Projects

Warehousing