

FOR IMMEDIATE RELEASE

### **Weir Minerals Receives Multiple Orders For Salgaocar Iron Ore Reclamation Project**

Weir Minerals Africa has supplied a variety of pumps and cyclones to the Salgaocar Iron Ore Reclamation Project in Swaziland against international competition. Commissioned in November 2012, Salgaocar Swaziland's operation produces iron ore concentrates from tailings created by the now defunct Ngwenya mine in Ngwenya, western Swaziland. Salgaocar Swaziland is a wholly owned subsidiary of Salgaocar Africa Resources.

Jigging is the basic process at this operation to recover iron ore from the dumps. In the jigging process the -1mm material could not be processed due to its size limitation. Hence it needs to be separated prior to process. The separated -1mm material to be dewatered for which the Cavex® 800CVX desliming cyclones are used along with dewatering screens.

In the -1mm material iron ore recovered by means of magnetic separation. Minus 1 mm fraction material is re-pulped and pumped over magnets, where it is separated. The separated material goes through a dewatering process, while the waste material is pumped to a thickener and the process water recovered.

"I believe we secured these orders based on our well established brand and the proven performance of our product range," Sarel van der Walt, sales engineer at Weir Minerals Africa, says.

The scope of supply included 19 8/6F Warman® AH WRT bare shaft pumps and two jet pumps. The Warman AH slurry pumps are fitted with Weir Minerals Africa's new AH WRT impeller and throatbush design, whereby the impeller incorporates a unique vanelet on the back shroud that streamlines the flow through the impeller. This combination provides significantly improved wear life and gives higher efficiency and therefore lower absorbed power.

The Warman® slurry pumps are also fitted with an improved Hi-Seal™ expeller seal that offers a significant improvement in performance over the original expeller sealing method. The patented

expelling vane shape and larger diameter expeller generates considerably more pressure in the expeller ring chamber at the same pump speed, compared to the previous sealing arrangement. Benefits of the modification include improved sealing performance, elimination of seal leakage and extended component wear life, as well as reduced power consumption, operating and maintenance costs.

As the project developed further, Salgaocar erected two additional jig plants at the mine and placed further orders with Weir Minerals Africa for two Cavex® 800CVX desliming cyclones for Jig Plants 1 and 2. After the successful installation and commissioning of these cyclones, an additional order for one 500CVX cyclone for Jig Plant 1 and a 800CVX cyclone for Jig Plant 3 was placed in September 2013, an order that included more Warman 8/6F AH metal slurry pumps.

Sheldon Gabriel, product manager for cyclones and engineered systems at Weir Minerals Africa explains that the jig discard is pumped to the Cavex® cyclones for dewatering. The cyclone underflow reports to a dewatering screen and the screen oversize is stacked as final product. The cyclone overflow product, which has 80% passing 75 microns, reports to the thickener.

“This is the first installation of Cavex® cyclones installed in Swaziland,” Gabriel comments. “This innovative technology incorporates a unique laminar spiral inlet geometry designed to deliver maximum efficiency, maximum capacity and longer wear life, compared with conventional involute or tangential feed cyclone designs. At the Salgaocar plant they will enable improved recovery of saleable product and a reduction in the amount of solids reporting to the thickener, adding real value to the operation. This installation has further enhanced Cavex® cyclones’ growing reputation in Africa for providing superior classification efficiency.”

SALGAOCAR PIC 01 : One of Weir Minerals' Cavex 800 CVX cyclones with air core booster that will be supplied to Salgaocar.

SALGAOCAR PIC 02 : A Warman AH pump fitted with the Hi Seal in a slurry application.

SALGAOCAR PIC 03 : A section view of a Warman AH pump showing the improved technology rubber liner, Hi Seal expeller and wear reduction technology (WRT) hydraulics.

SALGAOCAR PIC 04 : A closer view of the new Hi Seal in operation.

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