

# MVR COMPRESSOR RERATES

# By Ryan Rottier

RMS rerated one of the MVR compressors with a new rotating element and inlet nozzle. The rerated compressor will provide additional capacity at the same power. The increased capacity can also be used to recirculate addition hot discharge gas back to the suction of the compressor to superheat the gas upstream of the compressor. This superheat extends

Figure 1

the longevity of the impeller as it reduces the amount of water present in gas reducing corrosion / erosion of the impeller.

RMS is in process of rerating a second MVR compressor with a new rotating element and inlet nozzle for the same site.

At the sister site, RMS is providing a new rotating element and inlet nozzle of the original geometric design to replace the used components.

In the above three cases, the inlet nozzles are cast stainless steel. The original material for the inlet nozzles was cast iron. The stainless steel is an upgrade that will last for many more years than the original cast iron components.

In addition to the above projects, RMS has also provided support for shop assemblies, replacement parts (backplate, bearings, seals, etc.), a new shaft end seal with reduced leakage and field service support. RMS has also provided engineering support such as an impeller FEA to review the longevity of a used impeller, on site blade frequency checks and recommendations for improved reliability.

Because of RMS's experience with steam turbines, we were also able to support the drivers for the three compressors.

With RMS's technical expertise, commitment to ontime delivery and desire to serve the customer we have become the first choice when in need of support for an AC Compressor unit.



Figure 2

### For more information:

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