

# SPREADER TOOL FOR ASSEMBLY/DISASSEMBLY OF A CENTRIFUGAL COMPRESSOR

By John Smolko

RMS was recently contracted to design and manufacture a set of diaphragm mounting studs for a model RF2BB-30 centrifugal compressor. An on-site visit was planned in order to examine the existing studs during a planned disassembly. During re-assembly of the compressor, it was discovered that the retaining ring, which locates the shear ring in a groove in the compressor casing, was difficult to install. In order for the retaining ring to be properly installed, the shear



ring should be expanded from its relaxed shape to allow easy bolting of the retaining ring segments to the diaphragm. RMS used state-of-the-art 3D modeling software to design a spreader tool that will be used to aid in future assemblies and disassemblies of the ring. The design of the tool was based on a turn-buckle that will be bolted to the existing holes in the shear ring and used to either expand the ring during assembly or shrink the ring during disassembly.

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