

Bowers: Connecting Quality to the Oil & Gas Industry

Bowers Metrology, UK agent for Gagemaker, the world's most popular Oil & Gas Industry measuring equipment supplier, has announced the launch of Gagemaker's Joint Strength System (JSS), a revolutionary breakthrough in high-accuracy rotary shouldered connection thread inspection.

As the financial and ecological consequences of the failure in the field of an Oil Industry rotary shouldered connector can be catastrophic, the meticulous inspection of all critical aspects of each component is vitally important. Universally, pitch diameter is used as the "control" diameter for the design of each connector. If a connector's pitch diameter is machined incorrectly, the quality of the connector is severely jeopardised. The commonly used ring and plug stand-off gauges that are utilised for this task are unable to directly detect variations in the component's pitch diameter.

Historically, pitch diameter has remained a connector feature that has been left to interpretation, by the perceived "fit" of a ring or plug gauge. At best, the ring or plug would identify a discrepancy in either lead, taper or thread form. Although any one of these features could render a connector unusable, the manufacturing operator has never been able to identify which element is responsible for the problem – until now.

Simply, Gagemaker's advanced new Joint Strength System is an ingenious method of accurately gauging the quality of a rotary shouldered connector. The cost effective JSS adds the most important measurement element – pitch diameter – to the numerous criteria currently used to accept or reject a connector's quality.

JSS provides a simple method that enables total control over all of the components contained in a connector assembly. The comprehensive system combines some of the company's existing gauges with ingenious new products, and the NEW easy to use TDWIN TAPER software enables the selection, calculation, setting and reporting of the measured sizes of the components.

JSS is able to check thread cone taper, thread lead, thread height, thread form, and pitch diameter at the pitch plane. Following the machining of all of these features, within the allowable tolerances, the offending element can be immediately identified. By using the basic JSS gauge package, manufacturers will now be able to inspect any right hand or left hand rotary shouldered connector, either with or without the use of ring or plug gauges.

