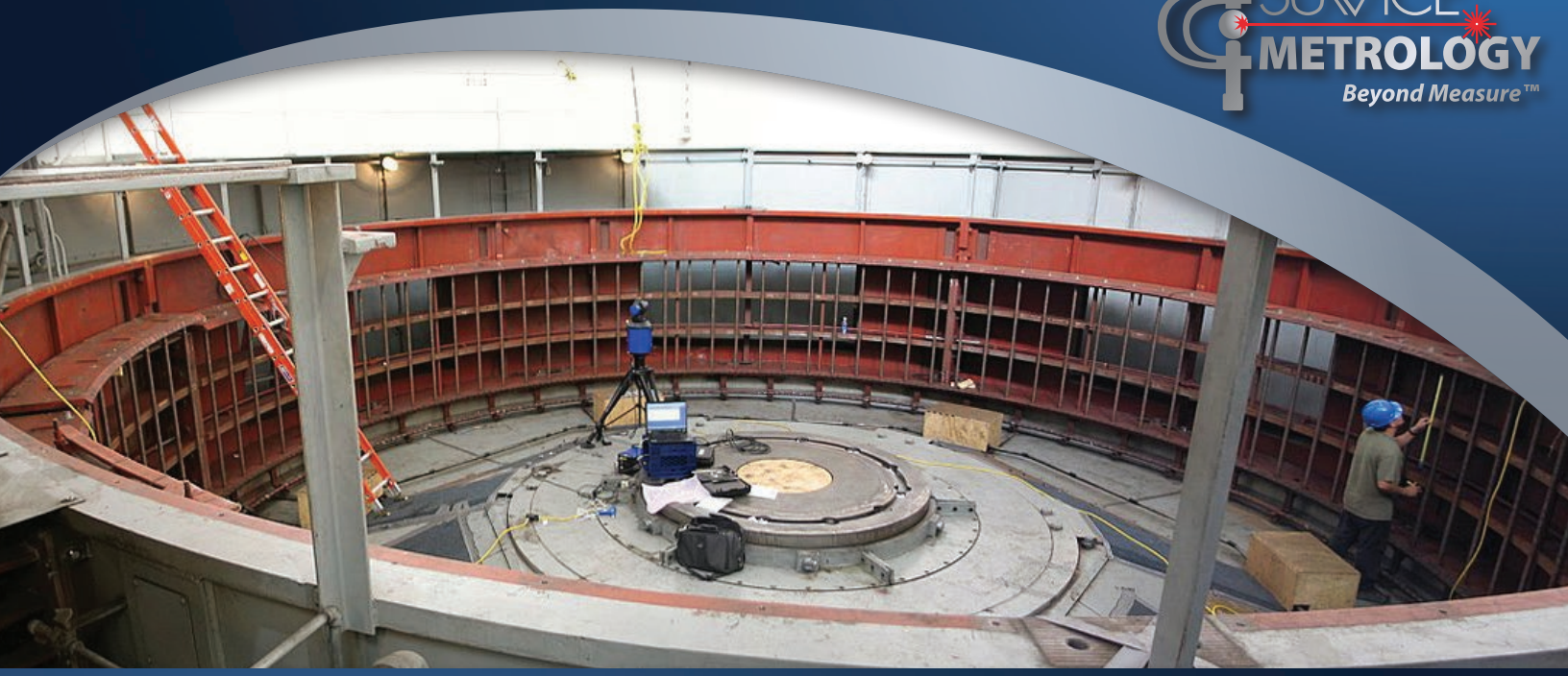

HYDROELECTRIC GENERATOR STATOR CONSTRUCTION

TASK: SURVICE Metrology staff have been providing stator stacking-bar alignment support services since 2003. We have developed several variations of a construction procedure which integrates the laser technology. Our equipment and procedures have enabled our customers to hold tighter tolerances and to nearly eliminate the time typically lost to rework using alternative construction methods. To date, our crews have successfully installed stacking bars in over 70 stators.

EQUIPMENT: FARO Laser Tracker

SOFTWARE: FARO Insight and Proprietary Excel Workbooks

EFFORT: A typical work flow in a stable environment yields ~20-32 attachments per shift. Example: 8 stacking bars x 4 attachment locations per bar = 32 attachments. Modest temperature variations are detected and managed throughout the construction process.

BENEFIT: The laser system can be used to confirm thru-hole patterns, frame ring dimensions, and sole plate elevations and keyway axes before work begins. In a typical situation, the system can set stacking bars in place to within ±0.003" (±0.075mm) before welding begins.

For more information on SURVICE Metrology, please contact us:
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