

Machinery diagnostic services

Expert engineering support to optimize the performance of rotating and reciprocating machinery

Our global team of experienced field engineers provides a comprehensive range of machinery diagnostic services (MDS) for rotating and reciprocating machinery—regardless of original equipment manufacturer.

Capabilities include:

- Rotating and reciprocating machinery diagnostics
- Startup and turnaround assistance
- Condition monitoring system optimization
- Field and shop rotor balancing
- Rotordynamic modeling
- Machinery failure analysis
- Structural analysis: operational deflection shape (ODS) analysis using vibration measurements and Optical ODS using optical image amplification, modal analysis (impact tests)
- Specification consulting
- Torsional vibration measurement and analysis
- Optical ODS
- Magnetic bearings vibration analysis
- Electrical machinery diagnostics
- Diagnostics training

Extensive experience

With over 18,000 successful MDS projects completed since 1972, our people have worked on every brand and type of rotating and reciprocating equipment there is. Our reputation is built on fast turnarounds and reliable solutions no matter who manufactured, installed, maintained, or operated the machinery.

We keep an extensive archive of all project results so lessons learned on one project can benefit others with similar machine problems. On top of that, our engineers and technicians around the world regularly collaborate in real time on current projects, which ensures that our deepest knowledge and expertise are brought to bear on each new challenge, no matter where the machinery is located.

Setting a new industry standard

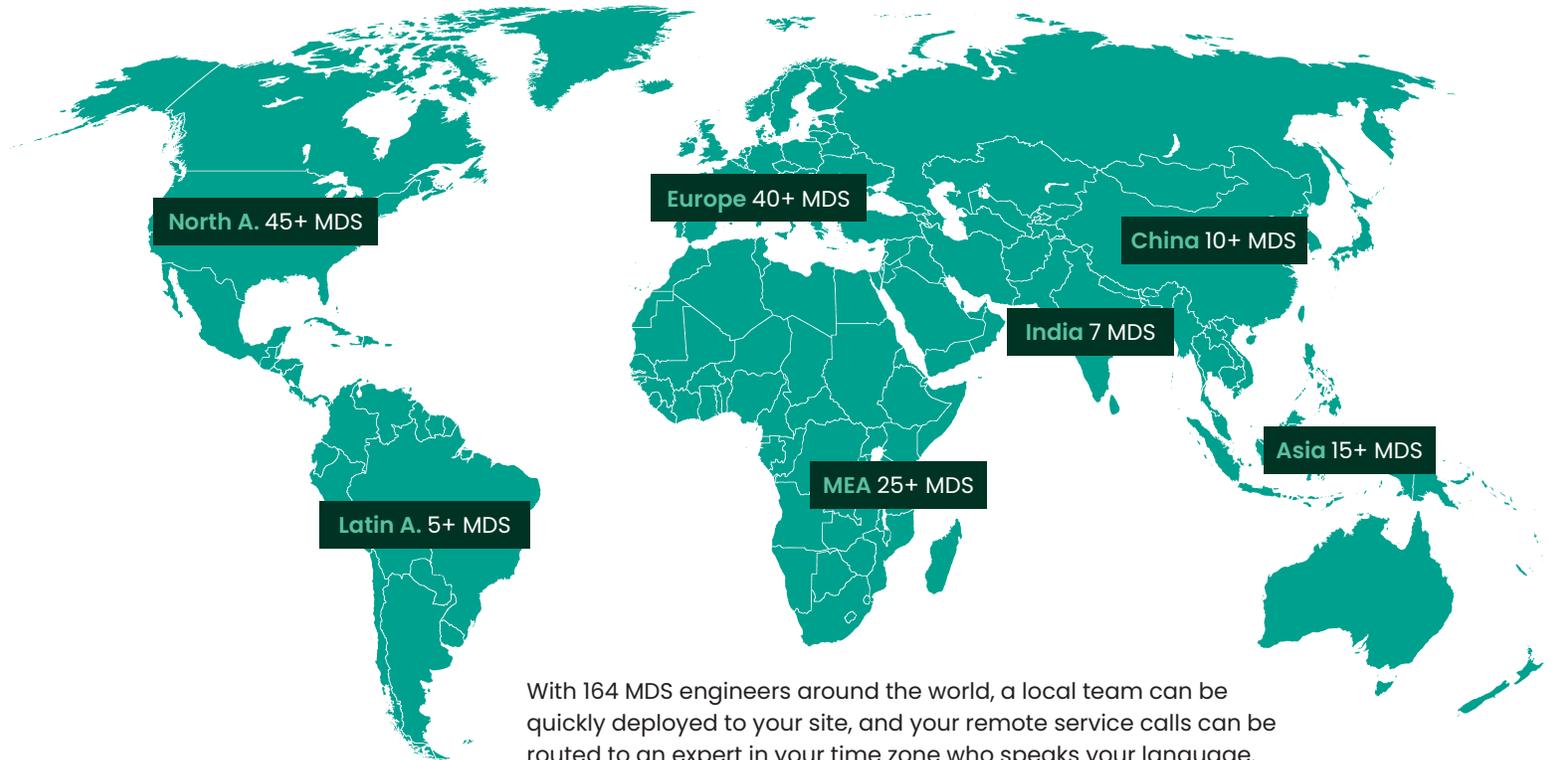
- 18,000+** successful MDS projects worldwide
- 160+** machinery diagnostic engineers worldwide, with cumulative years of experience with Bently Nevada
- 1,200+** technical training centers
- 50+** Global remote monitoring centers supported by a network of MDS engineers
- 8** customer assets under proactive remote monitoring
- 5000+**

Remote capabilities

We use data acquisition and analysis tools specifically designed to enable remote access. Depending on your needs and installed IT infrastructure, remote services can range from simple digital transfer of appropriate data, to full connectivity of your site systems with our remote monitoring centers. For startup commissioning and turnaround assistance, many of our support services can be performed remotely to increase speed and reduce onsite personnel costs.

Strategic locations

We have permanent engineering teams in the principal industrial centers of 20 countries around the world. For on-site assistance, this minimizes travel costs, and maximizes response speed. When remote support is needed, you can connect with an experienced professional who speaks your language, in your time zone.



Proven methodology

Our four decades of MDS experience is rooted in fundamental engineering principles. Our proven methodology has demonstrated its efficacy in thousands of successful projects, and every one of our new field engineers receives in-depth training in the method. It can be applied consistently and repeatedly across our entire MDS organization—ensuring that you'll receive the same high-quality service, no matter where you are.

Actionable information

Although we typically collect gigabytes of machine data during the course of our diagnostic services, we understand that data is meaningless on its own. Our professionally written, clear, and concise reports communicate meaningful information—summarizing findings, conclusions, and recommendations that are both actionable and appropriate for your situation.