

# Bently Nevada Design and Installation Services

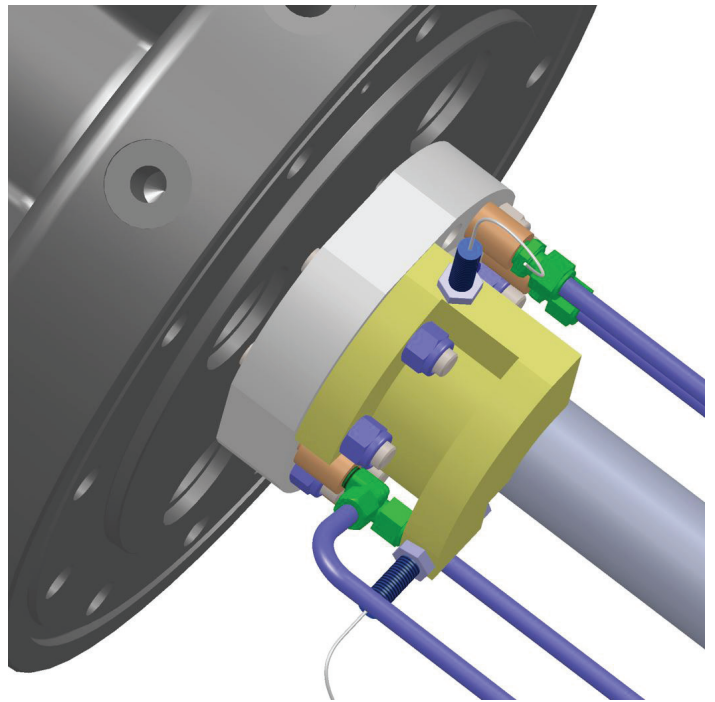
## Design & Installation Services (D&IS)

With the increased safety, reliability, enhanced monitoring solutions and new requirements as per OEMs and global standards (API, ISO, etc.), we understand your need to equip your rotating and reciprocating equipment to increase protection, reliability and availability of assets with minimum downtime. Our extensive project management capabilities are combined with domain expertise to mechanically modify your unmonitored machines ranging from installing a case mounted transducer to a full modification of the bearing cover to have proximity probes penetrate and look directly at the rotor; connected to state-of-the-art condition monitoring and protection systems. We can retrofit reciprocating compressors with comprehensive instrumentation enabling full diagnostic capabilities along with PV, rod load and performance analysis. Our support extends to steam turbines, gas turbines, generators, compressors, pumps, motors, reciprocating compressors, wind turbines, extruders, hydro turbines and countless equipment in adjacent industries. All these application-specific measurements are then connected to either continuous monitoring systems like 3500 rack, ADAPT, 2300 or 1900/65A field monitors; or online periodic DSM, vBOnline pro systems based on asset classification to better protect and diagnose your machines.

With an experience of 60+ years in condition monitoring, BN is well equipped with technical knowledge to decide the right kind of instrumentation; to modify machines by drilling and tapping; to design, manufacture and install brackets; to decide the correct mounting location of sensors specific to your assets; to prepare surfaces for sensor installation (spot face) and targets (rotor burnishing); to identify the accurate condition monitoring system for your application(s) and to provide preliminary (submitted for approval and IFC versions) and as-built electrical (field wiring, P&IDs, JBs, ILDs, loop folders, cable schedule) and mechanical (machine modification, bracket design and sensor installation/hook up) drawings.

## D&IS Portfolio

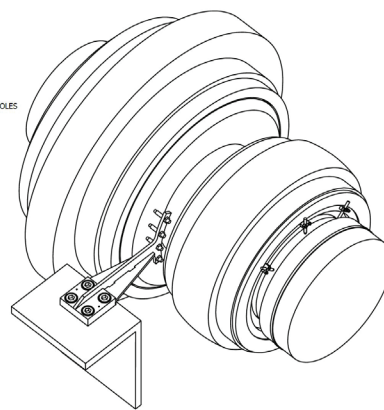
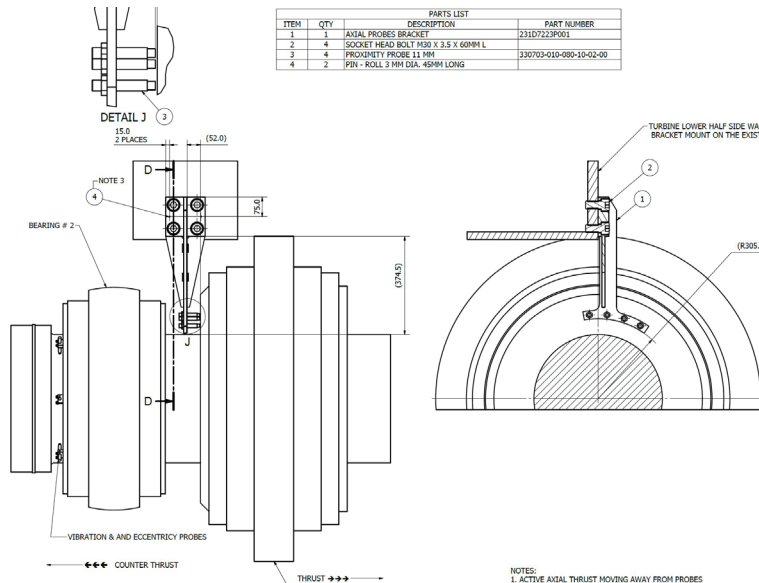
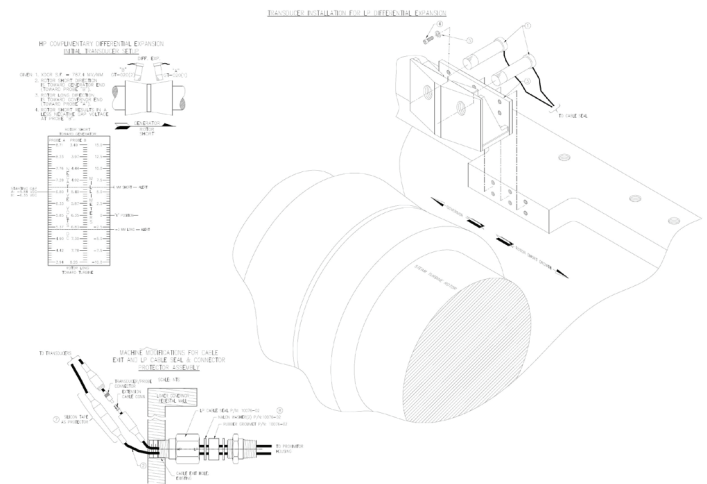
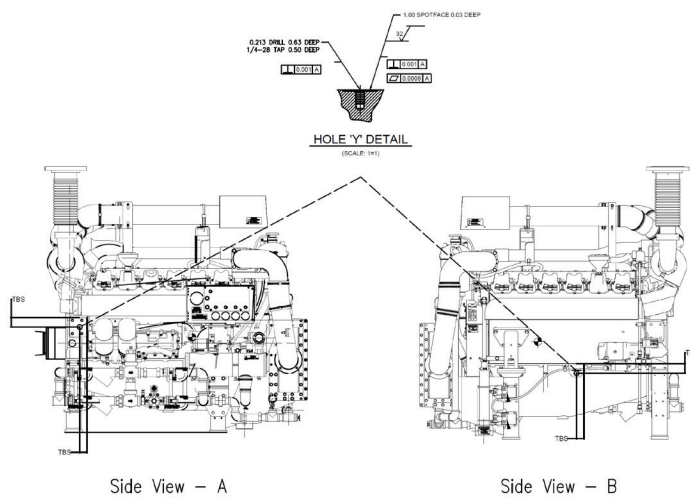
- LSTK (lumpsum turnkey) capabilities providing end-to-end solutions to customers as one-stop shop



- Complete system design and installation, project management and comprehensive, installation specific documentation.
- Design and installation of all necessary machinery modifications, transducer brackets, cable routing, junction boxes, monitoring systems, computers, software, and all aspects of a project to retrofit our transducers and monitoring systems to your machine.

- Site supervision of mechanical and electrical sub trades.
- Mobile machining facilities for on-site machining and fabrication—saves time, saves money.
- New or retrofit applications—single machines or plant wide.
- OEM agnostic (can retrofit on any OEM's machine)
- Able to address virtually any machine type encountered in the Oil & Gas, Power Generation, Pulp & Paper, and other process industries.
- Work closely with all machinery manufacturers to ensure safety and compatibility of modifications.
- Turbine Supervisory Instrumentation (TSI) systems a specialty.
- Able to accommodate tight turnaround schedules and outages.

- System integration services to integrate your Bently Nevada systems with new or existing machine, unit, or plant control and automation systems.
- Compliance with plant IT standards, hazardous area requirements, and country-specific certification agencies.
- System-specific training, on-site or in one of our global training facilities.
- Factory and Site Acceptance Testing.
- Scope based on your needs, from 100% turnkey to coordination with and use of internal plant resources for selected functions – design-only services also available upon request.
- Outstanding record for safety, timeliness, and adherence to budget.
- Extensive experience spanning 20 years and over 500+ retrofits worldwide.



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