
3500 TÜV Functional Safety Certification

Easier Safety Integrity Level (SIL) Determinations for Overspeed, Vibration, and Thrust Measurements

Bently Nevada's 3500 Series Machinery Protection System is now available with TÜV functional safety certification and the supporting data needed to determine Safety Integrity Levels (SILs) as required by such global standards as IEC 61508, IEC 61511, and ISA S84.01. The certification is available for specific configurations of 3500/53 Overspeed Detection and 3500/40 and /42 Vibration/Position Monitors when used in overspeed protection, vibration, and thrust position applications.

With increasing use of protective instrumentation systems in critical-to-safety applications and applications, where the costs of a false or missed trip can be enormous, more customers and regulatory agencies require such instrumentation be capable of meeting stringent quantitative reliability assessments.

While customers and suppliers can perform their own system assessments to establish compatibility with a given SIL level, it is recognized that independent assessment by a certifying agency is highly desirable and represents best engineering practice. TÜV, one of the most widely recognized certifying agencies for functional safety instrumentation, has now evaluated Bently Nevada's 3500 Series Machinery Protection System and certified its use in applications up to and including SIL 3. SIL levels communicate the likelihood of a given process to perform its designated function; SIL 3 compatibility requires an instrumentation system to incorporate self-diagnostic coverage of more than 90% of its functions. 3500's SIL 3 compatibility is achieved through its Triple Modular Redundant (TMR) capabilities and dual redundant power supplies. Of course, 3500 can be used in SIL 1 and SIL 2 applications as well.



For more information, contact your local Bently Nevada Sales Professional, or visit us online at www.bently.com and click on "What's New" for access to datasheets and an Application Note that describe functional safety certification and 3500's capabilities. ↪