

Computersystem CAST NT for Windows NT for data acquisition and automatic control of the spin test system

Large range of test speed variation

High accuracy of speed control

High safety for personnel and environment

Automatic control and monitoring of the complete system, very important for cyclic tests of long duration

Fully automatic test cycles

Testing under vacuum conditions

Spin Test System for testing of rotating components

Type BI 3 U

For more than 30 years SCHENCK is working in the field of development and construction of vertical spin test systems for testing of rotating components under centrifugal forces. These are testing machines which are absolutely necessary for research and development, production as well as quality assurance of:

- jet engines
- gas turbines
- turbo compressors
- turbo chargers
- fans
- commutators
- clutches
- wood working tools
- HSG-components

These test systems are mainly used for

prestressing of material by acceleration rotating components beyond the yield point

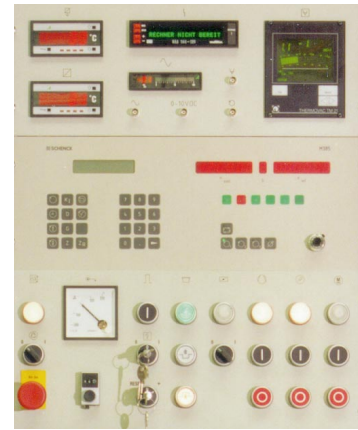
testing of material strength at speeds above the operational speed for quality assurance

acceleration of rotating components to the burst point for research and development

low cycle fatigue tests to establish Wöhler diagrams

Equipment

- Test stand with lifting device, automatic lid locking device and switch- and control system
- Drive with infinitely variable DC-shunt motor, high speed vertical planetary gear and digital test speed controls
- Oil supply and vacuum system
- Burst proof enclosure
- Burst monitoring system for measuring and indication of the burst speed
- Computersystem CAST NT for Windows NT for data acquisition and automatic control of the spin test system



Control cabinet with different control systems



Burst proof enclosure consisting of 3 steel rings



Computersystem CAST NT

Spin Test System BI 3 U Technical Data

Rotor diameter, max.	710 mm
Rotor length including mandrel, max.	450 mm
Rotor weight including mandrel, max.	400 kg
Test speeds, max. (infinitely variable)	31 500 / 63 000 min ⁻¹
Drive power	55 kW
Attainable vacuum	< 1 mbar residual pressure

Schenck offers spin test systems for rotor weights up to 6 300 kg, rotor diameters of 2.7 m or test speeds of max. 250 000 min⁻¹.

More information and technical data of our spin test systems you can find in our pamphlet A 1117e which we can send you.

For further information, please do not hesitate to contact our business unit Turbomachine Industry BRVT. Phone: +49 (0) 61 51 - 32 23 20



Balancing and Diagnostic Systems

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