

Advance Laser Alignment Systems

Asset Enhancement through Innovative Technology in Maintenance by METZIN

KOHECT AVV-701Pro Advance Laser Geometry Alignment System with new Bluetooth module up to 100m range

The Professional AVV-70Pro geometry alignment partner has been developed and designed by a team of experience field specialist to provide user with standard shaft alignment and industrial application such as flatness, straightness, and engine bore centerline and turbine alignment. This modular alignment system enables users to acquire the geometrical functions according to their needs by adding hardware brackets as one's job requirement grow, and provide better ROI for the device.



Avv-701Pro - Flatness Solution for any Cover and Flanges



Compact Control with new Bluetooth wireless



Avv-701Pro - Bore Centerline for Ship Stern-Tube & Compressor

With AVV-701 /AVV-701Pro, laser shaft and geometrical alignment become affordable, highly accurate and have related Conspect software via USB to PC that make measurement data report traceable in database and simple interpretation on results. AVV-701 family ensures user NO LONGER need to pay for high price on expensive brand like the past.

KOHECT AVV-701 Advance Laser Shaft Alignment System



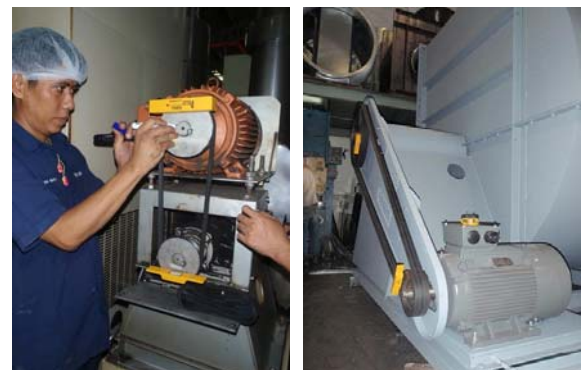
Avv-701 on Power Turbine Spacer Shaft & Winch Gear

Advance AVV-701 has been design for customers looking for the right laser shaft alignment equipment that fits both their application requirement and low investment for quick pays off.

The practical & user-friendly design with complete built-in alignment features & wireless *Bluetooth* on AVV-701 takes alignment of rotating machinery to a new level of simplicity and speed.

Seiffert Industrial - Laser Pulley Partner KX-2500/ KX-3500 Perfect alignment for pulleys

Laser pulley alignment system is a lightweight, compact and durable device with magnetically attaches to the inside or outside face of any pulley or sprocket and has no small parts to get lost. The new Green Pro KX-3500 work ten times bright even under the bright sunlight for out door. By using proven reflected beam technology for maximum angular resolution and thus provide the most reliable and accurate readings that no other method or tool can match.



Kx-2500 in Nestle factory and AHU Blower

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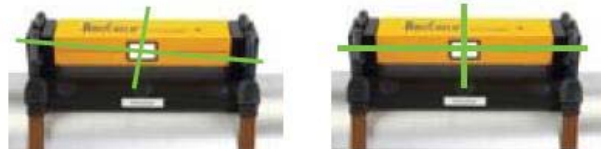
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Laser RollCheck SX-4100/ XS5100

Rolls parallel alignment visual quick check

Laser for accurate visual check on roll / press – Rolls are align vertically and parallel alignment with simple, fast and effective RollCheck system by Seiffert Industrial from USA. System angular accuracy up to 0.0005"/foot.



Rolls Misalignment

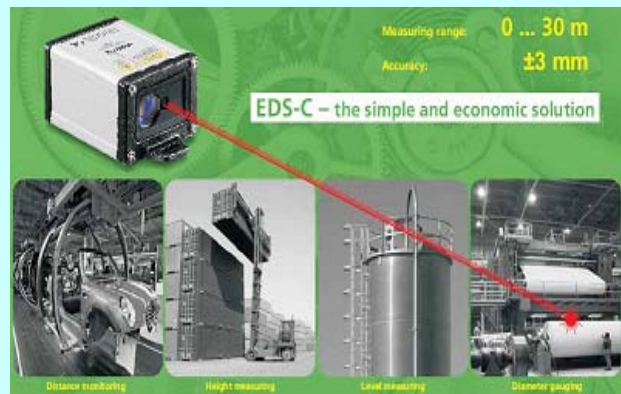


Roll in Alignment

EDS-C Distance Laser from Swiss

Simple and economic solution for distance monitoring

The EDS-C Distance-Sensor measures absolute distances up to 30 meters without contact. It measures, maintenance-free, distances on natural surfaces with a precision of 3mm. The EDS-C Distance Sensor can determine positions of objects that are difficult to access or may have very high surface temperatures. Just as well it can also measure distances in hostile environments, accurately and with ease. The EDS-C Distance-Sensor consists of a rugged, IP65 standard, aluminum case and can be operated at -10°C to +50°C ambient temperatures.



The excellent price-performance ratio is another added bonus. A scalable analog output is available for measurement readings, securing a cost-efficient connection to any control system.



METZIN Alignment Precut Shims

Machinery alignment timesavers

Precut shim is justified when machine alignment time, safety and accuracy are at a premium. The stainless steel full hard material protected against rust and deformation. All shims are machine cut, marked with thickness, size and come in a durable storage carrying case with size divider kits. The seven most common use standard shim thicknesses allow all possible shim change combination.



New! RotaChock variable chock shim

is the latest development for industries where its design puts this chock miles ahead of the field.

- Reduce Installation Time
- Avoid Trial and Error
- Wider Adjustment Range
- Self-leveling
- Re-usable throughout machine life cycle
- No soft foot



Condition Monitoring - Vibration

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Double Channel C911 on Alternator Machine

New! KOHTECT Advance C911-SA Dual Channel Data Collector, Signal Analyzer, Bearing Tester & Balancer with Shaft Alignment

The C911 offers a high performance 6400 lines, extra power and convenience of two-channel FFT data measurement and signal analysis. It can be used in almost every industrial maintenance for quick monitoring, bearing condition check and FFT signal diagnosis of machine condition. It also allows correction of dynamic imbalance machine with up to 8-planes mode. The analyzer is compact and weight only around 800g with IP 65 rugged housing design to withstand for harsh field environment.

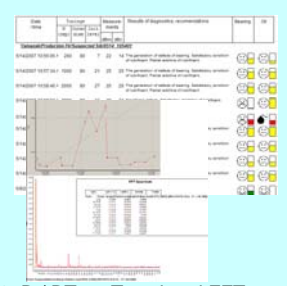
The *add-on laser alignment capability* delivers a premium return on investment for C911-SA.

KOHTECT 107B / 107Bi / BT-77 Compact FFT Vibrometer / Bearing Diagnostic Tester with "Patented" Conspect PC database Software

The most compact and robust Vibrometer that provide FFT spectrum in logarithmic/linear view, and overall ISO 10816 vibration measurement reference: Measure Acceleration, Velocity and Displacement machinery vibration with option of bearing condition & IR temperature.

Bearing Diagnostic Tester

The BT-77 proven shock pulse technique determines machine bearing and lubrication condition instantly by detect lub film and bearing surface defect. It also built-in IR non contact tachometer measured: RPM= 50-30000. Measurement route by Windows Explore can easily set-up on device and both devices allow saving of hundred of data, upload via USB to PC for data management and print report on **Conspect software**.



107B / BT-77 Trend and FFT Analysis Report by Conspect

Hansford Vibration Sensors

Hansford product range incl. vibration and velocity sensors or industrial accelerometers with either AC outputs for use with data collectors, or 4-20mA outputs for direct use with PLCs for monitoring vibration levels of plant machinery in a predictive maintenance role. **Intrinsically safe** AC and 4-20mA versions are now available with **ATEX and IEC Ex certification** for approved use in Group I (Mining) and Group II (Petrochemical).

Hansford Vibration On-line Monitoring Protection System

Apart from sensor, custom-built vibration protection system with sensors and multi-sensor switch boxes, vibration sensor modules, stud mount and cable accessories for sensors are also available to meet user requirement.



Hansford – Vibration Monitoring Online Protection System & Industrial Accelerometer Sensors

Testing, Inspection & Utilities

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Portable Industrial Borescope MVB-55 series and Advance MBV-AT Articulate series Portable flexible video borescope for all industrial inspection

The new revolutionary palm-sized portable flexible and 2-way articulate video Borescope with integrated monitor and video/ image capture offers operators a video image of the inspection area. Image can be zoomed up & mirror with new MVB-FT display. This

Borescope is equipped with a powerful LED Light Source; Ø 5.5 mm tube and 3.5" TFT display screen can perform all types of remote visual inspections with inter-changeable video probes that allow access to nearly any area. Interchangeable tube of working length available: std 1m and optional of 2m, 3m, 5m, 10m, 20m or even 30m.



BHC-2050 borehole inspection camera

New! METZIN Borehole /Well Inspection Camera

The BHC-20 series is most versatile and least expensive borehole inspection camera system in the market with view depth of 50m, 100m, 200m or 300m underwater range. This innovative inspection camera for borehole and wells offer user an easy, reliable, compact and lightweight field operations. IP 68 camera head with submersible pressure up to 20bar and pictures, videos and comments can be saved to any external laptop computer.

Electric Motor Winding Analyzer

Motor winding analyzer make electrical predictive on winding testing easy

ATPro is a all-in-one electrical predictive instrument that performs a series of impedance-based tests, (phase angle, impedance, and a current / frequency ratio) on each winding. These measurements and their balance across the three phases provide a clear picture of the condition of the motor winding and instantly indicate the presence of a fault, even at its earliest stages. The tests are preformed with non-disruptive low voltages so there is no damage to the windings.

You can identify or eliminate -Turn, coil, and phase shorts, broken rotor bars, winding contamination, poor connections, phase imbalances when you troubleshoot with an our motor winding analyzer.



Automatic and Easy to Use for Motor Winding Predictive Maintenance!

Crank Shaft Deflection Indicator and Ovality Measurement

Most engineers are familiar with the importance of regular checks on diesel engine crankshafts and cylinder liner. With an electronic Deflection Indicator MDI series, measurement task become easier and greater accuracy of 0.001mm. As an option, it can be connected to ovality kit to check the cylinder liner ovality and wear comparison. PC software allows data evaluate and report.



Utilities, Inspection & Services

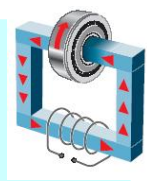
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METZIN Induction Heating

Faster, easier and safer way to shrink fitting

Induction heater by Eddy current principle is the superior method of expanding bearings, gears, sprockets, couplings and sleeves. For placement on shafts, it is the safest, quickest, most economical method of applying heat.

It resulted with perfectly heating and avoid damaged of parts that due to overheating.



Ultrasonic Thickness Gauge

MTT- series ultrasonic gauges measured 0.75mm up to 300mm thickness materials thickness with quick, ease and accurate readings.

Surface Roughness Tester

MTR200 series is a compact surface roughness tester with stylus position indicator to measure metal and non-metal parts with digital display. Result can be output direct to printer or PC.

Portable LED Stroboscope

Simple to use and economical for speed measurement.



Training & Industrial Services

We provide Industrial Solutions to Maintenance, Reliability and Engineering!

Beside maintenance products consulting, we are also providing in-house training course on laser alignment and condition monitoring, in-situ mechanical industrial engineering services, laser alignment, vibration service, motor winding analysis, consultancy and maintenance contract to improve your machinery performance.



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