

# qb701 Shaft Alignment System



## Compact Capable and Cost-Effective

The qb701 Shaft Alignment System delivers highprecision alignment at an affordable price

Designed for ease of use and reliability, it features **wireless laser transducers**, intuitive software, and a rugged, compact design

Ideal for aligning motors, pumps, compressors, and more, the qb701 helps reduce energy loss, prevent wear, and extend machine life — making it a smart choice for everyday maintenance tasks



## Affordable | Wireless | Professional



**Horizontal machines alignment**



**Vertical machines alignment**



**The Spacer Shaft Alignment**



**FeetCtrl™** – smart guidance for base- and boltbound situations with automatic foot correction suggestions for faster, more accurate alignments



**ShimAssist™** – shim simulation that displays the remaining misalignment when using the nearest standard shim



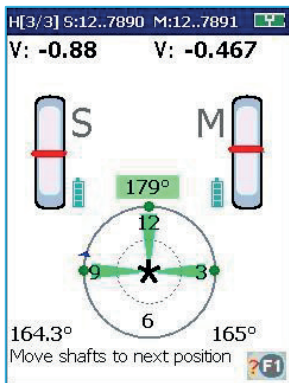
**SoftCtrl™** – detection and correction guidance for soft foot conditions to ensure stable, precise machine alignment from the start



**HotCtrl™** – compensates for thermal growth by applying preset or measured values, ensuring precise alignment under true operating conditions

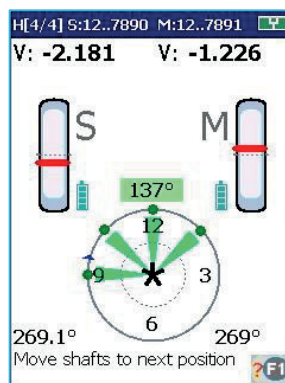


**SmartMerge™** – unified compatibility across all qb, AVV, and TXV systems for seamless use of displays, transducers, and accessories



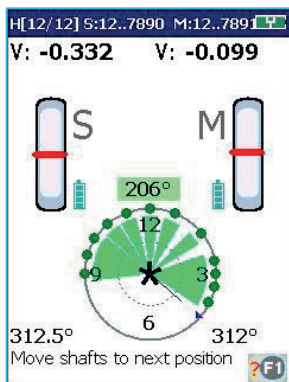
## 3-point method

In the 3-point method the alignment state is calculated by taking three points in a 3 clock positions within 180° or in 3 arbitrary positions within 60° or more



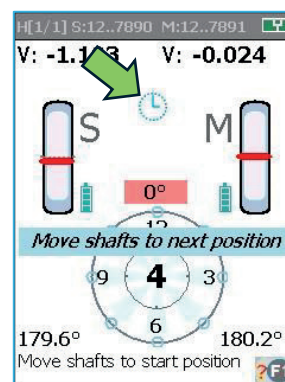
## 4-point method

In the 4-point method the alignment state is calculated by taking four points in arbitrary positions within 60° or more



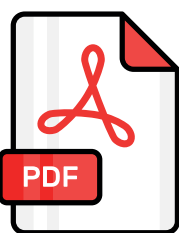
## Multipoint method

Multipoint Method – start measurements from any rotational position and record multiple points for more accurate results. Perfect for turbines, sliding bearings, and other demanding applications



## AutoShot

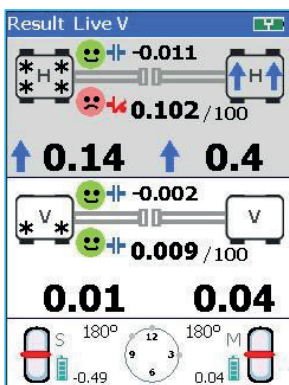
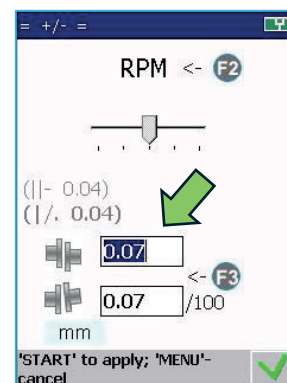
In the 4-point method the alignment state is calculated by taking four points in arbitrary positions within 60° or more



## PDF Report Generator

Built-in function that instantly creates measurement reports in PDF format for easy sharing and documentation

## Preset or User-defined tolerances



## LiveAlign™

Real-time update of alignment condition as you adjust the machine, ensuring precise and efficient corrections on the spot

# Specifications

Transducer type	TS7 S/M
Laser	650 nm class II diode laser
Laser power	< 1 mW
Measurement distance	20 mm to 10 m
Detector	CCD, 29 mm
Measurement resolution	1 $\mu$ m
Measurement accuracy	1% $\pm$ 5 $\mu$ m
Ambient light protection	Optical filtering
Inclinometer	3-axial MEMS inclinometer
Inclinometer accuracy	$\pm$ 0,1 $^{\circ}$
Battery type	LiPo, rechargeable
Operating time	10 h continuous use (measuring)
LED indicators	Sensor, battery, wireless link state
Wireless communication range	10 m (33 ft)
Charger / Firmware update connector	Micro USB
Operating Temp	-10 to 50 $^{\circ}$ C (14 to 122 $^{\circ}$ F)
Storage Temp	-20 to 70 $^{\circ}$ C (-4 to 158 $^{\circ}$ F)
Relative humidity	10 – 90 %
Environmental protection	IP65 (Dust tight and protected against water jets)
Housing Material	Impact resistant ABS plastic, Anodized Aluminum
Weight	105 g (3,7 oz)
Dimensions	91 x 57 x 41 mm (3,6 x 2,24 x 1,6 in)

Display unit	qb701
Display	Color IPS, sunlight readable, 320x240 px, 3.5"
CPU	Freescle Vybrid 500 MHz
Storage memory	8 GB, >100,000 measurements
External interfaces	USB host (thumb drive <32GB)
USB device for PC connection and battery charging	Wireless for S & M transducers
Battery	Li-Ion rechargeable, operating time up to 15 hrs
Ingress protection	IP65 (Dust tight and protected against water jets)
Enclosure	ABS with TPE impact protection
Temperature range	-10 $^{\circ}$ C ... +50 $^{\circ}$ C (14 $^{\circ}$ F .. 122 $^{\circ}$ F)
CE conformity	Directives: 2014/35/EU, 2014/30/EU
Dimensions	210 x 102 x 41 mm
Weight	365 g (12,9 oz)

## Kit content

- Display unit
- TS7 unit S
- TS7 unit M
- V-bracket x2
- Chain assembly x2
- 90 mm rods (stackable) x2
- 150 mm rods (stackable) x2
- Tape measure 3m
- Allen key x2
- 3-port USB wall charger
- USB-micro cable x3
- Carry case



### Optional hardware

- KB8006 Magnetic bracket
- KB8004 Offset adapter

Optional 5" display unit with IPS, sunlight readable display

## System versions and options

### qb701S

Most affordable, with firmware license for Horizontal alignment. Upgrade is possible at any time

### qb701M

Fully featured alignment system

