

Belt Hog

LaserBeltAlignment Tool

The Acoem Belt Hog is a fast and accurate tool for aligning the sheaves of belt-driven machines. Using a simple laser and target system, it quickly identifies misalignment and helps correct angular, parallel, and sheave issues to ensure optimal performance of your machinery.

- + Reduce downtime
- + Extend belt and pulley life
- + Reduce vibration and belt noise
- + Minimize unscheduled stops

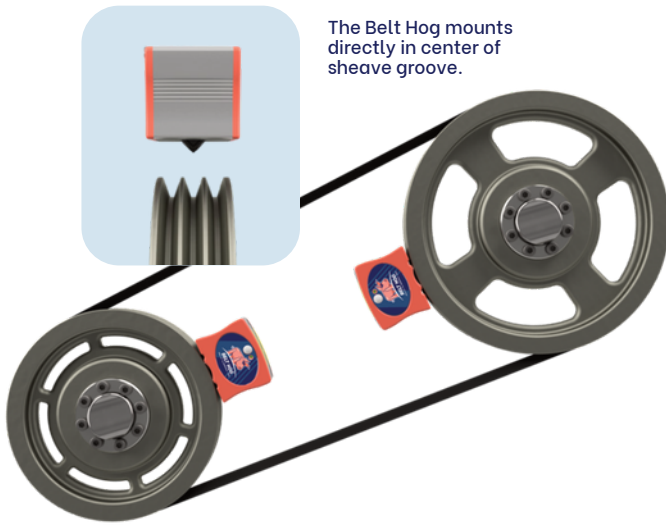


How It Works

The Belt Hog system consists of two laser heads that measure each other's relative position by simultaneously projecting and receiving laser beams. Each laser head is equipped with rare-earth magnets and interchangeable, spring-loaded pins (called V-Guide Tips) for easy mounting to the sheave.

Unlike other alignment tools, the Belt Hog mounts directly in the center of the sheave groove—exactly where the belts run. This method provides a more accurate alignment than mounting on the shoulders of the sheaves, which can vary in thickness and lead to errors.

Once the sensors are mounted, the user can detect and correct the following forms of misalignment, in order:



STEP 1 (M/S)

Vertical Angle Alignment (Twist)

If the laser lines deviate from being parallel to the center line on the targets, there is a vertical angular misalignment.



STEP 2 (M)

Horizontal Offset Alignment

The laser line is parallel to but not centered on the center line, there is a horizontal offset misalignment.



STEP 3 (S)

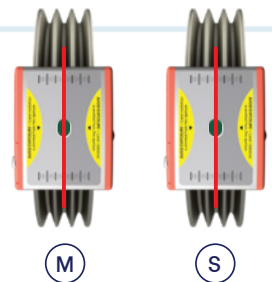
Horizontal Angle Alignment

If the laser line on the stationary side is parallel to the center line but is not centered, it indicates a horizontal angular misalignment.



ALIGNED

Verify that the laser line is precisely aligned with the center line on both the movable and stationary sides.





Sensor Specifications

Housing Material	Extruded aluminum (molded PA cover)
Operating Temp	32 to 104°F (0 to 40°C)
Relative Humidity	0 – 90%
Weight	12 oz (340 g)
Dimensions	2.4 x 3 x 2.4 in (61 x 77 x 61 mm)
Laser	630 – 680 nm class II diode laser
Laser Line Fan Angle	90°
Laser Power	< 1 mW
Measurement Distance	1.97 – 236.22 in (50 mm – 6000 mm)
Power Supply	2 pcs of LR03 (AAA) 1.5 V per unit
Operating Time	20 hours of continuous operation

What's Included

Each Belt Hog Tool is delivered with the following included hardware:

x2 Belt Hog Laser Transmitters

x2 Boxes of V-Guide Tips:
V-Guide 1: 5–2mm Short Rod
V-Guide 2: 5–22mm Long Rod
V-Guide 3: 22–40mm Short Rod
V-Guide 4: 22–40mm Long Rod

4 Batteries LR 03 1.5V (AAA)

Hard Case

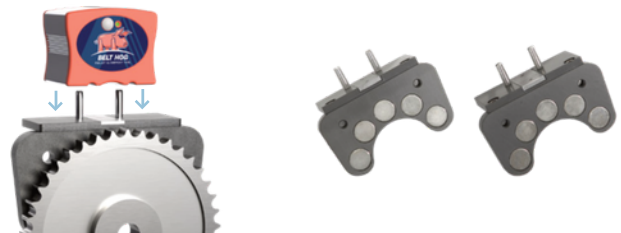


V-Guide Tips
in Various Sizes

Special Application Options



Timing Belt Guides are available for timing belt pulley alignments.



Chain Sprocket Adapters are available for sprocket alignment.