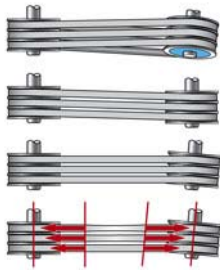


Belt Alignment Cost Savings

By Paul Berberian

Large savings to be made with correctly aligned sheaves & pulleys



A common misunderstanding is that sheave/pulleys are not affected dramatically by misalignments. If you have ever seen those black piles of rubber building up under a pulley, you know this is not true.

Sheave/pulley alignment in all size motors can extend the life of belts and chains, eliminating costly repairs and downtime.

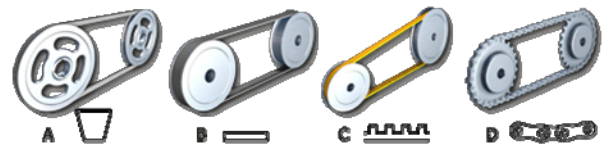
As we have shown in previous case shaft alignment case studies, sheave/pulley alignment can save energy dollars as well! Several investigations have shown savings up to 10 % in energy costs alone!

Transmissions with several wide belts are especially sensitive. It is easy to understand that the difference in belt tension between the inner and outer belts can differ greatly when aligned incorrectly. This reduces efficiency as not all belts are driven optimally. If one belt is worn then all belts must be replaced with new ones at the same time, which adds expense to the entire operation. Even wide belts are affected more as the tension is uneven over the entire width.

Extending service life thanks to correct alignment is easy. Large savings can also be made when it comes to the cost of these types of belts and pulleys. Whichever of our tools you choose for sheave/pulley alignment it usually pays for itself within a few months.

Side mounting for greater accuracy

Easy-Laser® uses the pulley's side surface as reference during alignment. This gives greater accuracy, as the mounting surface for the tool is larger



than if the tool was mounted against the radial surface. Any faults and damage on the pulley affect the result less on the side. The risk of wear and damage on the pulley is obviously greater in and by the groove where belts run. A further advantage is that without extra accessories, all types of pulleys can be aligned, regardless of belt type. It is even easy to compensate



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for pulleys of varying widths. Magnetic mountings on lasers, detectors or targets make it easy to install the equipment. Even non-magnetic pulleys can be aligned as the units are extremely light and can be mounted against the side, secured by double-sided tape.

Correctly aligned machines means greater improvements

- Increased availability and productivity of the machine = assured production
- Increased service life of belts, pulleys and bearings = fewer removals of replacement parts
- Optimally utilized lubricant film = less risk of overheating and secondary damage
- Reduced friction = lower energy consumption
- Less vibration = reduced noise level
- Less risk of serious breakdowns = safer working environment
- Greater overall savings with fewer spare parts, lower energy consumption and less unscheduled downtime.

Advantages of the Easy-Laser® sheave/pulley system

- Works on all types of pulley without special accessories
- For both horizontally and vertically mounted machines
- Can be used on non-magnetic pulleys
- Easily adjustable for pulleys of different widths
- No training required for use
- Readings only need to be taken from one pulley and not both
- With separate display unit, you can follow the adjustment in real time where you adjust
- Expandable

Advantages compared with traditional technology

- Significantly faster and easier than ruler and cord
- One person can perform alignment
- Facilitates alignment and adjustment of belt tension at the same time
- Possible to document the alignment (system D160)
- Digital readings ensure alignments within specified tolerances



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A system for every need

We have a complete range of professional tools for sheave/pulley alignment (even the world's only ATEX / Ex approved!). Choose between "visual" display on targets or digital display. Regardless which one you choose, the result when aligning with Easy-Laser® BTA (Belt Transmission Alignment) is reduced pulley, belt, bearing and seal wear. Vibration levels are also reduced. Increased efficiency also means lower energy costs. For these reasons, BTA normally pays for itself within a few months, regardless of which of the four models you choose.

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Since 1985, Alignment Supplies, Inc. has served the rotating machinery industry with a complete line of alignment-related products for shaft and machinery alignment. As the US Master Distributor for Easy-Laser®, Alignment Supplies, Inc. has the experience, resources, and equipment to address any alignment need. Contact us at 419.887.5890 or at www.alignmentsupplies.com.