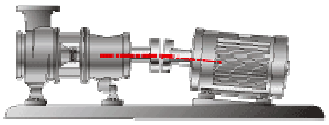
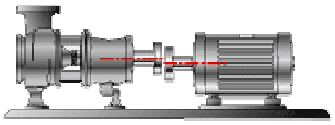
Detailed Services Limited
YOUR 24/7 SERVICE PARTNER



LASER ALIGNMENT BY DSL



When a driver like an electric motor or a turbine is coupled to a pump, a generator, or any other piece of equipment, it is essential that the shafts of the two pieces are aligned. Any misalignment between the two increases the stress on the shafts and will almost certainly result in premature breakdown of the equipment. This can be very costly. When the equipment is down, production might be down. Also bearings or mechanical seals may be damaged and need to be replaced. A proper shaft alignment or the use of disc couplings can prevent this.

Here at DSL we offer a full 'LASER ALIGNMENT' service. Please read on to find out the benefits of using this service using the latest SKF laser alignment tool. This equipment also allows us to download all the alignment results so that we can give you a detailed report on your equipment.

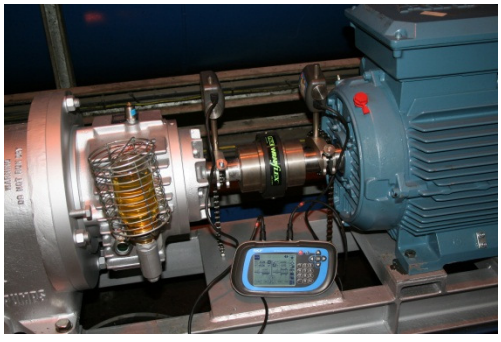
Bearing Failure

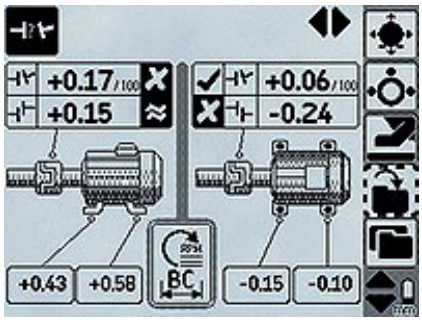
Bearing failure is a primary cause of unplanned, mechanical breakdown in rotating plant equipment. Although the bearings used in many industrial applications are often relatively inexpensive to purchase, it is the cost of production downtime resulting from the effect of the breakdown which presents the most expense.

Coupling Alignment

A coupling is the connection of two shafts for the purpose of transmitting power. Typical coupled-shaft arrangements include Motors and Pumps, gearboxes, fans, compressors & turbines. Coupling alignment refers to achieving a perfect rotational centreline between the two of more shafts that are coupled together, in order for the shafts to transmit power efficiently.

Where misalignment exists in the coupled shafts, the shafts are forced to rotate in an eccentric manner which increases power consumption and creates vibrations and stresses on the shafts, couplings and machines themselves which ultimately result in breakdowns. Shaft and coupling misalignment is the primary contributing factor in over 50% of plant breakdowns.





Pump Alignment

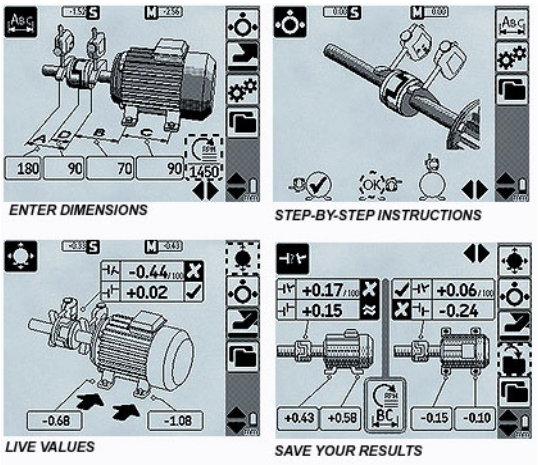
The alignment of pump shaft couplings and motor drive shafts is critical to ensure efficient running and to reduce the risk of breakdown.

Misaligned pumps and drives result in vibrations and premature wear of bearings, seals and couplings. It is a recognised statistic that over 50% of plant failures are a result of misalignment.

Drive Shaft Alignment

Drive Shaft Alignment in an industrial context refers to the correct positioning of rotating equipment to ensure that the rotating drive shaft and driven shaft (for example: a motor and pump assembly) are perfectly aligned across a rotational centreline for efficient running and operation.

Where shafts are misaligned, due to angular or offset misalignment due to one unit (such as the motor) being positioned fractionally out of line with the opposing unit, then the shafts, couplings and units themselves will be subjected to increased vibrations and stresses.



To Summarise Then

- Increase bearing life
- Reduce stress on couplings and thereby the risk of overheating and breakage
- Reduce wear on seals, helping to prevent contamination and lubricant leakage
- Reduce friction and thereby energy consumption
- Reduce noise and vibration
- Increase machinery uptime, efficiency and productivity
- Reduce costs of replacing components and machinery downtime