

Portable Laser Shaft Alignment | Interactive eLearning

Introduction to Laser Shaft Alignment - WX19275-XA01UEN-E1

Objective 1: Describe the Operation of a Laser and Give an Application

How Lasers Work

Laser

Click the button to start the stimulated emission process.

Inside a laser, light is produced through a process called stimulated emission. During this process, a very intense light source transfers energy to stimulate atoms. Once the atoms can no longer hold more energy, they emit energy in the form of light packets called photons. Photons bounce between two mirrors at each end of the laser. One of the mirrors is a semi-silvered mirror. It reflects some of the photons, while others pass through the mirror to form a laser beam.

This page is interactive. Click anywhere to hide the instructions.

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eLearning Course: M19275

Amatrol's Laser Shaft Alignment Multimedia Courseware (M19275) offers online eLearning training for aligning motor shafts using a laser alignment system. Learners will study topics like: the operation of an SKF laser shaft alignment system; safety rules for a laser alignment system; the function of jack bolts; installing and adjusting a laser alignment system; how to use a laser alignment system to correct soft foot; and more!

Laser Shaft Alignment is rapidly gaining popularity in industries throughout the world because it enables maintenance and plant engineering personnel to make quicker and more accurate shaft alignments than other shaft alignment methods such as the dial indicator method or the straight edge and feeler gauge method. Laser shaft alignment systems avoid problems such as sagging indicators, reading resolution error, and reading parallax error.

Teach Motor Troubleshooting

What is the Operation of a Laser?

Lasers are used in industry for tasks such as mechanical alignment. A laser emits light of one wavelength, or color, in a single direction. In contrast, light produced by a standard light bulb is emitted in all directions and many wavelengths. Laser light is produced by stimulated emission. During this process, a very intense light source transfers energy to stimulate atoms. Once the atoms can no longer hold more energy, they emit energy in the form of light packets called photons. Photons bounce between two mirrors at each end of the laser.

Interactive Multimedia Curriculum for Portable Laser Shaft Alignment

Amatrol's peerless [interactive](#) multimedia curriculum utilizes text with voiceovers, pictures, videos, stunning 3D animations, and interactive quizzes and reviews that engage learners in theoretical knowledge and concepts. This thorough, detailed curriculum begins with the basics and advances to complex concepts. Through partnerships with key industry leaders and leading educators, Amatrol developed the right balance of knowledge to train learners to work in their chosen field.

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