

H.O.T. R. BEARING TRAINING PACKAGE

MEM18005C PERFORM FAULT DIAGNOSIS, INSTALLATION & REMOVAL OF BEARINGS TRAINING MODULE PACKAGE

NATIONAL ACCREDITED TRAINING PACKAGE

Statewide Bearings have developed a fully integrated training rig from our 34 years of experience and intimate knowledge across a broad range of industries. Our knowledge of the issues affecting various site operations and the importance of correct handling and fitting of bearing and power transmission components have culminated to the training package we are now offering the market.

The HOTR (hands on training rig), consisting of a complete bulk handling belt conveyor pulley assembly – comprising of a shaft, locking elements, bearings, housings, pulley tracking, and sealing options.

The core theme of this course is a practical fitting exercise however there is a theoretical portion required to explain, teach and reinforce the engineering principles involved. A handout in the form of an A4 booklet is issued that covers and explains all the exercises along with a copy of all the components' catalogue and fitting specifications.

- All measuring tools are supplied with the course.
- An ability to read a technical drawing is assumed but guidance will be provided.
- The participants are required to provide their own PPE that is Boots and Safety Glasses.

Training options include:

Safety:

Safety training prior during and post exercise will be carried out with the same intensity and seriousness of the 'true' site operation that it is. This will include: - JHA, JRA; personal lock outs, barriers and zoning; post work assessment etc.

Bearing fitting and removal:

- Fitting of various bearing types using mechanical, thermal and hydraulic tools - as applicable.
- Checking of mounting components (shaft, housing and footplate) for dimensional and geometric conformity to recognised ISO standards. Although a working knowledge of the use of micrometers (both internal and external) is assumed there will be opportunity for familiarisation with the instruments.
- Installation of spherical roller bearings using internal radial clearance reduction, axial drive-up and the latest product vendor methods (NSK displacement, FAG volume methods).
- Removal of spherical roller bearings using the oil injection method.
- Mounting and removal of self-aligning ball bearings.

- Mounting and removal of a unitised roller bearing unit.
- Fitting of various bearing housing styles (of a size applicable to the Australian mining industry) complete with taconite (the industry standard) sealing.

Conveyor pulley assembly:

- Fitting and locking of the shaft to the pulley shell utilising Ringleader locking elements.
- Fitting the bearings and housings to the pulley assembly
- Explanation of the need to shim and pack the pulley arrangement to ensure correct alignment and proper running of the bearings and housings.

An ability to read a technical drawing is assumed but guidance will be provided.

Drive belt installation:

- Fitting of driver and driven vee belt pulleys to the appropriate shafts. Various pulleys to shaft locking devices are used.
- Vee belt fitting, alignment and tensioning using mechanical & laser methods.

Bearing Failure analysis:

Inspection of defective components to ascertain their failure mode and root cause (bearing, pulleys, belts and couplings).

Commissioning the machine:

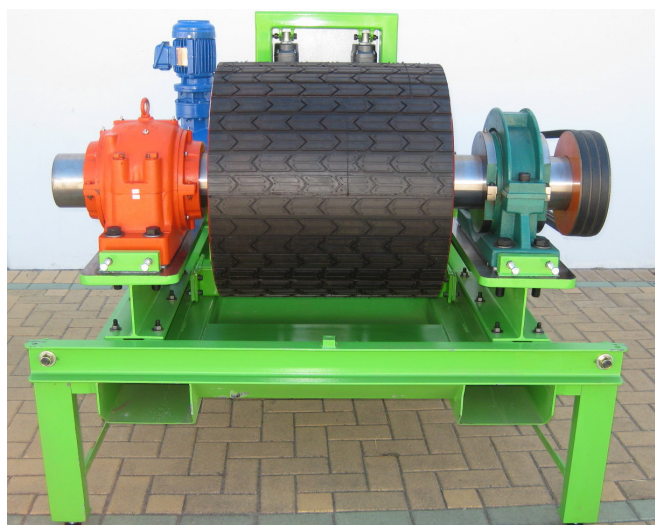
This is a fully dynamic training machine that can be run after assembly.

Commercial:

The standard course cost is \$3250/day and is run over two days. This is based on a maximum of six students with the training being conducted at our premises in Kewdale WA. The maximum class size of 6 (Six) is to allow 'one on one' hands on attention to detail and is run with TWO Cert 1V Trainers and Assessors that are experienced Fitters themselves. POA if timing and venue is not Kewdale based or course requires changes.



Safety



Front End Pulley View