

Product Name :
Crack Detection In Rotating Shaft Kit

Product Code :
ENGLABINGCAG600029



Description :

Crack Detection In Rotating Shaft Kit

Technical Specification :

"The crack influences the vibration behaviour of the shaft by changing its rigidity. Using suitable analysis software, this change can be registered and inspection of the machine organised in good time.

In the experiment, the crack is simulated by an asymmetric flange joint.

Cracks due to material fatigue are very dangerous for rotating machines.

Early detection of any crack is therefore essential before permanent rupture and often fatal consequences can occur.

The accessory set-up includes two shafts of different lengths: one short and one long.

The short shaft simulates a protruding shaft end, and is loaded with the belt drive.

Variable tightening of the flange bolts produces a temporary gapping of the butt joint, which closely approximates to the behaviour of a crack.

Specifications:

Investigation of the vibration behaviour of a cracked shaft

4 Different sized cracks can be simulated

Short shaft to simulate a protruding shaft end

Simulation of the crack by opening bolt joints

Accessory set-up for machinery diagnostic training system

Long shaft to simulate an elastic rotor

Crack adapter in flange form
Stackable box for all components

Technical Data:

6 Hexagon flange bolts M8x20

Flange diameter: D=90mm

Shafts

Diameter: D=20mm

Long shaft: L=200mm

Short shaft: L=85mm

Max. Permissible bending torques

Long shaft for mass disk: 3,9Nm

Short shaft for belt pulley: 15,9Nm

Dimensions and Weight of Crack Detection in Rotating Shaft Kit

l x w x h: 600x400x120mm (box)

Weight: approx. 3kg."



Engineering Lab Equipment India