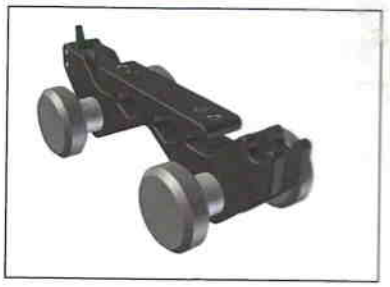
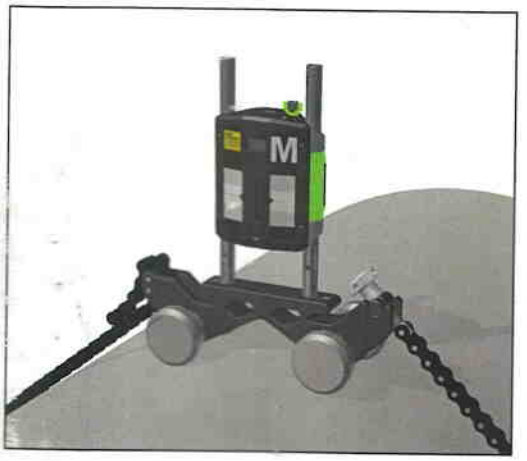
Fixturlaser

Brand of ACOEM

# FIXTURLASER NXA ACCESSORIES

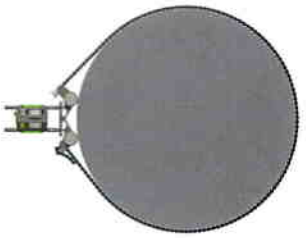
## Instructions for mounting of fixtures on non-rotating shafts (1-0776)





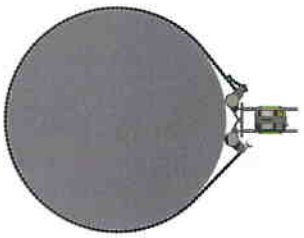

In cases where shaft alignment has to be performed on machinery which have a shaft that is non rotatable, it is necessary to simulate the axis of rotation by sliding the fixture on the shaft (or on the flange). It is important to know that this method will always be a compromise in measuring accuracy compared to rotating the shafts. The accuracy is directly affected by the form and surface condition on the object. Paint, rust, burs and run-out are potential risks for loosing accuracy in these cases.
The fixtures must always be used on machined surfaces with good surface condition. To obtain the best possible accuracy it is vital to always clean and check the surface for damages where the fixture is going to be used. Fixturlaser has two fixtures that are recommended for use on non rotating shafts.

This fixture is used on shafts where you have no access to the shaft end or a machined flange. It is based upon a chain fixture with increased width between the four contact points to increase the stability. It is also used on shafts with non-magnetic material. In the example below the TD-M is mounted on a non rotating shaft and the TD-S is mounted on a shaft which rotates. The fixture is mounted on the shaft by wrapping the chain around the shaft. To protect the surface, put some protective plastics (or equivalent material) between the chain and the shaft. Make sure that the chain is not twisted and tighten the chain slightly.



Slide the fixture into the first measuring position (e.g. 9 o´clock). If using Fixturlaser NXA, rotate the shaft with TD-S first and then slide the TD-M on the shaft until the same angle is obtained (within ± 0,5°) by using the Sensor Display function. Check that the fixture has correct axial position on the shaft (if needed, use an axial locator). Tight the chain firmly and check that the fixture has contact with the surface at all four contact points. Record the first measuring point.

---



Untighten the chain slightly and slide the fixture on the shaft to the next measuring position (e.g. 3 o´clock). Check that the fixture has correct axial position on the shaft (if needed, use an axial locator). Tighten the chain firmly and check that the fixture has contact with the surface at all four contact points. Record the second measuring point.

---

Untighten the chain slightly and slide the fixture to the last measuring position (e.g. 12 o´clock). Check that the fixture has correct axial position on the shaft (if needed, use an axial locator). Tighten the chain firmly and check that the fixture has contact with the surface at all four contact points.
Record the third and last measuring point.