To achieve good weighing results, always use flexible connections to the vessel and check that no ladders or other arrangements connect the weighed vessel to surrounding foundation, walls or roof.
KIMD and KOSD load cell is a double ended shear beam for multi purpose. The KIMD has a higher accuracy than KOSD and both consist only of a load cell element that ideally can replace a standard pin. Typical installation can be seen on next page.

The load cell shall be installed in a hole with recommended tolerance H7 and surface hardenes recommended above 300 HB.

At installation the load cell and the hole shall be covered with grease, preferably with EP additive.

The axial force used at installation shall not exceed 20% of capacity.

Orientate the load cell in the direction of the force to be measured using the two holes in the rear end of the load cell within ±1°.

The load cell deflects 0,05-0,2 mm at full load, the construction around the load cell must allow for this. Also there must be an axial play of min 1 mm on each side of the applied force bearing or yoke in order to avoid friction.

Installation with boss plate/locking plate – make sure this fits with min 0,5 mm gap. If used on both end of load cell, make sure these do not apply an axial force to the load cell.

Extra precausion should be taken to the external potting of the KIMD load cell measurement section at installation.

Welding in close area of the KIMD and KOSD is not allowed.

Dimensions and recommended loading will be given by the load cell product data sheet or the individual drawing.

The principle of the load cell is as follows: