

## **ARBIL LIMITED**

### **Drag Clamp Full Service Inspection Procedures**

The initial visual inspection will determine the extent of use/wear the drag clamp has undergone.

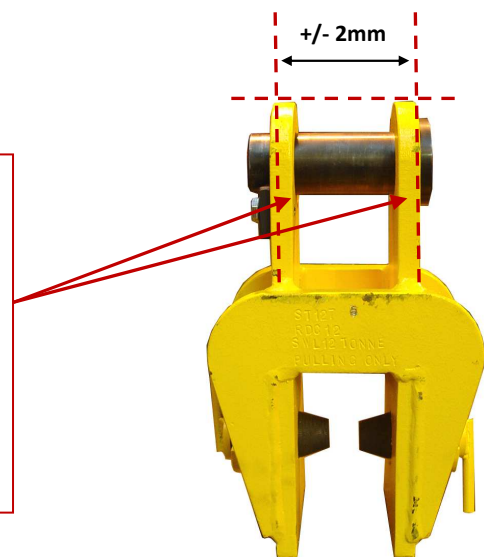
Chemical clean to remove any paint grease and dirt.

Visually inspect for any cracks or defects in the welds.

If defects are visual carry out a NDT inspection to determine the severity of the defect. If it is deemed that the weld defect is minor then a repair can be carried out by an experienced welder using the correct procedure.

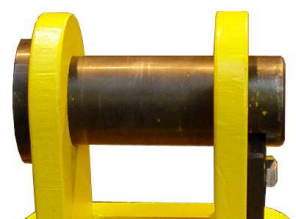
Check that the top clevis plates are straight and parallel.

In order to do this place an engineers square along the side of the clevis plate with the right angle across the top of the 2 clevis plates. There should be no gap along the straight edge of the square and both points of the clevis plates should touch the right angle leg of the square. Measure the gap between the clevis plates top, bottom and centre. These should be parallel although a tolerance of +/- 2mm is acceptable.



Check for wear and deformation to the top load pin.

Replace if any grooving, pitting or excess wear is found.



Check for wear in the top load pin location holes.

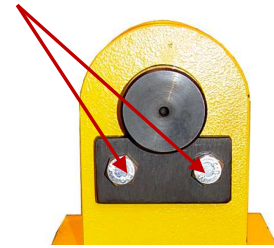
The holes should not be oval and the top load pin should not be able to move from side to side or be a sloppy fit. If so then the clamp should be declared scrap.



Check hole threads and hexagon set pins for the top load pin location plate.

If a loose fit is found replace the M10 hexagonal set pins.

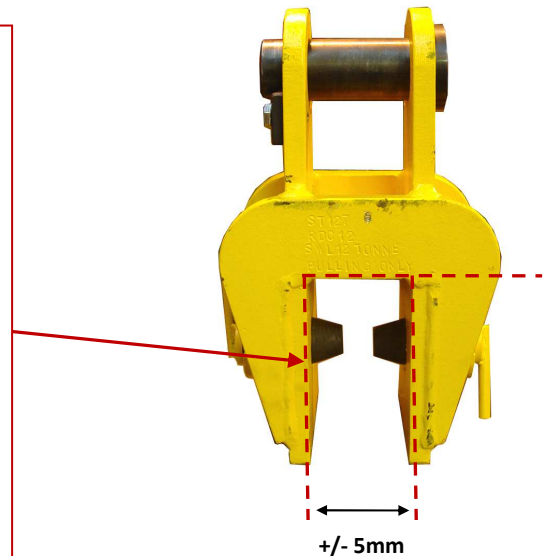
If a loose fit is still found then re-thread the clevis plate and use a larger M12 hexagonal set pin. The location plate will need its holes to be slightly increased to 12.5mm



Check the clamp body side plates are not bent and are parallel.

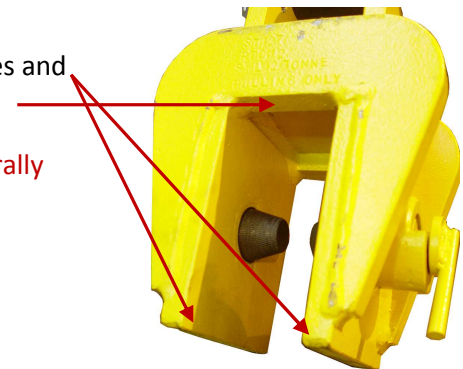
In order to do this place an engineers square along the side of the body plate with the right angle across the underside of the top plate. There should be no gap along the straight edge of the square and the body plate and the underside of the top plate should touch the right angle leg of the square with no gap. Measure the gap between the body side plates top, bottom and centre. These should be parallel although a tolerance of +/- 5mm is acceptable.

If the side plate is not square to the top plate this is a sign of side loading and must be reported to the client or hire manager.



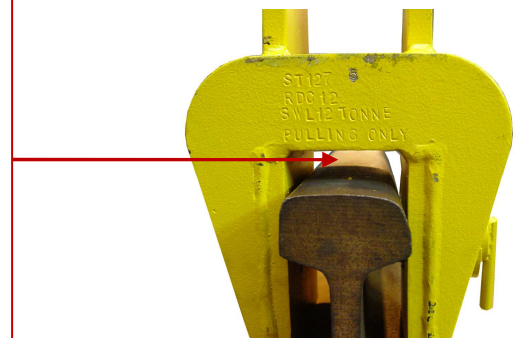
Check for excessive wear to the bottom corners of the side plates and the underside of the top plate (open rail aperture of the clamp)

A certain amount of wear to the bottom corners will occur naturally during the life of the drag clamp.



A regular inspection should be made by placing the drag clamp on a section of fixed rail and pulled at an angle until it locks in place under the head of the rail and the foot of the rail.

Under load the underside of the top plate should be clear of the rail. Proposed minimum clearance 5mm. To extend the lift of the clamp carefully radius or mitre the corner of the underside of the top plate. This should achieve a clearance much greater than 5mm



Check location locking pins and housing.

Visually check for wear to the location half washer and the knurled part of the location locking pin.  
Any sign of damage or excessive wear replace. Refer to weld procedure.