

# AVIATOR DAVIT ARMS PRODUCT BULLETIN



## Payload Davit Arms DA 300, 400 and 500 : LOLER Testing

### The need – why, and what frequency

Davit bases needed to be tested after installation and then every six months to ensure that they are fit for purpose.

It is important, particularly at the first test to record base fixing details and the actual test results in great detail as these will be used going forward and will form part of the history of that particular installation

### The equipment needed

Davit arm lifting equipment consists of the arm itself and the base.

The arm is tested at point of manufacture by applying 125% of the S.W.L in the direction of the potential load under test conditions.

The base has to be tested in situ as this is testing both the base and the fixing. To do this a test arm, which can withstand forces far beyond those required by the test is used, placed in the base and the test forces applied to it.

The weights. The weights are each of 25kgs and a total of 25 weights are used to achieve the test force required of 6 kilonewtons. Each weight has to be tested and calibrated each year.

In the event that bases are close enough together a chain block and strain gauge may be used to create the test force instead of using the free weights.

A gauge is used to measure deflection of the post both free and with the strain forces applied

### The test procedure

With the test arm inserted in the base the test force is applied, using either the chain block or the free weights. The combination of post and arm remain under the force for 3 minutes.

At this point the forces are removed and it is recorded by use of the gauge whether the post has recovered from the deflection that occurred during the test. Deflection is acceptable up to the limits proscribed by the manufacturer, any permanent deflection is recorded as a fail.

