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### **Erection & Maintenance Manual for Rigid Struts**

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# Erection & Maintenance Manual for Rigid Struts

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# Erection & Maintenance Manual for Rigid Struts

## 1.0 INTRODUCTION

Pipe Hangers & supports Private Limited's range of rigid struts, figure number RS along with associated welding clevises, figure number RWC cover loadings up to more than 90 Tonnes with lengths being up to 6 metres. The numbering system and sizes of end fittings are compatible with the other dynamic restraint components. The Fig. RS1-RS11 adjustable tubular strut provides length adjustment of +/- 100 mm.

## 2.0 OPERATION

The tubular rigid strut provides restraint for pipe work or equipment subject to static or dynamic loading; it can operate in tension and in compression. The end connections are provided with close fitting pins and spherical bearings which permit +/- 5 degrees of angulation.

## 3.0) STORAGE

Supports should be handled with care and stored in a dry and dust free environment, preferably off the floor and under cover. Do not remove the supports from its protective packing care if not being put into use immediately.

## 4.0 INSTALLATION

- 4.1 The connected welding clevises and pipe clamp if applicable should be positioned as required and the welding clevis welded to the existing steelwork. Please check weld fillet size with care.
- 4.2 Where sideways movements are large, it may be necessary to offset the installation positions to ensure the angulation does not exceed 5 degrees. This information is given on the support detail drawing. This is also known as cold offset.
- 4.3 If the pipe work is subject to cold pull, the support drawing should state whether the strut is to be installed before or after closure of the cold pull gap.
- 4.4 With the connections in place, fit one end of the strut to one of the connections, and then offer up the other end to the other connection.

Adjust the length of the strut to fit the distance between the connections by first releasing the locking nuts (right hand and then left hand) and then rotating the tubular body of the strut whilst preventing both end connections from rotating. Adjustment of +/- 100mm is provided. Sight holes are provided at both ends of the tubular body to visually verify that full thread engagement is achieved.

- 4.5 When the strut length has been adjusted so that the second clevis pin can be inserted, insert the pin followed by the split pins and tighten the locking nuts. The legs of the split pins must be bent back to ensure they stay in place.

## 5.0 **MAINTENANCE**

- 5.1 The Rigid Strut is designed to be essentially maintenance free. Periodically, at a frequency to suit site conditions, the rigid struts should be inspected for signs of mechanical damage, damage to paintwork or corrosion.

