



Pole Maintenance

Mechanical Rotating Arm



Applications:

Traffic Signals, CCTV, Emission Zone Cameras, Congestion Charge Cameras, Average Speed Cameras, ANPR Cameras

The Rotating Mast Arm, complete with the RS406 Retention Socket offers a complete maintenance solution for Mast Arm installations. This system has been specifically designed to eliminate closures during essential maintenance works on equipment installed on the Mast Arm.

A unique operating mechanism with the Mast Arm allows for rotation through 180° therefore enabling maintenance works to be carried out safely off the carriageway. The RS406 Retention Socket with Duckfoot Bend enables all civils works to be carried out prior to the Mast Arm installation. All equipment installation work can be carried out while the Mast Arm is at ground level. If required the Retention Socket allows the removal or replacement of the Mast Arm at any time, simply with a Hi-Ab.

Advantages

- ◇ Removes the need for traffic management/lane closures for maintenance works
- ◇ Minimal traffic disruption
- ◇ Reduces work times
- ◇ Increases contractor safety
- ◇ Reduces maintenance costs
- ◇ 5m to 8.5m outreach available
- ◇ Simple installation
- ◇ Adaptability / future proofing



A CRH COMPANY

In association with
 **VolkerHighways**

Product Specification

Mast Arm to be constructed from cylindrical mild steel tube which is blast cleaned to SA2.5.

Mast Arm must be coated internally and externally with ZINGA , followed by a coat of epoxy micaceous iron oxide primer and a top coat of two pack polyiloxane.

Mast Arms to be supplied with an outreach of 3 to 8.5 metres capable of securing signal or signs in two locations on the outreach arm.

Mast Arms must be supplied with an outreach arm capable of rotating through 180 degrees.

Mast Arms must have the ability to be rotated from ground level by one authorised person.

The Rotation mechanism must be accessible through a lockable low level access door to enable safe future maintenance.

Mast Arms to be supplied with the appropriate structural foundation calculations.

Mast Arms to be supplied with ground fixing options of Retention Socket with duckfoot bend (RS406DF) for planted root or with a steel cradle and flange plate for surface mounted option.

The Mast Arm will be supplied to the above specification by NAL Ltd.

Paint Specification

**All components are shot blasted, primed and painted.
The paint spec is as follows:**

Blast clean to SA2.5.

Apply 1 Coat Intercure 200 epoxy zinc phosphate to 75 microns.

Apply 1 coat Intercure 384 to 100 microns dft.

Apply 1 coat Intercure 979 polysiloxane to 100 microns dft.

Once painted mast is reassemble and checked.

At this point mast is ready to be fitted.



A CRH COMPANY

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Retention Socket Specification

The socket head and body shall be of mild steel construction, hot dipped galvanised on all internal and external surfaces. All assembly screws shall be M12 A2 stainless steel. It shall contain two M24 A2 stainless steel lateral fixing setscrews inside a locking chamber. This locking chamber shall be covered with a stainless steel locking lid. The socket shall have a swivelling, ductile iron, duckfoot bend attached to the mild steel body. All operating components shall be serviceable on site.

The RS406 Retention Socket consists of a mild steel head and body, stainless steel locking lid together with a ductile iron duckfoot base.

Head Body: Mild Steel

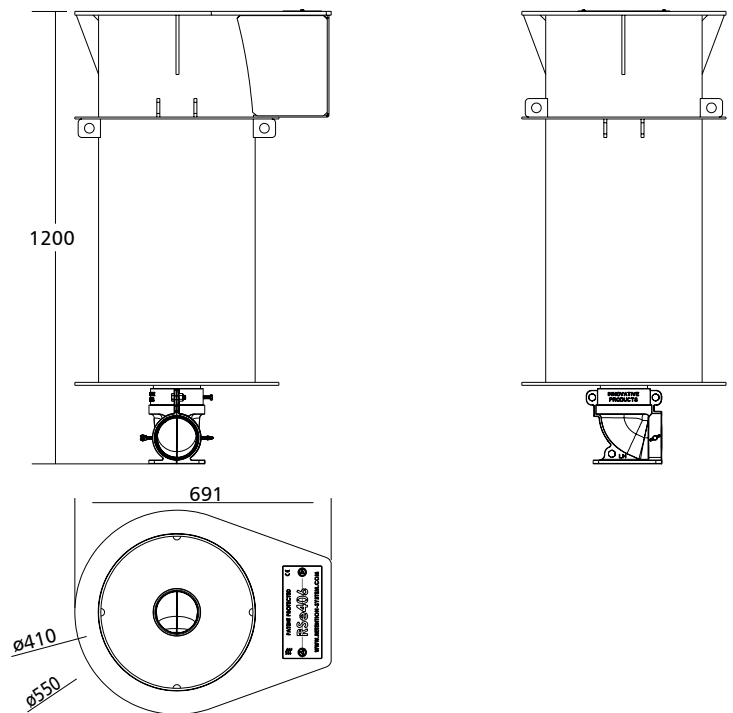
Duckfoot Base: Ductile Iron to BS2789 500-7

Setscrews: M42 A2 Stainless Steel

Locking Lid: Stainless Steel, 304 Grade

Assembly Screws: M12 A2 Stainless Steel

Finish: Galvanised



Ground Fixing Cradle Specification

Mast Arm to be supplied with 500 x 500mm x 30mm baseplate with 4nr x M42 pre drilled fixing holes.

Mast Arms to be supplied with a reinforced steel cast in ground fixing anchor cradle.

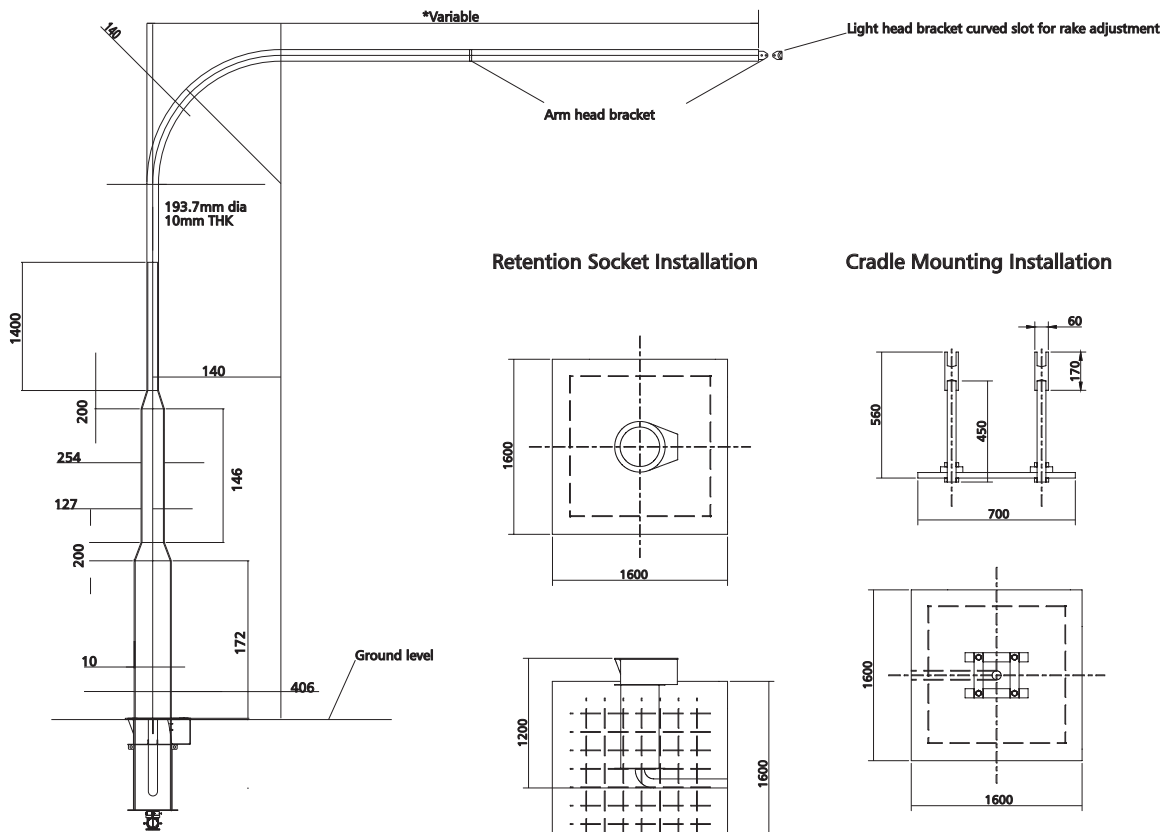
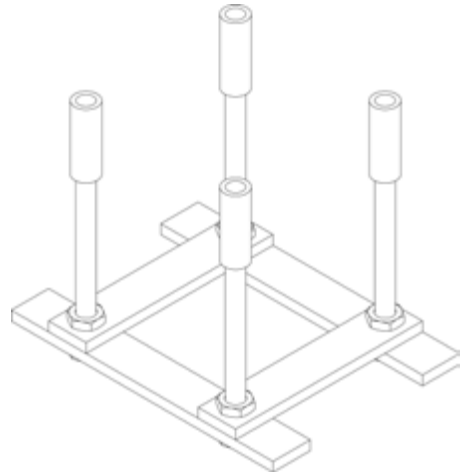
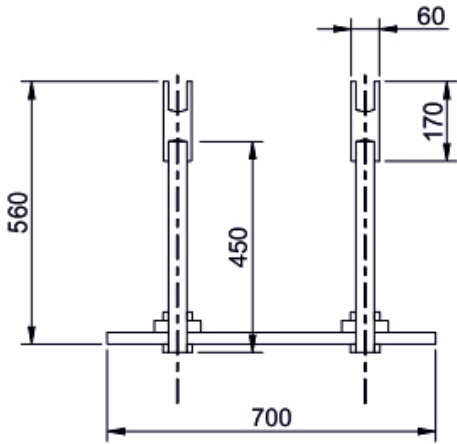
Anchor Cradle to be supplied c/w fixing bolts and securing nuts.

(4nr X M39 x 200mm stainless steel stud with 117mm x 10mm plate washer on M39 stainless steel nuts for levelling).

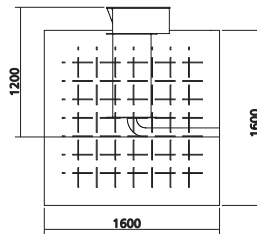
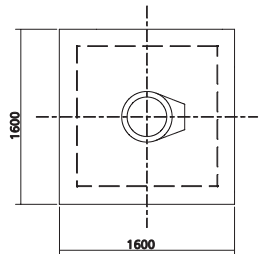
Mast to be lowered over studs then 117mm x 10mm plate washers M39 nuts and on top M39 nylock nuts, wrapped in denzo tape for protection.

Anchor Cradle to be located centrally within the foundation.

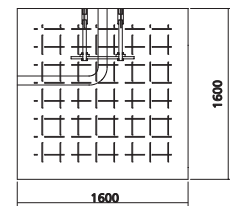
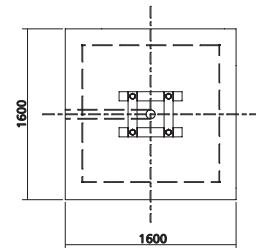
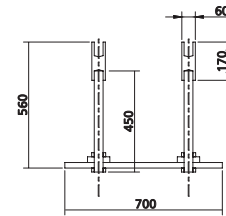
Cradle Fixing



Retention Socket Installation



Cradle Mounting Installation



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