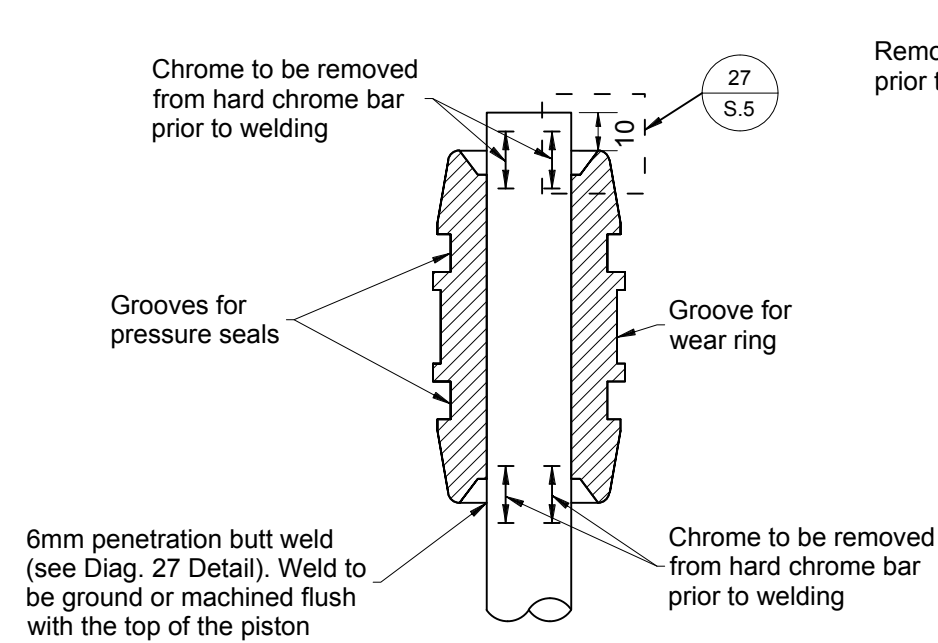
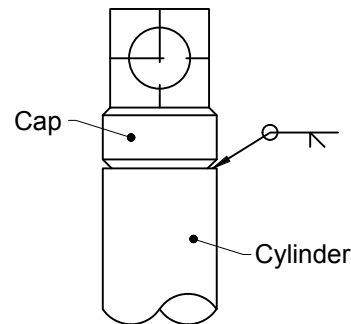


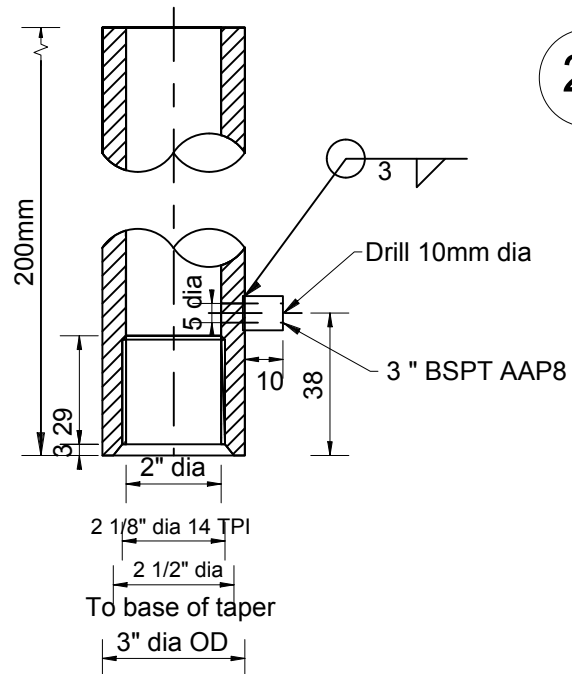
**18 Gland Nut Section**  
1:2  
Ex. 90mm round bar



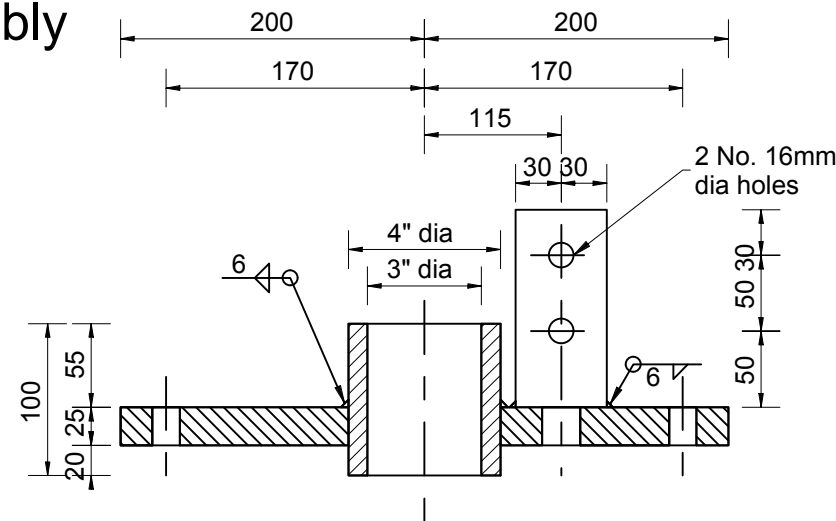
**20 Piston-Spear Assembly**  
1:2



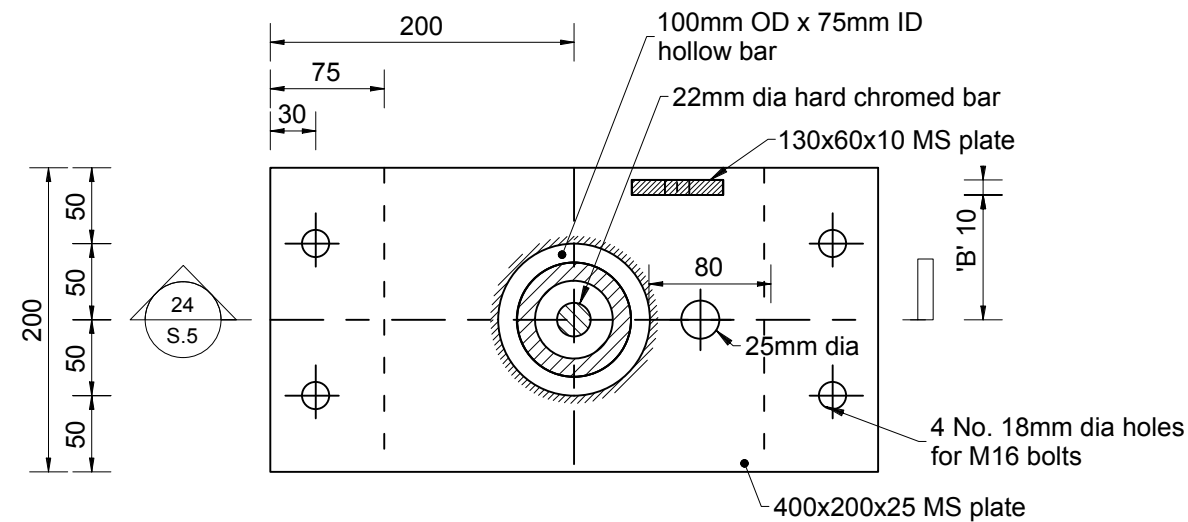
**21 Cylinder Cap Assembly**  
1:5



**19 Cylinder Section**  
1:2  
Ex. 3\"/>



**23 Section - Ram Support Fabrication**  
1:5



**24 Plan - Ram Support Fabrication**  
1:5

**NOTES**

- All dimensions are in millimetres unless otherwise shown.
- Particular care is to be taken to ensure that all welds are compatible with the materials being joined.
- TPI: Threads per Inch
- All steel plate to AS 3678 GR300 or equivalent unless indicated otherwise.
- Remove all burrs, sharp edges, weld slag and spatter after fabrication is complete.
- Corrosion Protection:  
All external surfaces, except hydraulic tube and fittings are to have a protective coating applied in accordance with the following specification:  
a. Surface Preparation  
Surface preparation shall be in accordance with the coating manufacturers application instructions. Mild steel surfaces shall be sandblasted to Swedish Standard SA2.5.  
b. Coating System  
Primer Catha-coat 302 75µm  
Intermediate Devran (White) 230 200µm  
Finish Devthane (Haze Grey) 239 50µm  
Or approved similar
- The raising and lowering hydraulic tube and fittings are identical except that the length of tubes, the 'coupler special adaptors' and the 'quick release couplers' differ and the 'orifice special adaptor' is required for the raising hydraulics only.  
  
Similarly 'quick release couplers' are 4000-06 (raising) and 4000-08 (lowering). These ENZED couplers are BSP parallel.  
  
Swagelok ©  
Parts are specified but other compatible fittings may be used.
- See Standardised Drawing A70 S.4 for weld symbols.
- The cylinder and hydraulic tube and fittings are to be filled with ISO46 hydraulic oil or approved similar.
- Dimension 'A' and 'B' is to be determined by make of tube fittings used.
- Dimension 'C' governs the lengths of lowering and raising

0	Construction	A Morphet	4/12/19
Rev	Description	Approved	Date



**Standard Drawings**  
**Sluice Gate**  
**Hydraulic Ram**

Date:	Drawn:
4 December 2019	A McCaughan
Checked:	M Farrell

Drawing Number	REV
WRC-1695	0

Scale:	@ A3
As indicated	