

Technical Support Sheet - Installation Instructions

Hy-Ram Under Pressure Tapping Tool

The Hy-Ram Under Pressure Tapping Tools are an essential product used for tapping a connection into a pipeline under pressure.

TECHNICAL SUPPORT SHEET: **TA8.2II**

The Machine Operation:

Step 1

Secure Under-pressure Tee onto pipe and ensure that it is tight. (Follow manufacturers fitting instructions with regard to torque values etc.).

Step 2

Assemble RS Gate Valve/Gasket to the Under-pressure Tee again making sure that the Nuts/Bolts are tight. Ensure RS Valve is in the 'Shut' Position.

Step 3

Assemble Holesaw Cutter and pilot Drill onto the Drill spindle of the C4/C6 Machine. Ensure diameter of cutter is fit for purpose for the application and ensure it will fit through RS Gate Valve with ease. (i.e. 83mm cutter through DN100 Valve.).

Step 4

As a precaution; measure the distance from the top of the RS Gate Valve to the top of the flange and compare this with the depth required for the cutter/pilot assembly on the drill spindle. If extra clearance is required between the RS Valve and flange of the C4/C6 use a suitable flanged Spacer - (provided).

(Note! This is only normally required for Gas applications where the Valves tend to have shorter flange to flange dimensions.)

Step 5

Open RS Gate Valve.

Step 6

Ensure flange assembled onto the bottom of the C4/C6 is compatible with the flange on the RS Gate Valve - change C4/C6 flange as required.

Step 7

Assemble C4/C6 onto the valve using suitable Gasket and Boltset.

Step 8

Ensure that the Drilling Machine is assembled to the Tee 'Square'. i.e. tighten bolts equally.



Scan for more information

Disclaimer: While every effort has been made to ensure that the information in this document is correct and accurate, users of Hygrade Water product or information within this document must make their own assessment of suitability for their particular application. Product dimensions are nominal only, and should be verified if critical to a particular installation. No warranty is either expressed, implied, or statutory made by Hygrade Water unless expressly stated in any sale and purchase agreement entered into between Hygrade Water and the user.

April 2020

Step 9

Connect Hydrostatic Test Pump to port on Drilling Machine. Bleed air back through pump. After bleeding, pressure test to approx. 1 ½ times mains pressure. Check for leakage.

Step 10

Disconnect Hydrostatic Test Pump.

Step 11

Begin to Drill. Operate Ratchet Spanner and Feed Screw.

Step 12

Apply force by rotating the handwheel clockwise to load the spring, then operate ratchet spanner. As load diminishes, again turn handwheel clockwise to reload.

Step 13

Keep repeating this loading and ratcheting sequence until hole is drilled.

DO NOT APPLY EXCESSIVE PRESSURE WITH THE HANDWHEEL. LET THE PILOT DRILL AND CUTTER DO THE WORK! 95% OF FAILED DRILLINGS ARE DUE TO OPERATOR ERROR. EXCESSIVE PRESSURE (RESULTING IN HOLES AW DAMAGE) IS THE MOST COMMON PROBLEM.

Step 14

Whilst drilling, periodically open the Thumb valve (where the Hydrostatic Test Pump was connected) to 'jet' water out. This has the effect of clearing the swarf. Also, whilst drilling the operator must periodically 'feel' the cutter and 'back-off' to allow swarf to clear.

Step 15

The operator should feel when drilling is complete, and the cutter has broken through into the main. This can be confirmed by rotating the feedscrew a couple of turns without resistance. Once drilling is complete, retract the feedscrew.

Step 16

Once the operator is certain that the Cutter is fully retracted and clear/above the valve plate area' shut the Valve.

Step 17

Once the Valve is shut, operate the Thumb Valve on the Drilling Machine to relieve internal pressure. The Drilling Machine can then be removed.

Instructional Video

<https://www.hygradewater.co.nz/product/hy-ram-under-pressure-tapping-tools/>



Scan for more information

Disclaimer: While every effort has been made to ensure that the information in this document is correct and accurate, users of Hygrade Water product or information within this document must make their own assessment of suitability for their particular application. Product dimensions are nominal only, and should be verified if critical to a particular installation. No warranty is either expressed, implied, or statutory made by Hygrade Water unless expressly stated in any sale and purchase agreement entered into between Hygrade Water and the user.

April 2020