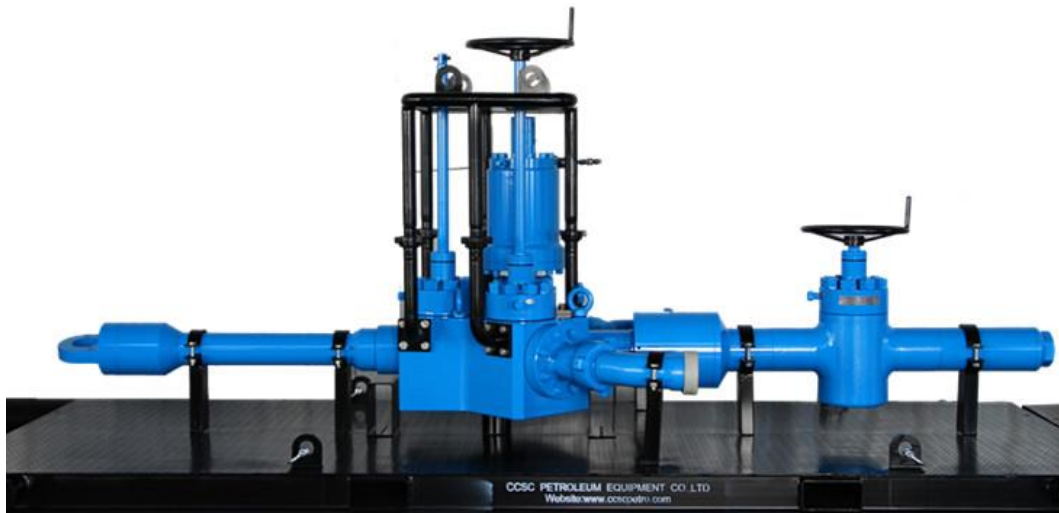


## Surface Test Tree – Flowhead

### General:

Surface test tree, also called Flowhead, is located directly on top of the well and is the first piece of equipment that fluid from the well flows through. Its principal function is to control the fluid flow in and out of the well.

The flowhead consists of four gate valves: a master valve, two wing valves, and a swab valve. The flowhead swivel is inserted between the master valve and the main valve block. It allows the subsurface equipment to be rotated with respect to the main flowhead block.



### Applications:

Pre-completion testing

Drill Stem Testing (DST)

Post-completion testing (carried out without the use of X-mass tree)

### Features & Benefits

- Supports the weight of the test string.
- Adaptable and compact design provides added flexibility and mobility.
- Low torque metal-to-metal sealing on all gate valves provides increased reliability and ease of operation.
- Protection frame on main block for manual and hydraulic valves improves durability.
- It controls flow out of the well through a flow valve.
- Swivel enables rotation of the test string for packer setting and disconnect operations.



Available Specification

Service	Oil, Gas, H2S Service			
Working pressure (psi)	5000	10,000	15,000	10,000
Working temperature	P - U			
ID (in. [mm])	3 - 1/8 [79]	3 - 1/16 [78]	3 - 1/16 [78]	4-1/16 [103]
Connection				
Flow Line	3" Fig. 1002 M	3" Fig. 1502 M	3" Fig. 2202 M	3" Fig. 1502 M
Kill Line	3" Fig. 1002 F	3" Fig. 1502 F	3" Fig. 2202 F	3" Fig. 1502 F
Top Connection	To be advised			
Bottom Connection	To be advised			