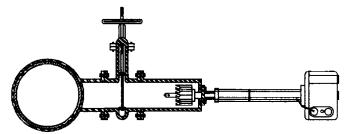


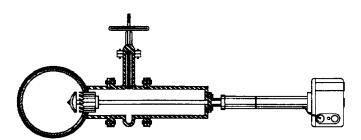
HOT TAPPING

Hot tapping or pressure tapping is the method of making a connection to existing piping or vessels without interruption to the system. Hot tapping is also the first procedure in line stopping, where the hole saw is used to make an opening in the pipe, so a line plugging head can be inserted.

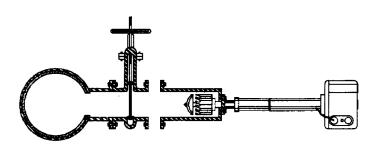
IFT hot tapping services include tapping 1/2" to 102" on natural gas, water, sewage, steam, petroleum products, and chemicals.



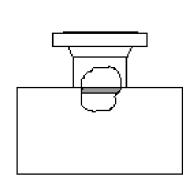
A. Saddle or weld nozzle installed, valve installed, assembly pressure tested and tapping machine attached.

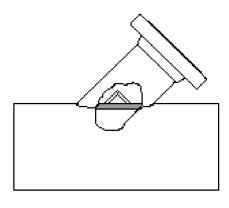


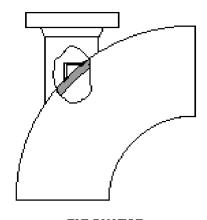
B. Valve opened, hot tap completed, coupon or cut portion retained by latches on pilot drill. Pressure is contained within tapping machine.



C. Cutter and coupon retracted and valve closed. Fluid is drained and tapping machine removed. The tapped valve is now ready for the contractors tie-in or IFT line stopping equipment to be inserted.







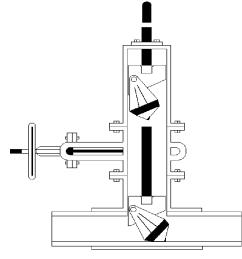
STRAIGHT TAP ANGLE TAP

ELBOW TAP

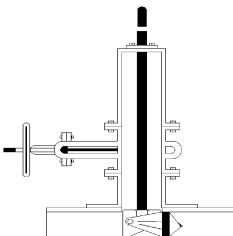


LINE STOPPING

Line stopping or line plugging is a means of isolating a piping system and providing a shut off where none exists. This process serves as a control, or temporary valve that can be removed after alterations or valve replacements have been made.

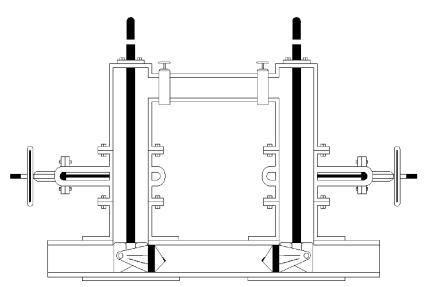


Hot tap on line previously made, line stopper attached to temporary valve and valve opened. Line stopper hydraulically or mechanically pushed into line to seal the pipe.



There are various types of line stopping heads. The type illustrated can hold pressures ranging through 1000 psi.

A single line stop can be used to stop off and abandon a shutdown.



Two or more line stops can be used in conjunction to isolate and bypass many intersecting lines at once.

Fluid in line is bypassed, leaving a workable dead section to alter, repair or add a valve while service provided by this line is continued.