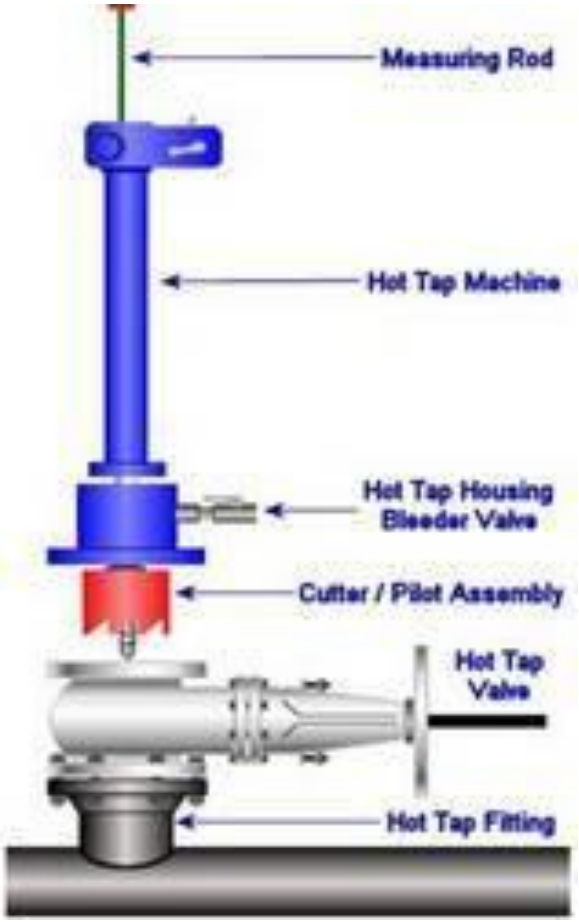
Stopple Equipment and how it works.

Stopple Equipment is used to isolate a section of gas line in the absence of a permanently installed shutoff valve. This is the step by step process.

1. Hot Tap process
    a. Hot Tap Fitting- A flanged saddle Tap is welded to the pipe while it is still has gas pressure. This is basically a Tap Tee and at this stage the pressurized pipe has not been penetrated or opened.
    b. A hot tap valve is bolted to the flange of the hot tap fitting. This is a temporary valve that is used to shut the gas off during the different stages of the process.
    c. The hot tap machine is bolted to the hot tap valve. The hot tap machine is a sealed housing that includes a cutter which is a hole saw used to cut an opening into the pressurized pipe.
    d. The hot Tap valve is opened and the cutter is lowered to the pipe and a hole is cut into the pressurized pipe.
    e. After the hole is cut the cutter is raised above the hot tap valve, and the hot tap valve is shut.



2. Stopple Process
    a. The hot tap machine is removed from the hot tap valve and replaced with a stopple machine. The Stopple machine includes one or two folding rubber plug “stopple plug” that is small enough to fit through the previously cut hole.
    b. The hot tap valve is opened and the stopple plug is lowered into the still pressurized pipe.
    c. Once in the pipe the stopple is positioned to one side of the inside of the pipe away from the hole and unfolds to expand to the inside diameter of the pipe until the flow of gas is stopped. This takes an incredible level of skill by our most experienced technicians because it is a difficult process that is not always exact.
    d. Depending on the nature of the work this process may be performed at multiple locations, and sometimes includes adding a bypass line between stopples so that the delivery of gas is not interrupted while the repair work is completed.

Images of Pic Of Stopple Equipment