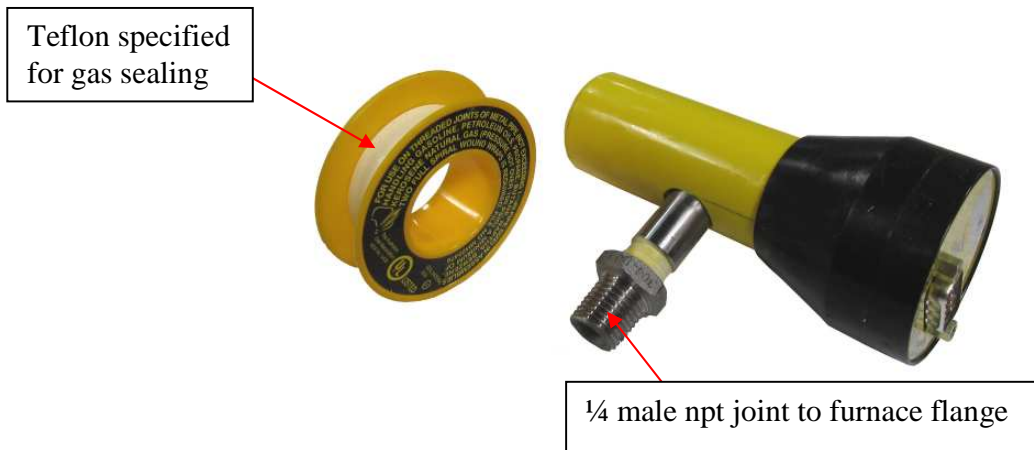


How to seal vacuum system

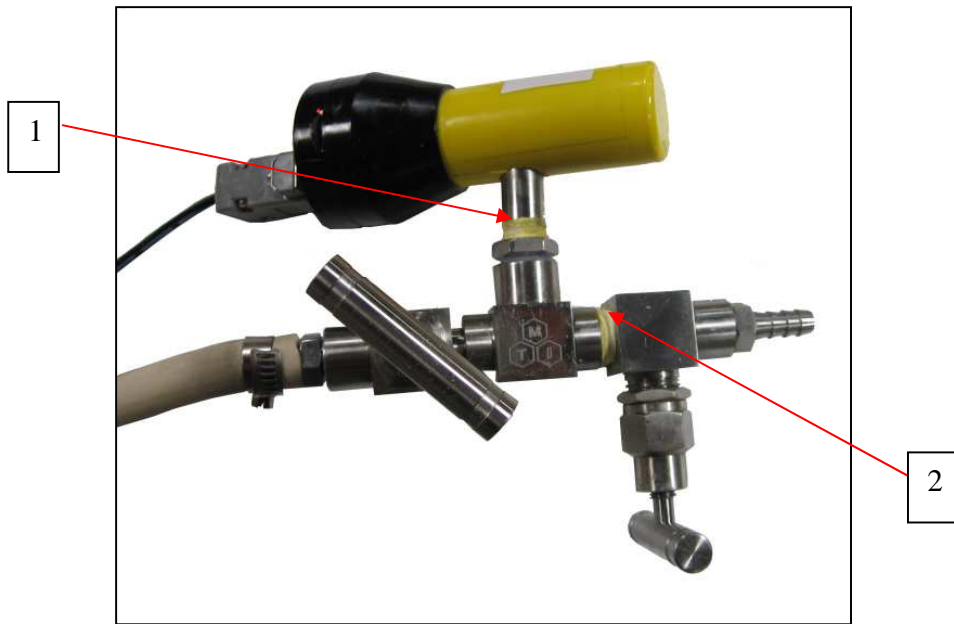
In order to gain the best vacuum environment using MTI furnace, pre-sealing for the joint of connection on the flange should be done as below:

1. Wrap the Teflon which is used for gas sealing (note: wet sealing is not recommended) to the joint of vacuum meter, the orientation of the wrapping must comply with the rotation direction of the pipe sealing (Mostly, the pipe sealing direction is clockwise and loosening direction counter-clockwise).



2. Repeat the wrapping on all the joint of the flange.
3. Apply some vacuum grease (order [here](#) from MTI) on both the male (already sealed by Teflon) and female joint (like 1 and 2 in the picture below) and then, join them together.





4. To avoid any damage on the tube or to get the minimum leaking rate, please always make even force to set-screw and let the flange be vertical to the ground when you assemble it to the tube.

5. When get everything done, please vacuum the system and see if the it can reach to 55 ± 5 mtorr by MTI's pump (for the customer who are using [MTI's KFD25 fitting and ball valve, SS pipe](#), the vacuum would be 5 mtorr) and the stable gas leaking rate is 3 ± 1 mtorr/min (" \pm " is introduced because of the different vacuum condition); if not, adjust every joint and the position of the flange till you get the number.