

heaters

GLOW RED ON STARTUP?

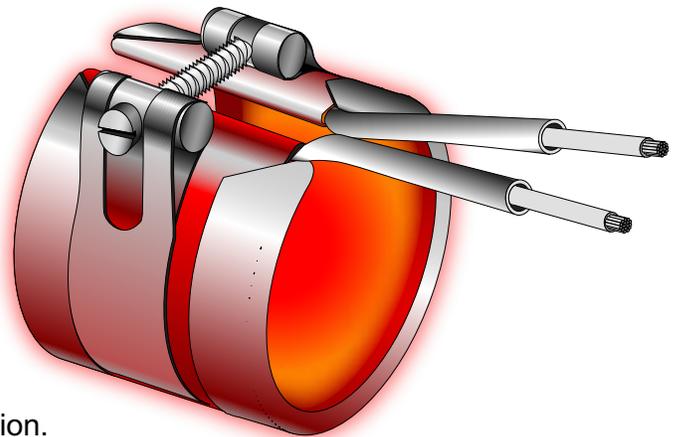
Are you getting cherry red heaters on startup before reaching your barrel set point? We have a few common problem areas to check: wiring, installation, & thermal considerations.

First, a couple Wiring Considerations:

- If heaters are dual voltage, check wiring to ensure that heater halves are wired in series for higher voltage installation.
- Check incoming voltage for over voltage condition.

Second, a few Installation Considerations:

- Since most heaters transfer heat through conduction, it is essential that heaters fit tightly to the machine barrel. Check installation instructions to ensure that heaters are clamped to torque values indicated. Check out the Torque Chart below.
- Ensure that dirt and grit are removed prior to installation.



Torque Chart

Clamp Screw Size	Nickel Plated, Dry Standard	Nickel Plated, Anti-Seize	Black Oxide, Dry	Black Oxide Anti-Seize
UNC #6-32	30	20	20	15
UNC #8-32	40	30	25	20
UNC #10-24	55	35	35	30
UNC 1/4-20	80	55	50	45
UNC 1/4-20 w/springs	40	40	N/A	N/A
M6-1	80	55	50	45
M5-0.8	60	40	35	35

Any foreign mater under the heater will interfere with proper heat conduction.

Third, Thermal Considerations:

- Review application and clamping graphs to ensure heater watt density is not excessive.
- Examine machine to evaluate thermal mass in a particular zone. High thermal mass can conduct heat away from zone being heated, driving up heater temperature as heater expands away from barrel.

As always, if you need additional technical help please call Proheat and ask to speak with your account manager.