

Department	HydroLogic		Doc #	SOP – Operation Temperature	
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Standard Operating Procedure (SOP); System Operation Temperature

1. Purpose

The purpose of this SOP is to aid users in further understanding how incoming water temperatures can affect the RO Permeate (product) water output flow rate.

2. Applicable To

This SOP is applicable to all HyperLogic Commercial Series RO systems [3/4/6/9/12 membranes].

3. Prerequisites

Ensure you follow all state & federal guidelines for personal workplace safety prior to disassembly and/or maintenance of your HyperLogic equipment and related consumables.

4. Materials/Reference

Suggested tools/materials required for this operation include, but may not be limited to, the following:

- Ref. HyperLogic 'Owner's Manual'

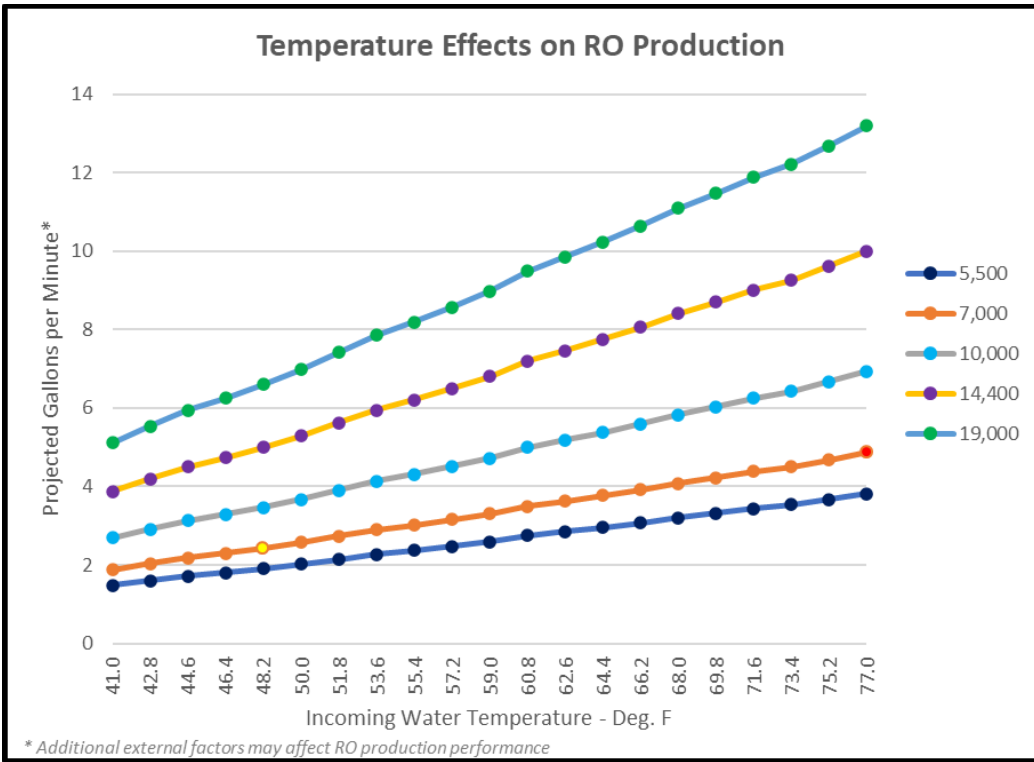
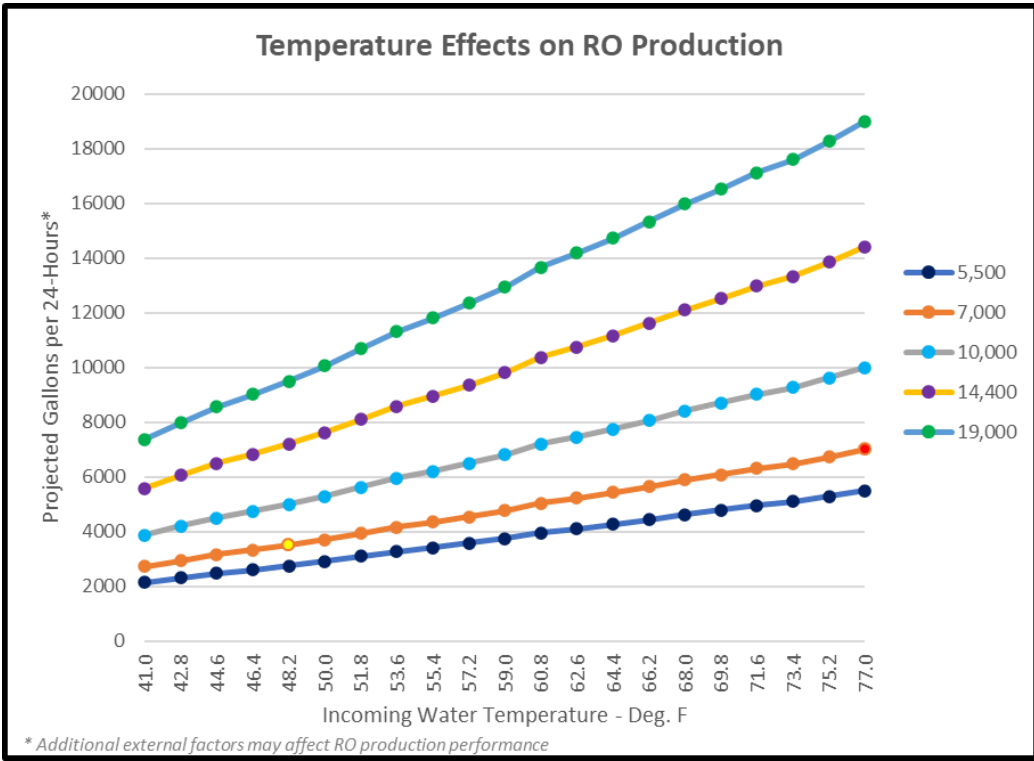
5. Procedure

One of the foremost key factors in RO Permeate (product) water production performance is the incoming water temperature to the RO system. RO membranes are performance evaluated and rated based on a constant operating water temperature of 77deg F (25deg C). As incoming water temperatures decline, the water becomes more viscous thus requiring more energy, in the form of water pressure, to perform RO functionality. Leaving 'System Pressure' as a constant would result in lower RO Permeate (product) rate. Pressure applied to a membrane is limited without potential system damage.

To aide in overcoming production loss due to low feed water temperatures, the RO can be upsized to accommodate. Another alternative is pre-heating the incoming source water to help lower its viscosity and increase production capabilities.*

**Please consult with your HyperLogic Technical representative for further details and associated options.*

Refer to Charts on Page 2



END OF SOP DOCUMENT

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