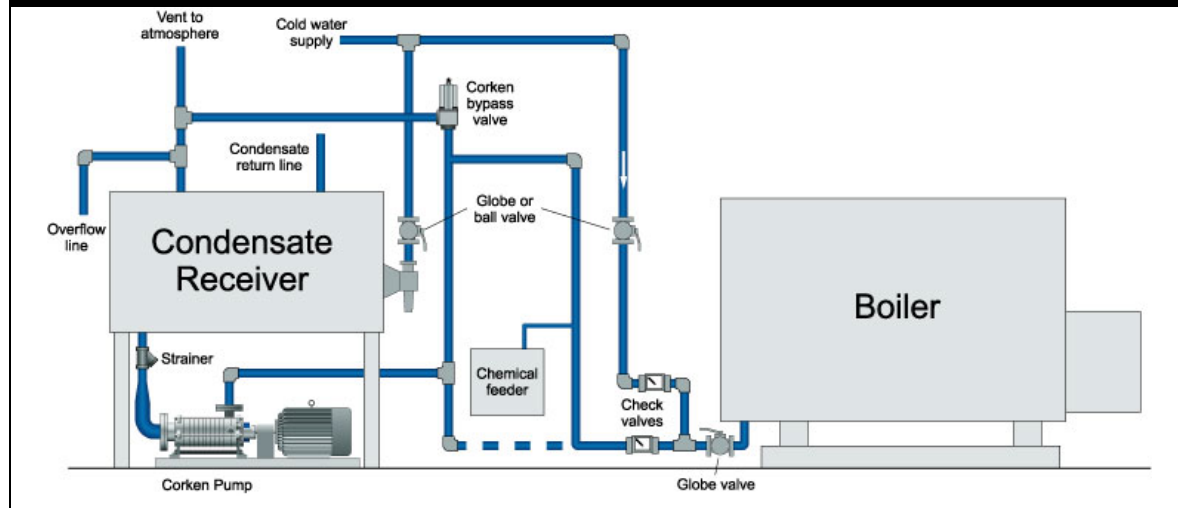


PROCESS SHEET

For Boiler Feed and Hot Condensate Pumps

Application	Business Sector	
<ul style="list-style-type: none"> Boiler Feed Hot Condensate 	<ul style="list-style-type: none"> Steam Boilers Condensate Service Laundry Services 	<ul style="list-style-type: none"> Pulp and Paper Building Heat Boiler Manufactures

Installation



Process Description

Most systems need help returning condensate to the boiler. The pump's job is to provide the push the water needs to get back into the boiler. The water leaves the boiler as steam, condenses into a liquid in the radiators and piping, and flows by gravity into a condensate receiver. When the water level inside the receiver reaches a certain point, a float switch turns the pump on. The pump quickly moves the water out of the receiver and back into the boiler.

Medium

- Water

Equipment used in this process

- High Temperature Side Channel – 2 Types
 - Pump utilizing cooling fins – available in SC20/30/40 series
 - Pump utilizing cooling water – available in all series

Design Selection

1. **SIMPLEX:** One pump system to serve one boiler.
2. **DUPLEX:** Two pump systems to serve one boiler (with one stand-by pump); or two boilers (with one pump per boiler). If system is to serve two boilers, select pumps for individual boiler size and select tank and system for total boiler load.
3. **TRIPLEX:** Three pump system to serve two boilers (with one stand-by pump). Select pump for individual boiler size and select tank and system for total boiler load.

BOILER HP	PUMP GPM	BOILER HP	PUMP GPM
20	4	200	28
40	6	250	35
60	9	300	42
80	11	350	48
100	14	400	56
125	18	500	70
150	21	600	83

Benefits of the Side Channel Pump

- Good to temperatures reaching 428°F (220°C).
- Exceptional in light liquid transfer.
- Capable of pumping liquids containing up to 50% gas.
- Enclosed centrifugal impeller provides improved NPSH capabilities.
- Able to develop high pressures without pulsations.
- There is no metal-to-metal contact, so wear is minimized.
- Designed for continuous duty.
- Cooling fins eliminate cooling water and the cost of a cooling system.

Potential Customers

- Lockwoode Greene
- Willamette Industries
- Cleaver – Brooks
- Sellers Engineering