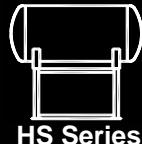


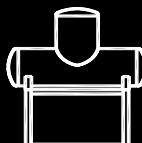
Standard  
Deaerating  
Units



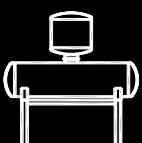
# KANSAS CITY DEAERATOR



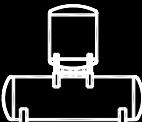
**HS Series**  
Up to 350,000 #/hr  
Low Headroom



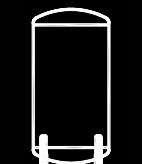
**TC Series**  
Up to 250,000 #/hr  
Tray Unit  
Meets HEI



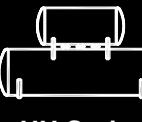
**BDS Series**  
Up to 250,000 #/hr  
Tray Unit  
Meets HEI



**DS Series**  
Up to 800,000 #/hr  
Tray Unit  
Meets HEI



**VT Series**  
Up to 800,000 #/hr  
Tray Unit  
Minimal Plan Area  
Meets HEI



**HH Series**  
Up to 16,000,000 #/hr  
Tray Unit-Meets HEI

## BFS – Boiler Feed System

### Principles of Operation

Kansas City Deaerator Boiler Feed Systems can be used in applications when a deaerator is not feasible and / or desirable. In addition, the systems can be equipped with low pressure pumps and utilized as a condensate receiver.

Boiler Feed Systems should be sized to allow adequate storage volume for anticipated surges and to ensure sufficient reserves while plant controls react to changing.

### FEATURES

- Available in simplex, duplex, triplex or quadropole up to 125,000 square feet EDR or 1,000 boiler horsepower
- Assembled and pre-wired to the extent possible for shipping
- Rugged heavy duty centrifugal pumps with low NPSH
- Receivers up to 1000 gallons as standards with custom receivers to any size



## Condensate Pumps – Standard Equipment

Single condensate return units are equipped with a 2-pole, heavy-duty float switch activated by a float. The entire switch mechanism including flange, float and rod is mounted on end of receiver, and it can be removed as a complete unit. The mechanism is readily adjustable for various water levels without removal from the receiver.

Duplex return units are equipped with a mechanical alternating float switch which alternates the operation of two pumping unit in successive cycles. It consists of two 2-pole switch units in one enclosure, and is operated by one float within the receiver. This device not only alternates the pumping units, but also automatically starts the second pump in case the first pump fails to start or to carry the load.

Tappings for gauge glass and thermometer are standard on all H Series receiver tanks.

## Condensate Pumps – Optional Equipment

- Controls  
Two float switches on duplex units  
Electric alternator on duplex units
- Gauge glass assembly
- Gate valve(s)
- Thermometer
- Control cabinet – duplex includes magnetic starters with reset buttons and third leg overload protection for three-phase. Two hand-off automatic selector information reference bulletin ACC-700.
- Inlet strainer – basket or "y" type
- Magnesium corrosion inhibitor
- Tank linings
- High water alarm
- Manhole
- Split leg flanges

## Boiler Feed Pumps – Standard Equipment

Single and duplex boiler feed units are equipped with a heavy duty float operated makeup valve actuated by a float. The entire mechanism including flange, float and rod is mounted on the end of receiver. It can be removed as a complete unit and is readily adjustable for various water levels. Tappings for gauge glass and thermometer are standard on all H series receiver tanks.

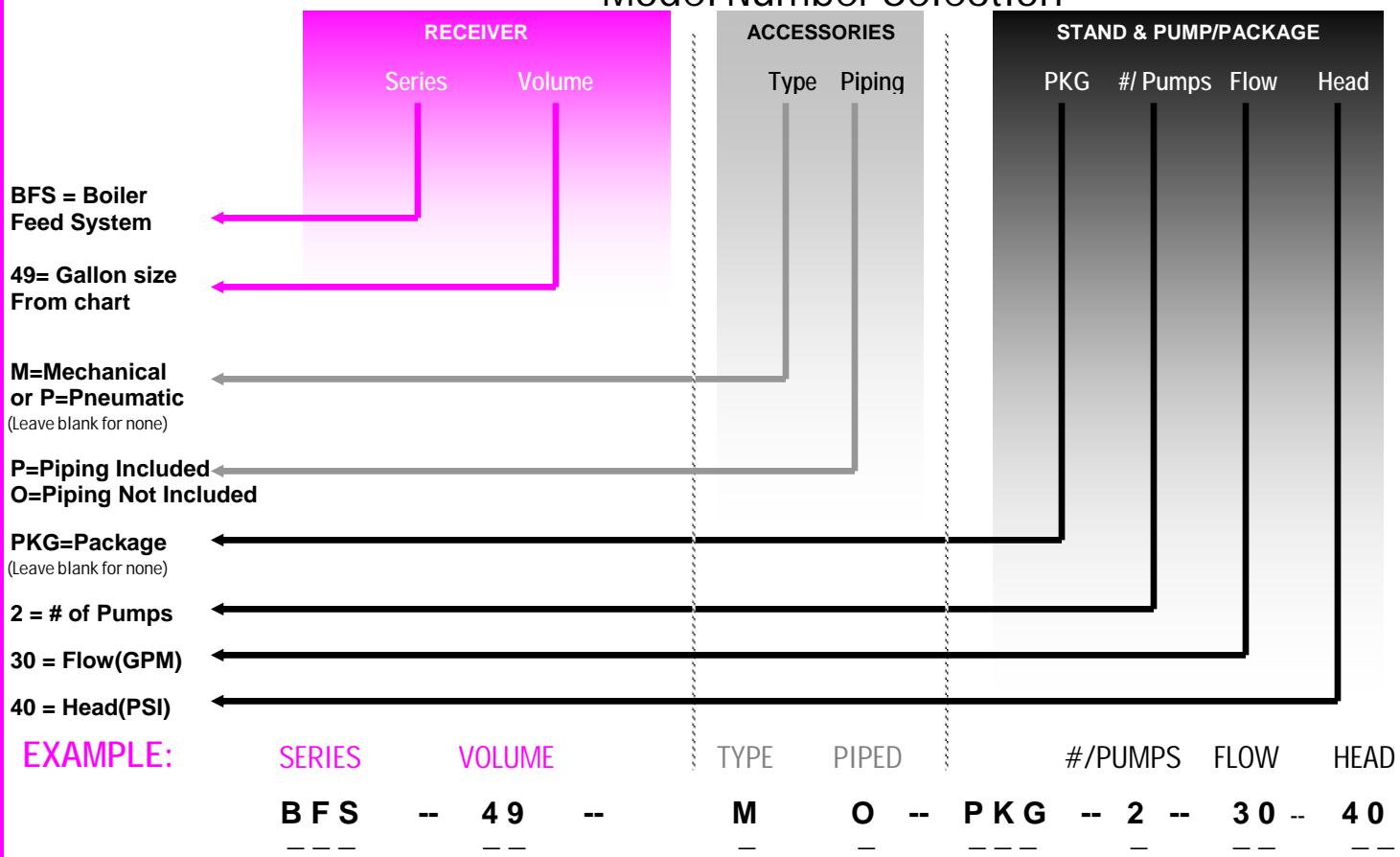
## Boiler Feed Pumps – Optional Equipment

- Solenoid operated makeup valve with float switch
- McDonnel-Miller #21 makeup valve
- McDonnel-Miller #25 makeup valve
- Gauge glass assembly
- Gate valve – pump suction
- Thermometer
- Control cabinet – duplex includes two started switches, two reset buttons and third leg overload protection for three-phase. Two hand-off automatic selector switches are optional. Other electrical options are available, see bulletin ACC-700 for additional information
- Magnesium corrosion inhibitor
- Inlet strainer – basket or "y" type
- Preheater
- Manhole
- Split leg flanges

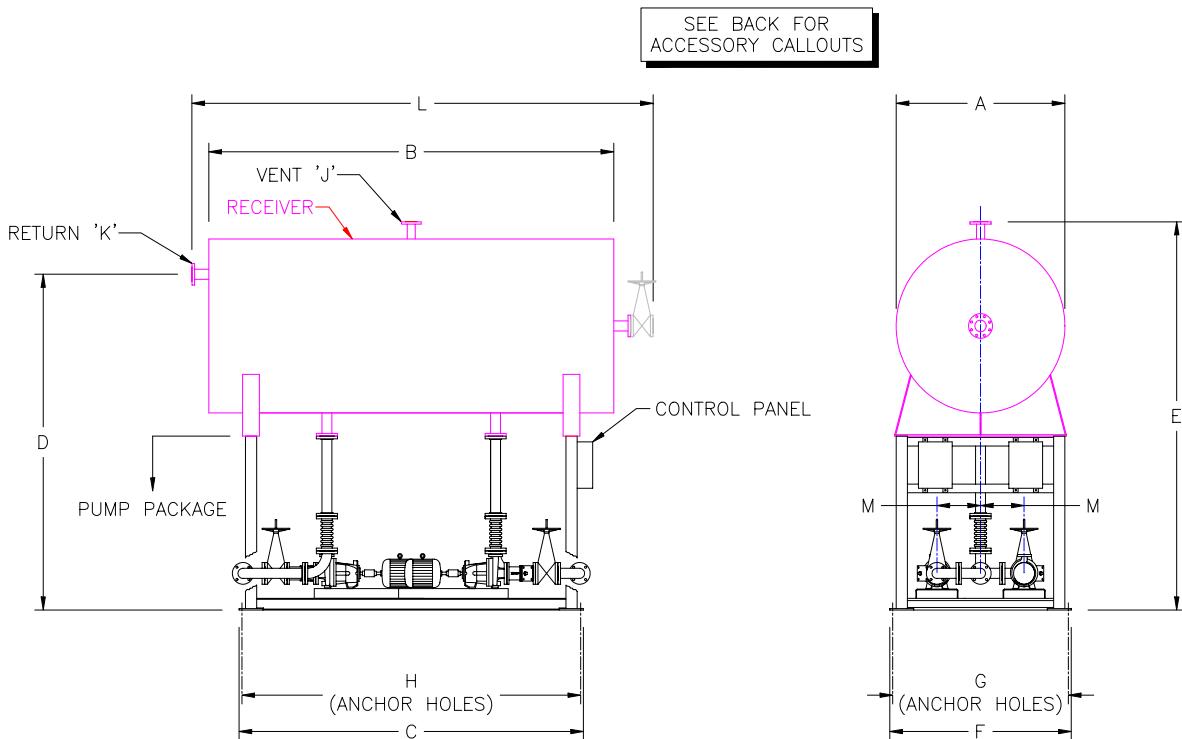
# Boiler Feed System

MODELS

## Model Number Selection



## Typical Arrangement



## Boiler Feed System

## CHART

## **RECEIVER SELECTION**

Receiver Size (Gallons)	A	B	C	D	E	F	G	H	J	K	L	M
21	14	30	30	42	45 ¼	30	27 ½	27 ½	1	2	36 ½	13 ¾
49	22	30	30	49 7/8	53 ¼	30	27 ½	27 ½	1 ¼	2 ½	36 ½	13 ¾
71	24	36	36	51 ½	55 ¼	32	29 ½	33 ½	1 ½	3	42 ½	14
117	24	60	36	51	55 ½	32	29 ½	33 ½	2	4	66 ½	14
209	32	60	50	58	63 ¾	50	47 ½	47 ½	2	5	66 ½	22
260	36	60	50	62	67 7/8	50	47 ½	47 ½	2	5	66 ½	22
370	36	84	50	62	68	50	47 ½	47 ½	2	5	90 ½	22
500	42	84	50	68	74	50	47 ½	47 ½	2	5	90 ½	22
650	42	108	50	68	74	50	47 ½	47 ½	2	5	114 ½	22
750	48	96	76	74	80	56	53 ½	73 ½	2	5	102 ½	25
1000	48	132	76	74	80	56	53 ½	73 ½	2	5	138 ½	25

## PUMP SELECTION