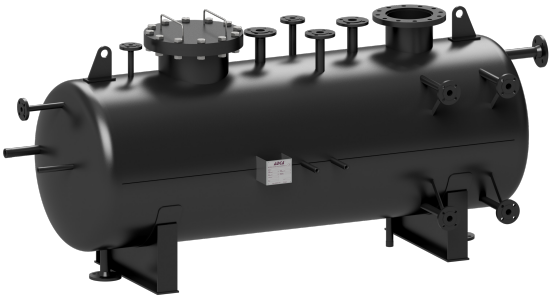
LRQA CERTIFIED ISO 9001

ADCA ADCATherm

BOILER FEED TANKS
BFT

DESCRIPTION



The ADCATherm BFT boiler feed tank is one of the most important equipment in a boiler room. Its main function is to store the make-up water and condensate, assuring a reserve of treated water to supply the steam boilers.
The make-up water has to be softened to prevent scale formation on the boiler and the oxygen has also to be removed, so that corrosion in the boiler and steam system is avoided (this situation is normally handled by specialists).
The consumption of chemicals used to eliminate the oxygen can be drastically reduced if one of the several ADCATherm thermal degasification systems (ADG, TDG, FCD) is used for the removal of oxygen and other non-condensable gases (mainly carbon dioxide).
Even if such systems are not used, the ADCATherm boiler feed tanks will always be optimized according to the existing needs, being able to include water pre-heating, as well as other features, obvious to a true steam expert, but not to a simple tank manufacturer.

MAIN FEATURES

Sandblasted, metalized and painted.
Prevents energy waste.
Can be installed on new or existing systems.

OPTIONS: Vertical and special designs for different applications.
Complete stainless steel construction.
Complete system including all the necessary equipment.
Vent condenser for energy recovery.

USE: Steam boiler feed water and condensate.

AVAILABLE MODELS: BFT – standard horizontal design.
BFT/ADG or TDG – vessel and correspondent deaerator dome.
BFTV – special vertical design.

CONNECTIONS: Flanged EN 1092-1 or ASME.
ISO or NPT threaded sockets.
Others on request.

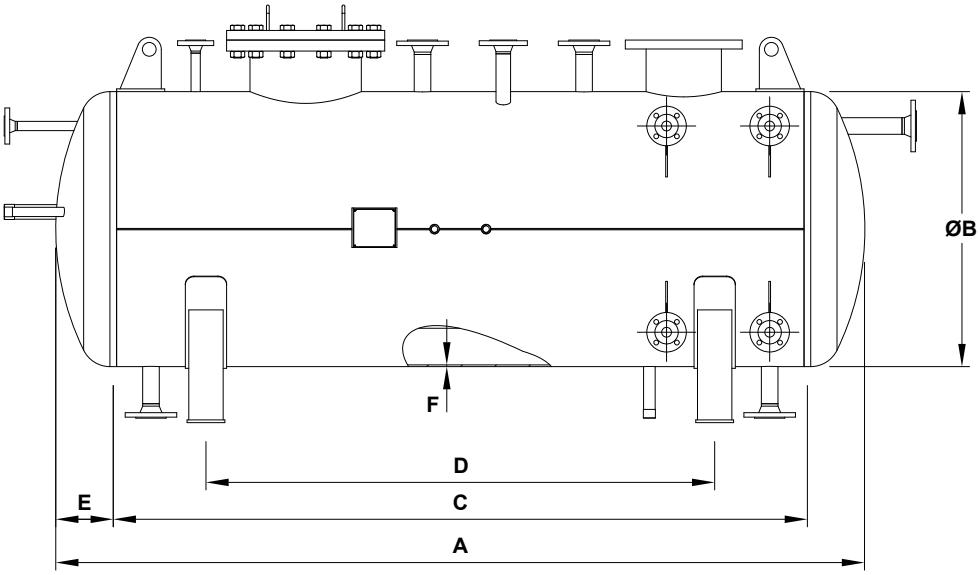
CONSTRUCTION: Carbon steel with internal stainless steel components.

INSTALLATION: See ADG/TDG datasheets for typical installations.
Standard horizontal installation. Vertical on request.
Final dimensions and connections according to the drawing supplied after order confirmation.
Insulation (not included) recommended after installation.

LIMITING CONDITIONS	
PS – Maximum allowable pressure	0,5 bar
TS – Maximum allowable temperature	120 ºC

Minimum operating temperature: -10 ºC.
Design code: AD-Merkblatt.
Remark: Other conditions and CE marking on request.

We reserve the right to change the design and material of this product without notice.



DIMENSIONS (mm)								
MODEL	**CAPACITY (L)**	**A**	**ØB**	**C**	**D**	**E**	**F**	**WEIGHT (kg)**
BFT-500	537	1800	640	1500	900	150	4	180
BFT-750	856	1860	800	1500	900	180	5	290
BFT-1000	1107	2360	800	2000	1200	180	5	350
BFT-1250	1336	1920	960	1500	900	210	5	360
BFT-1500	1698	2420	960	2000	1200	210	5	410
BFT-2000	2248	2480	1080	2000	1200	240	6	570
BFT-2500	2706	2980	1080	2500	1500	240	6	665
BFT-3000	3068	2560	1280	2000	1200	280	7	795
BFT-3500	3711	3060	1280	2500	1500	280	7	920
BFT-4000	4176	2660	1500	2000	1200	330	8	1160
BFT-5000	5060	3160	1500	2500	1500	330	8	1335
BFT-6000	5943	3660	1500	3000	1800	330	8	1510

Remarks: For other combinations certified dimensions, consult the manufacturer.
Pipe connections and location approved after order confirmation.

BOILER FEED TANK DATA INQUIRY	
Make-up water pressure	bar
Make-up water temperature	ºC
Make-up water flow rate	kg/h
Condensate return pressure	bar
Condensate temperature	ºC
Condensate flow rate	kg/h
Available saturated heating steam pressure	bar
Feed-water tank required capacity	m³
Maximum deaerated water flow required	kg/h
Boiler capacity	kg/h
Make-up water control	Electric / pneumatic
Pressure control	Self-acting / electric / pneumatic

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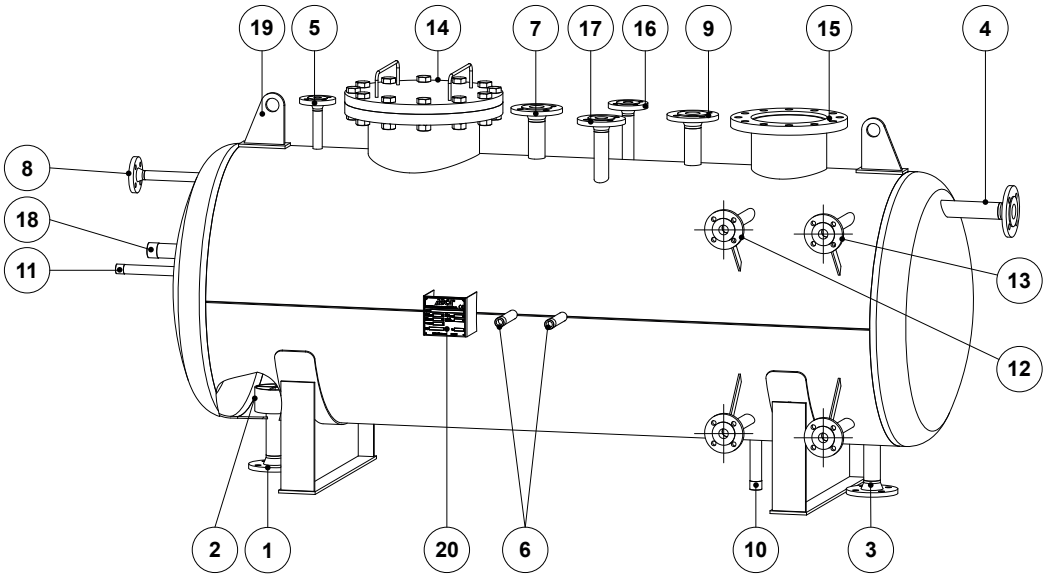
MATERIALS			
DESIGNATION	**MATERIAL**	**DESIGNATION**	**MATERIAL**
Cylindrical shell	EN 10025 / S235JR / 1.0038	Socket	ASTM A105 / 1.0432
Domed end	EN 10025 / S235JR / 1.0038	Internals	EN 10028-7 / AISI 316 / 1.4401
Inlet / Outlet pipe	EN 10216-2 / P235GH / 1.0345	Supports	EN10025 / S235JR / 1.0038
EN flange	EN 10222-2 / P250GH / 1.0460	Bolt	Steel 8.8
ASME flange	ASTM A105 / 1.0432		

EN 10204 3.1 certificate available on request.



CONNECTIONS *		
POS. Nº	**DESIGNATION**	**REMARKS**
1	Boiler feed pump supply	Larger diameter to optimize pressure loss (preventing cavitation)
2	Anti vortex	–
3	Drain	To be connected to a BEX (always at a lower level than the feed tank)
4	Overflow	Float trap or “U” bend (only for atmospheric)
5	Heating steam	Can be located at the domed ends
6	Chemical dosing	Can be located at the domed ends
7	Condensate return	Only if not connected to a deaerator dome
8	Soft water inlet	Only if not connected to a deaerator dome
9	Vent outlet	Only if not connected to a deaerator dome
10	Recirculating pump	Recommended for atmospheric design only
11	Temperature indicator	Can be located at the domed ends
12	Level indicator	Can be located at the domed ends
13	Level controller	Can be located at the domed ends
14	Headhole	DN 300 PN 6 up to 1000 L
14	Manhole	DN 500 PN 6 for 1250 L and above
15	Dome flange	For ADG or TDG
16	Vacuum valve	For pressurized systems only
17	Safety valve	For pressurized systems only
18	Temperature control	Suitable for electrical or self-acting valve control
19	Lifting eye	–
20	Nameplate	–

* Sizes to be defined according to the real flow conditions.