



Tanpera Separators

HIGH CAPACITY, UNINTERRUPTED PERFORMANCE!

AIR SEPARATOR

THA SERIES



Features

The operating principle of air separators is based on several physical effects. The active section, made of expanded stainless steel sheet, is positioned radially inside the body. The water flowing across the expanded surface creates strong turbulence while maintaining continuous flow.

As a result, the velocity and pressure changes inside the device release small air bubbles. Bubbles on the metal surfaces move toward the upper section. The bubbles collected in the upper section are discharged through the air vent.

Applications and Advantages

Applications of air separators;

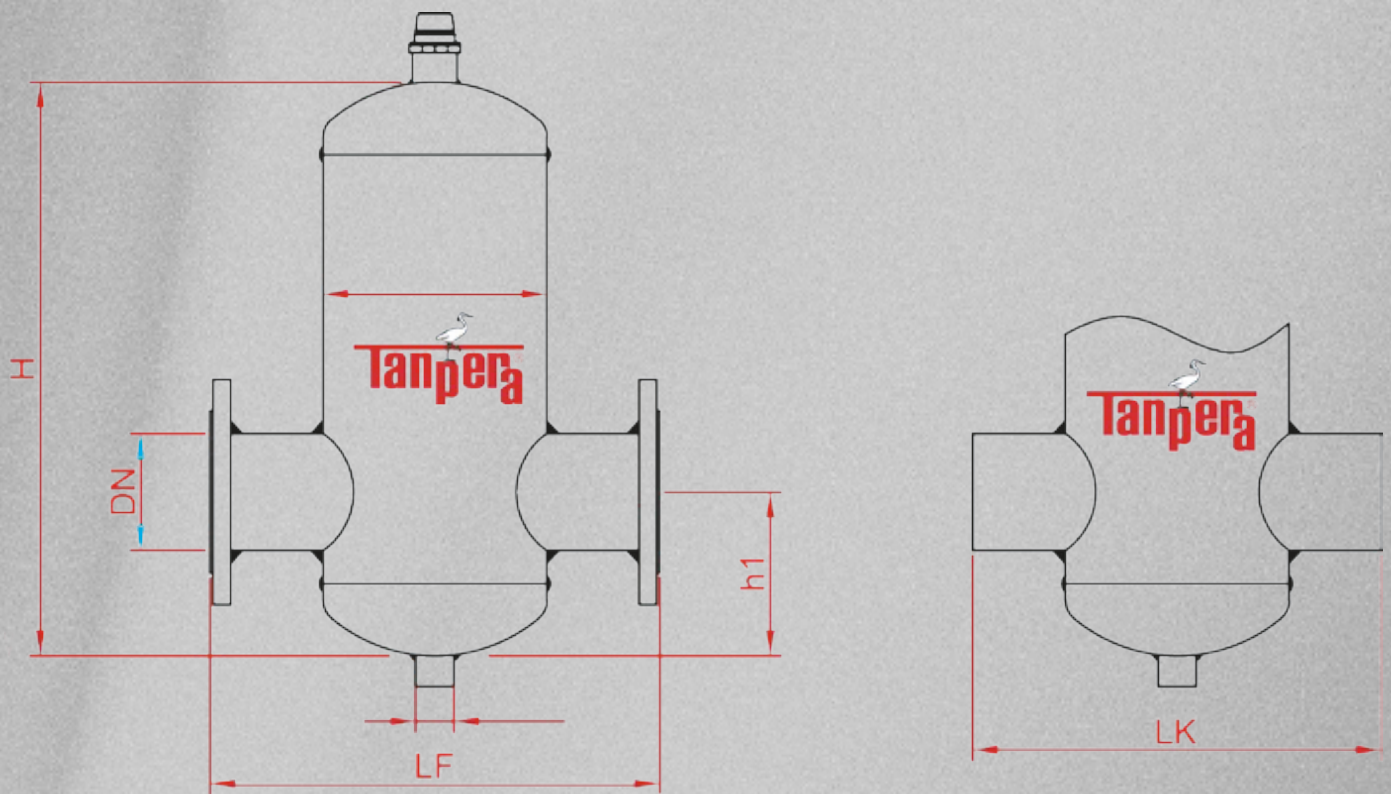
- Central heating systems
- Air-conditioning and cooling systems
- Underfloor heating systems

Especially in installations using pipes without an oxygen barrier, continuous fresh air entry into the system makes corrosion and other problems chronic.

Tanpera THA Series air separators continuously separate and discharge air from the system thanks to their special design and internal channel structure.

SIZING

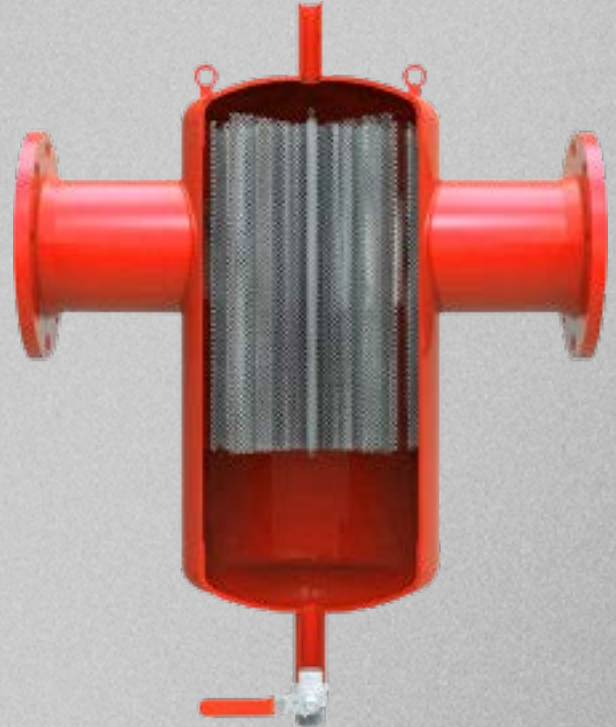
Maximum Operating Pressure: 10 bar Maximum Operating Temperature: 95 °C Body: Carbon Steel



Connection Diameter		Dimensions											
Product Code	Connection Diameter	ØD	H	h1 (Flanged)	h1 (Threaded)	h1 (Kb)	L (Threaded)	LK (Kb)	LF (Flanged)	ØA	ΔP(kPa)	Flow Rate (m³/h)	Capacity (kW)
THA 20	3/4" (DN 20)	88,90	230	80	80	80	190	190	240	1/2"	0,02288	21	20/20
THA 25	1" (DN 25)	88,90	230	80	80	80	190	190	240	1/2"	0,02188	21	20/28
THA 32	1 1/4" (DN 32)	88,90	230	80	80	80	190	190	240	1/2"	0,01798	21	29/42
THA 40	1 1/2" (DN 40)	114,3	270	105	105	105	225	225	260	1/2"	0,01478	33	43/57
THA 50	2" (DN 50)	114,3	350	125	125	125	280	280	280	1/2"	0,17957	42	58/107
THA 65	2 1/2" (DN 65)	139,7	430	140	140	140	315	315	315	1/2"	0,01685	50	108/196
THA 80	3" (DN 80)	168,3	470	165	165	165	365	365	365	1/2"	0,01419	72	197/260
THA 100	4" (DN 100)	219,1	490	175	-	175	-	420	420	1/2"	0,01049	95	261/394
THA 125	5" (DN 125)	273	620	215	-	215	-	475	475	1"	0,00977	105	395/899
THA 150	6" (DN 150)	273	640	260	-	260	-	500	500	1"	0,00962	190	900/1749
THA 200	8" (DN 200)	406	850	275	-	275	-	715	715	1"	0,00872	407	1750/3499
THA 250	10" (DN 250)	406	1000	300	-	300	-	750	750	2"	0,01026	407	3500/5000
THA 300	12" (DN 300)	500	1240	325	-	325	-	780	780	2"	0,01018	636	5000/6000

DIRT SEPARATOR

TTT SERIES



Features

Dirt separators are products that collect sediment and dirt formed in the installation in the lower chamber of the device, by slowing the flow inside the unit and separating particles through a special filter and design while the system is operating.

Sediment and dirt in water cause failures, wear and reduced efficiency in pumps, motorized valves and other fittings, increase maintenance requirements, and lead to corrosion.

This product eliminates the difficulties experienced in the maintenance and cleaning of conventional strainers and prevents possible neglect caused by these difficulties.

Applications and Advantages

Applications of dirt separators;

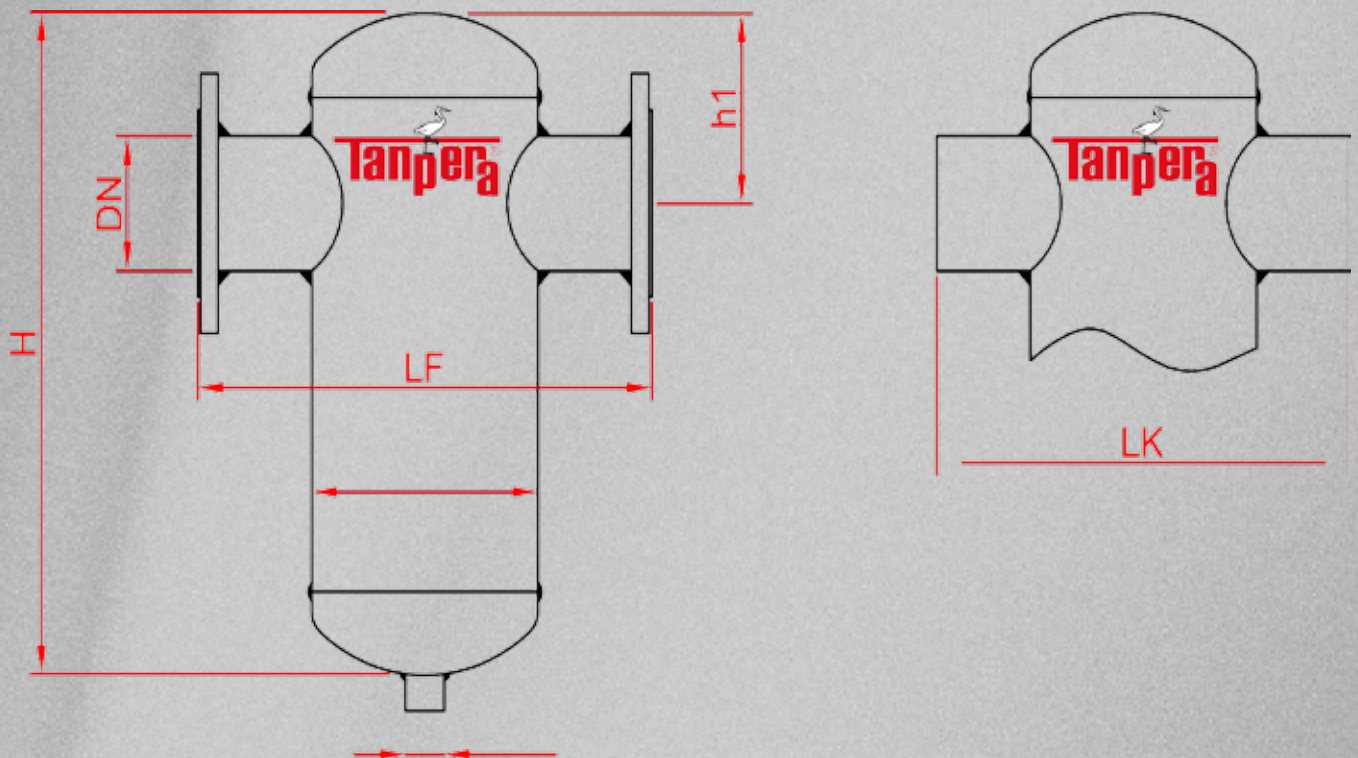
- Central heating systems
- Air-conditioning and cooling systems
- Underfloor heating systems

With Tanpera dirt separators, sediment and dirt formed in the installation while the system is operating are separated by the special filter and internal design as the flow slows inside the device, and are collected in the lower chamber of the dirt separator.

The collected sediment and dirt are discharged from the system by opening the ball valve located at the bottom of this chamber. The system does not need to be stopped while these operations are performed.

SIZING

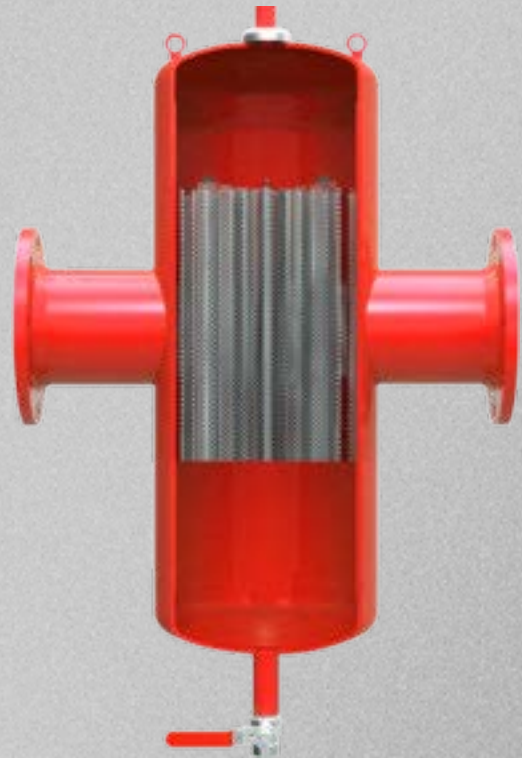
Maximum Operating Pressure: 10 bar Maximum Operating Temperature: 95 °C Body: Carbon Steel



Connection Diameter		Dimensions											
Product Code	Connection Diameter	ØD	H	h1 (Flanged)	h1 (Threaded)	h1 (Kb)	L (Threaded)	LK (Kb)	LF (Flanged)	ØA	ΔP(kPa)	Flow Rate (m³/h)	Capacity (kW)
TTT 20	3/4" (DN 20)	88,90	230	80	80	80	190	190	240	1/2"	0,02288	21	20/20
TTT 25	1" (DN 25)	88,90	230	80	80	80	190	190	240	1/2"	0,02188	21	20/28
TTT 32	1 1/4" (DN 32)	88,90	230	80	80	80	190	190	240	1/2"	0,01798	21	29/42
TTT 40	1 1/2" (DN 40)	114,3	270	105	105	105	225	225	260	1/2"	0,01478	33	43/57
TTT 50	2" (DN 50)	114,3	350	125	125	125	280	280	280	1/2"	0,17957	42	58/107
TTT 65	2 1/2" (DN 65)	139,7	430	140	140	140	315	315	315	1/2"	0,01685	50	108/196
TTT 80	3" (DN 80)	168,3	470	165	165	165	365	365	365	1/2"	0,01419	72	197/260
TTT 100	4" (DN 100)	219,1	490	175	-	175	-	420	420	1/2"	0,01049	95	261/394
TTT 125	5" (DN 125)	273	620	215	-	215	-	475	475	1"	0,00977	105	395/899
TTT 150	6" (DN 150)	273	640	260	-	260	-	500	500	1"	0,00962	190	900/1749
TTT 200	8" (DN 200)	406	850	275	-	275	-	715	715	1"	0,00872	407	1750/3499
TTT 250	10" (DN 250)	406	1000	300	-	300	-	750	750	2"	0,01026	407	3500/5000
TTT 300	12" (DN 300)	500	1240	325	-	325	-	780	780	2"	0,01018	636	5000/6000

PACKAGED AIR SEPARATOR AND DIRT SEPARATOR

TTHA SERIES



Features

This product combines in a single device all functions normally performed by using an air separator and dirt separator separately in installations. It is used to separate and discharge both the sediment and dirt accumulated in the water, and the dissolved air and gases in the system.

Packaged air separators and dirt separators extend the service life of boiler systems by providing thermal and hydraulic balancing between the heat source and the installation in closed-loop heating systems.

They also balance the pressure, temperature and flow rate of heating boilers with different capacities. The position of the balancing vessel in the installation is also an ideal location for air separation and dirt separation.

Air separation can be performed very quickly thanks to the automatic air vent. Sediment and dirt accumulated inside the vessel can be easily discharged through the drain valve located at the bottom of the balancing vessel.

Applications and Advantages

Applications of packaged air separator and dirt separator units;

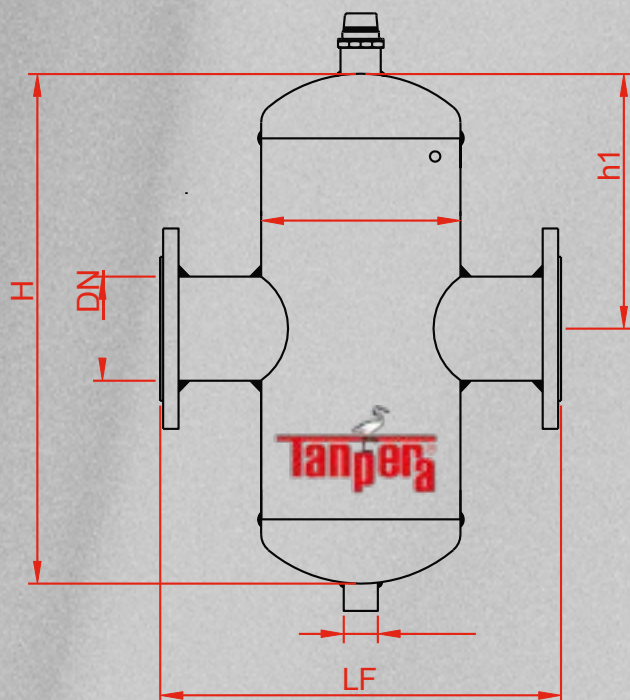
- Central heating systems
- Air-conditioning and cooling systems
- Underfloor heating systems

Advantages of Packaged Air Separator and Dirt Separator

Packaged balancing vessels minimize initial investment costs and significantly reduce operating costs through the advantages they provide to the system.

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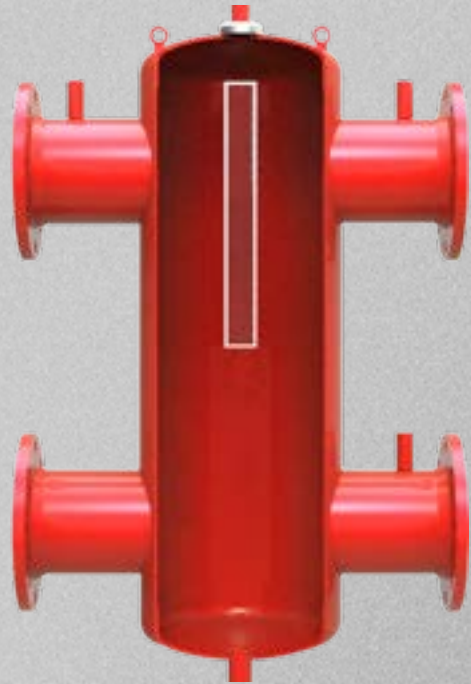
Maximum Operating Pressure: 10 bar Maximum Operating Temperature: 95 °C Body: Carbon Steel



Connection Diameter		Dimensions											
Product Code	Connection Diameter	ØD	H	h1 (Flanged)	h1 (Threaded)	h1 (Kb)	L (Threaded)	LK (Kb)	LF (Flanged)	ØA	ΔP(kPa)	Flow Rate (m³/h)	Capacity (kW)
TTHA 20	3/4" (DN 20)	88,90	230	80	80	80	190	190	240	1/2"	0,02288	21	20/20
TTHA 25	1" (DN 25)	88,90	230	80	80	80	190	190	240	1/2"	0,02188	21	20/28
TTHA 32	1 1/4" (DN 32)	88,90	230	80	80	80	190	190	240	1/2"	0,01798	21	29/42
TTHA 40	1 1/2" (DN 40)	114,3	270	105	105	105	225	225	260	1/2"	0,01478	33	43/57
TTHA 50	2" (DN 50)	114,3	350	125	125	125	280	280	280	1/2"	0,17957	42	58/107
TTHA 65	2 1/2" (DN 65)	139,7	430	140	140	140	315	315	315	1/2"	0,01685	50	108/196
TTHA 80	3" (DN 80)	168,3	470	165	165	165	365	365	365	1/2"	0,01419	72	197/260
TTHA 100	4" (DN 100)	219,1	490	175	-	175	-	420	420	1/2"	0,01049	95	261/394
TTHA 125	5" (DN 125)	273	620	215	-	215	-	475	475	1"	0,00977	105	395/899
TTHA 150	6" (DN 150)	273	640	260	-	260	-	500	500	1"	0,00962	190	900/1749
TTHA 200	8" (DN 200)	406	850	275	-	275	-	715	715	1"	0,00872	407	1750/3499
TTHA 250	10" (DN 250)	406	1000	300	-	300	-	750	750	2"	0,01026	407	3500/5000
TTHA 300	12" (DN 300)	500	1240	325	-	325	-	780	780	2"	0,01018	636	5000/6000

HYDRAULIC BALANCING TANK

TDK SERIES



Features

Hydraulic balancing tanks provide hydraulic balancing of the water circulating between primary and secondary circuits.

Depending on the temperature difference between the fluids, they provide hydraulic balancing by separating part of the water coming from these circuits when required, or by combining it when required.

Suitable connection ports in the required diameter and size are provided for installing an automatic air vent at the top of the tank and a drain valve at the bottom.

Applications and Advantages

Applications of hydraulic balancing tanks;

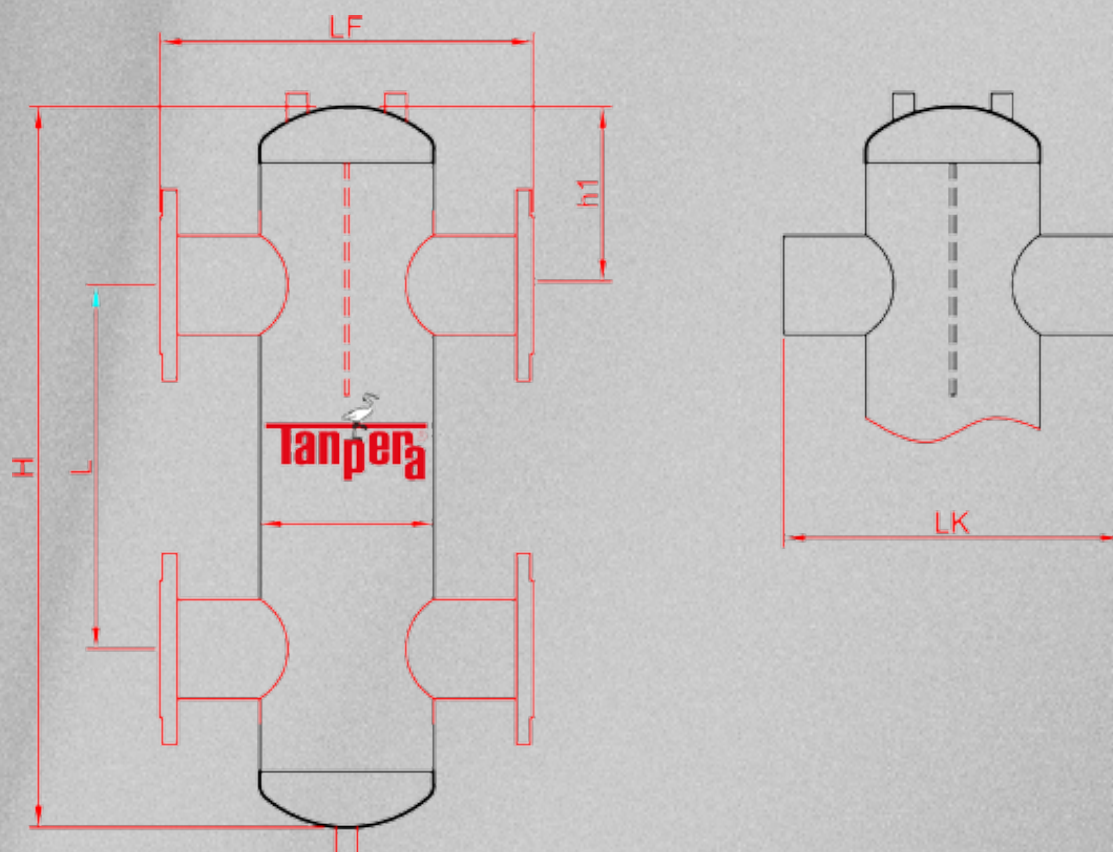
- Central heating systems
- Air-conditioning and cooling systems
- Underfloor heating systems

Tanpera THD Series hydraulic balancing tanks are used in both heating and cooling systems.

In installations with multiple generators (energy sources) and multi-pump systems with variable flow, hydraulic balancing is extremely important for healthy operation.

SIZING

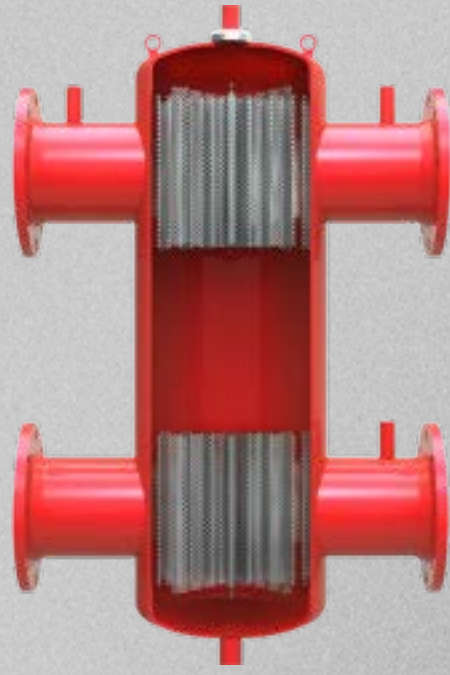
Maximum Operating Pressure: 10 bar Maximum Operating Temperature: 95 °C Body: Carbon Steel



Connection Diameter		Dimensions								
Product Code	Connection Diameter	ØD	LK	LF	H	h1	L	ΔP(kPa)	Flow Rate (m³/h)	Capacity (kW)
TDK 32	1 1/4" (DN 32)	65	150	80	350	85	180	0,02288	5	29/42
TDK 40	1 1/2" (DN 40)	80	180	80	410	95	220	0,02188	8	43/57
TDK 50	2" (DN 50)	100	180	80	510	115	280	0,01798	15	58/107
TDK 65	2 1/2" (DN 65)	125	300	105	570	120	330	0,01478	22	108/129
TDK 65	2 1/2" (DN 65)	150	315	125	660	135	390	0,17957	22	130/196
TDK 80	3" (DN 80)	200	420	140	730	140	450	0,01685	30	197/260
TDK 100	4" (DN 100)	200	420	165	860	175	510	0,01419	60	261/394
TDK 125	5" (DN 125)	250	513	175	1030	215	600	0,01049	83	395/899
TDK 150	6" (DN 150)	300	600	215	1340	260	820	0,00977	125	900/1299
TDK 150	6" (DN 150)	350	650	260	1440	270	900	0,00962	190	1300/1749
TDK 200	8" (DN 200)	400	700	710	1530	275	980	0,00872	225	1750/2499
TDK 200	8" (DN 200)	450	750	760	1620	290	1140	0,01026	280	2500/2999
TDK 200	8" (DN 200)	500	800	710	1740	300	1140	0,01018	350	3000/3499
TDK 250	10" (DN 250)	550	850	860	1890	320	1250	0,01212	400	3500/3999
TDK 250	10" (DN 250)	600	900	910	2060	350	1360	0,13890	470	4000/4999

PACKAGED HYDRAULIC BALANCING TANK

TDKP SERIES



Features

The Packaged Hydraulic Balancing Tank is a product that combines the functions of an air separator, dirt separator and hydraulic balancing tank in a single device for installation systems.

- It prevents overload on pumps or boilers and prevents damage caused by this load.
- Heat transfer is provided easily and efficiently.
- It eliminates pressure and circulation imbalances in the system.

Applications and Advantages

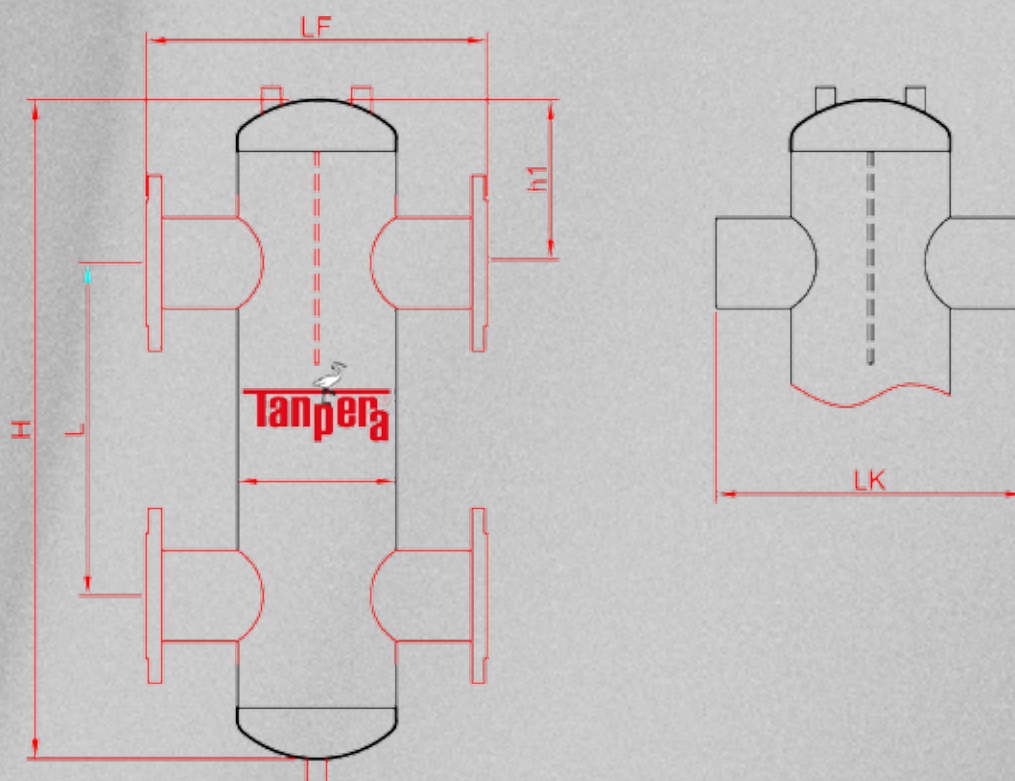
Applications of packaged hydraulic balancing tanks;

- Central heating systems
- Air-conditioning and cooling systems
- Underfloor heating systems

The packaged hydraulic balancing tank performs all the functions defined in the previous sections for air separator, dirt separator and hydraulic balancing tank devices, providing a major advantage in terms of initial investment, labor, operating costs and space.

SIZING

Maximum Operating Pressure: 10 bar Maximum Operating Temperature: 95 °C Body: Carbon Steel



Connection Diameter		Dimensions								
Product Code	Connection Diameter	ØD	LK	LF	H	h1	L	ΔP(kPa)	Flow Rate (m³/h)	Capacity (kW)
TDK 32	1 1/4" (DN 32)	65	150	80	350	85	180	0,02288	5	29/42
TDK 40	1 1/2" (DN 40)	80	180	80	410	95	220	0,02188	8	43/57
TDK 50	2" (DN 50)	100	180	80	510	115	280	0,01798	15	58/107
TDK 65	2 1/2" (DN 65)	125	300	105	570	120	330	0,01478	22	108/129
TDK 65	2 1/2" (DN 65)	150	315	125	660	135	390	0,17957	22	130/196
TDK 80	3" (DN 80)	200	420	140	730	140	450	0,01685	30	197/260
TDK 100	4" (DN 100)	200	420	165	860	175	510	0,01419	60	261/394
TDK 125	5" (DN 125)	250	513	175	1030	215	600	0,01049	83	395/899
TDK 150	6" (DN 150)	300	600	215	1340	260	820	0,00977	125	900/1299
TDK 150	6" (DN 150)	350	650	260	1440	270	900	0,00962	190	1300/1749
TDK 200	8" (DN 200)	400	700	710	1530	275	980	0,00872	225	1750/2499
TDK 200	8" (DN 200)	450	750	760	1620	290	1140	0,01026	280	2500/2999
TDK 200	8" (DN 200)	500	800	710	1740	300	1140	0,01018	350	3000/3499
TDK 250	10" (DN 250)	550	850	860	1890	320	1250	0,01212	400	3500/3999
TDK 250	10" (DN 250)	600	900	910	2060	350	1360	0,13890	470	4000/4999

AIR BOTTLE

THT SERIES



Features

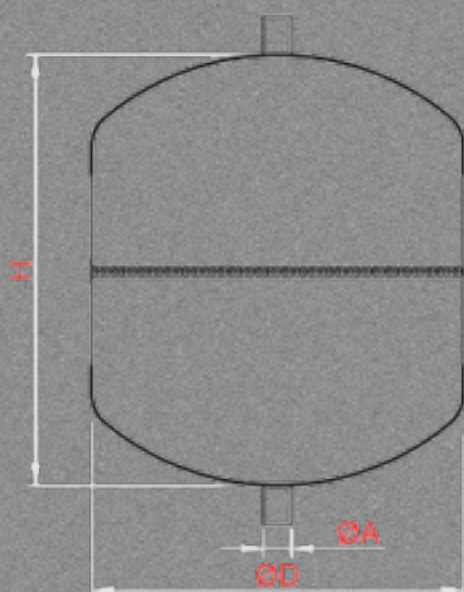
Air present in installation water and circulating through the system causes corrosion in fittings and devices, serious failures, significant efficiency losses, and noise in the installation.

Air bottles;

- Collect and discharge the air in the system.
- Continuously discharge air while the system is operating, without stopping the pump.
- Allow an upper drain valve or air vent to be installed for air evacuation during system water filling.

SIZING

Maximum Operating Pressure: 10 bar Maximum Operating Temperature: 95 °C Body: Carbon Steel



Tube Volume		Dimensions	
Liter	ØD	H	A
3	160	150	1/2"
5	219	150	1/2"
10	219	260	1/2"
15	219	400	1/2"
20	273	400	1/2"

MAGNETIC FILTER

TMF SERIES



Features

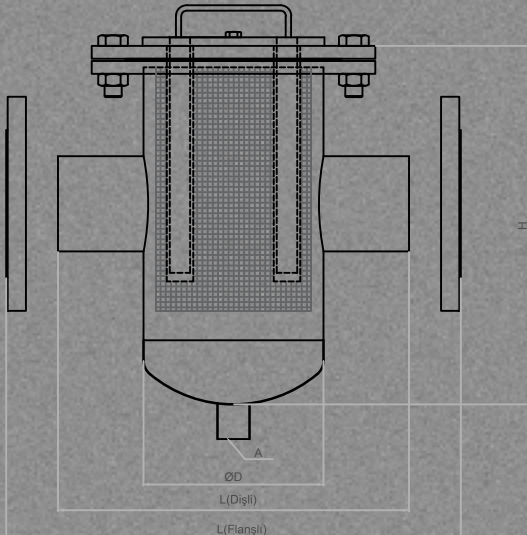
Magnetic filters are used in heating and cooling installations to separate sediment and dirt with high performance.

With their magnetic separation feature, they effectively separate metal particles circulating in the installation and allow the system to be cleaned quickly and easily.

By minimizing the damage that metal particles may cause in high-efficiency pumps with low energy consumption, they extend the service life of the pump and other connection components.

SIZING

Maximum Operating Pressure: 10 bar Maximum Operating Temperature: 95 °C Body: Carbon Steel



Product Code	Dimensions					
	Conn. Dia.	ØD	H	A	B	C
TMF DN50	DN50	114,3	290	12,7	280	160
TMF DN65	DN65	139,7	330	12,7	315	270
TMF DN80	DN80	168,3	360	12,7	365	290
TMF DN100	DN100	219,1	400	12,7	410	-
TMF DN125	DN125	273	470	25,4	475	-
TMF DN150	DN150	273	530	25,4	500	-
TMF DN200	DN200	400	625	25,4	715	-

SAND SEPARATOR

TKS SERIES



Features

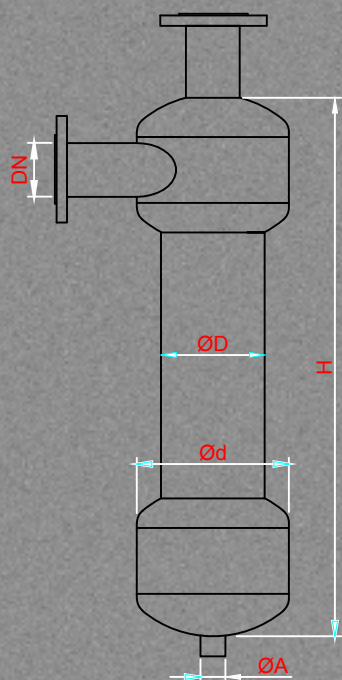
Sediment, sand, metal particles and other solid contaminants in installation water cause wear, blockages and serious performance losses in pumps, heat exchangers, valves and other equipment. This reduces system efficiency and increases maintenance costs.

Sand separators;

- Separate heavy particles circulating in the system with high efficiency and remove them from the installation.
- Protect pumps, heat exchangers and sensitive equipment against sediment-related wear and damage.
- Operate with much lower pressure loss than filters and do not negatively affect system performance.
- Continuously perform sediment separation while the system is operating.
- Allow particles accumulated at the bottom to be easily discharged from the system through the drain valve.

SIZING

Maximum Operating Pressure: 10 bar Maximum Operating Temperature: 95 °C Body: Carbon Steel



Product Code	Connection Diameter		Dimensions			
	DN	Inch	ØD	Ød	H	ØA
TKS DN20	20	3/4"	76	165	550	1/2"
TKS DN25	25	1"	76	165	550	1/2"
TKS DN32	32	1 1/4"	89	219	650	1/2"
TKS DN40	40	1 1/2"	89	219	650	1"
TKS DN50	50	2"	114	219	750	1"
TKS DN65	65	2 1/2"	114	219	850	1 1/2"
TKS DN80	80	3"	139	273	1150	1 1/2"
TKS DN100	100	4"	219	323	1300	1 1/2"
TKS DN125	125	5"	219	323	1300	1 1/2"
TKS DN150	150	6"	273	406	1800	1 1/2"

BAG FILTER

TBS SERIES



Features

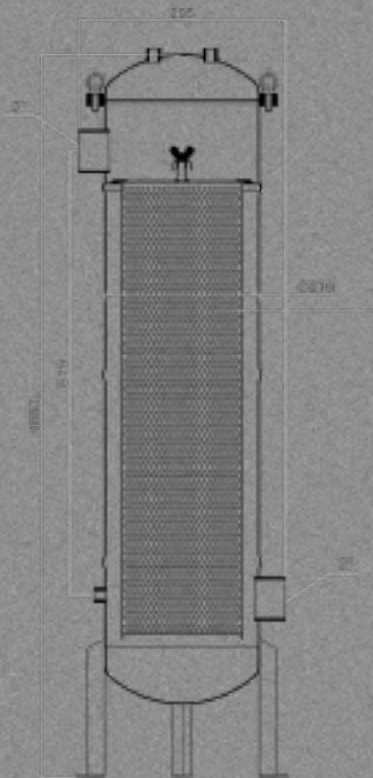
Fine particles in installation water cause blockages and efficiency losses in system equipment.

Bag filters;

- Filter fine particles with high precision.
- Protect equipment against dirt and sediment.
- Operate efficiently with low pressure loss.
- Provide easy maintenance with a replaceable filter bag.
- Adapt to the application with different micron options.

SIZING

Maximum Operating Pressure: 10 bar Maximum Operating Temperature: 95 °C Body: Carbon Steel



Dimensions				
ØD	H	A	B	C
160	150	1/2"	1/2"	1/2"
219	150	1/2"	1/2"	1/2"
219	260	1/2"	1/2"	1/2"
219	400	1/2"	1/2"	1/2"
273	400	1/2"	1/2"	1/2"



Thanks to effective heat transfer between blood coming from the heart at 40 °C and returning from the feet at 1 °C, it can remain in cold water for a long time without freezing. Using these natural principles, we design our engineering marvel heat exchangers.

Tanpera Turkey

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