

dal 1968



SCAMBIATORI - BOLLITORI - SERBATOI

# CHILLED WATER STORAGE TANKS





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# DET NORSKE VERITAS

## QUALITY MANAGEMENT SYSTEM CERTIFICATE

Certificato No. / Certificate No. **92635-2011-AQ-ITA-ACCREDIA**

Si attesta che / This certifies that

Il sistema di gestione per la qualità di / the quality management system of

**PACETTI S.r.l.**

Via Marconi, 240-242 - 44122 Ferrara (FE) - Italy

Via Due Abeti, 31 - 44122 Ferrara (FE) - Italy

È conforme ai requisiti della norma per i sistemi di gestione per la qualità  
Conforms to the quality management systems standard

**UNI EN ISO 9001:2008 (ISO 9001:2008)**

Questa certificazione è valida per il seguente campo applicativo:

This certificate is valid for the following products or services:

(Ulteriori chiarimenti riguardanti lo scopo e l'applicabilità dei requisiti della normativa si possono ottenere consultando l'organizzazione certificata)  
(Further clarifications regarding the scope and the applicability of the requirements of the standard(s) may be obtained by consulting the certified organization)

**Progettazione, produzione e commercializzazione di apparecchiature termotecniche  
(scambiatori a piastre, bollitori, serbatoi)**

Design, production and trade of thermo-technical equipments (plate exchangers, boilers, tanks)

Data di scadenza

Expiry Date

**2014-02-17**

per l'Organismo di Certificazione  
for the Accredited Unit

**DET NORSKE VERITAS ITALIA S.R.L.**

Luogo e data  
Place and date

**Agrate Brianza, (MB) 2011-02-17**



SGQ N°003 A PRD N°003 B  
SGA N°003 D SSI N°002 C  
SCR N°004 F FSM N°001 I  
Membro di M.A. EA per gli schemi di accreditamento SGQ,  
SGA, PRD, PMS, ISP e LAB, di M.A. IAF per gli schemi di  
accreditamento SGQ, SGA, SSI, FSM e PRD  
e di MRA ILAC per gli schemi di accreditamento LAB

**Settore EA : 17 - 18**

**Federico Mattara**  
Lead Auditor

**Vittore Marangon**  
Management Representative

La validità del presente certificato è subordinata a sorveglianza periodica (ogni 6, 9 o 12 mesi) e al riesame completo del sistema con periodicità triennale

The validity of this certificate is subject to periodical audits (every 6, 9 or 12 months) and the complete re-assessment of the system every three years

Le aziende in possesso di un certificato valido sono presenti nella banca dati sul sito [www.dnv.it](http://www.dnv.it) e sul sito Accredia ([www.accredia.it](http://www.accredia.it)) - All the companies with a valid certificate are online at the following addresses: [www.dnv.it](http://www.dnv.it) and [www.accredia.it](http://www.accredia.it)



## Chilled water storage tanks Technical characteristics



100 ÷ 1000 lt

Hard foam polyurethane insulation 30mm  
 Coloured PVC covering



100 ÷ 1000 lt

Hard foam polyurethane insulation 30 mm  
 Embossed aluminium covering



1500 ÷ 5000 lt

Closed-cell elastomer foam 20mm  
 Coloured PVC covering

### Description

“Pacetti” chilled water storage tanks are equipped with threaded or flanged connections and insulation. It is possible to provide them with flow dividers or perforated plate dividers inside, in order to avoid preferential flow paths. Available in carbon or galvanized steel, or in 316L stainless steel. The carbon steel tanks are used in case of indoor installation, therefore it is not required any kind of coating against corrosion. The galvanized steel tanks are used in case of outdoor installation, when it is necessary to ensure corrosion and weather protection. All models can be manufactured in vertical or horizontal arrangement.

### Protection coating against corrosion

#### HOT DIP GALVANIZING

This kind of coating is performed by immersion of the tank in a molten zinc bath at 450°C according to UNI EN ISO 1461.

### Thermal insulation against condensation

#### HARD FOAM POLYURETHANE

##### Hard foam polyurethane injected

Made of hard foam polyurethane 30mm thick, density of 40 to 42 kg/m<sup>3</sup>, average conductivity of 0.024 W/mK. CFC and HCFC free.

##### Closed-cell elastomer foam

Made of closed-cell elastomer foam sheets 20 mm thick, density of 30 kg/m<sup>3</sup>, average conductivity of 0.034 W/mK. CFC and HCFC free.

Insulation	Tank capacity	Density	Thermal conductivity coefficient
Hard foam polyurethane injected 30 mm	100 ÷ 1000 l	40÷42 kg/m <sup>3</sup>	$\lambda = 0,024$ W/mK
Closed-cell elastomer foam 20 mm	1500 ÷ 5000 l	30 kg/m <sup>3</sup>	$\lambda = 0,034$ W/mK

External covering can be made of coloured PVC with zipper closing or of embossed aluminium 0.4mm thick.



## Operation

The chilled water storage tanks are used in air conditioning and cooling systems when the water content of the plant is reduced. Installed between user and chillers, these tanks can limit frequent compressor starts and allow a regular functioning of the plant at constant temperature, avoiding timer intervention.

## Models

“Pacetti” chilled water storage tanks are available in different models:

- VT-G → Carbon steel tanks with insulation and PVC or aluminium covering
- VT-Z → Galvanized steel tanks with insulation and PVC or aluminium covering
- VTS → Carbon steel tanks with perforated plate divider inside, insulation and PVC or aluminium covering
- VTP → Carbon steel tanks with flow dividers inside, insulation and PVC or aluminium covering
- VTX → 316L stainless steel tanks with insulation and PVC or aluminium covering
- VTCF → Carbon steel tanks with double insulation for hot and cold water

## Conformity

“Pacetti” chilled water storage tanks are made with automatic welding processes.

All manufacturing processes are guaranteed by the Quality Management System of the Company, certified to ISO 9001:2008.

The products, in all versions, are subjected to hydraulic tests at a pressure equal to 1.5 times the maximum working pressure.

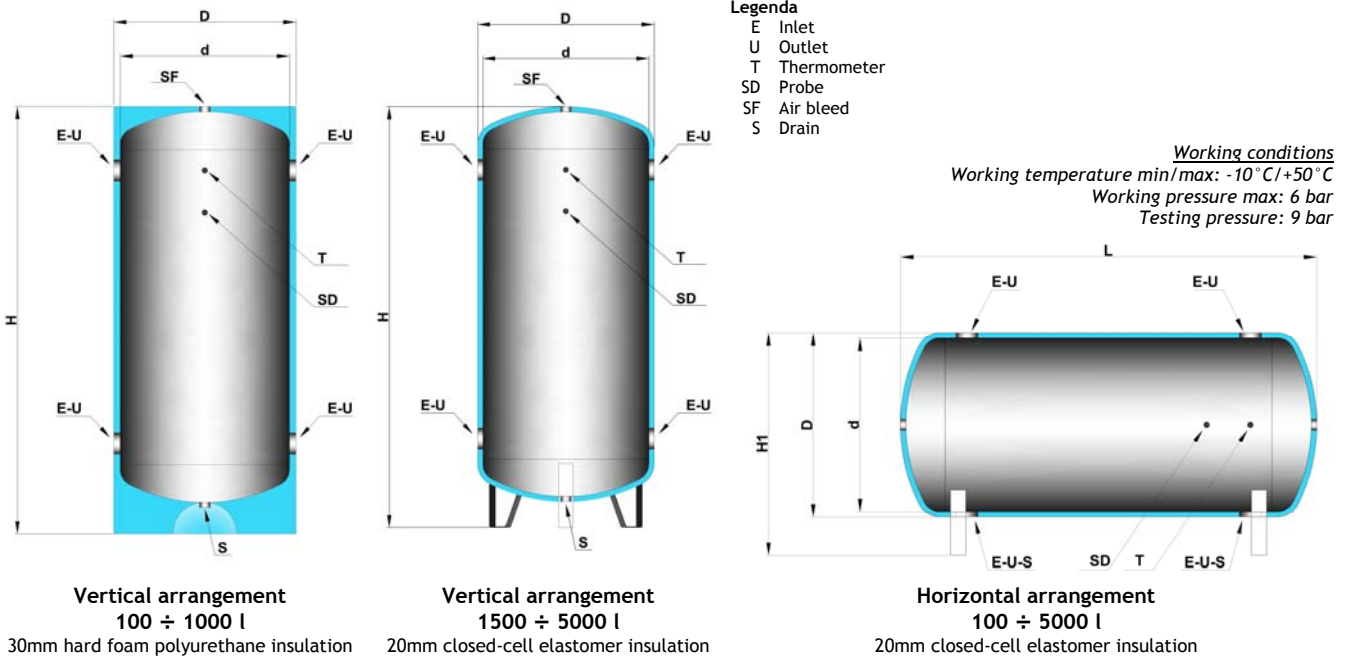
“VT” chilled water storage tanks are designed, manufactured and tested according to an accurate engineering practice (Law 46 of 05/03/1990 - material constructed in a workmanlike manner) and comply with the following standards:

- **European Pressure Equipment Directive 97/23/CE - Par.3.3** (pressure vessels) for which the tanks enclosed in this catalogue must be considered exempt from CE mark.



## CARBON STEEL chilled water storage tanks VT-G

Characteristics	Standard	Optional
<b>Tank</b>		
Capacity	100 ÷ 5000 l	> 5000 l
Arrangement	Vertical	Horizontal
Material	Carbon steel	
Inside protection coating	No	
Outside protection coating	No	Anti-rust paint
Connections type	Threaded	Flanged
Insulation for VERTICAL arrangement	<ul style="list-style-type: none"> <li>Hard foam polyurethane injected 30mm thick (100 ÷ 1000 l)</li> <li>Closed-cell elastomer 20mm thick (1500 ÷ 5000 l)</li> </ul>	Closed-cell elastomer foam 40mm thick (100 ÷ 5000 l)
Insulation for HORIZONTAL arrangement	<ul style="list-style-type: none"> <li>Closed-cell elastomer foam 20mm thick (100 ÷ 5000 l)</li> </ul>	
Covering	<ul style="list-style-type: none"> <li>Coloured PVC with zipper closing</li> <li>Embossed aluminium 0.4mm thick</li> </ul>	
<b>Compliance</b>		
Rules	European Pressure Equipment Directive 97/23/CE - Par. 3.3 (pressure vessels)	



CAPACITY	WEIGHT <sup>(*)</sup>	DIMENSIONS					CONNECTIONS Ø		
		D	d	H	L	H1	E-U	T / SD	SF / S
litres	kg	mm	mm	mm	mm	mm	inches	inches	inches
100	25	460	400	1000	855	580	1 1/4"	1/2"	1 1/4"
200	40	510	450	1400	1240	630	2"	1/2"	1 1/4"
300	50	610	550	1420	1260	730	2 1/2"	1/2"	1 1/4"
500	70	710	650	1660	1520	830	3"	1/2"	1 1/4"
800	90	860	800	1820	1645	980	3"	1/2"	1 1/4"
1000	105	860	800	2070	1895	980	3"	1/2"	1 1/4"
1500	200	1000	950	2450	2295	1180	3"	1/2"	1 1/4"
2000	240	1150	1100	2500	2325	1330	3"	1/2"	1 1/4"
2500	280	1300	1250	2600	2435	1480	3"	1/2"	1 1/4"
3000	300	1300	1250	2800	2635	1480	4"	1/2"	1 1/4"
4000	450	1450	1400	2880	2645	1680	4"	1/2"	1 1/4"
5000	530	1650	1600	2960	2765	1880	4"	1/2"	1 1/4"

<sup>(\*)</sup> Indicative value, valid only for transportation and handling purposes



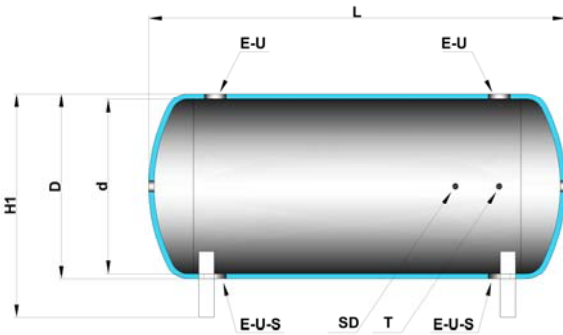
**GALVANIZED STEEL chilled water storage tanks**  
**VT-Z**



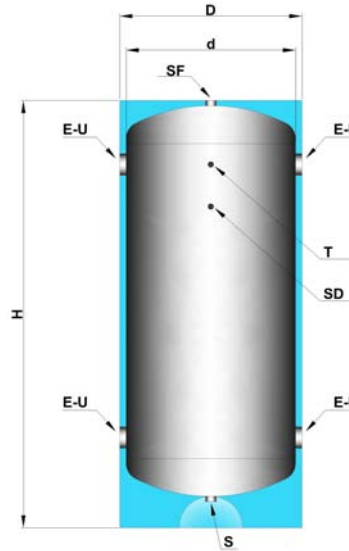
Characteristics	Standard	Optional
<b>Tank</b>		
Capacity	100 ÷ 5000 l	> 5000 l
Arrangement	Vertical	Horizontal
Material	Carbon steel	
Inside protection coating	Hot dip galvanizing	
Outside protection coating	Hot dip galvanizing	
Connections type	Threaded	Flanged
Insulation for VERTICAL arrangement	<ul style="list-style-type: none"> <li>Hard foam polyurethane injected 30mm thick (100 ÷ 1000 l)</li> <li>Closed-cell elastomer 20mm thick (1500 ÷ 5000 l)</li> </ul>	Closed-cell elastomer foam 40mm thick (100 ÷ 5000 l)
Insulation for HORIZONTAL arrangement	<ul style="list-style-type: none"> <li>Closed-cell elastomer foam 20mm thick (100 ÷ 5000 l)</li> </ul>	
Covering	<ul style="list-style-type: none"> <li>Coloured PVC with zipper closing</li> <li>Embossed aluminium 0.4mm thick</li> </ul>	
<b>Compliance</b>		
Rules	European Pressure Equipment Directive 97/23/CE - Par. 3.3 (pressure vessels)	

- Legenda**  
 E Inlet  
 U Outlet  
 T Thermometer  
 SD Probe  
 SF Air bleed  
 S Drain

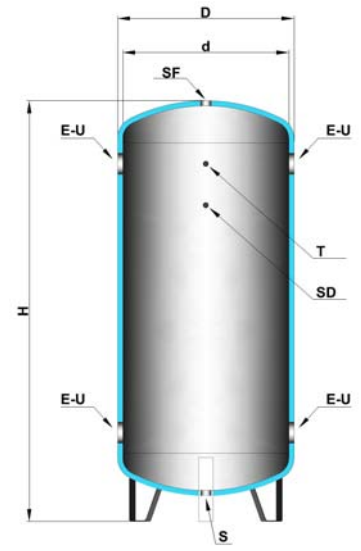
**Working conditions**  
 Working temperature min/max: -10°C/+50°C  
 Working pressure max: 6 bar  
 Testing pressure: 9 bar



**Horizontal arrangement**  
 100 ÷ 5000 l  
 20mm closed-cell elastomer insulation



**Vertical arrangement**  
 100 ÷ 1000 l  
 30mm hard foam polyurethane insulation



**Vertical arrangement**  
 1500 ÷ 5000 l  
 20mm closed-cell elastomer insulation

CAPACITY	WEIGHT (*)	DIMENSIONS					CONNECTIONS Ø		
		D	d	H	L	H1	E-U	T / SD	SF / S
litres	kg	mm	mm	mm	mm	mm	inches	inches	inches
100	27	460	400	1000	855	580	1 1/4"	1/2"	1 1/4"
200	44	510	450	1400	1240	630	2"	1/2"	1 1/4"
300	55	610	550	1420	1260	730	2 1/2"	1/2"	1 1/4"
500	77	710	650	1660	1520	830	3"	1/2"	1 1/4"
800	100	860	800	1820	1645	980	3"	1/2"	1 1/4"
1000	118	860	800	2070	1895	980	3"	1/2"	1 1/4"
1500	215	1000	950	2450	2295	1180	3"	1/2"	1 1/4"
2000	260	1150	1100	2500	2325	1330	3"	1/2"	1 1/4"
2500	300	1300	1250	2600	2435	1480	3"	1/2"	1 1/4"
3000	325	1300	1250	2800	2635	1480	4"	1/2"	1 1/4"
4000	495	1450	1400	2880	2645	1680	4"	1/2"	1 1/4"
5000	590	1650	1600	2960	2765	1880	4"	1/2"	1 1/4"

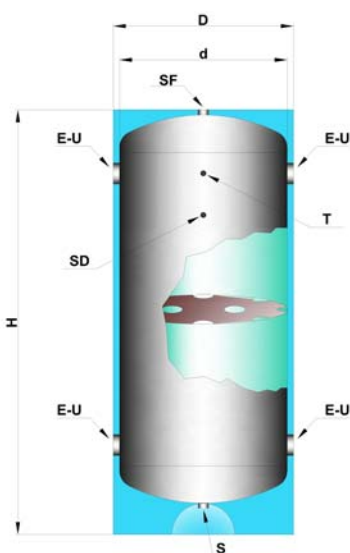
(\*) Indicative value, valid only for transportation and handling purposes



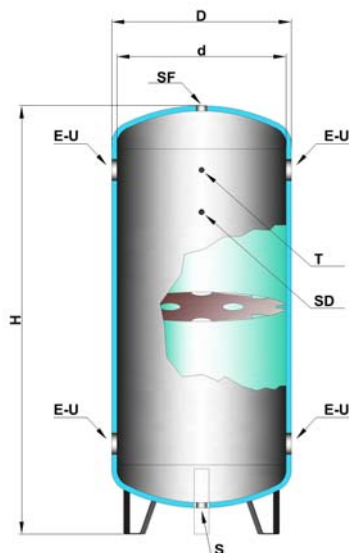


## CARBON STEEL chilled water storage tanks with perforated PLATE DIVIDER inside **VTS**

Characteristics	Standard	Optional
<b>Tank</b>		
Capacity	300 ÷ 5000 l	> 5000 l
Arrangement	Vertical	
Material	Carbon steel	
Perforated plate divider	Carbon steel	
Inside protection coating	No	
Outside protection coating	No	Anti-rust paint
Connections type	Threaded	Flanged
Insulation	<ul style="list-style-type: none"> <li>Hard foam polyurethane injected 30mm thick (100 ÷ 1000 l)</li> <li>Closed-cell elastomer 20mm thick (1500 ÷ 5000 l)</li> </ul>	Closed-cell elastomer foam 40mm thick (100 ÷ 5000 l)
Covering	<ul style="list-style-type: none"> <li>Coloured PVC with zipper closing</li> <li>Embossed aluminium 0.4mm thick</li> </ul>	
<b>Compliance</b>		
Rules	European Pressure Equipment Directive 97/23/CE - Par. 3.3 (pressure vessels)	



**Vertical arrangement**  
 300 ÷ 1000 l  
 30mm hard foam polyurethane insulation



**Vertical arrangement**  
 1500 ÷ 5000 l  
 20mm closed-cell elastomer insulation

- Legenda**  
 E Inlet  
 U Outlet  
 T Thermometer  
 SD Probe  
 SF Air bleed  
 S Drain

*Working conditions*  
 Working temperature min/max: -10°C/+50°C  
 Working pressure max.: 6 bar  
 Testing pressure: 9 bar

CAPACITY	WEIGHT <sup>(*)</sup>	DIMENSIONS			Ø ATTACCHI		
		D	d	H	E-U	T / SD	SF / S
litres	kg	mm	mm	mm	inches	inches	inches
300	50	610	550	1420	2 1/2"	1/2"	1 1/4"
500	70	710	650	1660	3"	1/2"	1 1/4"
800	90	860	800	1820	3"	1/2"	1 1/4"
1000	105	860	800	2070	3"	1/2"	1 1/4"
1500	200	1000	950	2450	3"	1/2"	1 1/4"
2000	240	1150	1100	2500	3"	1/2"	1 1/4"
2500	280	1300	1250	2600	3"	1/2"	1 1/4"
3000	300	1300	1250	2800	4"	1/2"	1 1/4"
4000	450	1450	1400	2880	4"	1/2"	1 1/4"
5000	530	1650	1600	2960	4"	1/2"	1 1/4"

<sup>(\*)</sup> Indicative value, valid only for transportation and handling purposes

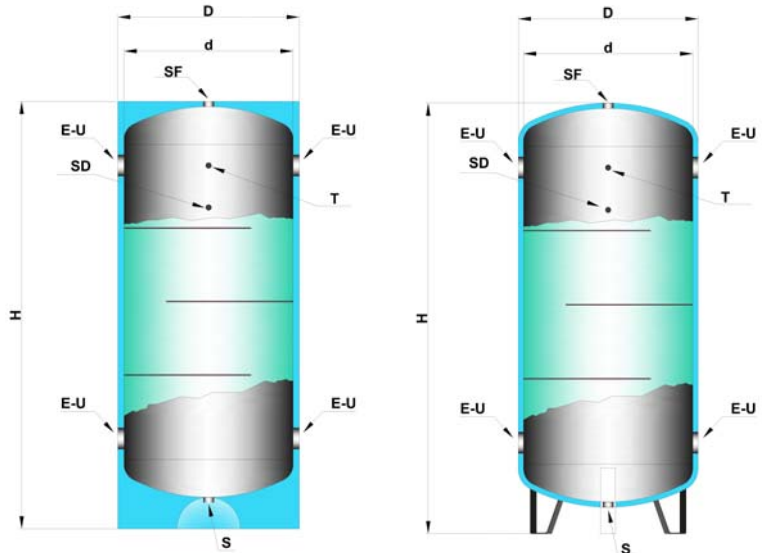


**CARBON STEEL chilled water storage tanks  
 with FLOW DIVIDERS inside  
 VTP**

Characteristics	Standard	Optional
<b>Tank</b>		
Capacity	300 ÷ 5000 l	> 5000 l
Arrangement	Vertical	
Material	Carbon steel	
Flow dividers (no. 3)	Carbon steel	
Inside protection coating	No	
Outside protection coating	No	
Connections	Threaded	Flanged
Insulation	<ul style="list-style-type: none"> <li>Hard foam polyurethane injected 30mm thick (100 ÷ 1000 l)</li> <li>Closed-cell elastomer 20mm thick (1500 ÷ 5000 l)</li> </ul>	Closed-cell elastomer foam 40mm thick (100 ÷ 5000 l)
Covering	<ul style="list-style-type: none"> <li>Coloured PVC with zipper closing</li> <li>Embossed aluminium 0.4mm thick</li> </ul>	
<b>Compliance</b>		
Rules	European Pressure Equipment Directive 97/23/CE - Par. 3.3 (pressure vessels)	

**Legenda**

- E Inlet
- U Outlet
- T Thermometer
- SD Probe
- SF Air bleed
- S Drain



**Vertical arrangement  
 300 ÷ 1000 lt**  
 30mm hard foam polyurethane insulation

**Vertical arrangement  
 1500 ÷ 5000 lt**  
 20mm closed-cell elastomer insulation

Working conditions

Working temperature min/max: -10 °C/+50 °C

Working pressure max: 6 bar

Testing pressure: 9 bar

CAPACITY	WEIGHT <sup>(*)</sup>	DIMENSIONS			Ø CONNECTIONS		
		D	d	H	E-U	T / SD	SF / S
litres	kg	mm	mm	mm	inches	inches	inches
300	50	610	550	1420	2 1/2"	1/2"	1 1/4"
500	70	710	650	1660	3"	1/2"	1 1/4"
800	90	860	800	1820	3"	1/2"	1 1/4"
1000	105	860	800	2070	3"	1/2"	1 1/4"
1500	200	1000	950	2450	3"	1/2"	1 1/4"
2000	240	1150	1100	2500	3"	1/2"	1 1/4"
2500	280	1300	1250	2600	3"	1/2"	1 1/4"
3000	300	1300	1250	2800	4"	1/2"	1 1/4"
4000	450	1450	1400	2880	4"	1/2"	1 1/4"
5000	530	1650	1600	2960	4"	1/2"	1 1/4"

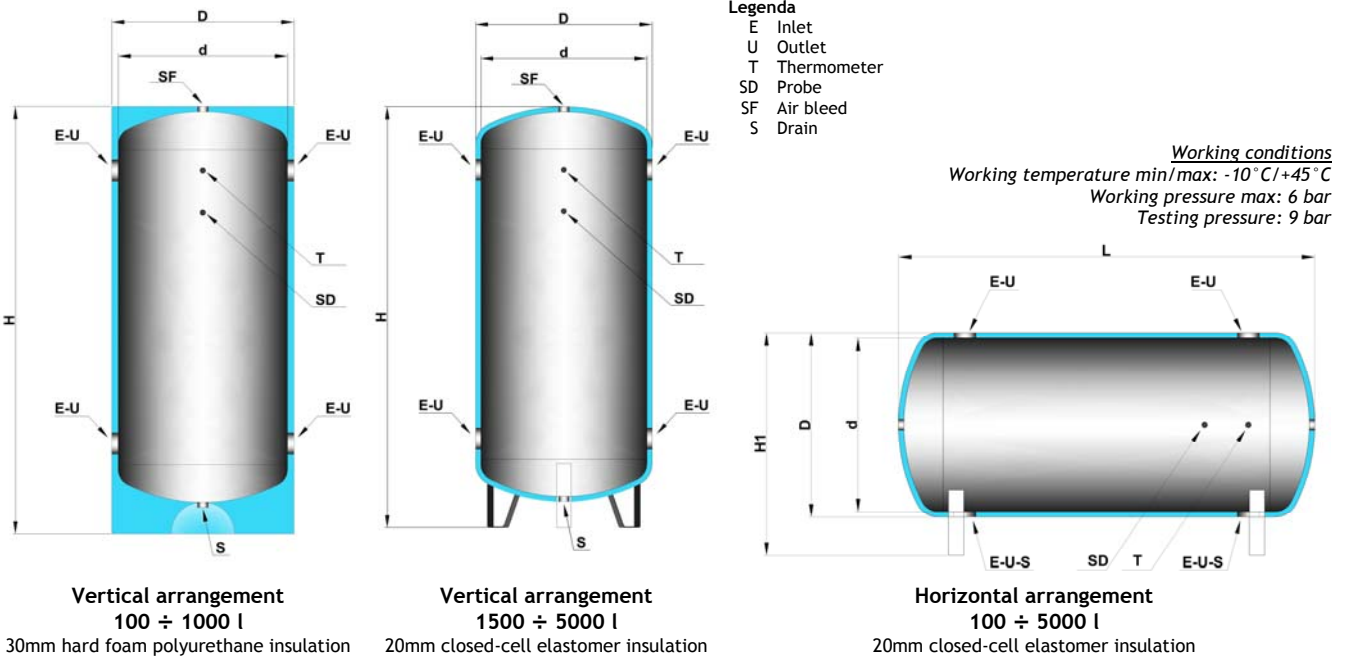
<sup>(\*)</sup> Indicative value, valid only for transportation and handling purposes



## 316L STAINLESS STEEL chilled water storage tanks

**VTX**

Characteristics	Standard	Optional
<b>Tank</b>		
Capacity	100 ÷ 5000 l	> 5000 l
Arrangement	Vertical	Horizontal
Material	316L stainless steel	
Inside protection coating	No	
Outside protection coating	No	
Connections type	Threaded	Flanged
Insulation for VERTICAL arrangement	<ul style="list-style-type: none"> <li>Hard foam polyurethane injected 30mm thick (100 ÷ 1000 l)</li> <li>Closed-cell elastomer 20mm thick (1500 ÷ 5000 l)</li> </ul>	Closed-cell elastomer foam 40mm thick (100 ÷ 5000 l)
Insulation for HORIZONTAL arrangement	<ul style="list-style-type: none"> <li>Closed-cell elastomer foam 20mm thick (100 ÷ 5000 l)</li> </ul>	
Covering	<ul style="list-style-type: none"> <li>Coloured PVC with zipper closing</li> <li>Embossed aluminium 0.4mm thick</li> </ul>	
<b>Compliance</b>		
Rules	European Pressure Equipment Directive 97/23/CE - Par. 3.3 (pressure vessels)	



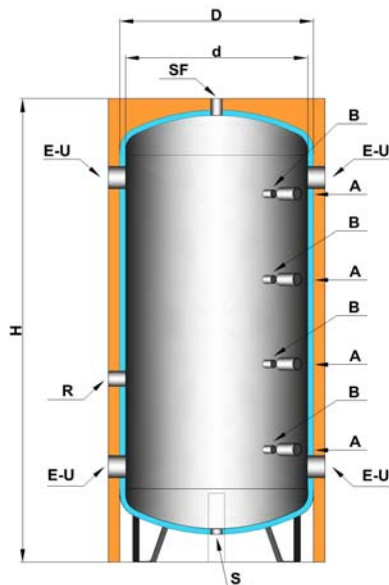
CAPACITY	WEIGHT <sup>(*)</sup>	DIMENSIONS					CONNECTIONS Ø		
		D	d	H	L	H1	E-U	T / SD	SF / S
litres	kg	mm	mm	mm	mm	mm	inches	inches	inches
100	35	460	400	970	900	580	1 1/4"	1/2"	1 1/4"
200	45	510	450	1395	1325	630	2"	1/2"	1 1/4"
300	55	610	550	1440	1370	730	2 1/2"	1/2"	1 1/4"
500	95	660	600	1880	1810	830	3"	1/2"	1 1/4"
800	120	860	800	1870	1770	1080	3"	1/2"	1 1/4"
1000	140	860	800	2120	2020	1080	3"	1/2"	1 1/4"
1500	220	990	950	2385	2285	1180	3"	1/2"	1 1/4"
2000	260	1140	1100	2430	2330	1330	3"	1/2"	1 1/4"
2500	320	1140	1100	2730	2610	1480	3"	1/2"	1 1/4"
3000	440	1290	1250	2750	2630	1480	4"	1/2"	1 1/4"
4000	520	1440	1400	2810	2690	1680	4"	1/2"	1 1/4"
5000	605	1640	1600	2840	2720	1880	4"	1/2"	1 1/4"

<sup>(\*)</sup> Indicative value, valid only for transportation and handling purposes



## CARBON STEEL storage tanks for cold and hot water accumulation VTCF

Characteristics	Standard	Optional
<b>Tank</b>		
Capacity	100 ÷ 2000 l	> 2000 l
Arrangement	Vertical	
Material	Carbon steel	
Inside protection coating	No	
Outside protection coating	No	Anti-rust paint
Connections type	Threaded	Flanged
Double insulation	Closed-cell elastomer 20mm thick (to prevent condensate formations) + Soft polyurethane 50mm thick (to ensure thermal insulation)	
Covering	Coloured PVC with zipper closing	
<b>Compliance</b>		
Rules	European Pressure Equipment Directive 97/23/CE - Par. 3.3 (pressure vessels)	

**Legenda**

- E-U Inlet - Outlet
- A Connections
- B Connections
- R Immersion electric heater
- SF Air bleed
- S Drain

**Vertical arrangement**  
100 ÷ 2000 l  
Double insulation

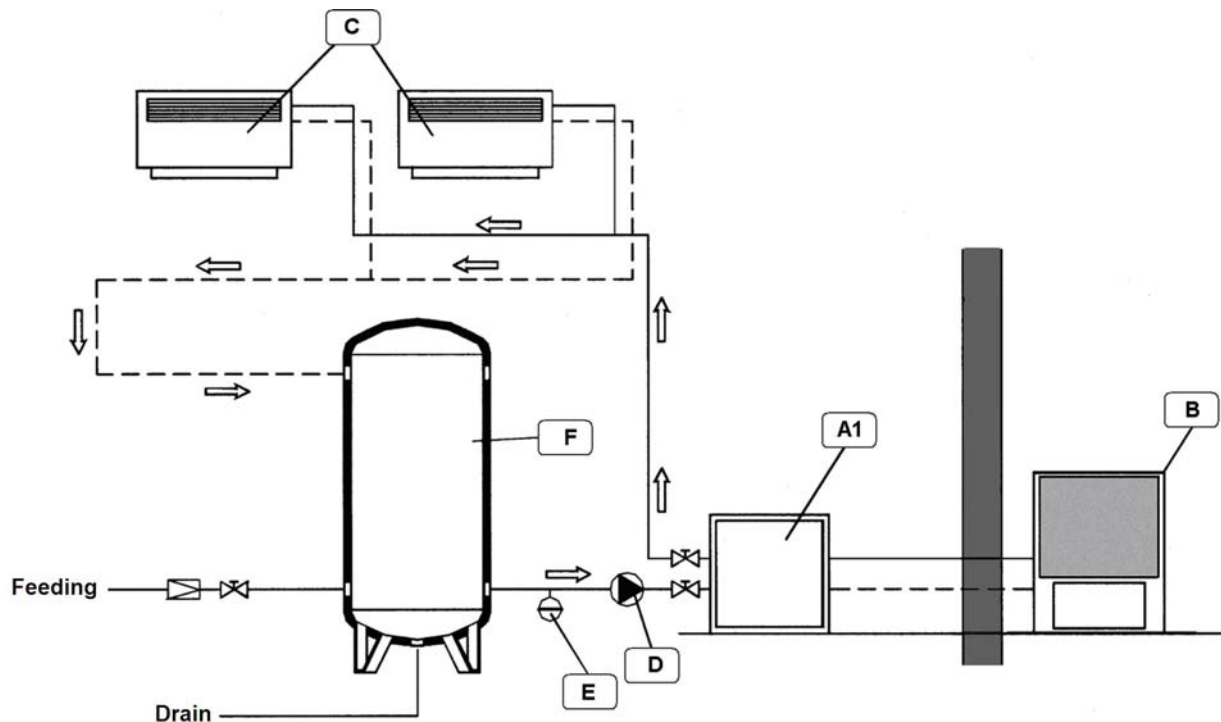
*Working conditions*  
 Working temperature min/max: -10 °C / +90 °C  
 Working pressure max: 6 bar  
 Testing pressure: 9 bar

CAPACITY	WEIGHT <sup>(*)</sup>	DIMENSIONS			CONNECTIONS Ø				
		D	d	H	E-U	R	A	B	SF / S
litres	kg	mm	mm	mm	inches	inches	inches	inches	inches
100	30	540	400	1050	1 1/4"	2"	1 1/2"	1/2"	1 1/4"
200	45	590	450	1425	2"	2"	1 1/2"	1/2"	1 1/4"
300	55	690	550	1450	2 1/2"	2"	1 1/2"	1/2"	1 1/4"
500	77	790	650	1670	3"	2"	1 1/2"	1/2"	1 1/4"
800	95	940	800	1820	3"	2"	1 1/2"	1/2"	1 1/4"
1000	110	940	800	2090	3"	2"	1 1/2"	1/2"	1 1/4"
1500	210	1090	950	2450	3"	2"	2"	1/2"	1 1/4"
2000	250	1240	1100	2500	3"	2"	2"	1/2"	1 1/4"

<sup>(\*)</sup> Indicative value, valid only for transportation and handling purposes

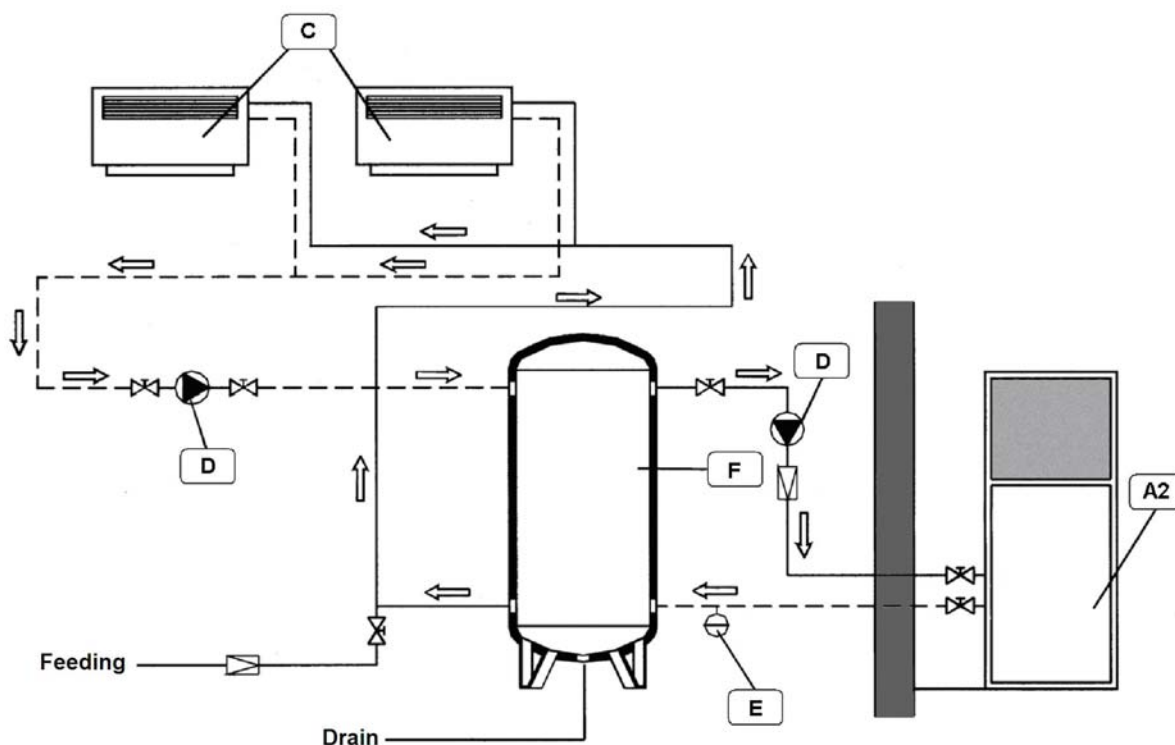
## Chilled water storage tanks Installation examples

Closed circuit plant with chilled water storage tank installed on return



- Legenda**
- A1 Heat pump / air conditioner (split system)
  - A2 Heat pump/air conditioner (monoblock)
  - B External unit
  - C Fan coil units
  - D Pump
  - E Expansion vessel
  - F Storage tank

Installation in a double circuit plant





## Hydronic kits POLARIS



### Use

- Polaris units are water storage units with inertial system accumulation tank, designed to allow significant saving in time required to set up water installations. Supplied complete with all hydraulic and electrical components necessary for correct operation of the water circuit for distribution of chilled water, these units can be installed in conjunction with all models of water chillers. All sizes can be equipped with a circulation pump chosen from the available range. The fully factory assembling and individually testing assure the quality standard in conformity with current rules.
- Polaris units, manufactured with components suitable for hot water, can be also used with heat pumps

### Technical characteristics

Polaris unit, supplied assembled and insulated, is composed of:

- **Tank:** made of steel, it is provided with a polyurethane foam insulation injected directly onto the tank and protected by an embossed aluminium covering. It increases the volume of water inside the hydraulic circuit, improving the work of the compressor and its durability as a consequence of reduced starts.
- **Pump:** centrifugal type pump with stainless steel impellers, for the water distribution to the user by suction from the storage tank. Some models allow the mounting in parallel of two pumps.
- **Water filter:** to filter the pump suction water, retaining any impurities found in the circuit. The strainer can be extracted for routine cleaning.
- **Shut-off ball valve:** shuts-off the pump and eventual primary circuit reducing repair times without draining the installation.
- **Unidirectional valve:** it allows the water flow in the delivery direction only.
- **Insulation:** a closed cell polyurethane foam is provided both to prevent condensate formations during the production of chilled water and to reduce heat losses during operation with hot water.
- **Feeder group:** complete with gauge and shut-off valve, it provides automatic filling of the circuit both during start-up and normal operation.
- **Safety valve:** set at 6 bar, it allows to discharge into a drain circuit and it protects the unit in case of overpressure.
- **Air vent valve:** positioned on the top of the tank and provided with a shut-off cock, it is useful to vent any air trapped inside the unit.
- **Drain coupling:** located at the lowest point in the tank, it allows to completely drain the installation.
- **Switch board:** supplied with a main switch, it contains all the components for the pump command and protection, and the terminal block to hook-up the machine. It is supplied already connected to the pumps.
- **External box:** made of galvanized steel, it is finished with an epoxy powder coating to provide optimum resistance to weathering.
- **Expansion vessel:** diaphragm tank with nitrogen charge



Hydronic kits  
**POLARIS**

**Models**

POLARIS units are available in two versions, from 75 to 2500 litres:  
 - with single pump  
 - with double pump

All sizes can be equipped with a circulator pump chosen from the available range.

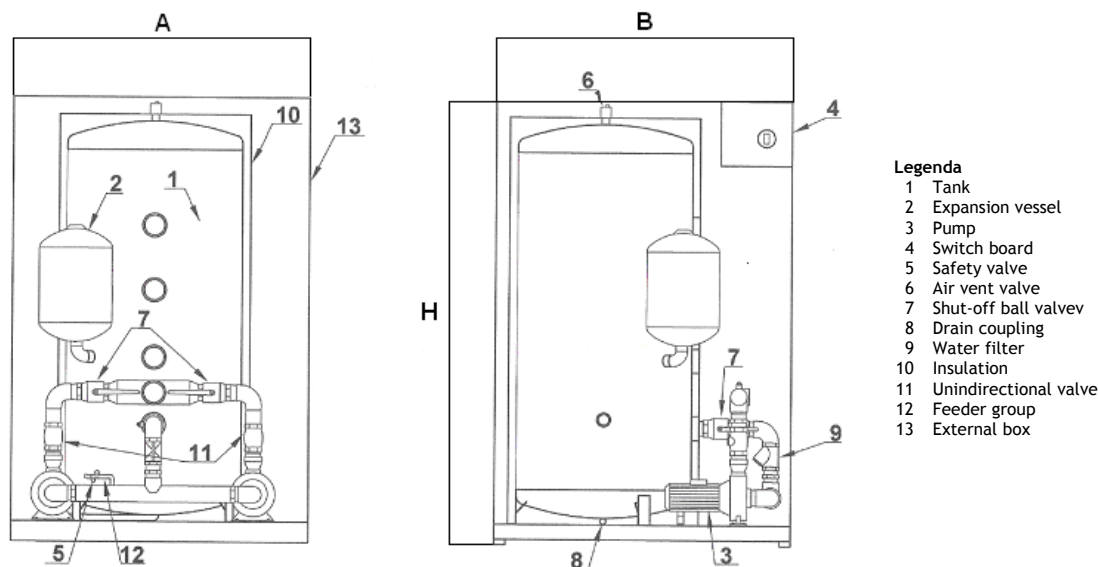
Some models allow the additional installation of a circulator or a second pump to have a primary circuit for the chiller and a secondary one for the users.

All the hydraulic unit is contained into a galvanized steel box finished with an epoxy powder coating (RAL9002) to provide optimum resistance to weathering.

An inspection panel is foreseen in each box to allow easy operation in case of routine maintenance and repair.

A wide range of pumps having water flow from 6 m<sup>3</sup>/h to 150 m<sup>3</sup>/h is available.

Different sizes or solutions can be realized on customer's needs.



CAPACITY	TANK ARRANGEMENT	WEIGHT (*)	DIMENSIONS			EXPANSION VESSEL CAPACITY	CONNECTIONS Ø
			A	B	H		
litres		kg	mm	mm	mm	litres	inches
75	vertical	115	700	1000	1000	8	1"¼
150	horizontal	125	700	1000	1000	12	1"½
300	vertical	215	1100	1100	1650	18	2"
500	vertical	225	1100	1100	1650	24	2"½
750	vertical	265	1000	1550	1980	2 x 18	3"
1000	vertical	335	1000	2200	2050	2 x 18	3"
1500	horizontal	400	1000	2200	2050	2 x 24	3"¼"
2000	horizontal	600	2000	2200	2050	3 x 24	3"¼"
2500	horizontal	700	2000	2200	2050	3 x 24	3"¼"

Notes: Drawings and pictures are representative. Technical data and specifications are subject to change without notice. More information on [www.pacetti.it](http://www.pacetti.it)



## Hydronic kits POLARIS

### Pumps - Table of choice

Code	Power kw	Point 1*		Point 2*		Point 3*		Point 4*		Point 5*		Point 6*		Point 7*		Point 8*	
		Flow m <sup>3</sup> /h	Head meters	Flow m <sup>3</sup> /h	Head meters	Flow m <sup>3</sup> /h	Head meters	Flow m <sup>3</sup> /h	Head meters	Flow m <sup>3</sup> /h	Head meters	Flow m <sup>3</sup> /h	Head meters	Flow m <sup>3</sup> /h	Head meters	Flow m <sup>3</sup> /h	Head meters
L01	0,37	6	6,8	9	5,8	12	4,9	15	4	18	3						
L02	0,55	6	9,8	9	8,8	12	7,8	15	6,8	18	5,7						
L03	0,75	6	11,4	9	10,4	12	9,4	15	8,3	18	7,2						
L04	0,9	6	12,8	9	11,7	12	10,6	15	9,6	18	8,4	24	8				
L05	1,1	6	14,2	9	13	12	11,9	15	10,8	18	9,6	24	7,1				
L06	1,5	6	17,2	9	16	12	15	15	14,1	18	12,9	24	5,8	30	7,5		
L07	1,1	8,4	16	9,6	15,5	12	15,5	15	14,5	18	13,5	21	11,5	24	10	-	-
L08	1,5	8,4	19,5	9,6	19,5	12	19	15	18	18	17	21	15,5	24	14	27	11,5
L09	1,85	8,4	23,5	9,6	23,5	12	23	15	22,5	18	21	21	19,5	24	18	27	15,5
L10	1,5	12	13,4	15	12,7	18	12	24	10,5	30	8,8	36	7	42	5		
L11	2,2	12	16,6	15	15,8	18	15	24	13,4	30	11,7	36	9,9	42	8	48	6
L12	3	12	20,5	15	19,6	18	18,8	24	17,1	30	15,4	36	13,5	42	11,5	48	9,4
L13	3	30	19,5	36	18,8	42	18	48	16,9	60	14,1	72	10,5				
L14	5,5	30	31,5	36	30,5	42	29,5	48	28	60	24,5	72	20,5				
L15	7,5	30	39	36	38	42	37	48	36	60	33	72	29				
L16	7,5	48	26	60	25	72	24,5	84	23	96	22	108	20				
L17	11	48	35	60	34	72	33	84	31,5	96	30	108	28				
L18	15	48	41,5	60	41	72	40	84	38,5	96	37	108	35				
L19	15	84	27,5	96	27	108	26	120	24,5	138	22,5	150	21				
L20	18,5	84	38,5	96	37,5	108	36,5	120	35,5	138	34	150	32,5				
L21	22	84	47,5	96	46,5	108	45	120	43,5	138	41	150	38,5				

\* Point of intersection on X / Y axis.

### Pump / tank combinations table

Pump code	Tank size (litres)									
	75	150	300	500	750	1000	1500	2000	2500	
L01	•	•	•	•	•	•	•			
L02	•	•	•	•	•	•	•			
L03	•	•	•	•	•	•	•			
L04		•	•	•	•	•	•			
L05		•	•	•	•	•	•			
L06		•	•	•	•	•	•			
L07			•	•	•	•	•			
L08			•	•	•	•	•			
L09			•	•	•	•	•			
L10			•	•	•	•	•			
L11			•	•	•	•	•			
L12			•	•	•	•	•			
L13					•	•	•	•	•	•
L14					•	•	•	•	•	•
L15					•	•	•	•	•	•
L16						•	•	•	•	•
L17						•	•	•	•	•
L18						•	•	•	•	•
L19							•	•	•	•
L20								•	•	•
L21								•	•	•

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## OFFER REQUEST FORM for water storage tanks

PACETTI S.R.L.  
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FAX 0532 773835  
E-mail: [info@pacetti.it](mailto:info@pacetti.it)  
Web: [www.pacetti.it](http://www.pacetti.it)

**PRODUCT:**

- Chilled water storage tank (VT / VTS / VTP)
- Hydronic kits (POLARIS)
- Domestic hot water storage tank (TA)
- Hot water cylinder with plate heat exchanger for DHW production (PRI / PRS / PRA)
- Multifunction hot water cylinder (Ecocella Simple / Ecocella Multitherm)
- Hot water cylinder with removable coil/s (BTS / BTX / BTE / BTES / BT2 / BT3)
- Hot water cylinder with removable coil/s for steam (BTV)
- Solar hot water cylinder with fixed coil/s (BM1 / BM2)
- Hot water cylinder for heat pumps (BKP / BKP-S)
- Buffer tank for heating circuit (PVR / PVR1 / PVR2)
- Buffer tank for heating circuit and instant production of DHW (RM1 / RM2 / RM3)
- Combi hot water cylinder (KBF)

**ARRANGEMENT:**

- Vertical
- Horizontal

**MATERIAL:**

- Carbon steel
- 304 stainless steel
- 316L stainless steel

**PROTECTION COATING:**

- Hot dip galvanizing
- Anti-rust paint
- Termoflon enamelling
- Glass-enamel lining
- Ceramix
- None

**CONNECTONS:**

- Threaded
- Flanged

**HEAT EXCHANGERS:**

Type	Surface	Qty
U-tube, copper coil		
U-tube, 304 stainless steel		
U-tube, 316L stainless steel		
Spiral steel coil		
Spiral finned copper coil		

**ACCESSORIES:**

- Thermometer
- Thermostat
- Electric switchboard GTA
- Immersion electric heaters KW \_\_\_\_\_ Qty \_\_\_\_\_
- Magnesium anode with tester device
- Electronic anode

**INSULATION:**

- Closed-cell elastomer foam \_\_\_\_\_mm thick
- Flexible polyurethane \_\_\_\_\_mm thick
- Hard foam polyurethane inhected \_\_\_\_\_mm thick
- Hard foam polyurethane semi-shells \_\_\_\_\_mm thick
- Other \_\_\_\_\_

**COVERING:**

- PVC
- Embossed aluminium

**DIMENSIONS:**

- Capacity - litres \_\_\_\_\_
- Diameter without insulation mm. \_\_\_\_\_
- Diameter with insulation mm. \_\_\_\_\_
- Total height mm. \_\_\_\_\_

MAX WORKING TEMPERATURE: \_\_\_\_\_

MAX WORKING PRESSURE: \_\_\_\_\_

MAKE A DRAWING OF YOUR SPECIAL TANK

Date \_\_\_\_\_

STAMP & SIGN

CAT\_REF-EN 09-11

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