

# TANKS AND EQUIPMENT

## DOMESTIC HOT WATER PRODUCTION AND STORAGE

for individual and communal installation and industrial applications.

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STAINLESS STEEL TANKS



# DOMESTIC HOT VATERPRODUCTION AND STORAGE

Proven quality, excellence in surface protection and maximum storage capacity.

apesa Solutions FOR YOUR COMFORT AND ECONOMY



## TANKS FOR DOMESTIC HOT WATER PRODUCTION AND STORAGE 50 to 12000 litres for individual and communal installation and industrial applications

# **STAINLESS STEEL** TANKS DHW PRODUCTION/STORAGE TANKS

GEISER INOX domestic range 60 to 1000 litres

**SERIES** 



MASTER INOX large capacity 1500 to 6000 litres



MODELS	CAPACITIES DHW / TOTAL (I.)	STAINLESS STEEL MATERIAL	STANDARD DHW PRODUCTION TYPE/SYSTEM	OPTIONAL DHW PRODUCTION SYSTEM
GX6 S	60/90 to 500/600	AISI 316 L	DOUBLE WALL	
GX6 TS	150/175 to 200/235	AISI 316 L	DOUBLE WALL	
GX6 D	60/90 to 500/600	AISI 316 L	DOUBLE WALL	ELECTRIC HEATING ELEMENT
GX6 DE	90/140 to 712/1000	AISI 316 L	DOUBLE WALL	ELECTRIC HEATING ELEMENT
GX6 DEC	60/90 to 500/600	AISI 316 L	DOUBLE WALL + ELECTRIC HEATING ELEMENT	
GX6 P	115/245 to 250/1000	AISI 316 L	DOUBLE WALL + COIL	ELECTRIC HEATING ELEMENT
GX6 PAC	115/245 to 250/1000	AISI 316 L	DOUBLE WALL	ELECTRIC HEATING ELEMENT
GXR	200 to 1000	AISI 316 L	STORAGE	PLATE EXCHANGER/ELECTRIC HEATING ELEMENTS
GXRB	800 to 1000	AISI 316 L	STORAGE	PLATE EXCHANGER/ELECTRIC
		A NOT D TO E	STOLUCE	HEATING ELEMENTS
GXM1/M1B	200 to 1000	AISI 316 L	1 COIL	ELECTRIC HEATING ELEMENT
GXTSC	100 to 150	AISI 316 L	1 COIL	
GXTSM	150 to 200	AISI 316 L	1 COIL	
GXM2/M2B	200 to 1000	AISI 316 L	2 COILS	ELECTRIC HEATING ELEMENT
GXHL/HLB	200 to 1000	AISI 316 L	OVERDIMENSIONED COIL	ELECTRIC HEATING ELEMENT

HYDRAULIC INSTALLATION EXAMPLES DHW PRODUCTION ELECTRIC HEATING REGULATION AND CONTROL THERMAL INSULATION CATHODIC PROTECTION / ACCESSORIES

MXVRB	1500 to 6000	AISI 316 L	STORAGE	PLATE EXCHANGER/ELECTRIC HEATING ELEMENTS
MXVSB	1500 to 6000	AISI 316 L	DETACHABLE COIL	ELECTRIC HEATING ELEMENT
MXVSSB	1500 to 6000	AISI 316 L	OVERDIMENSIONED DETACHABLE COIL	ELECTRIC HEATING ELEMENT
MXVS2B	2000/3500/5000/6000	AISI 316 L	2 DETACHABLE COILS	ELECTRIC HEATING ELEMENT
MXVSS2B	2000/3500/5000/6000	AISI 316 L	2 DETACHABLE COILS (LOWER ONE OVERDIMENSIONED)	ELECTRIC HEATING ELEMENT

DHW PRODUCTION ELECTRIC HEATING THERMAL INSULATION CATHODIC PROTECTION / ACCESSORIES / FINISHES IN ALUMINIUM ALUNOX

#### INDUSTRIAL CAPACITY STORAGE TANKS: 7000 to 12000 litres



		2011	APPLICABLE ENE	RGY SOURCE			INDEX
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Chromium-nickel-molibdenum **STAINLESS STEEL**, highly resistant to pitting caused by halogen elements such as the chlorine present in drinking water, is the material used to manufacture all of the models in our **"GEISER INOX" and "MASTER INOX "**series.

**HYGIENIC MATERIAL:** Easy to clean, it allows the use of very energetic washing and disinfecting means (e.g. anti-legionella treatments) without undergoing any changes. In DHW tanks made of stainless steel there is no accumulation of residues from sacrificial anodes because the tanks do not require cathodic protection in normal working conditions.

**FOOD GRADE:** Stainless steel is a non-toxic material that is commonly used in the food industry. In hygiene tests it is on a par with glass and porcelain and is thus considered ideal for use in the manufacture of tanks intended for the production and storage of domestic hot water.

**MAXIMUM WORKING TEMPERATURE:** It withstands the maximum DHW storage temperatures handled by this type of facilities (90°C) without undergoing any change. **LONG SERVICE LIFE:** Amongst the stainless steels used for these products, **AISI 316 L stainless steel** has one of the highest levels of corrosion resistance. By way of example AISI 316 L stainless steel withstands twice as much dissolved chloride in water content than AISI 304 L steel in the same working conditions.

Cathodic protection is not required. The "GEISER and MASTER INOX" series of storage tanks do not require cathodic protection in normal conditions of use for drinking water (European Directive 98/83/CE). In the case of water which is particularly aggressive due to its chemical composition, the storage tanks supplied with lapesa correx-up permanent, maintenance-free cathodic protection.

High mechanical strength: The stainless steel withstands the mechanical stress caused by sudden fluctuations in pressure, water hammer effects of pumps, etc. without any problems or risk of damage.

**EXCEPTIONAL PRODUCT QUALITY:** The best-kept secret. The process employed in the manufacture of our stainless steel storage tanks is the key to their success as products of proven quality.

The special welding procedures used in their manufacture and the subsequent pickling and passivation of metal surfaces, which is subject to strict quality controls, endows our products with a quality that puts them at the very highest market level.

This level of quality is underpinned by our products' worldwide presence for more than 30 years.

#### **OPTIMIZED DESIGN. BEST VALUE FOR MONEY:**

Design and features. The wide range of models in

our **"GEISER INOX and MASTER INOX"** series, leverages the many design options that stainless steel affords, endowing our products with the best performance features. Excellent product value-for-money comes from optimizing the design and the manufacturing process for each model.

Double-wall models with electric heating incorporated in the primary heating circuit, maintenance-free, specific high-performance models to ensure the best possible use of **RENEWABLE ENERGIES**, models for low-temperature, mixed, communal, individual or battery installations are only some of the possibilities provided by the variety of designs in our range.

The level of quality of a stainless steel tank mainly depends on the quality and execution of the manufacturing processes, well as on the design of the storage tank and the quality of the stainless steel used. The success of **lapesa** products is closely linked to the combination of these three aspects

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#### APPLICABLE DIRECTIVES AND STANDARDS:

Directive 2014/68/UE: European Pressure Equipment Directive. Royal Decree 865/2003 establishing hygiene-health criteria for the prevention and control of Legionnaires' disease. Regulation on thermal installations in buildings (RITE) and its accompanying technical instructions. UNE 100030:2005 IN STANDARD: Guide for the prevention and control of the proliferation and dissemination of legionella in installations. UNE 112076:2004 IN STANDARD: Prevention of corrosion in water circuits.

#### **GEISER INOX**

- Individual installations for the production/storage of DHW
- Single-family homes
- Gymnasiums and sports centres
- Clinics and hospitals
- Laboratories
- Restaurants, hotels, bars
- Laundries
- Schools and universities
- Solar and other renewable energy installations
- DHW centralized systems (battery installation)

#### **MASTER INOX**

- Individual production/storage installations with large DHW consumptions
- Collective housing
- Gymnasiums and sports centres
- Clinics and hospitals
- Laboratories
- Restaurants, cafeterias, bars
- Hotels
- Laundries
- Schools and universities
- Solar and other renewable energy installations
- Industrial installations (individual or battery installation)
- Large DHW consumptions (individual or battery installation)
- Centralized DHW systems in buildings (individual or battery installation)



## **DOUBLE WALL models - nothing but advantages!**

The water contained in the surrounding tank or primary tank is heated by an external energy source (boiler, heat pump, solar collectors, etc.) that passes through this vessel and



transmits its thermal energy to the water contained in the inner tank or DHW storage tank.

> **DOUBLE-WALL TANKS:** This is the star product of the "GEISER INOX" series thanks its many advantages over conventional DHW production systems.

> The DOUBLE-WALL system basically consists of a combination of two tanks, one inside the other. DHW production takes place by the exchange of heat from the external or primary tank to the internal or secondary tank (DHW), throughout the whole of the tank's surface.

The water contained in the surrounding tank or primary tank is heated by an external energy source (boiler, heat pump, solar collectors, etc.) that passes through this vessel and transmits its thermal energy to the water contained in the inner tank or DHW storage tank.

#### DHW PRODUCTION/STORAGE TANKS GEISER INOX - **DOUBLE WALL**

## lapesa

#### LONG-LASTING PRODUCT: Nickel-chromium-molybdenum

**STAINLESS STEEL** DHW storage tank, highly resistant to pitting caused by halogen elements such as chlorine in drinking water. This is the material used to manufacture all of the models in our "GEISER INOX" series.

**SELF-CLEANING EFFECT:** Corrugated design of the DHW storage tank, in constant vertical movement depending on the fluctuations in the internal pressure, which helps to detach any limescale from the walls.

**ANTI LEGIONELLA DESIGN:** Totally uniform DHW storage temperature, with no cold zones inside the storage tank. The surround heating of DHW produces a uniform water storage temperature throughout the whole of the tank, which in turn allows it to be used to its full capacity.

**MAINTENANCE-FREE:** DHW tank without any internal heat exchange elements. It does not require cathodic protection in normal drinking water conditions. The models with electric heating have the heating element in the primary circuit so there is no risk of corrosion or lime scale.

**LARGE DHW PRODUCTION CAPACITY:** The heat exchange area is that of the total surface area of the DHW storage tank.

**MAXIMUM STORAGE CAPACITY:** Extra thick, rigid, PU mouldinjected insulation that minimizes heat losses of stored DHW (see HEAT INSULATION chapter, page: 37)



DOUBLE WALL TANKS HEATING SYSTEM





#### FEATURES COMMON TO ALL "DOUBLE-WALL GEISER INOX" MODELS:

- DHW storage tanks in AISI 316 L stainless steel
- DHW capacities: 60, 100, 150, 200, 300 and 500 litres
- Maximum working pressure of DHW storage tank: 8 bar (10 bar optional)
- Maximum working temperature of DHW storage tank: 90 °C
- Maximum working pressure of surrounding tank (primary circuit): 3 bar
- Maximum working temperature of surrounding tank (primary circuit): **110 °C**
- Thermal insulation: **Rigid, mould-injected PU** (CFC/HCFC-free, 0.025 W/m°K)
- VERTICAL or HORIZONTAL installation. Up to 150 litres, ready for WALL MOUNTING (except TS models)

#### DHW PRODUCTION/STORAGE TANKS GEISER INOX - **DOUBLE WALL**

#### **GEISER INOX** "S"

**DOUBLE-WALL** storage tank for the production of DHW by heat exchange between the surrounding tank (primary circuit) and the internal tank (DHW), via an external energy source (boiler, solar panels, heat pump, etc.). Finish: RAL 9016 white external lining and RAL 7021 grey cover. For VERTICAL or HORIZONTAL installation. Designed for wall mounting, up to GX6 \$190 model.

#### **EQUIPMENT:**

DHW thermometer on top cover. Brackets for wall mounting, up to GX6 S190 model.





- c inspection hole d - DHW tank
- d DHW tank e - heating chamber
- f external lining
- g cover
- h thermal insulation
- j side hole
- s probe tube for sensors
- t thermometer

GENERAL CHARACTERISTICS		GX6 S90	GX6 S130	GX6 S190	GX6 S260	GX6 S400	GX6 S600
Total capacity	l.	82	130	191	256	365	608
DHW capacity	l.	60	100	150	200	300	500
Primary HW capacity	l.	22	30	41	56	65	108
D: external diameter	mm.	480	480	620	620	620	770
H: overall height	mm.	750	1155	985	1240	1725	1730
kw: cold water inlet / drain ww: DHW outlet z: Recirculation kv: primary input kr: primary return	" GAS/M " GAS/M " GAS/M " GAS/F " GAS/F	3/4 3/4 3/4 1	3/4 3/4 3/4 1	3/4 3/4 3/4 1	3/4 3/4 3/4 1	1 1 1 1	1 1 1 1/2 1 1/2
Heat exchange surface	m²	0,8	1,2	1,2	1,6	2,4	3
Empty weight (approx.)	Kg	34	50	63	76	105	149

#### DHW PRODUCTION/STORAGE TANKS GEISER INOX - **DOUBLE WALL**

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#### **GEISER INOX** "TS"

**DOUBLE-WALL** storage tank for the production of DHW by heat exchange between the surrounding tank (primary circuit) and the internal tank (DHW), via an external energy source (boiler, solar panels, heat pump, etc.). Specifically designed for **HORIZONTAL INSTALLATION**. Finish: RAL 9016 white external lining and black covers.

Able to withstand the weight of a boiler of up to 700 kg on top.

#### **EQUIPMENT:**

Thermometer & DHW regulation thermostat on front cover.





GENERAL CHARACTERISTICS		GX6 TS180	GX6 TS240
Total capacity DHW capacity Primary HW capacity	l. l. l.	175 150 25	233 200 33
A: heigth / width B: length	mm. mm.	630 1.000	630 1.225
kw: cold water inlet / drain ww: DHW outlet z: recirculation kv: primary input kr: primary return	" GAS/M " GAS/M " GAS/M " GAS/F " GAS/F	3/4 3/4 1 1	3/4 3/4 3/4 1 1
Heat exchange surface	m <sup>2</sup>	1,2	1,6
Empty weight (approx.)	Kg	66	85

c - inspection hole

d - DHW tank

e - heating chamber f - external lining

h - thermal insulation

m - side covers

p - leveling feet

s - probe tube for sensors t - thermometer

tt - thermostat

**STAINLESS STEEL TANKS** 



#### DHW PRODUCTION/STORAGE TANKS **GEISER INOX - DOUBLE WALL**

#### **GEISER INOX** "D"

**DOUBLE-WALL** storage tank tank for the production of DHW by means of heat exchange between the surrounding tank (primary circuit) and the internal tank (DHW), via an external energy source (boiler, solar panels, heat pump, etc.). Equipped with side hole in primary circuit for optional incorporation of electric heating element. Finish: RAL 9016 white external lining and RAL 7021 grey cover. For VERTICAL or HORIZONTAL installation (under request, see page 14)

(except TS models)

Designed for wall mounting, up to GX6 D190 model.

#### **EQUIPMENT:**

"K" control panel, wired and mounted, with thermometer, dual safety and control thermostat, winter-summer switch and LEDs.

OPTIONAL: "KP1" control panel with analog time switch for electric heating. Brackets for wall mounting, up to model GX6 D190.



- c inspection hole d DHW tank
- e heating chamber f - external lining
- g cover
- h thermal insulation
- i control panel
- j side hole
- s probe tube for sensors
- t thermometer

GENERAL CHARACTERISTICS		GX6 D90	GX6 D130	GX6 D190	GX6 D260	GX6 D400	GX6 D600
Total capacity	l.	82	130	191	256	365	608
DHW capacity	l.	60	100	150	200	300	500
Primary HW capacity	l.	22	30	41	56	65	108
D: external diameter	mm.	480	480	620	620	620	770
H: overall height	mm.	750	1155	985	1240	1725	1730
kw: cold water inlet / drain	" GAS/M	3/4	3/4	3/4	3/4	1	1
ww: DHW outlet	" GAS/M	3/4	3/4	3/4	3/4	1	1
z: Recirculation	" GAS/M	3/4	3/4	3/4	3/4	1	1
kv: primary input kr: primary return	" GAS/F " GAS/F	1	1	1	1	1	1 1/2 1 1/2
Heat exchange surface Control panel	m²	0,8	1,2	1,2	1,6	2,4	3
	model	K	K	K	K	K	K
Empty weight (approx.)	Kg	36	52	65	78	107	151

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#### DHW PRODUCTION/STORAGE TANKS GEISER INOX - **DOUBLE WALL**

#### **GEISER INOX** "DE"

**DOUBLE-WALL** storage tank for the production of DHW by means of heat exchange between the surrounding tank (primary circuit) and the internal tank (DHW), via an external energy source (boiler, solar panels, heat pump, etc.). Equipped with side threaded connection in primary circuit for **optional incorporation of an "RI"-type THREADED electric heating element.** 

Finish: RAL 9016 white external lining and RAL 7021 grey cover. For VERTICAL installation.

#### **EQUIPMENT:**

"K" control panel, wired and mounted, with thermometer, dual safety and control thermostat, winter-summer switch and LEDs.

OPTIONAL: "KP1" control panel with analog time switch for electric heating.



с-	Top	inspection	hole

- d DHW tank
- e Heating chamber
- f Outer lining
- g Cover
- h Thermal insulation i - Control panel
- s Probe tube for sensors

GENERAL CHARACTERISTICS		GX6 DE140	GX6 DE180	GX6 DE215	GX6 DE260	GX6 DE400	GX6 DE600	GX6 DE1000
Total capacity	l.	138	176	214	252	355	574	955
DHW capacity	l.	92	127	161	196	265	433	712
Primary HW capacity	l.	46	49	53	56	90	141	243
D: external diameter	mm.	560	560	560	560	620	770	950*
H: overall height	mm.	1030	1280	1530	1780	1725	1730	2250
kw: cold water inlet / drain ww: DHW outlet z: Recirculation kv: primary input kr: primary return R: connection for electric heating element N: primary side connection M: primary side connection	" GAS/M " GAS/M " GAS/M " GAS/F " GAS/F " GAS/F " GAS/F " GAS/F	3/4 3/4 1 1 2 - 1	3/4 3/4 1 1 2 1 1	3/4 3/4 1 1 2 1 1	3/4 3/4 1 1 2 1 1	1 1 1 1/2 1 1/2 2 1 1/2 1 1/2 1 1/2	1 1 1 1/2 1 1/2 2 1 1/2 1 1/2 1 1/2	1 1 1 1/2 1 1/2 2 - 1 1/2
Heat exchange surface	m <sup>2</sup>	0,9	1,2	1,6	1,9	2,2	2,8	4
Control panel	model	K	K	K	K	K	K	K
Empty weight (approx.)	Kg	50	67	90	97	106	150	239

(\*) Insulation system allows passing through 800 mm wide doors.



#### DHW PRODUCTION/STORAGE TANKS GEISER INOX - **DOUBLE WALL**

#### **GEISER INOX** "DEC"

**DOUBLE-WALL** storage tank for the production of DHW by means of heat exchange between the surrounding tank (primary circuit) and the internal tank (DHW), via an external energy source (boiler, solar panels, heat pump, etc.).

Equipped with side hole in primary circuit, with **factory-mounted** electric heating element.

Finish: RAL 9016 white external lining and RAL 7021 grey cover.

#### **EQUIPMENT:**

Full electric heating unit, factory-mounted and wired, comprising electric heating element and "K" control panel, with thermometer, dual safety and control thermostat, winter-summer switch and LEDs.

Brackets for wall mounting, up to model GX6 DEC190. OPTIONAL: "KP1" control panel with analog time switch for electric heating.





- c Inspection hole d - DHW tank e - Heating chamber f - External lining
- g Cover s F h - Thermal insulation r - E i - Control panel
- j Side hole
- s Probe tube for sensors r - Electric heating element

el			

GENERAL CHARACTERISTICS		GX6 DEC90	GX6 DEC130	GX6 DEC190	GX6 DEC260	GX6 DEC400	GX6 DEC600
Total capacity DHW capacity Primary HW capacity	l. l. l.	82 60 22	130 100 30	191 150 41	256 200 56	365 300 65	608 500 108
D: external diameter H: overall height	mm. mm.	480 750	480 1155	620 985	620 1240	620 1725	770 1730
kw: cold water inlet / drain ww: DHW outlet z: Recirculation kv: primary input kr: primary return	" GAS/M " GAS/M " GAS/M " GAS/F " GAS/F	3/4 3/4 3/4 1 1	3/4 3/4 3/4 1 1	3/4 3/4 3/4 1 1	3/4 3/4 3/4 1 1	1 1 1 1 1	1 1 1 1/2 1 1/2
Heat exchange surface	m <sup>2</sup>	0,8	1,2	1,2	1,6	2,4	3
Control panel	model	К	К	К	К	К	К
Electric heating element (factory mounted) Empty weight (approx.)	kW Kg	1,5 37	2,2 53	2,2 67	2,5 80	2,5 109	4,5 153

**WALL INSTALLATION:** Double wall "GEISER INOX" models up to 190 litres total capacity can be WALL-MOUNTED. The necessary anchors are supplied with the tanks (see installation and mounting instructions).

**VERTICAL POSITION:** All double wall "GEISER INOX" tanks are supplied ready to be installed in VERTICAL position, with the hydraulic connections of their inner (DHW) tank on the top flange.

**HORIZONTAL POSITION\*:** All double wall "GEISER INOX" tanks can be installed in HORIZONTAL position (except "DE), with a special plate for the hydraulic connections of the inner (DHW) tank mounted on factory upon request. The specific type of horizontal installation must be chosen, either "HORIZONTAL LEFT" or "HORIZONTAL RIGHT", according

to the position of the hydraulic connections of the inner (DHW) tank.

#### **ELECTRIC HEATING IN HORIZONTAL INSTALLATION:**

The electric heating elements for HORIZONTAL installation must be ordered specifically according to the tank orientation:

- Electric heating element RC.. I for horizontal left tank orientation.
- Electric heating element RC..D for horizontal right tank orientation.

For VERTICAL installations, both types of electric heating elements are valid.

\*If the decision for installing a tank in horizontal position occurs after the reception of a standard model, a specific KIT of "plate with DHW hydraulic connections for horizontal installation" can be supplied, and installed in tank on site.



LEFT-HAND HORIZONTAL INSTALLATION

VERTICAL INSTALLATION

# nothing but advantages!

Models DOUBLE WALL

- STAINLESS STEEL STORAGE TANK
- LARGE DHW PRODUCTION
   CAPACITY
- SELF-CLEANING EFFECT
- ANTI-LEGIONELLA DESIGN
- MAXIMUM STORAGE
   CAPACITY
- MAINTENANCE-FREE



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#### DHW PRODUCTION/STORAGE TANKS **GEISER INOX - DOUBLE WALL**

#### **GEISER INOX** "P"

"DOUBLE-WALL" tanks termed "MULTIFUNCTIONAL" are known as such since several different energy sources can be installed for one single tank. Just like in the previous systems, DHW production is carried out by heat exchange between the primary (external) circuit and the DHW (internal) tank via several external energy sources (boiler, solar panels, heat pump, electric heating element, etc.) simultaneously coupled to the tank.

These tanks have a large capacity primary circuit that acts as a thermal inertia buffer (for solid fuel or biomass boilers and/ or heat pump), which houses a coil with a large heat exchange surface, specially designed for solar energy. Tanks for VERTICAL installation on floor.

The P800 and P1000 models incorporate an insulation system, which allows pass through doors of 800 mm. wide. Finish: RAL 9016 white external lining and RAL 7021 grey cover.

#### **EQUIPMENT:**

"S" panel with DHW thermometer. OPTIONAL: "K", "KP1", "BC" control panels (see REGULATION AND CONTROL chapter, page: 36)





GX6 P600...P1000

GX6 P300...P400



GENERAL CHARACTERISTICS		GX6 P300	GX6 P400	GX6 P600	GX6 P800	GX6 P1000
Total capacity DHW capacity Primary HW capacity	l. l. l.	244 116 128	341 147 194	605 215 390	770 200 570	970 250 720
D: external diameter H: overall height	mm. mm.	560 1770	620 1725	770 1730	950 1840	950 2250
kw: cold water inlet / drain ww: DHW outlet z: DHW recirculation kv: primary input kr: primary return sv: coil inlet sv: coil return eh: side connection R: electric element connection	" GAS/M " GAS/M " GAS/M " GAS/F " GAS/F " GAS/F " GAS/F " GAS/F " GAS/F	3/4 3/4 - - 1 1 1 1/4 2	3/4 3/4 - 1 1 1 1/4 2	3/4 3/4 1 1/4 1 1/4 1 1 1 1/4 2	3/4 3/4 1 1/4 1 1/4 1 1 1 1/4 2	3/4 3/4 1 1/4 1 1/4 1 1 1 1 1/4 2
Heat exchange surface	m²	1,7	1,8	2,4	2,7	2,7
Control panel	model	S	S	S	S	S
Empty weight (approx.)	Kg	88	127	185	245	290

#### DHW PRODUCTION/STORAGE TANKS **GEISER INOX - DOUBLE WALL**



#### **GEISER INOX** "PAC"

"DOUBLE WALL" tanks specifically designed for the application of RENEWABLE ENERGIES (installation with heat pump, solid fuel or biomass boilers).

These tanks have a large capacity primary circuit that acts as an inertia buffer, combining both functions -inertia buffer and DHW tank-.

Just like the previous systems, DHW production is carried out by heat exchange between the primary circuit (external) tank and the DHW (internal) tank.

Tanks for VERTICAL installation on floor.

Ready to incorporate an electric heating element.

The PAC800 and PAC1000 models incorporate an insulation system, which allows pass through doors of 800 mm. wide. Finish: RAL 9016 white external lining and RAL 7021 grey cover.

#### **EQUIPMENT:**

"S" panel with DHW thermometer. Optional: "K", "KP1", "BC" control panels (see REGULATION AND CONTROL chapter, page: 36)







D

C -	inspection	hole
d -	DHW tank	

- e heating chamber
- f external lining

g - cover

h - thermal insulation i - control panel

s - probe tube for sensors

tm- connection for sensors

probe tube

GENERAL CHARACTERISTICS		GX6 PAC300	GX6 PAC400	GX6 PAC600	GX6 PAC800	GX6 PAC1000
Total capacity	l.	244	341	605	770	970
DHW capacity Primary HW capacity	l. I	116 128	147 194	277 328	200 570	250 720
, , ,	ι.					
D: external diameter H: overall height	mm. mm.	560 1770	620 1725	770 1730	950 1840	950 2250
kw: cold water inlet / drain ww: DHW outlet	" GAS/M " GAS/M	3/4 3/4	3/4 3/4	3/4 3/4	3/4 3/4	3/4 3/4
z: DHW recirculation	" GAS/M	3/4	3/4	3/4	3/4	3/4
eh: side connection R: electric element connection	" GAS/F " GAS/F	1 1/4 2				
Control panel	model	S	S	S	S	S
Empty weight (approx.)	Kg	72	85	125	217	262



DHW PRODUCTION/STORAGE TANKS

#### **GEISER INOX -** STAINLESS STEEL

## STORAGE models, energy savings!

Designed to provide maximum energy storage capacity, with overdimensioned rigid, mould-injected PU thermal insulation, these models maintain the DHW storage temperature for a long time without the need for any additional energy input, affording users continued savings throughout the storage tank's service life.

**STORAGE TANKS:** Designed to provide an extraordinary storage capacity that translates directly into real savings.

The overdimensioned, rigid, mould-injected PU thermal insulation maintains the DHW storage temperature over long periods of time without requiring additional energy input. This means less start-ups and adjustments of external energy sources, which in turn translates into less energy consumption.

Storage tanks without their own heat exchange system, designed for the installation of plate heat exchangers and/or electric immersion elements as the heating source.



#### DHW PRODUCTION/STORAGE TANKS GEISER INOX - **STORAGE**





Detail of pre-cut insulation on 800 and 1000 litre tanks allowing access through 800 mm wide doors.

**LONG-LASTING PRODUCT: Nickel-chromium-molybdenum STAINLESS STEEL** DHW storage tank, highly resistant to pitting caused by halogen elements such as chlorine in drinking water. This is the material used to manufacture all of the mo-

dels in our "GEISER INOX" series.

**EASY TO MAINTAIN:** With access to tank interior through side and top holes, for inspection and cleaning. Models RB, with a ND400 manhole on the side of the tank.

**EASY TO INSTALL:** Their dimensions facilitate access to enclosed spaces (even the models with capacities greater than 800 litres), with a detachable system for the insulation on the two opposite sides of the tank, allowing access through 800 mm wide entrances.

**ELECTRIC HEATING:** Ready for installation with Incoloy, low charge density electric immersion elements or with ceramic heating elements (see ELECTRIC HEATING chapter, page: 34).

**MAXIMUM STORAGE CAPACITY:** Extra thick, rigid, PU mouldinjected insulation that minimizes heat losses of stored DHW (see HEAT INSULATION chapter, page: 37).

**Lapesa** storage tanks have minimal heat losses and are thus considered to be one of the products with the greatest storage capacity on the market.





#### FEATURES COMMON TO ALL "GEISER INOX STORAGE" MODELS:

- DHW storage tanks in AISI 316 L stainless steel
- Capacities: 200, 300, 500, 800 and 1000 litres
- Maximum working pressure of DHW storage tank: 8 bar (10 bar optional)
- Maximum working temperature of DHW storage tank: 90 °C
- Thermal insulation: Rigid, mould-injected PU (CFC/HCFC-free, 0.025 W/m°K)
- Tanks for VERTICAL installation on floor.

#### DHW PRODUCTION/STORAGE TANKS GEISER INOX - **STORAGE**

#### **GEISER INOX** "R"

Tanks for **DHW STORAGE.** DHW production is by

means of an external heat exchange system (plate heat exchanger).

They can be fitted with immersion electric elements or ceramic electric elements. Tanks of more than 800 litre capacities include an insulation system that allows them to pass through 800 mm wide doors.

Finish: RAL 9016 white external lining and RAL 7021 grey cover.

**EQUIPMENT:** control panel "S" with thermometer.





GENERAL CHARACTERIS	GX-200-R	GX-300-R	GX-500-R	GX-800-R	GX-1000-R	
Total capacity	I.	200	300	500	800	1000
D: external diameter H: overall height	mm. mm.	620 1205	620 1685	770 1690	950 1840	950 2250
kw: cold water inlet / drain ww: DHW outlet z: recirculation m: plate exchanger connection	" GAS/M " GAS/M " GAS/M " GAS/M	1 1 1/4" 1 1/4" 1 1/4"	1 1 1/4" 1 1/4" 1 1/4"	1 1 1/4" 1 1/4" 1 1/4"	1 1/4" 1 1/2" 1 1/2" 1 1/2"	1 1/4" 1 1/2" 1 1/2" 1 1/2"
Empty weight (approx.)	Kg	50	64	102	147	170

#### **GEISER INOX** "RB" -

Tanks for **DHW STORAGE.** DHW production is by means of an external heat exchange system (plate heat exchanger).

The "RB" models include a ND 400 side manhole. They can be fitted with immersion electric elements or ceramic electric elements. The 800 and 1000 litre capacity tanks include an insulation system that allows them to pass through 800 mm wide doors. Finish: RAL 9016 white external lining and RAL 7021 grey cover.

**EQUIPMENT:** control panel "S" with thermometer





GENERAL CHARACTERIS	TICS	GX-800-RB	GX-1000-RB
Total capacity	l.	800	1000
D: external diameter H: overall height	mm. mm.	950 1840	950 2250
kw: cold water inlet / drain ww: DHW outlet z: recirculation m: plate exchanger connection	" GAS/M " GAS/M " GAS/M " GAS/M	1 1/4" 1 1/2" 1 1/2" 1 1/2"	1 1/4" 1 1/2" 1 1/2" 1 1/2"
Side manhole	mm.	ND400	ND400
Empty weight (approx.)	Kg	178	201

Availability of all the necessary hot water at the lowest energy cost.

Jolutions CONVENIENCE AND SAVINGS.



## Models with COIL, production and efficiency!

Tanks with high-efficiency, internal heat exchange coils for high DWH production demands at peak flow. Their overdimensioned, rigid, mould-injected PU thermal insulation maintains DHW storage temperature for long periods without the need for any additional energy input, providing users with continued savings throughout the life of the storage tank.



#### **STORAGE TANKS WITH COIL:**

Tanks with high-efficiency, internal heat exchange coils for high DWH production demands at peak flow.

Models with one or two coils for the production of DHW using one or two energy sources, with the option of adding backup electric heating elements.

Overdimensioned, rigid, mouldinjected PU thermal insulation maintains the DHW storage temperature over long periods of time without requiring additional energy input. This means less start-ups and adjustments of external energy sources, which translates into energy savings.

#### DHW PRODUCTION/STORAGE TANKS GEISER INOX - **COIL**







Detail of pre-cut insulation on 800 and 1000 litre tanks to allow access through 800 mm wide doors.

**LONG-LASTING PRODUCT: Nickel-chromium-molybdenum STAIN-LESS STEEL** DHW storage tank, highly resistant to pitting caused by halogen elements such as chlorine in drinking water. This is the material

used to manufacture all of the models in our "GEISER INOX" series.

**ANTI-LEGIONELLA DESIGN:** The shape of the heat exchange coil is ideal for heating the lowest zone of the storage tank, preventing cold zones and thus the proliferation of bacteria such as Legionella.

**EASY TO MAINTAIN:** With access to tank interior through side and top holes, for inspection and cleaning.

In models with capacities of more than 800 litres there is a ND400 manhole on the side of the tank.

**EASY TO INSTALL:** Their dimensions facilitate access to enclosed spaces (even models with capacities greater than 800 litres), with a detachable system for insulation on the two opposite sides of the tank, allowing access through 800 mm wide entrances.

**ELECTRIC HEATING:** Ready for installation with Incoloy, low charge density electric immersion elements or with ceramic heating elements (see ELECTRIC HEATING chapter, page: 34).

**MAXIMUM STORAGE CAPACITY:** Extra thick, rigid, PU mould-injected insulation that minimizes heat losses of stored DHW (see DHW PRO-DUCTION chapter, page: 28).

"Exchange capacity and heat efficiency", for installations with high demands of domestic hot water production, with the best response capacity.





#### FEATURES COMMON TO ALL "GEISER INOX COIL" MODELS:

- DHW storage tanks in AISI 316 L stainless steel
- Capacities: 200, 300, 500, 800 and 1000 litres
- Maximum working pressure of DHW storage tank: 8 bar (10 bar optional)
- Maximum working pressure of coil/s: 25 bar
- Maximum working temperature of DHW storage tank: 90 °C
- Maximum working temperature of coil/s: 200 °C
- Thermal insulation: Rigid, mould-injected PU (CFC/HCFC-free, 0.025 W/m°K)
- Tanks for VERTICAL installation on floor (except TSM models, only HORIZONTAL).

#### DHW PRODUCTION/STORAGE TANKS **GEISER INOX - COIL**

#### **GEISER INOX** "M1"

Storage tanks with "ONE COIL" for the production of DHW using an external energy source (boiler, solar panels, heat pump, etc.).

They can be fitted with immersion electric elements or ceramic electric elements (See ELECTRIC HEATING chapter, page: 34). 800 and 1000 l. tank models, include an insulation system that allows them to pass through 800 mm wide doors.

Tank models M1B include a ND400 side manhole.

Finish: RAL 9016 white external lining and RAL 7021 grey cover.

#### **EQUIPMENT:**

Side control panel with "ST" thermometer and control thermostat (except GX-150-M1).





g - Cover

h - Thermal insulation

i - Control panel



D

c - Top inspection hole d - DHW tank f - Outer lining

j - Side hole q - Heating coil s - Probe tube for sensors

G

GENERAL CHARACTERISTICS		GX-150-M1	GX-200-M1	GX-300-M1	GX-500-M1	GX-800-M1	GX-1000-M1	GX-800-M1B	GX-1000-M1B
DHW capacity	l.	150	200	300	500	800	1000	800	1000
D: external diameter H: overall height	mm. mm.	560 1265	620 1205	620 1685	770 1690	950 1840	950 2250	950 1840	950 2250
kw: cold water inlet / drain ww: DHW outlet z: recirculation eh: side connection kv: primary input kr: primary return	" GAS/M " GAS/M " GAS/M " GAS/M " GAS/M " GAS/M	1 1 - 3/4 3/4	1 1 1 1/2 1 1	1 1 1 1/2 1 1	1 1 1 1/2 1 1	1 1/4 1 1/2 1 1/2 1 1/2 1 1 1	1 1/4 1 1/2 1 1/2 1 1/2 1 1 1	1 1/4 1 1/2 1 1/2 1 1/2 1 1 1	1 1/4 1 1/2 1 1/2 1 1/2 1 1/2 1 1
Heating coil surface	m <sup>2</sup>	0,8	1,1	1,4	1,8	2,8	3,4	2,8	3,4
Empty weight (approx.)	Kg	44	60	85	117	164	189	195	220

NOTE: Models M1B, with side manhole ND400

#### GEISER INOX "TSC" NEW

Storage tank with "ONE COIL" for the production of DHW using an external energy source (boiler, solar panels, heat pump, etc.). All the connections are placed at the top of the tank Finishing with external lining and top cover in white color RAL 9016

**EQUIPMENT:** Thermometer in top cover.



t - Thermometer



GENERAL CHARACTE	RISTICS	GX-100-TSC	GX-150-TSC
DHW capacity	l.	102	148
D: external diameter H: overall height	mm. mm.	510 870	510 1210
kw: cold water inlet / drain ww: DHW outlet z: recirculation DHW kv: primary input kr: primary return e: drain	" GAS/M " GAS/M " GAS/M " GAS/M " GAS/M " GAS/F	3/4 3/4 3/4 3/4 3/4 1/2	3/4 3/4 3/4 3/4 3/4 1/2
Heating coil surface	m <sup>2</sup>	0,7	1,3
Empty weight (approx.)	Kg	35	47

#### DHW PRODUCTION/STORAGE TANKS GEISER INOX - **COIL**

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#### GEISER INOX "TSM"

Storage tanks with **"ONE COIL"** for the production of DHW using combined external energy sources (boiler, solar panels, heat pump, etc.). Specifically designed for **HORIZONTAL INSTALLATION**, a boiler of up to 700 Kg can be installed on top.

**EQUIPMENT:** thermometer and DHW control thermostat on front cover.

	В	i.	A
	f d	m 10 - ww 10 - z 10 - kv 10 - kv 10 - kr	
p h q		d - DH f - Out m - Side h - The q - Hea s - Prol p - Leve t - The	vection hole N tank er lining e covers rmal insulation titing coil be tube for sensors eling feet rmometer rmostat

GENERAL CHARACTERISTICS	GENERAL CHARACTERISTICS					
DHW capacity	I.	150	200			
A: Height / width B: Length	mm. mm.	630 1000	630 1255			
kw: cold water inlet / drain ww: DHW outlet z: recirculation kv: primary input kr: primary return	" GAS/M " GAS/M " GAS/M " GAS/M " GAS/M	3/4 3/4 3/4 3/4 3/4	3/4 3/4 3/4 3/4 3/4			
Heating coil surface	m <sup>2</sup>	0,7	0,9			
Empty weight (approx.)	Kg	51	70			

#### **GEISER INOX** "M2"

Storage tanks with **"TWO COILS"** for the production of DHW using combined external energy sources (boiler, solar panels, heat pump, etc.).

They can be fitted with immersion electric elements or ceramic electric elements (See ELECTRIC HEATING chapter, page: 34). 800 and 1000 I. tank models, include an insulation system that

allows them to pass through 800 mm wide doors. Tank models M2B include a ND400 side manhole.

Finish: RAL 9016 white external lining and RAL 7021 grey cover.

#### **EQUIPMENT:**

Side control panel with "ST" thermometer and control thermostat.







c - Top inspection hole d - DHW tank

f - Outer lining

g - Cover h - Thermal insulation

GENERAL CHARACTERISTIC	GX-300-M2	GX-400-M2	GX-500-M2	GX-800-M2	GX-1000-M2	GX-800-M2B	GX-1000-M2B	
DHW capacity	l.	300	400	500	800	1000	800	1000
D: external diameter H: overall height	mm. mm.	620 1685	770 1525	770 1690	950 1840	950 2250	950 1840	950 2250
kw: cold water inlet / drain ww: DHW outlet z: recirculation eh: side connection kv, kr: upper coil connections sv, sr: lower coil connections	" GAS/M " GAS/M " GAS/M " GAS/M " GAS/M " GAS/M	1 1 1 1/2 1 1	1 1 1 1/2 1 1	1 1 1 1/2 1 1	1 1/4 1 1/2 1 1/2 1 1/2 1 1 1	1 1/4 1 1/2 1 1/2 1 1/2 1 1 1	1 1/4 1 1/2 1 1/2 1 1/2 1 1/2 1 1	1 1/4 1 1/2 1 1/2 1 1/2 1 1 1
Upper coil heating surface Lower coil heating surface Empty weight (approx.)	m² m² Kg	1,1 1,4 93	0,9 1,8 120	1,2 1,8 126	1,3 2,8 175	1,3 3,4 200	1,3 2,8 206	1,3 3,4 231

NOTE: M2B models, with side manhole ND400

i - Control panel j - Side hole

q - Heating coil s - Probe tube for sensors

#### DHW PRODUCTION/STORAGE TANKS GEISER INOX - COIL

#### **GEISER INOX** "HL"

Storage tanks with **HIGH PERFORMANCE COIL**, with high thermal exchange surface, for the production of DHW using combined external energy sources (boiler, solar panels, heat pump, etc.).

They can be fitted with immersion electric elements (See ELECTRIC HEATING chapter, page: 34).

Tank models of 800 L or higher, include a ND400 side manhole and an insulation system that allows them to pass through 800 mm wide doors.

Finish: RAL 9016 white external lining and RAL 7021 grey cover.

#### **EQUIPMENT:**

**Models "HLB"** with side manhole ND400. Side control panel with thermometer.





GENERAL CHARACTERI	STICS	GX-200-HL	GX-300-HL	GX-500-HL	GX-800-HLB	GX-1000-HLB
DHW capacity	l.	200	300	500	800	1000
D: external diameter	mm.	620	620	770	950	950
H: overall height	mm.	1205	1685	1690	1840	2250
kw: cold water inlet / drain	" GAS/M	1	1	1	1 1/4	1 1/4
ww: DHW outlet	" GAS/M	1	1	1	1 1/2	1 1/2
z: recirculation	" GAS/M	1	1	1	1 1/2	1 1/2
eh: side connection	" GAS/M	2	2	2	2	2
kv: primary input	" GAS/M	1 1/4	1 1/4	1 1/4	1 1/4	1 1/4
kr: primary return	" GAS/M	1 1/4	1 1/4	1 1/4	1 1/4	1 1/4
Heating coil surface	m <sup>2</sup>	2,4	3,1	4,8	5,7	6,4
Empty weight (approx.)	Kg	63	83	120	221	258

NOTE: HLB models, with side manhole ND400

#### DHW PRODUCTION/STORAGE TANKS GEISER INOX - STAINLESS STEEL

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#### ICONG-LASTING PRODUCT:

Nickel-chromium-molybdenum STAINLESS STEEL DHW storage tank, highly resistant to pitting caused by halogen elements such as chlorine in drinking water. This is the material used to manufacture all of the models in our "GEISER

#### **HYGIENIC MATERIAL:**

INOX" series.

Easy to clean, allows the use of strong washing and disinfecting methods (e.g. anti-legionella treatment). In DHW tanks made of stainless steel there is no accumulation of residues from sacrificial anodes because the tanks do not require cathodic protection in normal working conditions.

#### FOOD GRADE:

Stainless steel is a non-toxic material that is commonly used in the food industry. In hygiene tests it is on a par with glass and porcelain and is thus considered ideal for use in the manufacture of tanks intended for the production and storage of domestic hot water.

#### F ANTI LEGIONELLA DESIGN:

The surround heating of DHW produces a uniform water storage temperature throughout the whole of the tank, avoiding cold zones and allowing to use the full capacity of the tank. In models equipped with heat exchange coil, the stored water is heated from the lowest zone of the tank, therefore hot water can be stored in the complete tank volume.

#### **EFFECTIVE SAVING:**

Rigid, mould-injected PU thermal insulation maintains the DHW storage temperature over long periods of time, therefore reducing heat losses. Tanks adapted to requirements of ErP Directive.



#### **EXAMPLES OF INSTALLATION** "GEISER INOX"



EXAMPLE OF INSTALLATION: DOUBLE WALL GEISER INOX



EXAMPLE OF INSTALLATION: GEISER INOX P/PAC



EXAMPLE OF INSTALLATION: GEISER INOX HL/HLB

	PRIMARY INPUT TEMP	ERATURE °C	5	5 ℃	7	∕0 °C	8	0 °C	g	0° °C
	tank model	primary pump flow (m³/h)	ĸw	DHW (l/h)	KW	DHW (l/h)	KW	DHW (l/h)	KW	DHW (l/h)
C	GX6 S/D/DEC 90	2 3	5 6	123 148	11 12	271 295	14 15	344 369	18 20	443 492
- 45°		5	7	172	13	320	15	418	20	541
0°C	GX6 S/D/DEC 130	2 3	9 10	221 246	19 20	468 492	25 27	615 664	32 34	787 837
VLL 11		5	11 8	271	22 18	541	30 25	738	37 32	910
E WP	GX6 S/D/DEC 190	3	9	197 221	20	443 492	27	615 664	35	787 861
UBL n (lite		5	11 11	271 271	22 25	541 615	30 33	738 812	39 44	960 1083
- DOUBLE WALI uction (liters/hour)	GX6 S/D/DEC 260	3 5	12 13	295 320	27 29	664 714	36 41	886 1009	48 53	1181 1304
VOX prod		2	17	418	33	812	45	1107	55	1353
GEISER INOX - DOUBLE WALL [Continuous flow DHW production (liters/hour) 10°C - 45°C]	GX6 S/D/DEC 400	4 6	19 20	468 492	38 41	935 1009	53 57	1304 1403	66 72	1624 1772
	GX6 S/D/DEC 600	2 4	20 22	492 541	39 45	960 1107	52 60	1280 1476	66 78	1624 1919
ious f		6	24	591	48	1181	65	1599	85	2092
[Continu	GX6 TS180	2 3	9 10	221 246	17 18	418 443	23 25	566 615	29 32	714 787
		5	11 10	271 246	19 21	468 517	27 28	664 689	35 36	861 886
	GX6 TS240	3	11	271	22	541	31	763	39	960
		5	13 11	320 271	24 21	591	34 28	837	42 34	1033 837
	GX-150-M1	3	12	295	23	517 566	31	689 763	38	935
		5	13 15	320 369	26 28	640 689	35 37	861 910	43 47	1058 1157
	GX-200-M1	3 5	16 18	394 443	32 36	787 886	43 49	1058 1206	53 61	1304 1501
	GX-300-M1/M2*	2	15	369	33	812	45	1107	56	1378
5°C]	*lower coil	4 6	18 19	443 468	42 47	1033 1157	56 62	1378 1526	69 77	1698 1895
10°C - 45°C]	GX-500-M1/M2*	2 4	20 23	492 566	40 51	984 1255	53 67	1304 1649	66 83	1624 2042
	* lower coil	6	25	615	58	1427	76	1870	93	2288
hour)	GX-800-M1/M2* * lower coil	3 5	33 39	812 960	62 72	1526 1772	79 94	1944 2313	98 116	2411 2854
coll liters/		8	44 40	1083 984	82 77	2018 1895	108 101	2658 2485	132 127	3248 3125
GEISER INOX - COIL HW production (liters/	GX-1000-M1/M2* * lower coil	5	47	1157	94	2313	124	3051	155	3814
R INC		8 2	54 15	1329 369	110 27	2707 664	145 36	3568 886	181 45	4454 1107
SEISE W pro	GX-300-M2** ** upper coil	4 6	17 18	418 443	33 37	812 910	44 49	1083 1206	55 61	1353 1501
N DH	GX-500-M2**	2	15	369	31	763	41	1009	50	1230
us flov	** upper coil	4 6	18 20	443 492	38 42	935 1033	50 56	1230 1378	61 68	1501 1673
inuou	GX-800-M2**	2 4	15 18	369 443	31 38	763 935	41 50	1009 1230	50 61	1230 1501
GEISER INOX - COIL [Continuous flow DHW production (liters/hour)	** upper coil	6	20	492	42	1033	56	1378	68	1673
	GX-1000-M2** ** upper coil	2 4	15 18	369 443	31 38	763 935	41 50	1009 1230	50 61	1230 1501
		6 2	20 9	492 221	42 19	1033 468	56 25	1378 615	68 32	1673 787
	GX-150-TSM	4	10 11	246 271	22 24	541 591	30 32	738 787	37 41	910 1009
		2	11	271	24	591	31	763	39	960
	GX-200-TSM	4 6	14 15	344 369	30 33	738 812	38 42	935 1033	47 52	1157 1280
										N. Contraction

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	PRIMARY INPUT TEMP	ERATURE °C	70	) °C	80	) °C	90 °C		
	tank model	primary pump flow (m³/h)	KW	DHW (l/h)	KW	DHW (l/h)	KW	DHW (l/h)	
60°C]	GX6 S/D/DEC 90	2 3 5	7 8 9	121 138 155	11 12 13	189 207 224	16 17 18	276 293 310	
) 10°C -	GX6 S/D/DEC 130	2 3 5	13 14 16	224 241 276	20 21 23	344 362 396	27 29 32	465 500 551	
ters/hour	GX6 S/D/DEC 190	2 3 5	13 15 16	224 258 276	20 22 24	344 379 413	27 29 32	465 500 551	
luction (li	GX6 S/D/DEC 260	2 3 5	18 20 22	310 344 379	27 29 32	465 500 551	35 39 43	603 672 741	
HW proc	GX6 S/D/DEC 400	2 4 6	23 27 29	396 465 500	36 42 46	620 723 792	47 55 60	810 947 1033	
[Continuous flow DHW production (liters/hour) 10°C - 60°C]	GX6 S/D/DEC 600	2 4 6	27 32 34	465 551 586	42 48 52	723 827 896	57 66 72	982 1137 1240	
Continuo	GX6 TS180	2 3 5	12 13 14	207 224 241	18 20 21	310 344 362	25 27 29	431 465 500	
_	GX6 TS240	2 3 5	15 16 17	258 276 293	23 25 27	396 431 465	31 33 35	534 568 603	
	GX-150-M1	2 3 5	15 17 18	258 293 310	23 25 28	396 431 482	29 32 36	500 551 620	
	GX-200-M1	2 3 5	21 24 28	362 413 482	31 35 40	534 603 689	40 45 52	689 775 896	
60°C)	GX-300-M1/M2* *lower coil	2 4 6	24 30 33	413 517 568	36 44 49	620 758 844	47 58 65	810 999 1120	
10.0 - 6(	GX-500-M1/M2* * lower coil	2 4 6	30 37 40	517 637 689	44 55 61	758 947 1051	57 70 78	982 1206 1344	
	GX-800-M1/M2* * lower coil	3 5 8	44 51 58	758 878 999	63 74 83	1085 1275 1430	83 98 112	1430 1688 1929	
Continuous flow DHW production (liters/hour)	GX-1000-M1/M2* * lower coil	3 5 8	57 68 78	982 1171 1344	83 99 115	1430 1705 1981	109 132 153	1878 2274 2635	
W produ	GX-300-M2** ** upper coil	2 4 6	18 22 24	310 379 413	30 36 40	517 620 689	38 46 51	655 792 878	
	GX-500-M2** ** upper coil	2 4 6	21 26 29	362 448 500	34 41 45	586 706 775	44 53 59	758 913 1016	
nonuituo	GX-800-M2** ** supper coil	2 4 6	21 26 29	362 448 500	34 41 45	586 706 775	44 53 59	758 913 1016	
	GX-1000-M2** ** upper coil	2 4 6	21 26 29	362 448 500	34 41 45	586 706 775	44 53 59	758 913 1016	
	GX-150-TSM	2 4 6	13 16 17	224 276 293	20 24 26	344 413 448	27 32 34	465 551 586	
100	GX-200-TSM	2 4 6	17 21 24	293 362 413	25 30 34	431 517 586	33 40 44	568 689 758	

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**STAINLESS STEEL TANKS** 

## **DHW PRODUCTION** - GEISER INOX

	PRIMARY INPUT TEMP	ERATURE °C	5	5 °C	7	0 °C	80	) °C	9	0 °C
	tank model	primary pump flow (m³/h)	KW	DHW (l/h)	KW	DHW (l/h)	KW	DHW (l/h)	KW	DHW (l/h)
	GX6 DE 140	2 4 6	8 10 12	205 250 300	18 21 23	450 500 555	24 28 31	625 700 750	32 36 39	790 880 950
	GX6 DE 180	2 4 6	9 11 13	210 255 305	19 21 23	460 510 560	25 29 31	630 710 750	33 36 40	795 890 960
<mark>C - 45°C</mark> ]	GX6 DE 215	2 4 6	11 13 15	300 320 350	26 30 32	620 720 795	34 41 44	820 995 1090	45 53 56	1105 1300 1390
GEISER INOX - DOUBLE WALL [Continuous flow DHW production (liters/hour) 10°C - 45°C]	GX6 DE 260	3 5 8	16 18 19	400 420 440	31 35 38	790 870 925	44 49 51	1070 1180 1270	54 59 65	1305 1405 1600
OUBLE V tion (liters,	GX6 DE 400	3 5 8	19 20 21	450 495 510	36 41 44	900 1010 1050	50 55 60	1210 1350 1505	61 66 75	1510 1670 1860
GEISER INOX - DOUBLE WALL ow DHW production (liters/hour)	GX6 DE 600	3 5 8	21 22 24	550 580 600	41 45 50	1005 1120 1210	56 61 68	1370 1510 1660	71 81 90	1800 2000 2200
GEISEI us flow DH	GX6 DE 1000	2 4 6	25 37 40	625 900 1000	45 58 65	1100 1400 1600	65 85 93	1600 2075 2300	95 118 132	2330 2900 3250
Continuo	GX6 PAC/P 300	2 4 6	8 10 11	200 245 265	16 19 21	400 455 500	24 26 30	600 650 725	30 35 37	740 860 915
	GX6 PAC/P 400	2 4 6	8 10 11	200 245 265	17 20 22	425 485 545	25 27 32	610 690 775	33 35 40	805 860 980
	GX6 PAC/P 600	2 4 6	9 11 13	240 275 320	22 26 28	545 645 700	29 34 36	735 850 915	40 46 49	985 1150 1210
45°C]	GX-200-HL	2 4 6	25 32 35	614 776 872	47 60 69	1145 1484 1688	61 81 92	1511 1987 2272	78 100 114	1909 2473 2810
<b>COIL</b> (/h) 10°C -	GX-300-HL	2 4 6	30 40 46	749 986 1127	58 76 86	1432 1861 2118	75 98 112	1850 2416 2755	95 126 144	2348 3095 3543
GGEISER INOX - COIL [Continuous flow DHW production (I/h) 10°C - 4	GX-500-HL	2 4 6	39 53 62	969 1314 1519	73 93 105	1786 2293 2595	94 124 141	2317 3040 3470	115 154 178	2829 3795 4371
GGEISI us flow DHW	GX-800-HLB	3 5 8	56 67 78	1383 1660 1919	101 125 148	2479 3076 3635	125 154 181	3080 3791 4457	152 182 211	3728 4478 5181
[Continuou:	GX-1000-HLB	3 5 8	58 69 80	1428 1704 1961	106 129 152	2603 3187 3732	131 159 187	3212 3924 4590	158 192 224	3891 4722 5501

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	PRIMARY INPUT TEMP	ERATURE °C	70	°C	80	°C	90 °C	
	tank model	primary pump flow (m³/h)	KW	DHW (l/h)	KW	DHW (l/h)	ĸw	DHW (l/h)
	GX6 DE 140	2 4 6	12 15 16	205 255 275	20 22 24	345 375 405	26 31 32	455 525 555
	GX6 DE 180	2 4 6	13 16 17	225 260 275	21 22 24	355 390 415	26 31 33	460 530 555
GEISER INOX - DOUBLE WALL [Continuous flow DHW production (liters/hour) 10°C - 60°C]	GX6 DE 215	2 4 6	19 22 24	315 385 410	30 34 36	520 585 605	37 44 47	645 755 810
WALL s/hour) 10	GX6 DE 260	3 5 8	22 25 26	345 430 455	34 37 40	600 650 700	45 50 55	760 855 950
GEISER INOX - DOUBLE WALL ow DHW production (liters/hour)	GX6 DE 400	3 5 8	25 28 30	440 490 505	40 44 47	695 750 805	51 57 61	890 1000 1055
ER INOX - HW produ	GX6 DE 600	3 5 8	29 32 35	500 550 600	45 50 55	780 860 910	61 70 76	1070 1200 1300
GEISE Dus flow D	GX6 DE 1000	2 4 6	32 41 46	580 700 800	55 68 75	950 1180 1300	82 105 112	1400 1740 1910
[Continuc	GX6 PAC/P 300	2 4 6	11 14 15	200 225 250	18 21 23	310 360 385	25 30 32	425 515 550
	GX6 PAC/P 400	2 4 6	13 15 18	230 255 305	21 24 25	360 395 425	26 31 34	460 525 560
	GX6 PAC/P 600	2 4 6	14 18 19	250 310 320	24 28 30	400 480 520	31 37 40	530 635 690
- 60°C]	GX-200-HL	2 4 6	34 43 49	585 745 842	50 81 74	864 65 1279	67 86 97	1155 1478 1671
	GX-300-HL	2 4 6	43 55 62	747 945 1065	62 80 90	1072 1377 1556	83 108 123	1434 1858 2114
GGEISER INOX - COIL [Continuous flow DHW production (I/h) 10°C	GX-500-HL	2 4 6	55 68 76	946 1175 1312	80 101 114	1373 1747 1972	101 133 152	1748 2296 2625
GGEIS bus flow DHV	GX-800-HLB	3 5 8	76 92 107	1303 1586 1844	105 126 147	1801 2175 2532	133 157 180	2292 2707 3100
[Continue	GX-1000-HLB	3 5 8	80 95 110	1385 1644 1896	109 131 151	1882 2260 2609	139 166 191	2392 2855 3297

**STAINLESS STEEL TANKS** 

#### GEISER INOX - models DOUBLE WALL - S/D/DE/DEC/P/PAC - (DHW production - peak flow - )

		GX6 S/D/DEC 90	GX6 S/D/DEC 130	GX6 S/D/DEC 190	GX6 S/D/DEC 260	GX6 S/D/DEC 400	GX6 S/D/DEC 600
Peak flow 40°C	L/10'	120	203	315	380	575	900
Peak flow 45°C	L/10'	102	175	270	325	490	770
Peak flow 60°C	L/10'	72	122	190	225	344	539
Peak flow 40°C	L/60'	590	1000	1132	1545	2135	2755
Peak flow 45°C	L/60'	495	840	954	1290	1790	2310
Peak flow 60°C	L/60'	295	515	590	755	1075	1400
Continuous flow 40°C	Ltrs/h	565	960	980	1400	1875	2225
Continuous flow 45°C	Ltrs/h	470	800	820	1160	1560	1850
Continuous flow 60°C	Ltrs/h	265	470	480	635	875	1040
Heating time (from 10 to 75°C)	Min	28	31	45	47	50	56
Primary flow	m³/h	5	5	5	6	6	6

Primary input temperature 85°C

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		GX6 DE140	GX6 DE180	GX6 DE215	GX6 DE260	GX6 DE400	GX6 DE600
Peak flow 40°C	1/10'	203	315	475	530	575	900
Peak flow 45°C	L/10'	175	270	415	440	490	770
Peak flow 60°C	L/10'	122	190	250	265	344	539
Peak flow 40°C	L/60'	935	1190	1675	1875	2175	2790
Peak flow 45°C	L/60'	785	1000	1415	1565	1820	2345
Peak flow 60°C	L/60'	465	605	795	925	1100	1435
Continuous flow 40°C	Ltrs/h	880	1050	1440	1620	1920	2270
Continuous flow 45°C	Ltrs/h	735	880	1200	1350	1600	1890
Continuous flow 60°C	Ltrs/h	415	500	653	790	905	1075
Heating time (from 10 to 75°C)	Min	31	41	37	37	50	56
Primary flow	m³/h	2,6	3,5	4,2	5,5	6,4	7,2
Drimon in put to properture 85%							

Primary input temperature 85°C

		GX6 P300	GX6 P400	GX6 P600	GX6 P800	GX6 P1000
Peak flow 40°C	L/10'	251	320	465	433	540
Peak flow 45°C	L/10'	215	275	400	370	465
Peak flow 60°C	L/10'	150	190	280	260	325
Peak flow 40°C	L/60'	965	1080	1360	1495	1875
Peak flow 45°C	L/60'	815	910	1150	1250	1570
Peak flow 60°C	L/60'	500	555	710	785	970
Continuous flow 40°C	Ltrs/h	860	915	1075	1275	1600
Continuous flow 45°C	Ltrs/h	720	760	900	1060	1325
Continuous flow 60°C	Ltrs/h	420	440	520	630	775
Heating time (from 10 to 75°C)	Min	40	48	55	47	48
Primary flow	m³/h	3	3	3	5	5

Primary input temperature 85℃

		GX6 PAC300	GX6 PAC400	GX6 PAC600	GX6 PAC800	GX6 PAC1000	
Peak flow 40°C	L/10'	250	315	600	433	540	
Peak flow 45°C	L/10'	215	270	515	370	465	
Peak flow 60°C	L/10'	150	190	360	260	325	
Peak flow 40°C	L/60'	1050	1165	1650	1495	1875	
Peak flow 45°C	L/60'	880	975	1390	1250	1570	
Peak flow 60°C	L/60'	525	585	870	785	970	
Continuous flow 40°C	Ltrs/h	960	1020	1260	1275	1600	
Continuous flow 45°C	Ltrs/h	800	850	1050	1060	1325	
Continuous flow 60°C	Ltrs/h	450	475	610	630	775	
Heating time (from 10 to 75°C)	Min	40	48	54	47	48	
Primary flow	m³/h	5	5	5	5	5	
Primary input temperature 85°C	-00		° 0				

GEISER INOX, DHW production <b>- peak flo</b>	DOUBL TS m		COIL TSM models		
		GX6 TS180	GX6 TS240	GX-150-TSM	GX-200-TSM
Peak flow 40°C	L/10'	238	303	320	410
Peak flow 45°C	L/10'	204	260	275	350
Peak flow 60°C	L/10'	143	182	195	245
Peak flow 40°C	L/60'	994	1238	1185	1510
Peak flow 45°C	L/60'	834	1039	995	1270
Peak flow 60°C	L/60'	505	629	610	775
Continuous flow 40°C	Ltrs/h	908	1122	1040	1325
Continuous flow 45°C	Ltrs/h	757	935	865	1105
Continuous flow 60°C	Ltrs/h	435	537	500	635
Heating time (from 10 to 75°C)	Min	44	46	37	42
Primary flow	m³/h	5	6	5	6
Primary input temperature 85°C					

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GEISER INOX - models with COIL - M1/M2/HL - (DHW production - peak flow -)										
							GX-1000 M1			

		M1	M1B	M1B						
Peak flow 40°C	L/10'	315	425	600	823	1007	1690	1995	1692	1995
Peak flow 45°C	L/10'	270	364	515	705	863	1450	1710	1450	1710
Peak flow 60°C	L/10'	190	255	360	494	604	1015	1195	1015	1197
Peak flow 40°C	L/60'	1265	1840	2310	2865	3050	4610	5950	4610	5950
Peak flow 45°C	L/60'	1060	1530	1910	2410	2570	3860	5000	3860	5000
Peak flow 60°C	L/60'	645	930	1170	1475	1580	2370	3110	2370	3110
Continuous flow 40°C	Ltrs/h	1140	1700	2050	2450	2450	3500	4750	3500	4750
Continuous flow 45°C	Ltrs/h	950	1400	1675	2050	2050	2900	3950	2900	3950
Continuous flow 60°C	Ltrs/h	550	810	975	1175	1175	1625	2300	1625	2300
Heating time (from 10 to 75°C)	Min	35	37	45	40	50	52	58	52	58
Primary flow	m³/h	5	6	6	6	6	8	8	8	8

Primary input temperature 85°C

								A. UP	1238
LOWER COIL		GX-300 M2	GX-400 M2	GX-500 M2	GX-800 M2	GX-1000 M2	GX-800 M2B	GX-1000 M2B	F.
Peak flow 40°C	L/10'	600	823	1007	1692	1995	1692	1995	200
Peak flow 45°C	L/10'	515	705	863	1450	1710	1450	1710	1000
Peak flow 60°C	L/10'	360	494	604	1015	1197	1015	1197	1.7
Peak flow 40°C	L/60'	2310	2865	3050	4610	5950	4610	5950	S. Report
Peak flow 45°C	L/60'	1910	2410	2570	3860	5000	3860	5000	DP
Peak flow 60°C	L/60'	1170	1475	1580	2370	3110	2370	3110	
Continuous flow 40°C	Ltrs/h	2050	2450	2450	3500	4750	3500	4750	- 10
Continuous flow 45°C	Ltrs/h	1675	2050	2050	2900	3950	2900	3950	
Continuous flow 60°C	Ltrs/h	975	1175	1175	1625	2300	1625	2300	2=544
Heating time (from 10 to 75°C)	Min	45	40	50	52	58	52	58	
Primary flow	m³/h	6	6	6	8	8	8	8	1250 0
Primary input temperature 85°C						Co Manual	acr.	Se D	ESS

GX-200 HL GX-300 HL GX-500 HL GX-800 HLB GX-1000 HLB Peak flow 40°C L/10' Peak flow 45°C L/10' Peak flow 60°C L/10' Peak flow 40°C L/60' Peak flow 45°C L/60' Peak flow 60°C L/60' Continuous flow 40°C Ltrs/h Continuous flow 45°C Ltrs/h Continuous flow 60°C Ltrs/h Heating time (from 10 to 75°C) Min Primary flow m³/h Primary input temperature 85°C

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GX-1000

## **ELECTRIC HEATING - GEISER INOX**

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#### GEISER INOX "DOUBLE WALL" (models D/DEC)

	AISI 321 flanged electric heating elements, specific for primary heating circuit										
electric element model	KW	V	installed as standard on tank models	optional application to tank models							
RC-15/15-D	1,5	230	GX6 DEC90	GX6 D/DEC-90/130							
RC-15/15-I	1,5	230		GX6 D/DEC-90/130							
RC-16/22-D	2,2	230	GX6 DEC130	GX6 D/DEC-90/130							
RC-16/22-I	2,2	230		GX6 D/DEC-90/130							
RC-17/22-D	2,2	230	GX6 DEC190	GX6 D/DEC-190/600							
RC-17/22-I	2,2	230		GX6 D/DEC-190/600							
RC-18/25-D	2,5	230	GX6 DEC260/400	GX6 D/DEC-190/600							
RC-18/25-I	2,5	230		GX6 D/DEC-190/600							
RC-08/45-D	4,5	230	GX6 DEC600	GX6 D/DEC-600							
RC-50D	5,0	400		GX6 D/DEC-600							
RC-75D	7,5	400		GX6 D/DEC-600							

#### GEISER INOX "DOUBLE WALL" (models DE/P/PAC)

Threaded immersion electric heating elemens, specific for primary heating circuit.									
electric element model	KW	V	length L*	optional application to tank models					
RI 4/2-22	2,2	3-230 / 3-400	260	GX6 DE-140/1000, GX6 P/PAC-300/1000					
RI 4/2-54	5,4	3-230 / 3-400	345	GX6 DE-140/1000, GX6 P/PAC-300/1000					
RI 4/2-72	7,2	3-230 / 3-400	445	GX6 DE-215/1000, GX6 P/PAC-400/1000					
RI 4/2-90	9,0	3-230 / 3-400	505	GX6 DE-400/1000, GX6 P/PAC-400/1000					
RI 4/2-120	12,0	3-230 / 3-400	680	GX6 DE 600/1000, GX6 P/PAC-600/1000					

#### GEISER INOX "SINGLE WALL" (STORAGE and COIL tank models)

Backup heating, Incoloy immersion electric heating elements.									
electric element model* KW V length L* optional application to tank mod									
RB-25	2,5	230/400	310	GX-2001000-R/M1/M2					
RB-50	5	230/400	310	GX-2001000-R - GX-4001000-M1/M2					
RB-75	7,5	230/400	440	GX-5001000-R - GX-8001000-M1/M2					
RB-100	10.0	230/400	580	GX-8001000-R					

(\*) In GEISER models with Correx-up cathodic protection, please consult options to install electric kit "RB-25/50/75/100" in lateral inspection opening

Ceramic electric heating elements, sheathed in stainless steel plate. Stainless steel plate set + ceramic electric element, for side hole mounting

electric element model	KW	V	length L*			optional application to tank models				
RCER-12	1,2	230/400	300			GXR/M1/M2				
RCER-15	1,5	230/400	300			GXR/M1/M2				
RCER-20	2,0	230/400	400			GXR/M1/M2				
RCER-24	2,4	230/400		400		GXR/M1/M2				
Backup heating, Incoloy immersion electric heating elements.										
electric element model	KW	V IP thread				length L* optional application to tank models				
RA2/2-15	1,5	230	40	1"M	1"M 650		GX6 PAC**			
RA3/2-25	2,5	230	40	1 1/2"M		540	GX-2001000-M1/M2			
RA3/2-25T(*)	2,5	230	65	1 1/2"M		350	GX-2001000-M1/M2			
RA3/2-50	5,0	230/400	40 1 1/2"M			690	GX-4001000-M1/M2			

(\*) Model RA 3/2-25T, incorporates regulation and safety thermostat in an IP65 head. (\*\*) For PAC models, on special upper plate.

#### GEISER INOX "SINGLE WALL" (800 and 1000 litres STORAGE models "RB", with side manhole ND400)

Incolog threaded immersion electric heating elements for ND400 side manhole on models GX-800/1000-RB. ND400 stainless steel plate set with 2"F bushings + selected type and number of electric elements. Number of electric elements per plate on side manhole ND400: 3,4,5,6,7 or 8 units.

electric element model	KW	V	IP	thread	length L*	optional application to tank models	
RA4/2-60	6,0	230/400	40	2"	797	GX-800/1000-RB	
RA4/2-120D	12,0	230/400	40	2"	680	GX-800/1000-RB	

Ceramic electric heating elements sheathed in stainless steel plate for ND400 side manhole on models GX-800/1000-RB. Stainless steel plate set with sleeves for ceramic electric elements + selected number of electric elements. Number of electric elements per plate on side manhole ND400: 3,4,5,6,7 or 8 units.

electric element model	KW	V	length L*	optional application to tank models
RCER-45	4.5	230/400	800	GX-800/1000-RB

## **ELECTRIC HEATING** - GEISER INOX

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Electric heating element RC...l. for left horizontal position. Electric heating element RC...D. for right horizontal position. Both types of electric elements are valid for VERTICAL installations.



"RI" HEATING ELEMENTS: Threaded immersion heating elements for primary heating circuit, for GEISER INOX "DOUBLE WALL". Models P/DE/PAC.





"RB" HEATING ELEMENT: Flanged heating element for GEISER INOX "SINGLE WALL", STORAGE AND COIL models.



"RCER" HEATING ELEMENT: Flanged, sheathed ceramic heating element for GEISER INOX "SINGLE WALL", STORAGE AND COIL models.



"RA" HEATING ELEMENT: Threaded heating elements for backup heating in GEISER INOX "SINGLE WALL", STORAGE and COIL models







Electric heating in GEISER INOX STORAGE models, GX-800/1000-RB models

## **REGULATION AND CONTROL** - GEISER INOX



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**"lapesa"** control panels are integrated into the different types of tanks in the **"GEISER INOX"** series.

They are supplied fully wired and mounted on the tank.

The panels include all the necessary components to control the temperature of the DHW stored in the tank and for the thermostatic control of the installation's heating equipment.

Any of the standard control panels fitted in tanks can be replaced by another type of control panel, if the installation so requires.

#### **CONTROL PANEL COMPONENTS:**

- [Teº] Thermometer: 0 120°C
- [TL°] Control thermostat: 0 75°C
- [TL°] Safety thermostat: 90°C
- \*/ Switch: winter summer
- Power on LED: green
- Primary pump LED: amber
- Electric heating element LED: red
- [P] Analog time switch: electric heating element.



#### COMPONENTS ON CONTROL PANELS

CO	NTROL PANEL	INCORPORATED COMPONENTS									
Dene	omination	Thermometer	Regulation thermostat	Safety thermostat	Switch ON/ OFF	SWITCH SUMMER/ WINTER	LEDS	Analog time switch	Regulation	Standard installed on tank models "GEISER INOX"	
"S"	PANEL	YES								GX6 S/P/PAC GXR/RB/HL/HLB	
"ST	" PANEL	YES	YES						hydraulic primary circuit	GXM1/M2	
"К"	PANEL	YES	YES	YES	YES	YES	YES		hydraulic primary circuit / electric heating element	GX6 D/DE/DEC	
"KP	1" PANEL	YES	YES	YES	YES	YES	YES	YES	hydraulic primary circuit / electric heating element with time programming	-	
# THERMAL INSULATION - GEISER INOX

The **"GEISER INOX"** series are thermally insulated at the factory by direct mould-injection with CFC and HCFC-free PU material.

This system guarantees a perfectly regular insulation thickness with optimum material density. The thicknesses indicated in the table refer to the circular tank body, but the insulation is much thicker on the top part (up to four times greater). Because the top part of the tank has better thermal protection, heat losses are much lower than those specified by the most stringent regulations, such as the DIN 4753/8 standard.



• Minimal heat loss!

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- For hot and cold water!
- No condensation on tank body!
- Compact block, no joints!

#### TABLE OF THERMAL INSULATION: GEISER INOX SERIES

### Minimum thickness of equivalent insulation with other insulating materials (mm)

Serie	Туре	Model	Thermal insulation k= 0.025 W/m °K	Insulation thickness PU (mm.)	Static heat losses EN 12897 (W)	ErP (EU 812/2013)	Flexible polyurethane foam* k= 0,040 W/m °K	Rockwool* k= 0,034 - 0,042 W/m °K	Fiberglass* k= 0,035 - 0,046 W/m °K
GEISER INOX		GX6-S/D/DEC 90	PU	40	45	В	65	55 - 70	55 -75
GEISER INOX		GX6-S/D/DEC 130	PU	40	50	В	65	55 - 70	55 - 75
GEISER INOX		GX6-S/D/DEC 190	PU	40	58	В	65	55 - 70	55 -75
GEISER INOX		GX6-S/D/DEC 260	PU	40	63	В	65	55 - 70	55 - 75
GEISER INOX		GX6-S/D/DEC 400	PU	40	99	С	65	55 - 70	55 -75
GEISER INOX		GX6-S/D/DEC 600	PU	40	103	С	65	55 - 70	55 - 75
GEISER INOX		GX6-DE 140	PU	55	49	В	65	55 - 70	55 - 75
GEISER INOX	Γ	GX6-DE 180	PU	55	53	В	65	55 - 70	55 -75
GEISER INOX	WALL	GX6-DE 215	PU	55	56	В	65	55 - 70	55 - 75
GEISER INOX	BLE	GX6-DE 260	PU	55	61	В	65	55 - 70	55 -75
GEISER INOX	DOUBLE	GX6-DE 400	PU	40	99	C	65	55 - 70	55 - 75
GEISER INOX	Δ	GX6-DE 600	PU	40	103	C	65	55 - 70	55 - 75
GEISER INOX		GX6-TS 180	PU	45/160	52	В	75/260	65/220 - 80/280	65/220-85/300
GEISER INOX		GX6-TS 240	PU	45/160	57	В	75/260	65/220 - 80/280	65/220-85/300
GEISER INOX		GX6-P/PAC 300	PU	40	62	B	65	55 - 70	55 -75
GEISER INOX		GX6-P/PAC 400	PU	40	99 102	C	65	55 - 70	55 -75
GEISER INOX		GX6-P/PAC 600	PU	40	103 87	С	65	55 - 70	55 - 75 115 - 160
GEISER INOX GEISER INOX		GX6-P/PAC 800 GX6-P/PAC/DE 1000	PU PU	80 80	87	B C	130 130	110 - 140 110 -140	
GEISER INUX		GX6-P/PAC/DE 1000	PU	80	115	L	130	110-140	115 - 160
GEISER INOX		GX-150-M1	PU	55	41	В	100	85 - 105	85 - 120
GEISER INOX		GX-200-R/M1/M2/HL	PU	60	44	В	100	85 - 105	85 - 120
GEISER INOX		GX-300-R/M1/M2/HL	PU	60	62	В	100	85 - 105	85 - 120
GEISER INOX	STORAGE	GX-400-R/M1/M2	PU	60	75	В	100	85 - 105	85 - 120
GEISER INOX	OR,	GX-500-R/M1/M2/HL	PU	60	81	В	100	85 - 105	85 - 120
GEISER INOX	- ST	GX-800-R/M1/M2	PU	80	87	В	130	110 - 140	115 - 160
GEISER INOX	- Coll	GX-800-RB/M1B/M2B/HLB	PU	80	95	В	130	110 - 140	115 - 160
GEISER INOX	9	GX-1000-R/M1/M2/HL	PU	80	113	C	130	110 - 140	115 - 160
GEISER INOX		GX-1000-RB/M1B/M2B/HLB	PU	80	123	С	130	110 - 140	115 - 160
GEISER INOX		GX-150-TSM	PU	45/160	55	В	75/260	65/220 - 80/280	65/220-85/300
GEISER INOX		GX-200-TSM	PU	45/160	59	В	75/260	65/220 - 80/280	65/220-85/300

(\*) Detachable systems can lose up to 25% of the insulating capacity overall, so that in that case the insulation thickness will increased proportionally

# **CATHODIC PROTECTION** - GEISER INOX



The "GEISER INOX" series do not require cathodic protection in normal conditions of use with drinking water (European Directive 98/83/CE). However, depending on the installation site, drinking water conditions may differ greatly from the potability requirements established by current regulations. In this case, and taking as a reference a chloride content limit of 150 mg/l, we recommend incorporating a permanent, maintenance-free "lapesa correx-up" cathodic protection system in the storage tank.

"lapesa correx-up"

permanent cathodic protection system.

Totally automatic! Maintenance free!



"lapesa correx-up" permanent cathodic protection system: Maintenance-free permanent cathodic protection unit. These anodes do not wear out and they emit the necessary electric current automatically, providing the tank with cathodic protection via an individual potentiostat for each anode, connected to the mains electricity.



# **ACCESSORIES** - GEISER INOX

**EXTERNAL LININGS** External linings for "GEISER INOX" tanks. Standard external lining: WHITE / RAL 9016. **ALUNOX EXTERNAL LINING** 

External aluminium sheet lining. ALUNOX external lining is supplied ready-mounted on the tank, over the PU insulation.





WHITE: RAL 9016





BLUE: RAL 5015

## ACCESSORIES - GEISER INOX



#### SAFETY GROUP.

- Safety group set at 7 bar and 3/4" connection.
- Set of safety valve, non-return valve, stopcock and connection from trap to drain.

# ELECTRIC HEATING ELEMENT. DOUBLE-WALL MODELS.

Electric heating element in AISI 321, specifically for "GEISER INOX" DOUBLE-WALL tanks, "**D" and "DEC"** models. Characteristics and power range: page: 34 -ELECTRIC HEATING-



#### THREADED ELECTRIC HEATING ELEMENT, STORAGE AND COIL MODELS.

Low charge density, threaded immersion electric element in Incoloy for "GEISER INOX" STORAGE and COIL tanks, "R", "RB", "M1" and "M2" models.

Characteristics and power range: page: 34 -ELECTRIC HEATING-



Low charge density, flanged immersion electric element, in Incoloy, for "GEISER INOX" STORAGE and COIL tanks, **"R", "M1" and "M2"** models.





# CERAMIC ELECTRIC HEATING ELEMENT, STORAGE AND COIL MODELS.

Sheathed ceramic electric element for "GEISER INOX" STORAGE and COIL tanks, **"R", "M1" and "M2"** models.

Characteristics and power range: page: 34 -ELECTRIC HEATING-



#### THREADED ELECTRIC HEATING ELE-MENT, DOUBLE WALL MODELS.

Electric element in AISI 321 specifically for "GEISER INOX" DOUBLE-WALL tanks, "DE", "P" and "PAC" models Characteristics and power ratings: page: 34 -ELECTRIC HEATING-



CATHODIC PROTECTION SYSTEM. "lapesa correx-up" permanent cathodic protection unit for

"GEISER INOX" tanks in installations with aggressive water.

#### REGULATION AND CONTROL PANELS.

Regulation and control panels for "GEISER INOX" tanks. Characteristics / applications: page: 36 -REGULATION AND CONTROL-



# lapesa

DHW PRODUCTION/STORAGE TANKS

### **MASTER INOX -** STAINLESS STEEL

### STORAGE models, energy savings!

Designed to provide extraordinary storage capacity that translates directly into real savings. Their overdimensioned rigid, mould-injected PU thermal insulation maintains DHW storage temperature for long periods, providing users with continued savings throughout the life of the storage tank.



### MAIN ADVANTAGES - MASTER INOX - STORAGE

### DHW PRODUCTION/STORAGE TANKS MASTER INOX - **STORAGE**



**LARGE CAPACITY STORAGE TANKS:** Designed to provide an extraordinary storage capacity that translates directly into real savings.

#### - CAPACITIES from 1500 to 6000 litres -

Storage tanks ready for installation with plate heat exchanger and/or electric heating elements as the heating source.

**MAXIMUM STORAGE CAPACITY:** Extra thick, rigid PU insulation that minimizes heat losses of stored DHW (see HEAT INSULATION chapter, page: 56)

**LONG-LASTING PRODUCT: Nickel-chromiummolybdenum STAINLESS STEEL** DHW storage tank, highly resistant to pitting caused by halogen elements such as chlorine in drinking water. This is the material used to manufacture all of the models in our **"MASTER INOX"** series.

**ELECTRIC HEATING:** Ready to be fitted with Incoloy, low charge density electric immersion elements or with sheathed ceramic heating elements (see ELECTRIC HEATING chapter, page: 54) **EASY TO MAINTAIN:** With access to tank interior through ND400 side manhole, for inspection and cleaning.



**EASY TO HANDLE AND TRANSPORT:** Our "MAS-TER" storage tanks are designed for easy handling and transport to the place of installation.

They have an integrated system for handling and transporting by forklift truck, which facilitates handling operations enormously as there is no need to palletize the product which, given its weight and size, would make handling difficult.

The tanks are also equipped with lifting eyebolts on the top part so that if they have to be placed in a high area they can be lifted with an overhead hoist.



TRANSPORT SYSTEM: Openings/ducts under the tank for easier handling with pallet trucks (from 1500 litres or more).





### FEATURES COMMON TO ALL "MASTER INOX" STORAGE MODELS:

- DHW storage tanks in AISI 316 L stainless steel
- Capacities: 1500, 2000, 2500, 3000, 3500, 4000, 5000 and 6000 litres
- Maximum working pressure of DHW storage tank: 8 bar (optional: 10 and 12 bar)
- Maximum working temperature of DHW storage tank: 90 °C
- Thermal insulation: Rigid, mould-injected PU (CFC/HCFC-free, 0.025 W/m°K)
- Tanks for VERTICAL installation on floor. (OPTIONAL, HORIZONTAL position please consult us-)

**lapesa** storage tanks have minimal heat losses and for this reason are considered to be one of the products with the greatest storage capacity on the market.



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### DHW PRODUCTION/STORAGE TANKS MASTER INOX - **STORAGE**

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### MASTER INOX "RB"

#### DWH STORAGE tanks, from 1500 to 6000 litre capacity.

DHW production is by an external heat exchange system (plate heat exchanger)

They can be fitted with immersion electric elements or ceramic electric elements as the main and/or backup heating system. With ND400 side manhole for access to interior of tank for inspection, cleaning treatments and maintenance.

Thermally insulated with rigid, mould-injected, 80 mm-thick, PU polyurethane foam, with insulating piece in same material on the ND400 side manhole

As an option, PVC padded external lining and set of trims, or ALUNOX aluminium sheet lining can be supplied (see ACCESSORIES chapter, page: 57.







t	-	Manhole	ND400

d - DHW tank f - External lining

g - Top cover

h - Thermal insulation

j - Lifting eyes

GENERAL CHARACTERISTIC	cs	MXV-1500-RB	MXV-2000-RB	MXV-2500-RB	MXV-3000-RB	MXV-3500-RB	MXV-4000-RB	MXV-5000-RB	MXV-6000-RB
DHW capacity	I.	1500	2000	2500	3000	3500	4000	5000	6000
D: external diameter H: overall height Diagonal	mm. mm. mm.	1360 1830 2281	1360 2280 2655	1660 2015 2611	1660 2305 2841	1660 2580 3068	1910 2310 2998	1910 2710 3316	1910 3210 3735
kw: cold water inlet ww: DHW outlet z: recirculation e: drain R: side connection pc: "lapesa correx up" connection tm: probe tube connection for sensors	" GAS/M " GAS/M " GAS/M " GAS/F " GAS/F " GAS/F	2 2 1 1/2 1 2 3/4 1/2	2 2 1 1/2 1 2 3/4 1/2	2 3 2 1 2 3/4 1/2	2 3 2 1 2 3/4 1/2	3 2 1 2 3/4 1/2	3 2 1 2 3/4 1/2	3 2 1 2 3/4 1/2	3 2 2 2 3/4 1/2
Empty weight (approx.) Note: The 6000 litre model includes supp	Kg	265	305	450	485	520	600	670	730



DHW PRODUCTION/STORAGE TANKS

### **MASTER INOX -** STAINLESS STEEL

### **Models with COILS production and efficiency!**

Designed to provide great energy storage capacity with an exclusive, high-efficiency DHW production system. Modular heat exchange unit, comprising a set of detachable collectors and coils for DHW production via an external energy source.



#### LARGE CAPACITY TANKS FOR DWH PRODUCTION AND STORAGE: Designed for extraordinary energy storage ca-

pacity that directly translates into real savings, with an exclusive high-efficiency DHW production system.

#### - CAPACITIES from 1500 to 6000 litres -

The overdimensioned, rigid, mould-injected PU thermal insulation maintains the DHW storage temperature over long periods of time without requiring additional energy input. This means less start-ups and adjustments of external energy sources, which in turn translates into less energy consumption.

Storage tanks that incorporate a heat exchange system comprising a set of collectors and coils that are detachable from the inside of the storage tank, for DHW production via an external energy source (see DHW PRODUC-TION chapter, page: 50)

**LONG-LASTING PRODUCT:** Nickel-chromium-molybdenum STAINLESS STEEL DHW storage tank, highly resistant to pitting caused by halogen elements such as chlorine in drinking water. This is the material used to manufacture all of the models in our **"MASTER INOX"** series.

### DHW PRODUCTION/STORAGE TANKS MASTER INOX - **COILS**

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**ANTI-LEGIONELLA DESIGN:** The design of the complete range of "MASTER INOX" tanks adheres to all of the "Treatment and Prevention of Legionellosis" criteria specified in current UNE standards and EC Directives and, in particular, in the R.D. 865/2003 and the RITE (Regulations on Thermal Installations in Buildings).

The anti-legionella design applies to the storage: tank unit and its internal DHW production system.

**LARGE DHW PRODUCTION CAPACITY:** A set of separate collectors and coils, made of STAIN-LESS STEEL, are mounted inside the storage tank, allowing the heat exchange surface to be dimensioned in accordance with the power required (up to 10 m<sup>2</sup> in the 5000 litre model), adapted to traditional energy sources or to the use of renewable energies.

This exclusive **lapesa** DHW production system for large capacity tanks saves on installation space and allows total or partial maintenance of the unit, guaranteeing the continuous service of the installation.

**EASY TO MAINTAIN:** With access to tank interior through a ND400 side manhole for inspection and cleaning of the storage tank and/or coil system.

**MAXIMUM STORAGE CAPACITY:** Extra thick, rigid, PU mould-injected insulation that minimizes heat losses of stored DHW (see HEAT INSULATION chapter, page: 56).

**ELECTRIC HEATING:** Ready to be fitted with Incoloy, low charge density electric immersion elements or with sheathed ceramic heating elements, as backup electric heating (see ELECTRIC HEATING chapter, page: 54).

**EASY TO HANDLE AND TRANSPORT:** Our "MAS-TER" storage tanks are designed for easy handling and transport to the place of installation.

They have an integrated system for handling and transporting by forklift truck, which facilitates handling operations enormously, as there is no need to palletize the product which, given its weight and size, would make handling difficult.

The tanks are also equipped with lifting eyebolts on the top part so that if they have to be placed in a high area they can be lifted with an overhead hoist.



TRANSPORT SYSTEM: Openings/ducts under the tank for easier handling with pallet trucks (from 1500 litres or more).



### FEATURES COMMON TO ALL "MASTER INOX" COILS MODELS:

- DHW storage tanks in AISI 316 L stainless steel
- Capacities: 1500, 2000, 2500, 3000, 3500, 4000, 5000 and 6000 litres
- Maximum working pressure of DHW storage tank: 8 bar (optional: 10 and 12 bar)
- Maximum working temperature of DHW storage tank: 90 °C
- Maximum pressure of set of coils: 25 bar
- Maximum temperature of set of coils: **110 °C** (up to 200 °C with special high temperature seals)
- Thermal insulation: Rigid, mould-injected PU (CFC/HCFC-free, 0.025 W/m°K)
- Tanks for VERTICAL installation on floor. (OPTIONAL, HORIZONTAL position please consult us-)



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### DHW PRODUCTION/STORAGE TANKS MASTER INOX - COILS



### DHW PRODUCTION/STORAGE TANKS MASTER INOX - **COILS**

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### MASTER INOX "SB"

#### DWH PRODUCTION/STORAGE tanks, from 1500 to 6000 litre capacity.

With **detachable coils system** for DHW production via an external energy source.

They can be fitted with immersion electric elements or ceramic electric elements on the top part of the tank, as backup heating.

With ND400 side manhole for access to interior of tank for inspection, cleaning treatments and maintenance tasks. Thermally insulated with rigid, mould-injected, 80 mm-thick, PU polyurethane foam, with insulating piece in same material on the ND400 side manhole

As an option PVC padded external lining and set of trims, special outdoor lining or ALUNOX aluminium sheet lining can be supplied. (page: 57)







t	_	Manhole	ND400
		mannoic	110400

- d DHW tank
- f External lining g - Top cover
- h Thermal insulation
- j Lifting eyes
- q Detachable coils system

GENERAL CHARACTERISTI	cs	MXV-1500-SB	MXV-2000-SB	MXV-2500-SB	MXV-3000-SB	MXV-3500-SB	MXV-4000-SB	MXV-5000-SB	MXV-6000-SB
DHW capacity	l.	1500	2000	2500	3000	3500	4000	5000	6000
D: external diameter H: overall height Diagonal	mm. mm. mm.	1360 1830 2281	1360 2280 2655	1660 2015 2611	1660 2305 2841	1660 2580 3068	1910 2310 2998	1910 2710 3316	1910 3210 3735
kw: cold water inlet ww: DHW outlet z: recirculation	" GAS/M " GAS/M " GAS/M	2 2 1 1/2	2 2 1 1/2	2 3 2	2 3 2	3 3 2	3 3 2	3 3 2	3 3 2
e: drain R: side connection	" GAS/M " GAS/F	1 2	2 2						
pc: "lapesa correx up" connection tm: probe tube connection for sensors kv: primary input	" GAS/F " GAS/F " GAS/M	3/4 1/2 2							
kr: primary return	" GAS/M	2	2	2	2	2	2	2	2
Coils set heating surface	m <sup>2</sup>	2,8	3,4	4,8	5	6,7	6,7	8,4	8,4
Empty weight (approx.) Note: The 6000 litre model includes sup	Kg port legs	305	345	485	535	575	650	720	805

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### DHW PRODUCTION/STORAGE TANKS MASTER INOX - COILS

### MASTER INOX "SSB"

DWH PRODUCTION/STORAGE tanks, from 1500 to 6000 litre capacity.

**Set of OVERDIMENSIONED coils** for DHW production, specifically designed for the application of RENEWABLE ENERGIES, in particular, **SOLAR ENERGY**.

Heat exchange surfaces in the whole range comply with RITE requirements for SOLAR installations.

They can be fitted with immersion electric elements or ceramic electric elements on the top part of the tank, as backup heating.

With ND400 side manhole for access to interior of tank for inspection, cleaning treatments and maintenance.

Thermally insulated with rigid, mould-injected, 80 mm-thick, PU polyurethane foam, with insulating piece in same material on the ND400 side manhole.

Optional supply of PVC padded external lining and set of trims, special lining for exterior or ALUNOX aluminium sheet lining (page: 57)







t - Manhole ND400

d - DHW tank f - External lining

g - Top cover

h - Thermal insulation

j - Lifting eyes

q - Detachable coils system

GENERAL CHARACTERIST	<b>C</b> J	WIX - 1300-335	VIX V-2000-335	WIXV-2300-33D	WIXV-5000-555	14174-3300-335	1417 4-4000-335	14174-2000-225	1417.4-0000-221
DHW capacity	I.	1500	2000	2500	3000	3500	4000	5000	6000
D: external diameter	mm.	1360	1360	1660	1660	1660	1910	1910	1910
H: overall height	mm.	1830	2280	2015	2305	2580	2310	2710	3210
Diagonal	mm.	2281	2655	2611	2841	3068	2998	3316	3735
kw: cold water inlet	" GAS/M	2	2	2	2	3	3	3	3
ww: DHW outlet	" GAS/M	2	2	3	3	3	3	3	3
z: recirculation	" GAS/M	1 1/2	1 1/2	2	2	2	2	2	2
e: drain	" GAS/M	1	1	1	1	1	1	1	2
R: side connection	" GAS/F	2	2	2	2	2	2	2	2
pc: "lapesa correx up" connection	" GAS/F	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
tm: probe tube connection for sensors	" GAS/F	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
kv: primary input	" GAS/M	2	2	2	2	2	2	2	2
kr: primary return	" GAS/M	2	2	2	2	2	2	2	2
Coils set heating surface	m <sup>2</sup>	4,2	5,0	6,1	8,4	8,4	8,4	10,0	10,0
Empty weight (approx.)	Kg	315	365	500	565	590	665	745	817
Note: The 6000 litre model includes supp	ort legs								

MXV-1500-SSR MXV-2000-SSR MXV-2500-SSR MXV-3000-SSR MXV-3500-SSR MXV-4000-SSR MXV-5000-SSR MXV-6000-SSR

### DHW PRODUCTION/STORAGE TANKS MASTER INOX - **COILS**

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### **MASTER INOX** "S2B / SS2B"

DWH PRODUCTION/STORAGE tanks, 2000, 3500, 5000 and 6000 litre capacity.

"SB" and SSB" base models with **TWO detachable coil systems** for DHW production via two combined external energy sources.

With ND400 side manhole for access to interior of tank for inspection, cleaning treatments and maintenance. Thermally insulated with rigid, mould-injected, 80 mm-thick, PU polyurethane foam, with insulating piece in same material on the ND400 side manhole.

Optional supply of PVC padded external lining and set of trims or ALUNOX aluminium sheet lining (page: 57)







- t Manhole ND400
- d DHW tank
- f External lining g - Top cover
- h Thermal insulation
- j Lifting eyes
- q Detachable coils system

H: overall height Diagonal kw: cold water inlet " ww: DHW outlet " z: recirculation " e: drain " pc: "lapesa correx up" connection "	l. mm. mm. mm.	2000 1360 2280	3500 1660	5000 1910	6000
H: overall height Diagonal kw: cold water inlet " ww: DHW outlet " z: recirculation " e: drain " pc: "lapesa correx up" connection "	mm.			1010	
ww: DHW outlet " z: recirculation " e: drain " pc: "lapesa correx up" connection "		2655	2580 3068	2710 3316	1910 3210 3735
tm: probe tube connection for sensors " kv: primary input "	GAS/M GAS/M GAS/M GAS/F GAS/F GAS/F GAS/F GAS/M GAS/M	2 2 1 1/2 1 3/4 2 1/2 2 2	3 2 1 3/4 2 1/2 2 2	3 2 1 3/4 2 1/2 2 2	3 2 2 3/4 2 1/2 2 2
Lower coils set heating surface "S2B" Lower coils set heating surface "SS2B" Upper coils set heating surface "S2B" / "SS2B" Empty weight (approx.) "S2B" / "SS2B" Note: The 6000 litre model includes support legs	m <sup>2</sup> m <sup>2</sup> m <sup>2</sup> Kg	3,4 5,0 1,7/3,1 374 / 394	6,7 8,4 3,2/4,0 615 / 630	8,4 10,0 4,0/4,8 765 / 790	8,4 10,0 4,0/4,8 862 / 874

MAST	er inox - <b>Co</b>	ILS - SB	[Continuou	s flow Dł	HW producti	ion (liter	s/hour) <b>10°(</b>	: - 45°C	l
PRIMARY INPUT TEMP	ERATURE °C	55	5 °C	70	0 °C	8	0 °C	9	0 °C
tank model	primary pump flow (m³/h)	KW	DHW (l/h)	KW	DHW (l/h)	KW	DHW (l/h)	KW	DHW (l/h)
MXV-1500-SB	3	39	960	72	1772	98	2411	119	2928
	5	46	1132	85	2092	118	2904	143	3519
	8	52	1280	98	2411	137	3371	166	4085
MXV-2000-SB	3	44	1083	86	2116	109	2682	136	3347
	5	51	1255	104	2559	133	3273	165	4060
	8	58	1427	121	2977	154	3789	191	4700
MXV-2500-SB	3	53	1304	92	2264	119	2928	146	3593
	5	63	1550	113	2781	147	3617	180	4429
	8	72	1772	132	3248	172	4232	211	5192
MXV-3000-SB	3	61	1501	107	2633	141	3470	174	4282
	5	74	1821	134	3297	178	4380	220	5414
	8	86	2116	158	3888	212	5217	262	6447
MXV-3500-SB	3	71	1747	132	3248	181	4454	224	5512
	5	87	2141	165	4060	228	5610	284	6988
	8	102	2510	196	4823	270	6644	340	8366
MXV-4000-SB	3	71	1747	132	3248	181	4454	224	5512
	5	87	2141	165	4060	228	5610	284	6988
	8	102	2510	196	4823	270	6644	340	8366
MXV-5000-SB	3	83	2042	156	3839	211	5192	263	6472
	5	102	2510	197	4848	268	6595	337	8293
	8	120	2953	234	5758	321	7899	406	9990
MXV-6000-SB	3	83	2042	156	3839	211	5192	263	6472
	5	102	2510	197	4848	268	6595	337	8293
	8	120	2953	234	5758	321	7899	406	9990

### MASTER INOX - **COILS - SSB** [Continuous flow DHW production (liters/hour) **10°C - 45°C**]

PRIMARY INPUT TEMP	ERATURE °C	5	5 °C	7	0 °C	80	) °C	90	٥°C
tank model	primary pump flow (m³/h)	KW	DHW (l/h)						
MXV-1500-SSB	3	53	1304	92	2264	119	2928	146	3593
	5	63	1550	113	2781	147	3617	180	4429
	8	72	1772	132	3248	172	4232	211	5192
MXV-2000-SSB	3	61	1501	107	2633	141	3470	174	4282
	5	74	1821	134	3297	178	4380	220	5414
	8	86	2116	158	3888	212	5217	262	6447
MXV-2500-SSB	3	64	1575	119	2928	161	3962	199	4897
	5	78	1919	149	3666	204	5020	251	6176
	8	90	2215	177	4355	243	5979	299	7357
MXV-3000-SSB	3	83	2042	156	3839	211	5192	263	6472
	5	102	2510	197	4848	268	6595	337	8293
	8	120	2953	234	5758	321	7899	406	9990
MXV-3500-SSB	3	83	2042	156	3839	211	5192	263	6472
	5	102	2510	197	4848	268	6595	337	8293
	8	120	2953	234	5758	321	7899	406	9990
MXV-4000-SSB	3	83	2042	156	3839	211	5192	263	6472
	5	102	2510	197	4848	268	6595	337	8293
	8	120	2953	234	5758	321	7899	406	9990
MXV-5000-SSB	3	100	2461	177	4364	243	5973	301	7401
	5	125	3076	226	5569	314	7715	392	9657
	8	148	3642	271	6677	379	9319	477	11732
MXV-6000-SSB	3	100	2461	177	4364	243	5973	301	7401
	5	125	3076	226	5569	314	7715	392	9657
	8	148	3642	271	6677	379	9319	477	11732

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NOTE: for further information, consult our technical product catalog.

MAST	ER INOX - COILS - SB	Continuous flow D	HW product	ion (liters	s/hour) <b>10°</b>	<mark>C - 60°C</mark> ]	
PRIMARY INPUT TEMP	PERATURE °C	70	0 °C	8	0 °C	90	) °C
tank model	primary pump flow (m³/h)	ĸw	DHW (l/h)	KW	DHW (l/h)	KW	DHW (l/h)
MXV-1500-SB	3	46	792	73	1257	94	1619
	5	55	947	89	1533	114	1964
	8	64	1102	103	1774	132	2274
MXV-2000-SB	3	55	947	80	1378	107	1843
	5	67	1154	98	1688	131	2256
	8	78	1344	114	1964	152	2618
MXV-2500-SB	3	59	1016	87	1499	115	1981
	5	72	1240	108	1860	143	2463
	8	85	1464	128	2205	168	2894
MXV-3000-SB	3	68	1171	104	1791	137	2360
	5	86	1481	131	2256	174	2997
	8	102	1757	157	2704	209	3600
MXV-3500-SB	3	85	1464	133	2291	177	3049
	5	106	1826	168	2894	226	3893
	8	126	2170	200	3445	270	4651
MXV-4000-SB	3	85	1464	133	2291	177	3049
	5	106	1826	168	2894	226	3893
	8	126	2170	200	3445	270	4651
MXV-5000-SB	3	100	1722	155	2670	208	3583
	5	127	2188	198	3411	268	4616
	8	151	2601	238	4100	323	5564
MXV-6000-SB	3	100	1722	155	2670	208	3583
	5	127	2188	198	3411	268	4616
	8	151	2601	238	4100	323	5564

### MASTER INOX - COILS - SSB [Continuous flow DHW production (liters/hour) 10°C - 60°C]

PRIMARY INPUT TEMP	ERATURE °C	70	) °C	8	0 °C	9	D°C
tank model	primary pump flow (m³/h)	ĸw	DHW (l/h)	KW	DHW (l/h)	KW	DHW (I/ł
MXV-1500-SSB	3	59	1016	87	1499	115	1981
	5	72	1240	108	1860	143	2463
	8	85	1464	128	2205	168	2894
MXV-2000-SSB	3	68	1171	104	1791	137	2360
	5	86	1481	131	2256	174	2997
	8	102	1757	157	2704	209	3600
MXV-2500-SSB	3	76	1312	118	2040	157	2697
	5	96	1654	151	2595	199	3429
	8	114	1969	180	3107	238	4103
MXV-3000-SSB	3	100	1722	155	2670	208	3583
	5	127	2188	198	3411	268	4616
	8	151	2601	238	4100	323	5564
MXV-3500-SSB	3	100	1722	155	2670	208	3583
	5	127	2188	198	3411	268	4616
	8	151	2601	238	4100	323	5564
MXV-4000-SSB	3	100	1722	155	2670	208	3583
	5	127	2188	198	3411	268	4616
	8	151	2601	238	4100	323	5564
MXV-5000-SSB	3	113	1948	179	3077	238	4094
	5	144	2477	232	3992	312	5368
	8	172	2964	281	4833	380	6540
MXV-6000-SSB	3	113	1948	179	3077	238	4094
	5	144	2477	232	3992	312	5368
	8	172	2964	281	4833	380	6540

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PRIMARY INPUT TEMPERATURE °C         55 °C         70 °C         80 °C         90 °C           tank model         primary pump flow (m³/h)         KW         DHW (l/h)         LI L	C DHW (l/h)
tank model         flow (m³/h)         kw         DHW (I/n)         kw         DHW (I/n)         kw         DHW (I/n)         kw           3         36         886         70         1722         92         2264         115           MXV-2000-S2B/SS2B         5         42         1033         83         2042         110         2707         136	DHW (l/h)
MXV-2000-S2B/SS2B 5 42 1033 83 2042 110 2707 136	
	2830 3347 3814
3         50         1230         92         2264         119         2928         147           MXV-3500-S2B/SS2B         5         60         1476         112         2756         145         3568         179           8         69         1698         131         3224         169         4159         208	3617 4405 5118
MXV-5000-S2B/SS2B         3         58         1427         103         2535         136         3347         168           8         71         1747         129         3174         170         4183         210           8         82         2018         152         3740         202         4971         250	4134 5167 6152
MXV-6000-S2B/SS2B         3         58         1427         103         2535         136         3347         168           8         82         2018         152         3740         202         4971         250	4134 5167 6152

(1) DHW productions for the lower coils of S2B models correspond to the productions of the SB models, see page 50.

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### MASTER INOX - SERPENTÍN<sup>(2)</sup> SUPERIOR - S2B / SS2B [Continuous flow DHW production (liters/hour) 10°C - 60°C]

PRIMARY INPUT TEMPERA	ATURE °C	7(	0 °C	80	°C	90	) °C
tank model	primary pump flow (m³/h)	KW	DHW (l/h)	KW	DHW (l/h)	KW	DHW (l/h)
MXV-2000-S2B/SS2B	3	43	741	67	1154	88	1516
	5	53	913	82	1412	108	1860
	8	62	1068	96	1654	126	2170
MXV-3500-S2B/SS2B	3	58	999	86	1481	114	1964
	5	72	1240	106	1826	141	2429
	8	84	1447	125	2153	165	2842
MXV-5000-S2B/SS2B	3	66	1137	100	1722	132	2274
	5	83	1430	125	2153	167	2877
	8	98	1688	150	2584	199	3428
MXV-6000-S2B/SS2B	3	66	1137	100	1722	132	2274
	5	83	1430	125	2153	167	2877
	8	98	1688	150	2584	199	3428
(2) DHW productions for the lo	wer coils of SS2B models correspond to the product	tions of the SSB m	odels, see page 51				





### MASTER INOX - COILS models - SB - (DHW production - peak flow - )

		MXV1500 SB	MXV2000 SB	MXV2500 SB	MXV3000 SB	MXV3500 SB	MXV4000 SB	MXV5000 SB	MXV6000 SB
Peak flow 40°C	L/10'	2925	3900	4875	5850	6825	7800	9750	11800
Peak flow 45°C	L/10'	2500	3325	4175	5000	5850	6675	8350	10050
Peak flow 60°C	L/10'	1750	2325	2925	3500	4075	4675	5850	7075
Peak flow 40°C	L/60'	6675	8150	9625	11675	14240	15200	18500	20550
Peak flow 45°C	L/60'	5600	6850	8125	9825	12055	12875	15625	17340
Peak flow 60°C	L/60'	3400	4225	5050	6125	7450	8000	9750	10990
Continuous flow 40°C	Ltrs/h	4500	5100	5700	7000	8900	8900	10500	10500
Continuous flow 45°C	Ltrs/h	3725	4250	4750	5800	7450	7450	8750	8750
Continuous flow 60°C	Ltrs/h	2000	2300	2550	3150	4000	4000	4700	4700
Heating time (from 10 to 75°C)	Min	77	88	100	97	100	102	109	117
Primary flow	m³/h	8	8	8	8	8	8	8	8
Primary input temperature 85°C									

### MASTER INOX - COILS models - SSB - (DHW production - peak flow - )

		MXV1500 SSB	MXV2000 SSB	MXV2500 SSB	MXV3000 SSB	MXV3500 SSB	MXV4000 SSB	MXV5000 SSB	MXV6000 SSB
Peak flow 40°C	L/10'	2925	3900	4875	5850	6825	7800	10840	12790
Peak flow 45°C	L/10'	2500	3325	4175	5000	5850	6675	9235	10910
Peak flow 60°C	L/10'	1750	2325	2925	3500	4075	4675	6325	7500
Peak flow 40°C	L/60'	7675	9725	11550	14600	15575	16550	21740	23690
Peak flow 45°C	L/60'	6450	8150	9735	12275	13125	13950	18010	19680
Peak flow 60°C	L/60'	3875	4950	5930	7400	7975	8575	11065	12240
Continuous flow 40°C	Ltrs/h	5700	7000	8010	10500	10500	10500	13080	13080
Continuous flow 45°C	Ltrs/h	4750	5800	6675	8750	8750	8750	10530	10530
Continuous flow 60°C	Ltrs/h	2550	3150	3605	4700	4700	4700	5690	5690
Heating time (from 10 to 75°C)	Min	60	65	65	65	76	87	102	110
Primary flow	m³/h	8	8	8	8	8	8	8	8
Primary input temperature 85°C									

Primary input temperature 85°C

### MASTER INOX - COILS models - S2B / SS2B - (DHW production - peak flow - )

UPPER COIL		MXV2000 S2B	MXV3500 S2B	MXV5000 S2B	MXV6000 S2B	MXV2000 SS2B	MXV3500 SS2B	MXV5000 SS2B	MXV6000 SS2B
Peak flow 40°C	L/10'	3900	6825	9750	11800	3900	6825	10840	12790
Peak flow 45°C	L/10'	3325	5850	8350	10050	3325	5850	9235	10910
Peak flow 60°C	L/10'	2325	4075	5850	7075	2325	4075	6325	7500
Peak flow 40°C	L/60'	8150	14240	18500	20550	9725	15575	21740	23690
Peak flow 45°C	L/60'	6850	12055	15625	17340	8150	13125	18010	19680
Peak flow 60°C	L/60'	4225	7405	9750	10990	4950	7975	11065	12240
Continuous flow 40°C	Ltrs/h	5100	8900	10500	10500	7000	10500	13080	13080
Continuous flow 45°C	Ltrs/h	4250	7450	8750	8750	5800	8750	10530	10530
Continuous flow 60°C	Ltrs/h	2300	4000	4700	4700	3150	4700	5690	5690
Heating time (from 10 to 75°C)	Min	88	98	109	117	65	76	102	110
Primary flow	m³/h	8	8	8	8	8	8	8	8
Primary input temperature 85°C									

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# **ELECTRIC HEATING - MASTER INOX**



# The MASTER INOX models can be fitted with electric heating elements:

- "RB/EB" STORAGE models": MAIN ELECTRIC HEATING and/or BACKUP ELECTRIC HEATING
- Models "SB/SSB" with COILS: BACKUP ELECTRIC HEATING



#### MASTER INOX threaded immersion heating elements , in INCOLOY, for electric heating:

1	Electric heating element model	KW	V	Thread	Integrated control	IP	length L*	MAIN HEATING and/or BACKUP HEATING	BACKUPHEATING	
de la	RA4/2-60H	6,0	230/400	2" M	-	40	797	MXV15006000-RB/EB	MXV15006000-SB/SSB	
	RA4/2-90H	9,0	230/400	2"M	-	40	1115	MXV15006000-RB/EB	MXV15006000-SB/SSB	
	RA4/2-120DH	12,0	230/400	2"M	-	40	680	MXV15006000-RB/EB	MXV15006000-SB/SSB	
	RA4/2-120DHT	12,0	230/401		Regulation and safety thermostat*		680	MXV15006000-RB/EB	MXV15006000-SB/SSB	
	RA4/2-125DHT	12,5	230/400	2"M	Regulation and safety thermostat*	65	680	MXV15006000-RB/EB	MXV15006000-SB/SSB	
	RA4/2-150DH	15,0	230/400	2"M	-	40	820	MXV15006000-RB/EB	MXV15006000-SB/SSB	
	RA4/2-150DHT	15,0	230/400	2"M	Regulation and safety thermostat*	65	820	MXV15006000-RB/EB	MXV15006000-SB/SSB	· ); · ·
	RA4/2-250DH	25,0	230/400	2"M	-	40	1200	MXV15006000-RB/EB	MXV15006000-SB/SSB	and an interest
	RA4/2-250DHT	25,0	230/400	2"M	Regulation and safety thermostat*	65	1200	MXV15006000-RB/EB	MXV15006000-SB/SSB	

(\*) Regulation thermostat: o - 75°C (adjusted to 60 °C) / Safety thermostat: 90 °C

#### **HIGH ELECTRIC POWERS:**

If high electric power storage tanks have to be installed, the electric heating elements can be grouped together in the ND400 manhole. The "RB" models can be fitted with up to 8 immersion elements in the ND400 side manhole, to obtain a maximum power of 200 KW For the 2000, 3500, 5000 and 6000 litre models an optional second ND400 manhole can be included to group together up to 16 electric heating elements, for a maximum power of 400 KW.

#### SPECIAL MANUFACTURE:

The "SB" and "SSB" models can only incorporate electric heating elements in the ND400 manhole if it is moved to the top part of the storage tank, above the set of coils. In this case the electric heating would act as backup heating. As an option, the 2000, 3500, 5000 and 6000 litre models can also include a second ND400 manhole.

In all of the cases the system is supplied with a protective box for the set of heating elements in stainless steel, with a lid.

#### MXV "RB" Models with threaded immersion heating elements, in ND400 manhole

Tank models MXV "RB"	Number of heating elements on MH ND400	Number of heating elements on 2nd MH ND400 (OPTIONAL)
MXV1500RB	3, 4, 5, 6, 7 u 8	
MXV2000RB	3, 4, 5, 6, 7 u 8	3, 4, 5, 6, 7 u 8
MXV2500RB	3, 4, 5, 6, 7 u 8	
MXV3000RB MXV3500RB	3, 4, 5, 6, 7 u 8 3, 4, 5, 6, 7 u 8	- 3, 4, 5, 6, 7 u 8
MXV4000RB	3, 4, 5, 6, 7 u 8	-
MXV5000RB	3, 4, 5, 6, 7 u 8	3, 4, 5, 6, 7 u 8
MXV6000RB	3, 4, 5, 6, 7 u 8	3, 4, 5, 6, 7 u 8

# **ELECTRIC HEATING** - MASTER INOX

#### MXV "SB/SSB" models with threaded immersion heating elements, in ND400 (SPECIAL MANUFACTURE)

#### (ONLY BACKUP HEATING)

(OPTION 1) Manhole moved to top of tank. (OPTION 2) Second manhole on top part of tank

(or now 2) second manifold on top part of tank							
Tank models MXV "SB/SSB"	Number of heating elements on MH ND400 (OPTION 1)	Number of heating elements on 2nd MH ND400 (OPTION 2)					
MXV1500SB/SSB	3, 4, 5, 6, 7 u 8	-					
MXV2000SB/SSB	3, 4, 5, 6, 7 u 8	3, 4, 5, 6, 7 u 8					
MXV2500SB/SSB	3, 4, 5, 6, 7 u 8						
MXV3000SB/SSB	3, 4, 5, 6, 7 u 8						
MXV3500SB/SSB	3, 4, 5, 6, 7 u 8	3, 4, 5, 6, 7 u 8					
MXV4000SB/SSB	3, 4, 5, 6, 7 u 8						
MXV5000SB/SSB	3, 4, 5, 6, 7 u 8	3, 4, 5, 6, 7 u 8					
MXV6000SB/SSB	3, 4, 5, 6, 7 u 8	3, 4, 5, 6, 7 u 8					



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#### MASTER INOX" sheathed CERAMIC HEATING ELEMENTS on stainless steel plate for ND400

ND400 stainless steel plate with sheaths for ceramic heating elements + no. of heating elements selected. NUMBER OF HEATING ELEMENTS per plate in ND400: 3, 4, 5, 6, 7 or 8 optional application on models MXV

Heating element model	KW	V	length L*	MAIN and/or BACKUP HEATING	BACKUP HEATING
RCER-45	4,5	230/400	800	MW/ 1500 - 6000 PD	
RCER-60	6,0	230/400	1000	MXV-12006000-KB	MXV-2000/3500/5000/6000-SB/SSB



#### ELECTRIC HEATING WITH CERAMIC HEATING ELEMENTS. "DRY" SYSTEM

The "dry" system with ceramic electric heating elements means that there is no need to drain the storage tank when fitting/removing or replacing the heating elements.

This system consists of a ND400 stainless steel plate with blind sheaths in the same material that house the ceramic heating elements. With a maximum of 8 units per ND400 plate, this system provides a maximum of 48 KW of electric power.

**SPECIAL MANUFACTURE:** As an option, the storage tank can be equipped with a second ND400 manhole. In this case, maximum installable power would be 96 KW (only valid for 2000, 3500, 5000 and 6000 litre "RB" models ).

In all of the cases the system is supplied with a protective box for the set of heating elements in stainless steel, with a lid.

#### MXV "RB" models with ceramic ELECTRIC HEATING ELEMENTS, in ND400 manhole

Tank models MXV "RB"	Number of heating elements on MH ND400	Number of heating elements on 2nd MH ND400 (OPTIONAL)
MXV1500RB	3, 4, 5, 6, 7 u 8	-
MXV2000RB	3, 4, 5, 6, 7 u 8	3, 4, 5, 6, 7 u 8
MXV2500RB	3, 4, 5, 6, 7 u 8	_
MXV3000RB	3, 4, 5, 6, 7 u 8	_
MXV3500RB	3, 4, 5, 6, 7 u 8	3, 4, 5, 6, 7 u 8
MXV4000RB	3, 4, 5, 6, 7 u 8	-
MXV5000RB	3, 4, 5, 6, 7 u 8	3, 4, 5, 6, 7 u 8
MXV6000RB	3, 4, 5, 6, 7 u 8	3, 4, 5, 6, 7 u 8



#### MXV "SB/SSB" models with ceramic ELECTRIC HEATING ELEMENTS, in ND400 manhole

#### (ONLY BACKUP HEATING)

(OPTION 1) Manhole moved to top of tank. (OPTION 2) Second manhole on top part of tank

(0	(er men =) becond mannele on top part of tank							
Tank models MXV "SB/SSB"	Number of heating elements on MH ND400 (OPTION 1)	Number of heating elements on 2nd MH ND400 ( <b>OPTION 2)</b>						
MXV1500SB/SSB	3, 4, 5, 6, 7 u 8							
MXV2000SB/SSB	3, 4, 5, 6, 7 u 8	3, 4, 5, 6, 7 u 8						
MXV2500SB/SSB	3, 4, 5, 6, 7 u 8	_						
MXV3000SB/SSB	3, 4, 5, 6, 7 u 8	-						
MXV3500SB/SSB	3, 4, 5, 6, 7 u 8	3, 4, 5, 6, 7 u 8						
MXV4000SB/SSB	3, 4, 5, 6, 7 u 8	-						
MXV5000SB/SSB	3, 4, 5, 6, 7 u 8	3, 4, 5, 6, 7 u 8						
MXV6000SB/SSB	3, 4, 5, 6, 7 u 8	3, 4, 5, 6, 7 u 8						



**STAINLESS STEEL TANKS** 

# THERMAL INSULATION - MASTER INOX

10 P



The **"MASTER INOX"** series of tanks are thermally insulated at the factory by direct mould-injection with CFC and HCFC-free PU material.

This system guarantees a perfectly regular insulation thickness with optimum material density. The thicknesses indicated in the table refer to the circular tank body, but the insulation is much thicker on the top part (up to four times greater). Because the top part of the tank has better thermal protection, heat losses are much lower than those specified by the most stringent regulations, such as the DIN 4753/8 standard.



Rigid, mould-injected PU insulating material.

- Minimal heat loss!
- For hot and cold water!
- No condensation on tank body!
- Compact block, no joints!

#### Minimum thickness of equivalent TABLE OF THERMAL INSULATION: MASTER INOX SERIES insulation with other insulating materials (mm) ErP Thermal Static heat Flexible Fiberglass\* k= 0,035 - 0,046 Insulation Rockwool\* insulation losses polyurethane k= 0,034 - 0,042 Serie Туре Model thickness k= 0.025 EN 12897 , foam\* W/m °K W/m °K PU (mm.) (EU 812/2013) W/m °K (W) k= 0.040 W/m °K MASTER INOX MVV-1500-RB/SB/SSB PU 110 - 140 115 - 155 80 154 С 130 MVV-2000-RB/SB/SSB/S2B/SS2B MASTER INOX PU 80 174 130 110 - 140 115 - 155 C MASTER INOX MVV-2500-RB/SB/SSB PU 80 194 C 130 110 - 140 115 - 155 STORAGE MASTER INOX MVV-3000-RB/SB/SSB PU 80 215 C 130 110 - 140 115 - 155 MASTER INOX MVV-3500-RB/SB/SSB/S2B/SS2B PU 80 232 130 110 - 140 C 115 - 155 0 MASTER INOX MVV-4000-RB/SB/SSB PU 80 245 С 130 110 - 140 115 - 155 MASTER INOX MVV-5000-RB/SB/SSB/S2B/SS2B PU 80 266 С 130 110 - 140 115 - 155 MASTER INOX MVV-6000-RB/SB/SSB/S2B/SS2B PU 80 280 С 130 110 - 140 115 - 155

(\*) Detachable systems can lose up to 25% of the insulating capacity overall, so that in that case the insulation thickness will increased proportionally

# **CATHODIC PROTECTION** - MASTER INOX

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#### **The "MASTER INOX" series do not require cathodic protection** in normal conditions of use with drinking water (European Directive 98/83/CE). However, depending on the installation site, drin-

However, depending on the installation site, drinking water conditions may differ greatly from the drinking water requirements established by current regulations. In this case, and taking as the reference a 150 mg/l chloride content limit, we recommend fitting a permanent, maintenancefree **"lapesa correx-up"** cathodic protection system in the storage tank.

### "lapesa correx-up" permanent cathodic protection system:

# Totally automatic!

### Maintenance free!



 
 KIT C.P. lapesa correx-up
 Applicable to MASTER INOX tanks models:

 KITPCTIMX2A
 MXV1500RB...3000RB

 KITPCTIMX3A
 MXV3000RB...5000RB

 KITPCTIMX3A
 MXV2000SB/SSB/EB...2500SB/SSB/EB

 KITPCTIMX4A
 MXV3000SB/SSB/EB...4000SB/SSB/EB

 KITPCTIMX5A
 MXV5000SB/SSB/EB

"lapesa correx-up" permanent cathodic protection system: Maintenance-free permanent cathodic protection unit. These anodes do not wear out and they emit the necessary electric current automatically, providing the tank with cathodic protection via an individual potentiostat for each anode, connected to the mains electricity.



# **ACCESSORIES** - MASTER INOX



#### **EXTERNAL LINING**

External lining for "MASTER INOX" tanks with top cover, ND400 side manhole cover and trims for hydraulic connections. Standard external lining: GREY / RAL 7042.

Capacity (I)	Standard (KIT reference)	Fireproof (KIT reference)	Weatherproof (KIT reference)
1500	FME1500	FME1500	FME1500/EX
2000	FME2000	FME2000	FME2000/EX
2500	FME2500	FME2500	FME2500/EX
3000	FME3000	FME3000	FME3000/EX
3500	FME3500	FME3500	FME3500/EX
4000	FME4000	FME4000	FME4000/EX
5000	FME5000	FME5000	FME5000/EX
6000	FME6000	FME6000	FME6000/EX

#### ALUNOX EXTERNAL LINING ------

External aluminium sheet lining. ALUNOX external lining is supplied ready-mounted on the tank, over the PU insulation.

Capacity	Aluminium lining
(I)	ALUNOX - Ref.
1500	FME1500/ALUNOX-B
2000	FME2000/ALUNOX-B
2500	FME2500/ALUNOX-B
3000	FME3000/ALUNOX-B
3500	FME3500/ALUNOX-B
4000	FME4000/ALUNOX-B
5000	FME4000/ALUNOX-B







#### **2"M THREADED ELECTRIC HEATING ELEMENT.**

Low charge density, threaded, immersion electric element in Incoloy for "MASTER **INOX" STORAGE and COIL** tanks.

Characteristics and power range: page: 54 -ELECTRIC HEATING-

RA4/2-60         6,0         230/400         2"M         -           RA4/2-90         9,0         230/400         2"M         -           RA4/2-120D         12,0         230/400         2"M         -
<b>BA4/2 1200</b> 12.0 220/400 2"M
<b>KA4/2-120D</b> 12,0 230/400 2 Wi -
RA4/2-120DT 12,0 230/401 2"M Regulation and safety thermostat
RA4/2-125DT 12,5 230/400 2"M Regulation and safety thermostat
RA4/2-150D 15,0 230/400 2"M
RA4/2-150DT 15,0 230/400 2"M Regulation and safety thermostat
RA4/2-250D 25,0 230/400 2"M -
RA4/2-250DT 25,0 230/400 2"M Regulation and safety thermostat

(\*) Regulation thermostat 0 -75 °C (adjusted to 60 °C) / Safety thermostat 90 °C

#### **CERAMIC ELECTRIC HEATING ELEMENT,** STORAGE AND COIL MODELS.

Sheathed ceramic electric heating element for "MASTER INOX" STORAGE AND COIL tanks, "RB" models in ND400 Characteristics and power range: page: 54 -ELECTRIC HEATING-

Heating element	кW	v
RCER-45	4,5	230/400
RCER-60	6,0	230/400





#### ND 400 PLATES FOR INSTALLATION OF ELECTRIC **HEATING ELEMENTS ON ND400 SIDE MANHOLE.**

ND 400 plate and protective hood in stainless steel, with 2" threaded connections to install immersion electric heating elements in ND400 side manhole.



#### ND 400 PLATES FOR INSTALLATION OF **CERAMIC ELECTRIC HEATING ELEMENTS** IN ND400 SIDE MANHOLE.

ND 400 plate and protective hood in stainless steel, for the installation of sheathed ceramic electrical heating elements ("dry" system) in ND400 side manhole.



TBH2VAINAS **TBH4VAINAS TBH5VAINAS TBH6VAINAS TBH7VAINAS TBH8VAINAS** 

(\*) Heating elements not included

#### **DUAL CONTROL AND SAFETY THERMOSTAT**

Dual control 0-75° (set at 60°C) and safety 95°C thermostat KIT, with 1/2" x 100 mm threaded sheath and 3/4"-1/2" reduction. KIT

KIT MASTER double thermostat



0-16 BAR PRESSURE GAUGE

KIT pressure gauge

КІТ

KIT comprising 0-16 bar

3/4"-1/2" reduction and 1/2"-1/4" reduction

pressure gauge with



#### 0-120°C THERMOMETER

KIT comprising 0-120°C thermometer with 1/2 " x 100 mm threaded sheath and 3/4"-1/2" reduction KIT

KIT MASTER thermometer



#### **P & T PRESSURE AND TEMPERATURE SAFETY VALVE**

P & T pressure and temperature safety valve, 8 bar, 92°C

3/4" P&T valve KIT 1 1/4" P&T valve KIT

KIT

# ACCESSORIES - MASTER INOX

#### PLATE EXCHANGERS

COMPACT PLATE	EXCHANGERS	Ref.	Number of plates	Flow rate at 50°C (l/h)	Power (kW) <sup>(3)</sup>	Pressure drop (meters H <sub>2</sub> 0)	A x B x F mm	E mm	C mm	D mm	Connections
Max. working temperature	135 / 155°C <sup>(1)</sup>	LPIC-01	20	1.000	45	< 3	73 x 192 x 42,32	20,1	40	154	3/4"
Max working pressure	16 / 25 bar (2)	LPIC-02	20	2.000	90	< 6	73 x 315 x 42,32	20,1	40	278	3/4"
Applications	Fluid/Fluid	LPIC-03	20	3.000	140	< 6	119 x 289 x 48,8	45	72	243	1"
Chassis	AISI 316	LPIC-04	30	4.000	185	< 6	119 x 289 x 71,2	45	72	243	1"
		LPIC-05	40	5.000	235	< 6	119 x 289 x 93,6	45	72	243	1"
Plates	AISI 316	LPIC-07	40	7.000	325	< 8	119 x 376 x 93,6	45	63	320	1-1/4"
Connections	AISI 316	LPIC-10	60	10.000	465	< 8	119 x 376 x 136,4	45	63	320	1-1/4"
Additional features	Thermal Insulation	LPIC-12	70	12.000	560	< 8	119 x 376 x 160,8	45	63	320	1-1/4"

(1) Maximum working temperature for LPIC-01 and LPIC-02 models 135°C, for rest of models 155°C

(2) Maximum working pressure for LPIC-01 and LPIC-02 models 16 bar, for rest of models 25 bar

(3) Power defined according to: Primary 90/60°C and secondary 10/50°C

Optional: Other pressures, temperatures or fluids





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DETTACHABLE PLATE	EXCHANGERS	Ref.	Number of plates	Flow rate at 50°C (l/h)	Power (kW) <sup>(3)</sup>	Pressure drop (meters H <sub>2</sub> 0)	A x C x F mm	E(max) mm	B mm	D mm	H mm	G mm
Max. working temperature	110°C	LPID-00	5	1.000	48	< 3	204 x 490 x 13,25	290	86	381	-	1-1/4"
Max. working pressure	10 bar	LPID-01	7	1.300	60	< 3	204 x 490 x 18,55	290	86	381	-	1-1/4"
Applications	Fluid/Fluid	LPID-02	11	2.600	120	< 3	204 x 490 x 29,15	290	86	381	-	1-1/4"
Chassis	Carbon steel	LPID-03	13	3.200	148	< 3	204 x 490 x 34,45	290	86	381	-	1-1/4"
Plates	AISI 316	LPID-04	17	4.200	195	< 3	204 x 490 x 45,05	290	86	381	-	1-1/4"
Connections	AISI 316	LPID-05	21	5.200	240	< 3	204 x 490 x 55,65	290	86	381	-	1-1/4"
Gaskets	EPDM	LPID-07	27	6.600	305	< 3	204 x 490 x 71,55	290	86	381	-	1-1/4"
Additional features	Thermal Insulation Support leg <sup>(4)</sup>	LPID-10	37	8.600	400	< 3	204 x 490 x 98,05	290	86	381	-	1-1/4"
	11 5	LPID-12	45	10.000	465	< 3	204 x 490 x 119,25	290	86	381	-	1-1/4"
		LPID-21	23	15.700	725	< 3	312 x 963 x 80,5	960	140	690	185	2"
		LPID-22	29	20.500	950	< 3	312 x 963 x 101,5	960	140	690	185	2"
		I PID-23	35	25 000	1155	< 3	312 x 963 x 122 5	960	140	690	185	2"

(3) Power defined according to: Primary 90/60°C and secondary 10/50°C

(4) For models LPID-00 to LPID-12

Optional: Other pressures, temperatures or fluids Chassis and plates in AISI-304, AISI-316 or Titanium



### DATA REQUIRED TO PROVIDE A QUOTE FOR A CUSTOM PLATE EXCHANGER

To provide a specific offer of the most suitable plate heat exchanger for each particular case, the following details on the primary and secondary circuits are required: • Primary and secondary circuit flows

- Input/output temperatures of the primary and secondary circuits
- Physical properties of the liquids (if they are neither water nor steam), density and specific heat.
- Required working pressure
- Pressure drop



# INDUSTRIAL CAPACITY DHW STORAGE TANKS 7000 to 12000 litres

**lapesa** has a range of DHW storage tanks with capacities of more than 7000 litres for special installations and industrial applications, made in STAINLESS STEEL or COATED STEEL.

**lapesa** has a range of DHW storage tanks with capacities of **more than 7000 litres** for special installations and industrial applications. DHW storage and production tanks made in **STAINLESS STEEL** or **COATED STEEL.** 

This range of tanks can be fitted with our system of detachable stainless steel coils, adapting the heat exchange area to the installation's thermal power.

They are also designed to incorporate electric heating elements, both for back-up heating and as main heating. Our "dry" electric heating system with ceramic heating elements can be integrated in the ND400 side manhole, allowing the heating elements to be replaced without having to drain the storage tank.

The main options available for these storage tanks are **"lapesa correx-up"** permanent cathodic protection units or detachable insulation in 50 or 100 mm-thick glassfibre with PVC external lining (separate supply).

### INDUSTRIAL CAPACITY DHW STORAGE TANKS

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EQUIPMENT

### WITH COILS:

**MXV** and **MV** models can be fitted with one or two sets of **lapesa** detachable stainless steel coils, up to 10 m<sup>2</sup> of exchange area per set, adapting to the thermal power of the external source and the requirements of the installation.



### WITH ELECTRIC HEATING ELEMENTS:

The ND400 side manhole can be fitted with low charge density Incoloy electric heating elements to achieve a maximum power of 200 Kw. The equipment option with our "dry" system with ceramic heating elements allows to achieve a maximum power of 48 Kw.

As a special manufacturing option, this range of storage tanks can include a second ND400 side manhole to obtain up to 400 Kw with immersion heating elements and 96 Kw electric power with ceramic heating elements.





### INDUSTRIAL CAPACITY STORAGE TANKS 7000 to 12000 litres

- Industrial applications
- Food industry
- Textile industry
- Large storage volume facilities
- Centralized DHW facilities
- Energy management centres
- Specific projects





### INDUSTRIAL CAPACITY DHW STORAGE TANKS

### DHW TANKS: STAINLESS STEEL

- Capacity: 7000 to 12000 litres. •
- Material: AISI 304 L or AISI 316 L stainless steel. •
- Working pressure: 8 bar (optional: 10, 12 bar).
- Maximum working temperature: 90°C.
- ND400 side manhole.
- Internal surface treatment: chemical pickling and passivation. •
- Installation: vertical (horizontal as an option). •
- OPTIONAL: lapesa detachable coils system for DHW production.
- OPTIONAL: "lapesa correx-up" permanent cathodic protection unit. •
- OPTIONAL: immersion or ceramic electric heating elements. •
- OPTIONAL: thermal insulation, flexible PVC external lining with 50 or 100 mm thick glass fibre, supplied separately.



BH - Manhole ND400

d - DHW tank

j - Lifting lugs

p - Support legs S - Heating coils (OPTIONAL)

GENERAL CHARACTERISTICS		MXV-7000-RB	MXV-8000-RB	MXV-10000-RB	MXV-12000-RB
DHW capacity	l.	7000	8000	10000	12000
D: external diameter H: overall height	mm. mm.	1750 3633	1750 4058	1750 4808	1750 5808
kw: cold water inlet / drain ww: DHW outlet z: recirculation R: side connection pc: "lapesa correx up" connection tm: probe tube connection for sensors Empty weight (approx.) Side manhole	" GAS/M " GAS/M " GAS/M " GAS/F " GAS/M " GAS/F Kg ND	3 3 1 1/2 2 3/4 1/2 677 ND400	3 3 1 1/2 2 3/4 1/2 757 ND400	3 3 1 1/2 2 3/4 1/2 887 ND400	3 3 1 1/2 2 3/4 1/2 1059 ND400
COILS OPTION (heat exchange surface 10 M <sup>2</sup> )		MXV-7000-SB	MXV-8000-SB	MXV-10000-SB	MXV-12000-SB
kv: primary input kr: primary return	" GAS/M " GAS/M	2 2	2 2	2 2	2 2
Empty weight (approx.)	Kg	760	860	990	1162

# **INDUSTRIAL CAPACITY** STORAGE TANKS

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All offers and agreements shall be based exclusively on the following conditions; any other conditions by customers shall not be binding unless expressly agreed in writing.

#### GENERAL

**GENERAL** Agreements shall only be binding if confirmed in writing by Lapesa. The customer shall be responsible for the accuracy of the documentation that he provides, especially that of samples and drawings. Data, drawings, representations and descriptions of performances that appear in our catalogues, price lists or documentation pertaining to the offer, give approximate values usual within the sector unless it is specifically indicated in the order confirmation that they are binding. Conditions specified by buyers in orders that are not in accordance with our general sales conditions or, if relevant with the special conditions for each pro-duct shall be deemed invalid unless they have been agreed to by us and express mention is made of them in the written order acceptance. Orders that have been accepted may not be cancelled by customers if said orders are special productions and the materials required to produce them have been acquired; nor may they be cancelled after 5 working days from our acceptance of the order or if the materials have been dispatched.

#### DELIVERY TIMES AND DELIVERY TERMS

Delivery times are considered to be approximate unless a firm date of delivery has been indicated. The delivery time shall be counted from the date on which the order confirmation is sent or the date on which the deposit payment, if required, is received and shall be considered to have been fulfilled when the merchandise leaves our factory or warehouse on the date agreed or when its availability for dispatch to the customer has been notified. In the event that the contract were to be subsequently modified by the customer in such a way that this were to affect the delivery date, it may be prolonged in a reasonably correlative way. In the case of supplies for which prior notificating that the material is available, otherwise the material will be incorporated into Lapesa's stocks and may be used as required by Lapesa. Lapesa shall inform customers of the conditions and the period in which the merchandise

can be supplied.

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Delays in delivery due to force majeure or deriving from extraordinary or unforeseen causes that cannot be avoided by Lapesa will not give rise to any type of penalty nor the cancella-

be avoided by Lapesa will not give rise to any type of penalty nor the ca-tion by the customer of the order that has involuntarily been delayed. The buyer may not reject partial supplies. Delivery is carried out ex Lapesa works or ex Lapesa warehouse pro-vided that no other agreement has been made and without any commitment regarding the most economical way of carrying out the delivery. Unloading operations are for the customer's ac-count unless otherwise agreed. In the event of supplies that are sent carriage forward the risks are transferred to the customer at the time that the mer-

risks are transferred to the customer at the time that the mer-chandise is handed over to the person responsible for transporting it.

#### PRICE

**PRICE** The prices that are shown in our price list are ex-works or ex-warehouse, plus the corresponding value added tax in force at the time, delivery and packaging costs, if a different type of packaging to that usually provided is required. The prices in the price tariffs may be modified by Lapesa at any time. Said modification shall affect all those orders pending delivery at the date of the modification. If the customer were not to accept the new price he shall be entitled to cancel the order within the 10 days following the notification of the price increase. Any discount that is agreed presupposes on-time fulfilment of all obligations to us, including those deriving from other contracts.

#### PAYMENT TERMS

PAYMENT TERMS All invoices shall be paid at sight, upon delivery of the merchandise, unless the buyer has been allowed credit, in which case they shall be paid in the periods expressly indica-

ted. If a buyer is allowed credit payment shall be carried out by accepted domiciled letter of ex-

A a buyer is allowed texten by an out of the case of special agreements. If the date of payment is exceeded Lapesa shall add the corresponding interests to the unpaid amou-nt as well as the com arising from non-payment or the bill return. The first sales operations with a customer will always be at sight terms. If after signing a contract, Lapesa were to come to know facts that imply a substantial worsening in the financial conditions of the customer and which could endanger its right to good consideration, Lapesa may suspend deli-very of the goode unless the customer pays first. very of the goods unless the customer pays first.

#### GUARANTEE

Our products are guaranteed against all manufacturing defects for the period, and according to the conditions, expressly indicated for each product in its corresponding catalogue or guarantee, provided that they are used and installed in normal conditions, in accordance with the regulations in force or the specific installation

Our guarantee only covers manufacturing defects, never operating or installation defects and thus replacement of material free of charge for the buyer will be carried out within the terms established in current legislation and the terms specified in the product guarantee.

#### OWNERSHIP

Lapesa reserves the right of ownership of the merchandise supplied up to the time that all of the obligations deriving from the commercial relationship have been fulfilled, including the obligations that may arise in the future from the same contract or from other contracts signed with the customer.

#### RETURNS

No returns are allowed without our prior consent.

If a return is authorised the merchandise shall be sent by the customer carriage paid to the factory or warehouse specified by Lapesa.

All costs of reception of materials, inspection and testing and repair if relevant shall be discounted from the amount to be paid into the customer's account, deducting an amount of no less than 10%.

#### CUSTOMER SERVICE

All claims and communications indicating the intention to return merchandise, other than those covered by the guarantee, must be notified to Lapesa's customer service department within 10 days from the data of delivery of the materials. Once Lapesa has decided on the admissibility or inadmissibility of such claims, it will proceed accordingly.

#### JURISDICTION

The place in which the contracting parties shall comply with their obligations will be Zaragoza. The competent jurisdiction for all types of discrepancies arising from the contract or concerning its validity provi-ded that this are licit shall be the local courts or tribunals of Zaragoza. The law in force at the site of our registered offices shall be applicable.

### **WORLDWIDE PROJECTS**

# lapesa













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