



Winner in Solar System Category

دراسة إحصائية مستقلة أجريت من قبل شركة
IPSOS على عينة ١٢٠٠ مستهلك لبناني

Our Tank Will Never Leak 316-L Stainless Steel



Our Company

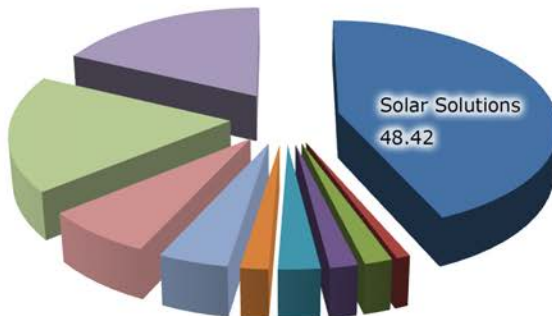
Established in Canada, Lösung is a world leader in the design and manufacture of solar thermal vacuum tube system. The unique design of our system uses vacuum technology to ensure the most effective transfer of energy into heat.

Lösung solar system has extra performance in comparison with a traditional flat plate collector المرايا, providing heat not only in warm, sunny days, but also in cold, windy or humid conditions. Lösung has two hi-tech plants in China and the headquarters is in Montreal, Canada.

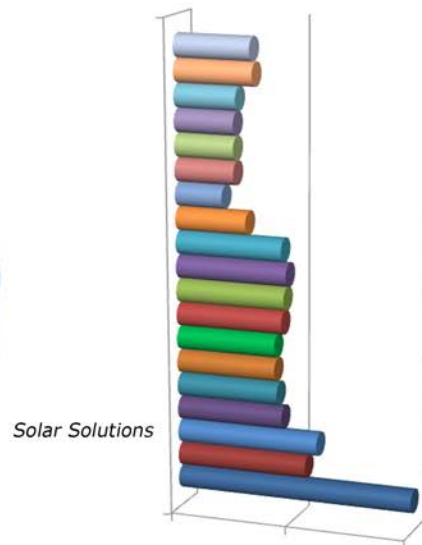
Lösung products are reliable and durable. The Factory is certified to ISO9000-2000 standard and all products have the best approval (European & American Certification).

Focus and investment in Research and Development means that Lösung is consistently innovative. This is complemented by a highly skilled and efficient workforce, ensuring a perfect product in performance, quality and service.

Lebanese Market Share



Top 10 solar dealers in the Bekaa



Installed systems in Lebanon

Figures According to



Winner in Solar System Category
تمنح جائزة المنتج للعام
من المستهلكين اللبنانيين
إصدار 1200 وحدة 2014



"We suffered a lot before installing the LOSUNG solar system, solar energy was able to solve this problem. It provides hot water constantly, we can no longer live without our solar systems."

Al-Nasira Hospital (G.M: Dr. Khaled Al-Fased)

Hot water for your daily needs

MODELS: NP316-150, 200, 240, 300

Non Pressurized



Epoxy
coated
tank



Hot water
up to
99°C



PUF
insulation



Suitable
for hard
water



Ultraviolet
protection



Corrosion
resistant



DIN
approved



3 year
warranty

FEATURES

- Stylish slim line design
- Thermosiphon operation minimizes maintenance.
- Electric heater model included
- Assistant tank to control the water level in the tank.
- Automatic intelligent controller available.
- Protective anode to reduce corrosion.
- Safety exhaust for pressure release.

BENEFITS

- Withstands hard water up to 600 PPM, chlorides up to 300 PPM
- Overnight temperature drop less than 3°C
- Saves up to 80% of your water heating energy consumption.
- Daily hot water up to 99°C
- Reliable, low maintenance operation.
- Hot water regardless of the weather.
- Reduced energy use, saves up to 3.2 tons of carbon monoxide emissions every year.

Hot water for your daily needs

MODELS: HP304-240-D

Pressurized



Epoxy
coated
tank



Hot water
up to
99°C



PUF
insulation



Suitable
for hard
water



Ultraviolet
protection



Corrosion
resistant



DIN
approved



3 year
warranty

FEATURES

- Pressurized system with operating pressure of 8 bar with burst pressure of 13 bar
- 99.9% pure copper high transitivity vacuum pipes with build in anti-freeze liquid
- High-transmissivity low iron vacuum glass
- Ultrasonic laser welded copper fins and raiser tubes

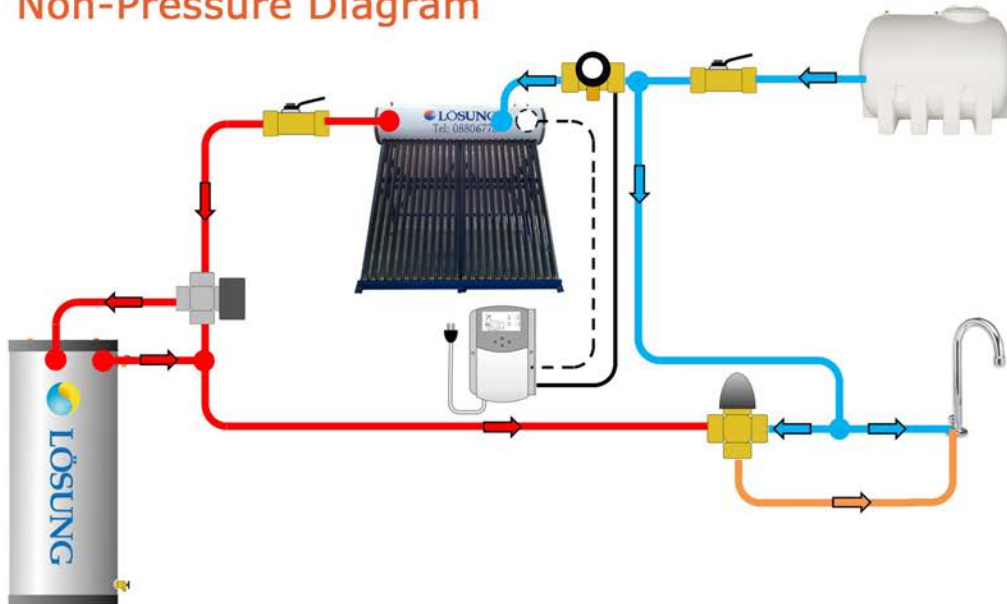
BENEFITS

- Withstands hard water up to 600 PPM, chlorides up to 300 PPM
- Overnight temperature drop less than 3°C
- Uniform pressurized hot water output when used with pressure booster pump
- Daily hot water up to 99°C
- 30% more efficient than textured glass flat plate collector

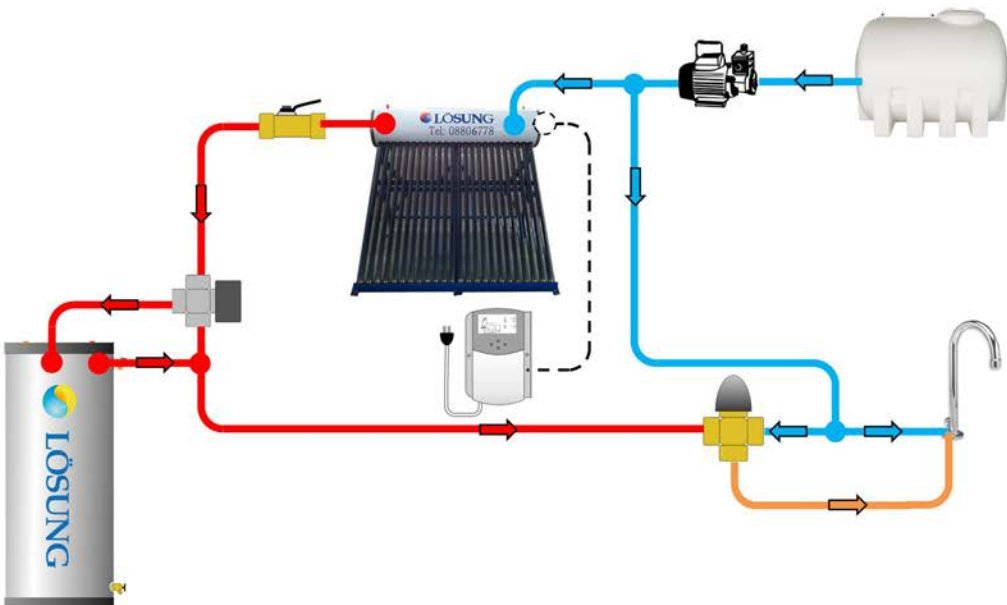
COMPONENTS

- 240 litres food grade 304 stainless steel
- 2.232 m² vacuum tube heat pipe
- Polyester powder coated steel structure
- Pressure and air-release valve

Non-Pressure Diagram



Pressurized System Diagram



"Hot water become a need nowadays, with the cost of fuel, the most suitable solution is the renewable energy, we felt the difference since we installed one, I advise everyone to install solar system"

Apotre Kab Elias (Responsible:)

Our Accessory



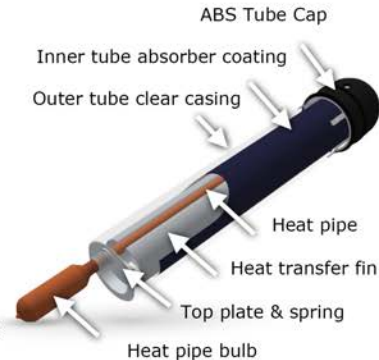
Specification

Model number	NP316-150	NP316-200	NP316-240	NP316-300	HP304-240-D
Inner tank capacity	150L	200L	240L	300L	240L
Inner tank material	SU 316L	SU 316L	SU 316L	SU 316L	SU 304
Inner tank thickness	0.4mm	0.4mm	0.4mm	0.4mm	1.5mm
Rack material	MICRoLaX Coated Rack	MICRoLaX Coated Rack	MICRoLaX Coated Rack	MICRoLaX Coated Rack	MICRoLaX Coated Rack
Thickness	1.5mm	1.5mm	1.5mm	1.5mm	1.5mm
Number of tube	15	20	24	30	24
Fit for family	3-4 person	4-5 person	5-6 person	6-8 person	5-6 person
Average Power capacity	7.1KW/day	9.3KW/day	11.2KW/day	13.95KW/day	11.2KW/day
Average time to heat water from 15°C to 60°C	3 hour	3 hour	3 hour	3 hour	3 hour
Width	1650mm	1650mm	1650mm	1650mm	1650mm
Length	1302mm	1712mm	2024mm	2492mm	2024mm
Height	1635mm	1635mm	1635mm	1635mm	1635mm
Rack angle	45°	45°	45°	45°	45°
Inlet outlet diameter	3/4"	3/4"	3/4"	3/4"	3/4"

Evacuated Tube & Heat Pipe

Manifold & Vacuum pipe

The vacuum pipes housing the copper header pipe (heat exchanger) that the system fluid circulates through. The header pipe is designed for both efficient heat transfer and reliability with only 4 brazing points. Brazing is 45% silver material for optimal strength and corrosion resistance. The header pipe drains effectively making it compatible with steam-back and drain-back systems.



A thick two layer of vacuum glass made from borosilicate glass insulates the header pipe to reduce heat loss and is able to withstand high temperatures. The copper heat pipe absorbs heat from the glass wall and the heat transfer fin. A small amount of volatile liquid inside the heat pipe turns to steam at only 30°C rapidly transferring heat up to the header pipe. Liquid circulates through the header pipe carrying away the heat.

High Purity Copper

LÖSUNG manufactures heat pipes in house using high purity **C10200** grade copper combined with an ageing process that ensure long term vacuum stability and optimum heat transfer. Using a lower purity grade copper such as C12200 reduces the cost of the heat pipes considerably but can reduce the longevity as impurities in the copper leach out over time (3-5 years) to form an air pocket in the bulb, compromising heat transfer.



ABS Rubber Plastic holder

ABS rubber is used for the manifold seals and tube caps due to its excellent stability through a wide temperature range and excellent UV stability.



"We saved more than 50% of fuel and electricity on our energy bill since we installed the solar system. We are very satisfied with our choice and I regret not installing this solar system earlier."

Liban Luit (Technical Engineer Jad Choubassi)

Often imitated, never duplicated.



LÖSUNG is at least a generation ahead of all solar heaters

"I am the first customer of LÖSUNG, I installed the system more than 4 years ago and it is still functioning as if it was a brand new system because of the yearly preventive maintenance program that Solar Solutions is offering."

Toni Alout

Commercial Solar Water Heating

Rapid Payback

Commercial Lösung systems typically pay for themselves in less than 2 years, are maintenance free, require zero additional maintenance cost and have a life expectancy of 20 years. On average, a 100-panel system will save 8000L of LP fuel per month.

Warranty Leadership

Lösung leads the solar industry with unsurpassed commercial investment protection. Warranties include panels, labor, parts and freeze protection. This extensive and unprecedented warranty has been our trade mark since we started our business.



Professional Design and Installation



Lösung's worldwide network of solar professionals use the Swiss software *polysun* the best in the world, well-engineered and worry-free installation from start to finish. A free performance and investment analysis will show just how much a Lösung solar water heating system can save your company year after year.



"My hotel is an ECO friendly building and solar water heaters are the main components. We use it for our washing machines and dishwashers and we love how practical and economical it is on our business."

Beit el-Kroum (Owner: Irene Alout)