OUR COMPANY

IES Group was established in 1998 and headquartered in Hong Kong. With perseverance and commitment to the “creation of excellence”, IES has experienced steady development and continued growth since its establishment.

IES Group has over 20 years of industry experience manufacturing heat exchangers, as well as the integration of automated control systems. Our expertise ranges from R&D, manufacturing, and sales & service; offering our customers a complete product and service experience. We specialize in the design and manufacture of various types of high-efficiency heat exchangers, energy-saving and environmental protection products based on market requirements. Our design & products adhere to ISO 9001:2008, BS PD5500, DIN4753, ISO 3834 and other related industry standards. IES products are widely used in air conditioning, central heating systems, space heating and pool heating. Our products can be found across multiple industries including electrical, metallurgy, petrochemical, food, and pharmaceutical covering China, Hong Kong, Macau and Southeast Asia.

IES Group’s production base located in Guangdong. Our plant covers over 10,000m2, and features multiple production lines, providing customers with a combination of production such as Hot Water Storage Tank, Semi-Storage Calorifier, Storage Type Calorifier, Electric Calorifier and Pressure Vessel.
INTERNATIONAL STANDARDS
OF QUALITY

Complete customer satisfaction is our goal, and IES strives to develop, implement, maintain and enhance effectiveness of our products to the highest international standards.
OUR PRODUCTS

IES products are designed for high performance and sustainability, with minimal maintenance, and all of our products are constructed from high graded stainless steel (304L/316L or Ti) for their durability. Our products combine advanced technology and innovative designs tailoring for wide range of commercial and industrial applications.

We manufacture a wide range of tanks from horizontal and vertical tanks to pressure vessels and calorifiers. Our engineering and production teams can assist you to design and manufacture tanks that will best match your application requirements and specification.
STAINLESS STEEL - THE ADVANTAGE

Designed for high performance and durability with minimal maintenance, each IES tank is constructed from high graded stainless steel.

CORROSION RESISTANCE
Stainless steel contains sufficient chromium to form a passive film of chromium oxide, which prevents further surface corrosion and blocks corrosion from spreading into the metal's internal structure.

HYGIENE
The antibacterial properties of stainless steel stop bacteria growing in the stored water makes it the first choice for strict hygiene conditions, such as hospitals, kitchens, abattoirs and other food processing plants.

FIRE AND HEAT RESISTANCE AND STRENGTH
Stainless steel prevents scaling and retain strength at high temperatures. The work-hardening property of austenitic grades, results in significant strengthening of the material from cold-working alone, and the high strength duplex grade, allows reduced material thickness over conventional grades.

ECO FRIENDLY MATERIAL
Stainless steel products are durable. There is less concern about disposal since this material is 100% recyclable. An average stainless steel object is composed of about 60% recycled material of which approximately 40% originates from end-of-life products and about 60% comes from manufacturing processes.
HOT WATER STORAGE TANK


TECHNICAL DESCRIPTION

Tanks are manufactured from material Austenitic Stainless Steel 304, 316, 316L or 316Ti with the most corrosive resistance. Automatic plasma and TIG welding is used to ensure uniform of surface and to minimize the risk of corrosion.

FEATURES:

- Pressure rating upto 25 bar, storage capacity from 100 Litres to 15,000 Litres
- 100% Austenitic Stainless Steel 304,316,316L or 316 Ti
- Fully hygienic for drinking water without sacrificial anode or anti vacuum valve
- World approved high quality Flux Cored Wire Welding and Plasma Arc Welding technique are used
- Standard conformity: BS PD5500, DIN4753 or ISO 3534

INSULATION

50mm soft polyurethane foam or fiberglass with conductivity 32kg/m² or on request.
**VERTICAL**

- **Manhole**
- **Temp. sensor**
- **Drain**
- **Cold feed**
- **Circulation**
- **Hot water supply**
- **Pressure gauge**
- **Thermometer**
- **Safety valve**
- **Vent**
- **Spare**

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**Remarks**

1. Horizontal
2. Vertical
3. The size of the above table is factory standard size, and other specifications can be customized according to customer requirements.
Semi-Storage Calorifier

Semi-Storage Calorifiers are designed for use in environments where there is high-peak hot water demand, but limited plant room space.

Each unit incorporates a buffer vessel and combining a packaged plate heat exchanger, U-tube battery or “shell & plate” heat exchanger together with circulation pump and isolation valve. It also makes a tail-on range of semi-storage calorifier with varying capacities and heat exchanger power ratings.

The principle of semi-storage calorifier is equipped with a built-in circulation pump ensuring a constant flow rate through the stainless steel heat exchanger and into the storage tank. The capacity of heat exchanger is set above the calculated peak hourly demand. The heat exchanger is designed to raise the temperature of the secondary water to desired temperature through the heat exchanger. The thermostat/controller can stops the circulation pump when the desired temperature is achieved.

The required storage volume is typically only a quarter of an equivalent storage calorifier. This not only assures a maximum reserve of hot water but also eliminates any areas of cool water to decrease the chance of growth of Legionella pneumophila.

FEATURES:
- Pressure rating up to 25 bar, storage capacity from 100 Litres to 15,000 Litres
- 100% Austenitic Stainless Steel 304, 316, 316L or 316Ti
- Fully hygienic for drinking water without sacrificial anode or anti vacuum valve
- Storage capacity shall be 100% usage
- Even water temperature distribution
- High K-value of “Shell & plate” heat exchanger in order to minimize the heat transfer area.
- “Shell & plate” heat exchanger has compact size which is suitable for the limited plant room
- Easy for installation, maintenance and service
- Higher efficiency thermal exchange
- Integrated control panel with digital display controller to monitor and control the water temperature. Data can be transfer to BMS.
- Standard conformity: BS PD 6500, DIN4753 or ISO 3834
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**Remarks:**
1. Horizontal
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3. The size of the above table is factory standard size, and other specifications can be customized according to customer requirements.
4. The heat storage capacity of the above table is designed for 30 minutes, which is for reference only and is subject to actual working conditions.
TECHNICAL DESCRIPTION
Storage Type Calorifier with U-tube Heat exchanger allows to deliver hot water for different application. Calorifiers and U-tube are manufactured by Austenitic Stainless Steel 304, 316, 316L or 316Ti, SUS444 or Titanium.

FEATURES:
- Pressure rating up to 25bar, storage capacity from 100Litres to 15,000 Litres
- High heating capacity from 10kW to 1400kW
- Heat exchanger in U-tube
- Removable Heat exchanger with high flexibility for system upgrading or modification
- Easy for maintenance and cleaning
- High conductivity heating element made of Copper Nickel, Stainless Steel 304, 316, 316L or 316Ti, Incoloy Steel or other material available
- Entirely hygienic for domestic hot water system
- Standard conformity: BS PD5500, DIN4753 or ISO 3834

INSULATION
Factory standard of 50mm soft polyurethane foam or fiberglass with conductivity 32kg/m 2 or upon request

HEAT EXCHANGER
Flange mounted U-tube Bundle

STORAGE TYPE CALORIFIER WITH U-TUBE HEAT EXCHANGER

Storage Calorifier is an indirect water heating equipment (with one or more than one heating source), which accumulates heat to produce hot water in a period of time. Calorifier ensures to achieve excellent thermal stratification with renewable and back up energy source. Heating source shall be boiler, heat pump, solar collectors or electric heater.
### Vertical
- Manhole
- Temp. sensor
- Drain
- Cold feed
- Circulation
- Hot water supply

### Horizontal
- Pressure gauge
- Thermometer
- Safety valve
- Vent
- Spare
- Heat source (in)
- Heat source (out)

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4. The heat storage capacity of the above table is designed for 45 minutes, which is for reference only and is subject to actual working conditions.
**Storage Type Calorifier**

*With Spiral Coil Heat Exchanger*

Storage Type Calorifier is an indirect water heating equipment (with one or more than one heating source), which accumulates heat to produce hot water in a period of time. Calorifier ensures to achieve excellent thermal stratification with renewable and back up energy source. Heating source shall be boiler, heat pump, solar collectors or electric heater.

**Technical Description**

Storage Type Calorifier with Spiral Coil Heat Exchanger allows to deliver hot water for different application. Calorifiers and Spiral Coil are manufactured by Austenitic Stainless Steel 304, 316, 316L or 316Ti, SUS444 or Titanium.

**Features:**

- Pressure rating up to 25bar, storage capacity from 100Litres to 15,000 Litres
- High heating capacity from 10kW to 1400kW
- Heat exchanger in Spiral Coil
- Space saving with built-in heat exchanger
- Easy for maintenance and cleaning
- High conductivity heating element made of Copper Nickel, Stainless Steel 304, 316, 316L or 316Ti, Incoloy Steel or other material available
- Entirely hygienic for domestic hot water system
- Standard conformity: BS PD5500, DIN4753 or ISO 3834

**Insulation**

Factory standard of 50mm soft polyurethane foam or fiberglass with conductivity 32kg/m² or upon request

**Heat Exchanger**

Built-in Spiral Coil
**Vertical**

- Manhole
- Temp. sensor
- Drain
- Cold feed
- Circulation
- Hot water supply
- Pressure gauge
- Thermometer
- Safety valve
- Vent
- Spare
- Heat source (in)
- Heat source (out)

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**Remarks:**
1. Horizontal
2. Vertical
3. The size of the above table is factory standard size, and other specifications can be customized according to customer requirements.
4. The heat storage capacity of the above table is designed for 45 minutes, which is for reference only and is subject to actual working conditions.
ELECTRIC CALORIFIER

Electric Calorifier is mostly used in district heating, solar plants, domestic hot water system and space heating operation in hospital, hotels, sports stadium & multi-purpose building. It provides stand-a-tone solution for different application to minimize complicated system and installation area.

TECHNICAL DESCRIPTION

Electric Calorifier is a storage buffer vessel integrated with electrical immersion heater with thermostat and control panel to deliver hot water for different application. Calorifiers are manufactured from material Austenitic Stainless Steel 304, 316, 316L or 316Ti with the most corrosive resistance.

FEATURES:
- Pressure rating up to 25 bar, storage capacity from 100 litres to 15,000 litres
- Compact in size, easy to be installed
- No other heat source required, minimize plant room space
- Quiet in operation and clean with no waste gas produced
- Available in variety material of SS304, SS316L, SS316Ti, SUS444 or Titanium
- High conductivity heating element made of copper Nickel, Stainless Steel 304,316,316L or 316Ti, Incoloy, Steel or other material available
- Technical innovation for water hygiene
- Electronic display control mounted on calorifier to maintain high “safety temperature” against Legionnaires
- Standard conformity: BS PD5500, DIN4753 or ISO 3834

INSULATION

50mm soft polyurethane foam or fiberglass with conductivity 32kg/m²

HEATING ELEMENT

Flange mounted electric heater are available in element sheath of Copper Nickel, Stainless Steel 304, 316, 316L or 316Ti, Titanium, Incoloy, Nicalloy 800, Nicalloy 825 or other specified.

Kilowatts rating from 20kW to 800kW, voltage in 220V or 380V in single phase or three phase.

Less Watts Density of heating element provides longer service life (approx. 5.5W/cm²)

CONTROL PANEL

Cabinet is made of factory standard 1.5mm thick steel construction with powder coating. Electrical components conform to European Standard with CE Mark. Control panel is designed to meet client requirements with stage control basis. Reliability temperature controller, protective circuit breaker, relay, step controller, timer, control circuit and safety switch provided in control panel for Calorifier on/off operation. Modulating control sequence is available for space heating application. The feedback output signal converted to building automation system indicates the operating status of the calorifier.

STANDARD ACCESSORIES

AND COMPONENTS
- Pressure Gauge
- Temperature Guage
- Thermostat
- Pressure Relief Valve
- Low Water Level Limiter
- High Temp Alarm and Cut-out
- Digital Temp Display
- Electric Heater / Stages On/Off Status indicator
- Cabinet Door Lock
- Test Button
- Power On
Expansion Vessel

Expansion Vessel is mainly adopted into hot water supply, heating system for reducing the volume expansion due to pressure fluctuation and temperature variance. Expansion Vessel included body part, bladder, water inlet/outlet port, inspection hole and air inlet.

Body Part made by Austenitic Stainless Steel 304, 316, 316L or 316Ti with the most corrosive resistance. EPDM rubber bladder made bladder, with elastic characteristics to enable total expansion inside the tank to ensure the best performance and longer product life cycle. The air cushion between bladder and body part is gas-filled before delivery.

Volume of expansion vessel is from 300L to 2000L with providing wide range of design pressure and working pressure for client selection.

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**HONG KONG**
- Crowne Plaza Hotel
- Mandarin Oriental Hotel
- Hong Kong Central Landmark Hotel
- Disneyland Hollywood Hotel
- Renaissance New World Hotel
- Regal Riverside Hotel
- The Mira Hotel
- W Hotel
- Prince of Wales Hospital
- Princess Margaret Hospital
- Tamar Government Headquarter
- EMSD Headquarter
- Hong Kong Sports Institute
- The Hong Kong Institute of Education
- Cathay Pacific Passenger Lounge

**MACAU**
- Sands Casino, Macau
- Venetian Parcell I
- Venetian Parcell II, Four Seasons Hotel
- Wynn Macau Hotel
- Galaxy Resort
- Altira Hotel, Macau
- New Grand Lisboa, Macau
- Grand Waldo, Macau
- MGM Grand, Macau
- Ponte 16 Macau Hotel

**VIETNAM**
- Vietnam Best Western Sapaty Hotel
- Times Square

**SINGAPORE**
- Singapore Marina Bay Sands
- Singapore Island Country Club
- National University of Singapore
- V-Hotel
- Traders Hotel
MAINLAND CHINA
The Guangzhou Chow Tai Fook Finance Centre
InterContinental Guangzhou Exhibition Center
The Westin Pazhou Hotel, Guangzhou
Doubletree by Hilton Hotel, Guangzhou
Sheraton Guangzhou Hotel
The Ritz Carlton Hotel, Guangzhou
Grand Hyatt Guangzhou
White Swan Hotel
Sun Yat-sen University Affiliated Cancer Hospital
PARK Hyatt Guangzhou
Crowne Plaza Zengcheng

The St. Regis Shenzhen
JW Marriott Hotel Shenzhen Bao’an
Shenzhen Marriott Hotel Nanshan
The Langham, Shenzhen

InterContinental Zhuhai
Zhuhai Chimelong Hengqin Bay Hotel
Zhuhai Chimelong Yinhai Hotel
Zhuhai Chimelong Ocean Science Museum
InterContinental Foshan
Pullman Huizhou Kalsia Hotel
Sheraton Zhongshan Hotel
Sheraton Qingyuan Lion Lake Resort
Softel Foshan
Shunde Marriott Hotel
Courtyard by Marriott Shunde Longjiang

Mandarin Oriental Wangfujing, Beijing
The Ritz-Carlton, Beijing
Rosewood Beijing
Shanghai Disneyland Park
Bulgari Hotel, Shanghai
Shangri-La Hotel Hangzhou
Crowne Plaza Hangzhou HEDA, Hangzhou
InterContinental Hefei
Nanjing ICC
W XIAN Hotel
Pullman Xuchang Hotel
W Changsha Hotel
The St. Regis Changsha
Changsha Tongguan Macrolink Legend Hotel
Haikou Marriott Hotel
Bo’ao State Guesthouse
Sanya Shangri-La Hotel
Beauty Crown Hotel
The St. Regis Chongqing
Chongqing Minyoun Financial Plaza
JW Marriott Hotel Chongqing
Art Residence By Armani Casa
W Chengdu Hotel
Chongqing Raffles City
New World Guiyang Hotel
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