Series

SUPERHEATED WATER BOILERS

ELECTRIC









PATTSU*

ASE

SUPERHEATED WATER BOILER

Electric, high efficiency, zero CO₂ emissions and low maintenance cost.

Power range from 15 kW to 10.000 kW.

Pressure range up to 40 bar and 250 °C.

GREAT NUMBER OF AVAILABLE OPTIONALS

These improve **performance**, **efficiency** and superheated water boiler **operation**.













ASE-1200

Series Control panel



24 h

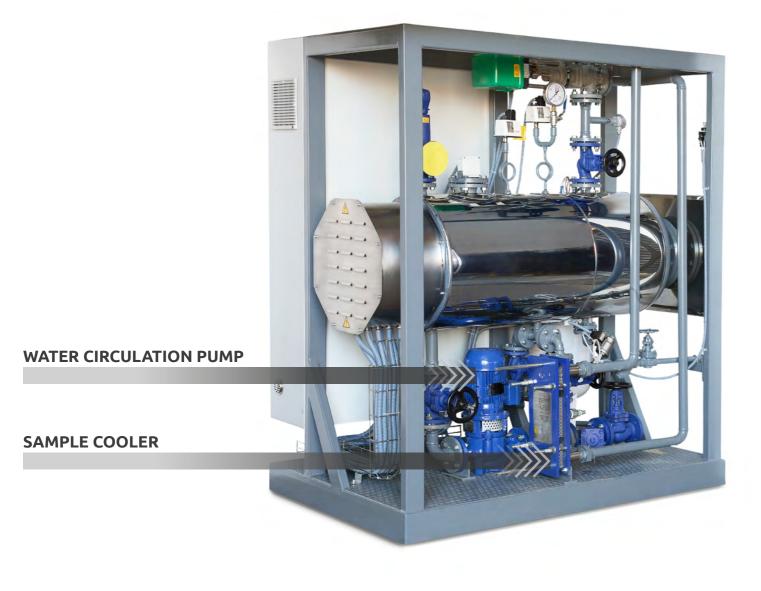
72 h

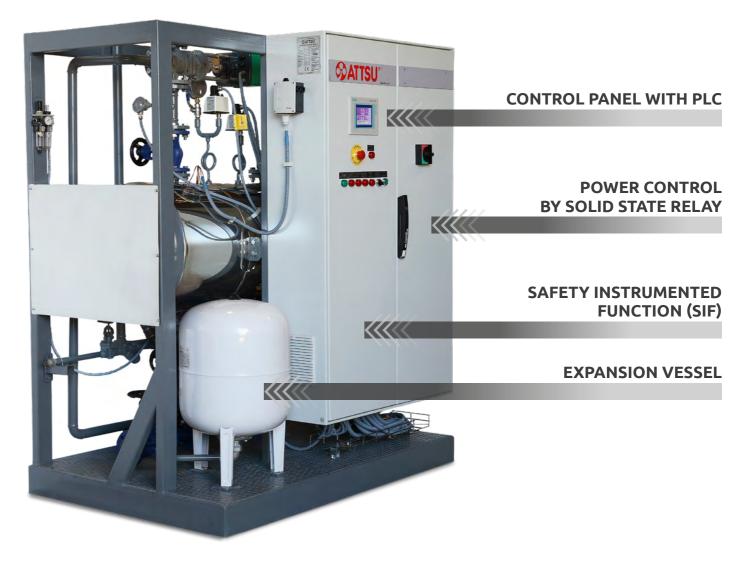
2 h

Add-on ACCESSORIES









Add-on

ACCESSORIES



CONTROL PANEL WITH PLC

Enable instantaneously communication and visualization of boiler operating values and data. Available on Modbus TCP/IP, RTU, PROFIBUS communication, etc.

√ Easy maintenance

MORE INFORMATION



WATER CIRCULATION PUMP

Superheated water pumping system for boiler and primary circuit operation.

√ Easy maintenance



SECOND FEED WATER PUMP

Installed on stand-by, enables automatic switching to the other pump.

√ Easy maintenance



MORE INFORMATION

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SPECIAL PUMPS

Encapsulated pumps, cooled by water, magnetic-driven or exclusive design for special applications.

√ Special applications



PLATFORM AND LADDER

Free access to valves on top for easy maintenance.

√ Easy maintenance



SAMPLE COOLER

It enables taking water samples of the same concentration than inside the boiler instantaneously in a safe way without flash steam expulsion risk.

√ Easy maintenance



POWER CONTROL BY SOLID STATE RELAY

Solid state relays (SSR) enable a continuous and instantaneous power supply, thanks to a power control from stages to modulating.

√ Special applications



FULLY IN STAINLESS STEEL

Complete boiler fully in stainless steel AISI-304, AISI-316 or Duplex, according to process requirements.

√ Special applications



BOILER REMOTE MONITORING

Remote connection by PC, tablet or mobile phone to the Cloud from any location with own VPN.

√ Easy maintenance



MORE INFORMATION

SAFETY INSTRUMENTED FUNCTION (SIF)

Safety Instrumented Function is an additional protective layer aiming at achieving or keeping a safe and stable process during a specific hazardous event, by "Safety integrated level" (SIL-3), 2003 logic and HART instrumentation.

√ Special applications



OUTDOOR INSTALLATION

Boiler is ready for outdoor installation.

√ Easy maintenance



ATEX CLASS II

Boiler fully equipped and accredited to operate in explosive risk zones ATEX class II.

√ Special applications



EXPANSION TANK INSTALLED ON BOILER

Expansion vessel for superheated water, temperature up to 250 °C.

√ Special applications



 $Images\ could\ differ\ from\ supplied\ equipment; ATTSU\ reserves\ the\ right\ to\ introduce\ modifications\ without\ prior\ notice.$



Technical

SPECIFICATIONS

							DIMENSIONS			
	POWER		AMPERS			TRANSPORT WEIGHT	Length (a)	Width (b)	Height (c)	INLET/ OUTLET
SERIES	kW	kCal/h	230 V	400 V	690 V	kg	mm	mm	mm	
ASE-15	15	12.900	38	22	N.A.	350	1.400	890	1.100	1" 1/4
ASE-20	21	18.060	53	31	N.A.	375	1.400	890	1.100	1" 1/4
\SE-30	30	25.800	76	44	N.A.	400	1.400	890	1.100	1" 1/4
ASE-40	42	36.120	106	61	N.A.	550	1.400	990	1.100	1" 1/4
ASE-55	54	46.440	136	79	N.A.	600	1.400	1.090	1.100	1" 1/4
ASE-65	66	56.760	166	96	N.A.	625	1.400	1.090	1.100	1" 1/2
ASE-100	96	82.560	242	139	N.A.	800	2.095	1.150	1.525	1" 1/2
ASE-120 ASE-130	120	103.200	302	174	N.A.	900	2.095	1.250	1.525	2" 2"
ASE-130 ASE-160	132 160	113.520 137.600	332 403	191 232	N.A. N.A.	925 1.075	2.095 2.095	1.250 1.250	1.525 1.525	2"
ASE-180	180	154.800	453	261	N.A.	1.100	2.095	1.250	1.525	2"
ASE-220	220	189.200	553	318	N.A.	1.250	2.450	1.450	1.915	2" 1/2"
ASE-280	280	240.800	704	405	N.A.	1.450	2.450	1.450	1.915	2" 1/2"
ASE-330	336	288.960	845	486	N.A.	1.500	2.450	1.450	1.915	2" 1/2"
ASE-400	400	344.000	1.006	579	N.A.	1.600	2.450	1.525	1.990	DN80
ASE-500	500	430.000	1.257	723	N.A.	1.700	2.450	1.525	1.990	DN80
ASE-600	600	516.000	1.508	867	N.A.	1.800	2.450	1.600	2.050	DN100
ASE-640	640	550.400	1.609	925	N.A.	1.900	2.200	1.850	2.000	DN100
ASE-720	720	619.200	1.810	1.041	N.A.	3.500	3.900	2.000	2.050	DN100
ASE-800	800	688.000	2.011	1.157	N.A.	3.600	3.900	2.000	2.050	DN100
ASE-960	960	825.600	2.413	1.388	N.A.	3.800	3.900	2.075	2.050	DN125
ASE-1040	1.040	894.400	2.614	1.503	N.A.	4.000	3.900	2.075	2.050	DN125
ASE-1200	1.200	1.032.000	3.016	1.735	N.A.	4.250	4.050	2.075	2.050	DN125
ASE-1280	1.280	1.100.800	3.217	1.850	N.A.	4.500	4.050	2.075	2.050	DN125
ASE-1360	1.360	1.169.600	3.418	1.966	1.140	8.500	4.050	2.950	3.000	DN125
ASE-1700	1.700	1.462.000	4.273	2.457	1.425	9.000	4.050	2.950	3.000	DN150
ASE-2000	2.000	1.720.000	N.A.	2.891	1.676	13.500	4.050	3.750	3.200	DN200
ASE-2400	2.400	2.064.000	N.A.	3.469	2.011	14.000	5.900	3.900	3.900	DN200
ASE-2800	2.800	2.408.000	N.A.	4.047	2.346	14.500	5.900	3.900	3.900	DN200
ASE-3200	3.200	2.752.000	N.A.	4.625	2.681	15.000	7.500	3.600	3.200	DN200
ASE-3600	3.600	3.096.000	N.A.	*2 x 2.530	3.017	15.600	7.500	3.600	3.200	DN200
ASE-4000	4.000	3.440.000	N.A.	*2 x 2.890	3.352	16.200	7.500	3.600	3.200	DN200
SE-4800	4.800	4.128.000	N.A.	*2 x 3.620	4.022	18.000	8.000	4.150	3.750	DN200
ASE-6000	5.600	4.816.000	N.A.	*2 x 4.200	4.692 *2 v 2 515	20.100	8.000	4.290	3.900	DN200
ASE-7000	6.000	5.160.000	N.A.	*2 x 4.336	*2 x 2.515	22.500	8.000	4.390	4.000	DN200
ASE-7000 ASE-8000	7.000	6.020.000	N.A.	N.A.	*2 x 2.940	23.800	8.000	4.390	4.000	DN250 DN250
ASE-8000 ASE-9000	9.000	6.880.000 7.740.000	N.A.	N.A.	*2 x 3.355 *2 x 3.355	25.500 27.000	10.000 10.000	4.590 4.590	4.200 4.200	DN250
ASE-10000	10.000	8.600.000	N.A.	N.A.	*2 x 4.200	28.500	11.500	4.590	4.200	DN250

NOTE: Please note that heating elements power could differ from nominal power +/- 5 % approximately. ATTSU reserves the right to introduce modifications without prior notice.

N.A.: Not available

*Two units of same supply *n* Amperes.

Company

ATTSU Group

HISTORY

In 1993, companies Arcones, Tecnivap and Teyvi which had a long career in the boiler manufacturing industry joined forces to establish ATTSU Group, becoming the largest Spanish boiler manufacturing group.

This union offers the market a vast range of products for generating, recovering and transporting heat in a wide variety of industrial sec-

ATTSU's advanced technology and R+D+i, together with its team of technically qualified specialists enable to offer innovative, safe and highly competitive products.



THE TEAM

We have three factories from which we expand worldwide

ATTSU Arcones

Móstoles (Madrid, Spain) Established in 1934

From this factory we provide technical and commercial service to the Mid North and North of Spain.

ATTSU Tecnivap

Celrà (Girona, Spain) Established in 1981

From this factory we provide technical and commercial service to the Northeast of Spain and Balearic Islands. Here it is also located our International Headquarters Office.

ALISU levvi

Paterna (Valencia, Spain) Established in 1957

From this factory we provide technical and commercial service to the South of Spain and Canary Islands.

MISION, VISION & VALUES

MISION

Our aim is to **satisfy our customer's needs** with regards to generating, transporting and applying heat in their industrial productive processes.

SIO

Consolidate and boost our domestic and international prestige via excellent management and a vocation for quality, innovation and service toward our customers.

In order to consolidate this vision, we follow the below premises:

- Guidance to our customers. Constantly seeking customer's satisfaction.
- Ongoing staff training programs to increase professionalism and motivation.
- Enhancing innovating processes and products.
- Accuracy and effectiveness in work procedures to guarantee quality.
- Continuous search for energy efficiency, sustainability and protection to the environment, within our products and our manufacturing process.

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At ATTSU we understand that our way of doing business and running our companies must aim towards voluntarily integrating social and environmental issues including relationships with our partners as a whole within the scope of Corporate Social Responsibility (CSR).

We believe that a company is socially responsible when it fully complies with its legal obligations and enhances progress investing in human capital, the environment and relationships with partners: employees, business partners, suppliers, customers, public authorities and ONGs that defend the interests of local communities and the environment.

To sum up, we would say that ethics, good management and good practices are the basis for CSR. Consequently, ATTSU is sparing neither efforts nor means to achieve them.

OUR CERTIFICATES



European Certification



ASME U

Manufacturer of pressure vessels by the American Society of Mechanical Engineers (USA).



Manufacturer Approval for vessels welded under pressure and boilers Class I and II (Maritime)



Register Authorization Certificate for pressure of Roiler & Pressure Vesse



ASME S

Manufacturer of boil lers by the American Society of Mechanical Engineers (USA)



ISO 9001

Quality Management System for design, manufacturing, installation, maintenance and inspection of boilers and pressure vessels

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