

PRODUCT CATALOGUE



01 | 2019

 icicaldaie.com







HUMAN TECHNOLOGY

Specialists in excellent solutions

Specialists in the design and production of complete high-tech thermal systems.

Our extensive experience has allowed us to develop a range of highly qualified services capable of meeting any requirements in terms of system management, monitoring and maintenance.

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icicaldaie.com

THE STRENGTH OF ICI CALDAIE

ICI Caldaie is a young and dynamic company, characterised by an indepth knowledge in the industrial field, great production capacity, customer support in the design phase and extreme flexibility in terms of design and production of non-standard boilers, entirely customised based on the customer's specific needs.

Complete system Technical support and constultancy

Each non-standard project is developed by our Technical Department Engineers, and our cutting-edge Research and Development laboratory is entrusted with the development of new products compliant with the increasingly stringent European standards in terms of fuel consumption and emissions. All models produced by ICI Caldaie bear the CE mark and for many of them we have obtained different national certifications for export to Countries that require specific mechanical and hydraulic tests like the ASME - American Society for Mechanical Engineers - certificates.

The international success is the result of high quality standards. ICI Caldaie has obtained international product quality certifications that allow it to produce and distribute its boilers all over the world with top quality and safety features as required by the relevant specific regulations.



CERTIFIED INNOVATION

The awarded certifications are an acknowledgement of our commitment to continual improvement proving the creation, application and maintenance of a Production, Management and Organisation System compliant with international regulations introduced to improve and standardise the internal processes as well as to enhance the effectiveness of the service to customers, thus increasing their satisfaction.

Continued Customer satisfaction is a mark of the company's continual progress

ICI Caldaie has a strong quality culture, based around continual improvement resulting in obtaining system and product certifications such as ISO 9001 certification, CE certification and marks, the construction according to Directives on gas equipment and pressurised tanks, and by several national certifications on the export to Countries that require specific mechanical and hydraulic tests, such as the ASME - American Society for Mechanical Engineers - certificates.

Beside these certifications, the company policy of ICI Caldaie S.p.A. sets further objectives in terms of low environment impact and workers' health and safety. This on-going improvement philosophy has brought ICI Caldaie S.p.A. to obtain the environment certification according to the ISO 14001 standard and the certification on the workers' health and safety as per standard BS OHSAS 18001 (Occupational Health and Safety Assessment Series). ICI Caldaie believes that meeting the Customer needs is essential for the company's continual progress.



ISO 9001 QUALITY CERTIFICATION



OHSAS 18001 HEALTH AND SAFETY CERTIFICATION



ISO 14001 ENVIRONMENTAL CERTIFICATION







COMMERCIAL AREA

With our experience ICI Caldaie S.p.A. Specialised technicians will support you from the initial study to the system sizing or renewal up to the test and monitoring activities of the plant room.

Complete system Technical support and consultancy

We have a presence in countries all around the world, with headquarters and representative offices in Russia, Belarus, Kazakhstan, Romania, Great Britain, USA, China with products certified according to the specific local trade & technical regulations.

-  Commercial subsidiary
-  Representative offices
-  Official distributors

 **ITALY**
Head Quarter

 **U.S.A.**
Representative offices

 **GREAT BRITAIN**
Commercial subsidiary

 **RUSSIA**
Commercial subsidiary

 **ROMANIA**
Commercial subsidiary





The international success is the result of high quality standards. ICI Caldaie has obtained international product quality certifications that allow it to produce and distribute its boilers all over the world with top quality and safety features as required by the relevant specific regulations.

Product certifications



EUROPE



U.S.A.



RUSSIA
BELARUS
KAZAKHSTAN



CHINA



UKRAINE



BELARUS

Representative offices



CHINA

Representative offices



KAZAKHSTAN

Commercial subsidiary



UKRAINE

Representative offices







Integrated systems for steam, hot water, superheated water and thermal oil with high water-volume boilers. Energy saving solutions for industrial applications of all kinds.



⊕ STEAM

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⊕ THERMAL OIL

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⊕ HOT WATER

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The provided figures and data are for reference only.

ICI CALDAIE SpA reserves the right to apply any modification it deems necessary to improve its products, without prior notice.



STEAM

Fire tube steam boilers manufactured as either three-pass or reverse flame type. The offer includes equipment for the production of instantaneous steam at low and high pressure.

All boilers can be combined with the global security systems (GSS) allowing them to be operated unmanned (up to 72 hours, i.e. arrangement 3.).





The steam generation rates are between 50 and 32,000 kg/h.









DESCRIPTION

Instantaneous reverse flame fire tube steam boiler, completely automatic and with high efficiency. Low water content and reduced dimensions make them the most suitable steam boiler for all small and medium installations.

FEATURES

-  **Design pressure: 5 bar**
-  **Heat output: 31,7 ÷ 209,2 kW**
-  **Steam capacity: 50 ÷ 300 kg/h**
-  **Efficiency: > 91,0 %**

ADVANTAGES

-  **High steam quality**
At high load the internal separator prevents the entrainment of water droplets to the steam outlet, the steam produced is then always of high quality having a very high dryness fraction.
-  **Maximum security**
The generator has been designed in accordance with the strictest international safety regulations in force.
-  **Modular versions**
The boiler is available as flexible modular sections dependant on the range of required power.
-  **Advanced management technology**
The boiler can be equipped with programmable logic technology that allows complete compatibility with any data acquisition system, also allowing the adjustment of parameters through the display.
-  **Configurable to specific requirements**
A wide range of optional accessories are available to customize the product to meet specific requirements.
-  **Easy, fast and safe installation**
The installation is very easy: you just need to connect the system to the electric, hydraulic, steam and discharge lines.

Instantaneous fire tube steam boiler

MODELS



FX



FX DUAL

AVAILABLE CERTIFICATIONS



MAIN APPLICATIONS

- + Food and beverage industry
- + Distilleries

- + Wine farms
- + Hospitals

FX

The FX model meets steam requirements between 50 and 150 kg/h.

Design pressure: 5 bar

Heat output: 31,7 ÷ 104,6 kW

Steam capacity: 50 ÷ 150 kg/h

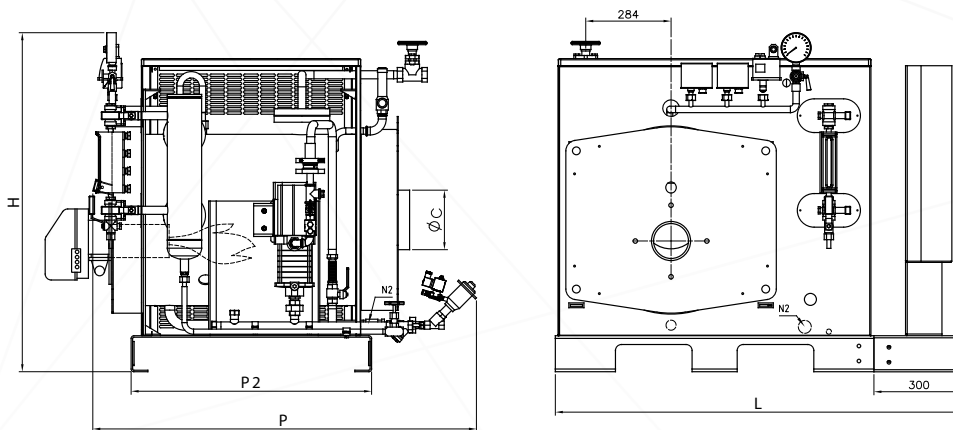
Efficiency: > 91,0 %



TECHNICAL DATA

Model	Heat output	Flow thermal	Steam capacity *:	Volume level H2O	Total volume H2O	Flue gas pressure drop	Gas consump.	Diesel fuel consump.	Total weight
FX	kW	kW	kg/h	lt	lt	mbar	Nm3/h	kg/h	kg
50	31,7	34,8	50	50	59	0,4	3,6	2,9	500
100	70,5	77,4	100	50	59	1,5	8,0	6,6	500
150	104,6	115,0	150	50	59	3,2	11,8	9,7	500

* Steam capacity with feed water at 80 ° C



DIMENSIONS

Model	H	L	P	P2	ØC	N1	N2
FX	mm	mm	mm	mm	mm	DN/in	DN/in
50	1130	1360	1280	800	200	3/4"	3/4"
100	1130	1360	1280	800	200	3/4"	3/4"
150	1130	1360	1280	800	200	3/4"	3/4"

STANDARD EQUIPMENT

Accessories on the steam side, including:

Steam outlet/crown valve
 Safety valve
 Reflex level indicator gauge
 Level indicator gauge drain and shut-off valve unit

Monitoring instrumentation, comprising:

Pressure gauge with three-way test valve
 Regulation pressure switch
 Limit pressure switch
 Manual reset safety pressure presure switch

Feed water delivery system containing:

Centrifugal pump for water at 90°C
 Feed water shut-off valve
 Pump suction side filter
 Non-return valve

Blow down system comprising:

Shut-off valve
 Pneumatically actuated boiler drain valve complete with solenoid valve

Automatic conductivity probe level control system comprising:

Pump start and stop probes
 1st and 2nd alarm and burner shut off probe for low level

Boiler control panel, IP55 1/N ~ 230V 50 Hz

PRODUCT CODES

Model	Code
FX 50	86014055
FX 100	86014105
FX 150	86014155

FX DUAL

The FX DUAL model is provided in stacked boiler configuration and is capable of meeting steam demands between 100 and 300 kg/h. It is ideal for the installation in small-size heating plant rooms

Design pressure: 5 bar

Heat output: 63,4 ÷ 209,2 kW

Steam capacity: 100 ÷ 300 kg/h

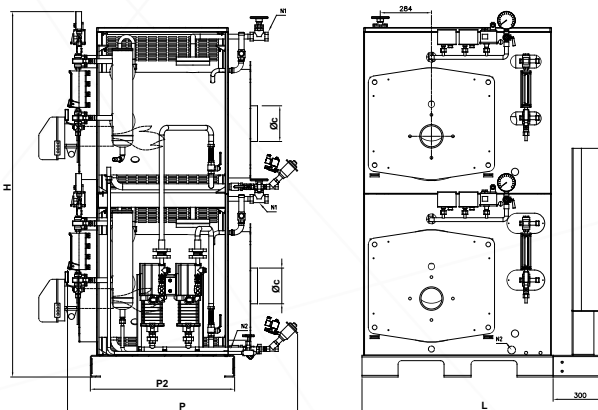
Efficiency: > 91,0 %



TECHNICAL DATA

Model	Heat output	Flow thermal	Steam capacity *:	Volume level H2O	Total volume H2O	Flue gas pressure drop	Gas consump.	Diesel fuel consump.	Total weight
FX DUAL	kW	kW	kg/h	lt	lt	mbar	Nm3/h	kg/h	kg
100 DUAL	63,4	69,6	100	100	59x2	0,4	7,1	5,9	990
200 DUAL	141	154,9	200	100	59x2	1,5	15,8	13,0	990
300 DUAL	209,2	230,0	300	100	59x2	3,2	23,6	19,4	990

* Steam capacity with feed water at 80 ° C



DIMENSIONS

Model	H	L	P	P2	ØC	N1	N2
FX DUAL	mm	mm	mm	mm	mm	DN/in	DN/in
100 DUAL	2030	1360	1280	800	200	3/4"	3/4"
200 DUAL	2030	1360	1280	800	200	3/4"	3/4"
300 DUAL	2030	1360	1280	800	200	3/4"	3/4"

STANDARD EQUIPMENT

Accessories on the steam side, including:

Steam outlet/crown valve
Safety valve
Reflex level indicator gauge
Level indicator gauge drain and shut-off valve unit

Monitoring instrumentation, comprising:

Pressure gauge with three-way test valve
Regulation pressure switch
Limit pressure switch
Manual reset safety pressure pressure switch

Feed water delivery system containing:

Centrifugal pump for water at 90°C
Feed water shut-off valve
Pump suction side filter
Non-return valve

Blow down system comprising:

Shut-off valve
Pneumatically actuated boiler drain valve complete with solenoid valve

Automatic conductivity probe level control system comprising:

Pump start and stop probes
1st and 2nd alarm and burner shut off probe for low level

Boiler control panel, IP55 1/N ~ 230V 50 Hz

PRODUCT CODES

Model	Code
FX 100 DUAL	86014103
FX 200 DUAL	86014205
FX 300 DUAL	86014305

ACCESSORIES AVAILABLE FOR THE RANGE

Code	Description	5 bar	
		FX	FX DUAL
96140100	Accessory kit for FX and FX DUAL boilers	■	■
96140200	Condensate separator kit for FX and FX DUAL boilers	■	■
96140060 *	Double safety valve kit for FX and FX DUAL boilers	■	■
96140090	Backup supply pump for FX steam boiler (supplied wired)	■	
96140080	Backup supply pump for FX DUAL steam boiler (supplied not wired)		■
96140050 **	Water delivery pre heating kit comprising of a solenoid valve and thermostat for FX and FX DUAL boilers	■	■
96140070 *	Double level indicator kit for FX and FX DUAL boilers	■	■
96140110 *	Maximum level kit for FX and FX DUAL boilers	■	■
96140120 **	Condensate Collection Tank high temperature kit for FX and FX DUAL boilers	■	■
96140150	Steam header kit FX DUAL		■

* In case of DUAL model, order no. 2 pieces.

** Kits applicable only if used with accessorised support for FX and FX DUAL boilers (code 96140100)

COMPONENTS FOR HEATING PLANT ROOM COMPATIBLE WITH THE RANGE



BDV
Blowdown vessel
Page 208



ACCESSORIES

Components designed to be combined with industrial boilers and further improve their performances; products developed to be integrated in high-performance systems.

SAMPLE COOLER



To make sure that the boiler is working within the desired conductivity parameters, it is necessary to take water samples and analyse them. To take precise samples in a safe way it is essential to perform a proper cooling cycle in order to make any steam formed before the take-off point condense. The cooler reduces the water temperature up to 25°C, ready for immediate sampling.

Standard equipment:

- AISI 304 cylinder with an internal water-cooling coil
- Cooling water injection ball valve
- Handwheel valve for sampling

Accessory code:

38040100

Accessory included in the standard equipment for:
GSS 72/1 and GSS 72/2X



HIGH LEVEL ALARM KIT



Kit designed to prevent an excessive increase of water level inside the boiler. Once the set level is reached, the system stops the supply pump and triggers an acoustic alarm. Alarm resetting and pump restart automatically occur once normal level in the boiler is restored.

Standard equipment:

- Conductivity probe mounted directly on the boiler body for high safety level
- High-level relay in boiler control panel

PRODUCT CODES

General:	90060010
For boilers of the FX or FX DUAL series:	96140110

ACCESSORIZED SUPPORT FOR FX - FX DUAL STEAM BOILERS



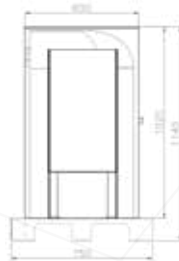
Standard equipment

- 1/2" level regulation float valve
- Regulation thermostat
- Thermometer
- Heating steam fitting complete with steam ejector
- Drain valve
- Minimum level switch
- Overflow/bleed fitting
- Condensate return fitting

Accessory base to be positioned and fastened on the right-hand side of the steam boiler, and to house, in addition to the boiler control panel, a water softener and a condensate collection tank/supply tank having the features listed below.

The softener is of the cabinet type with automatic regeneration control. The cylinder containing resin and brine tank are contained in a single appliance that also includes the mixing valve for residual hardness adjustment.

The softener is complete with latest design electronic programmer, flow sensor and turbine flow meter that allow regeneration programming in time/volume mode (after reaching of set volume at fixed time), volume (immediately after achieving set volume), or time (with the possibility of programming the frequency of regeneration or fixed days of the week at predetermined time). Also, a programmed spontaneous regeneration regardless of the actual consumption of water is possible. You can still manually start the regeneration at any time regardless of the programming operations performed.



Height	1140
Width	750
Depth	800

Accessory code: 96140100

CONDENSATE SEPARATOR FOR FX - FX DUAL STEAM BOILERS



Standard equipment:

- Steam trap
- Pressure gauge with three-way test valve

Water drops in the steam output of the boiler are a waste of energy for the plant and often cause damage to the production system that is using the steam.

The Condensate Separator is specially designed, according to the PED European Directive 2014/68/EU, separate and remove entrained water droplets from the steam: this results in the availability of dry saturated steam and herefore in the increase of the efficiency of all systems.

A steam trap is installed on the separator to discharge the condensate from the steam system.

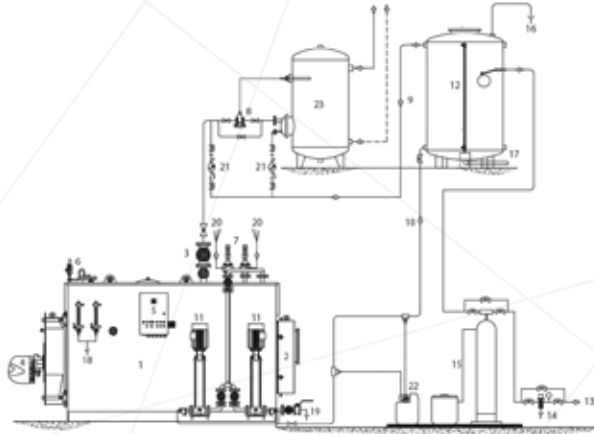
Accessory code: 96140200



SYSTEM LAYOUTS

SYSTEM LAYOUT

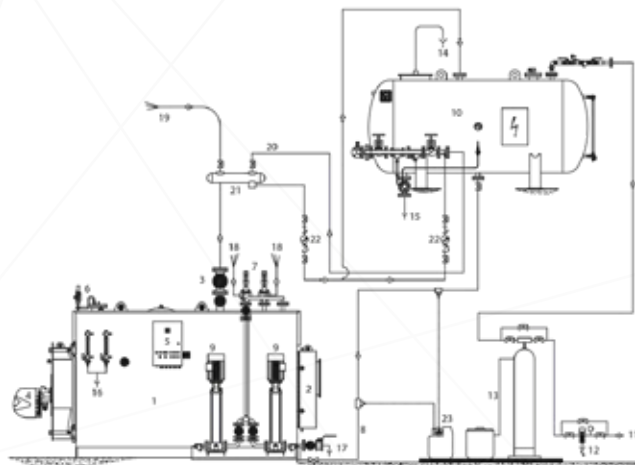
System layout with condensate recovery, for boilers of the following models:
 FX-BNX-SIXEN-GSX-GSX P-GX-GXC



Description

- | | | |
|---------------------|-------------------------------|--|
| 1.Boiler | 9.Condensate return line | 17.Condensate tank drain |
| 2.Smokebox | 10.Pump power supply | 18.Level indicator drain |
| 3.Steam outlet | 11.Supply pumps | 19.Boiler drain |
| 4.Burner | 12.Condensate collection tank | 20.Safety valve drain |
| 5.Control panel | 13.Water supply | 21.Steam trap |
| 6.Pressure switches | 14.Filter | 22.Dosing pump |
| 7.Safety valves | 15.Water treatment | 23.Use: industrial or d.h.w water heater |
| 8.Control valve | 16.Vent | |

System layout without condensate recovery, for boilers of the following models:
 FX-BNX-SIXEN-GSX-GSX P-GX-GXC



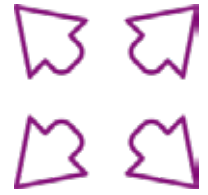
Description

- | | | |
|---------------------|--------------------------|--------------------------------|
| 1.Boiler | 9.Supply pumps | 17.Boiler drain |
| 2.Smokebox | 10.Deaerator | 18.Safety valve drain |
| 3.Steam outlet | 11.Water supply | 19.Direct use with waste steam |
| 4.Burner | 12.Filter | 20.Deaerator steam supply |
| 5.Control panel | 13.Water treatment | 21.Steam header |
| 6.Pressure switches | 14.Vent | 22.Steam trap |
| 7.Safety valves | 15.Tank drain | 23.Dosing pump |
| 8.Pump power supply | 16.Level indicator drain | |



Components and accessories to build complete heating plant rooms.

BOILER ROOM ANCILLARIES AREA



⊕ BOILER ROOM ANCILLARIES

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BDV

Blowdown vessel



The BDV blowdown vessel has been designed to receive sludge that usually settle at the bottom of the steam boilers which is discharged during a bottom blowdown operation; this sludge is cooled and allowed to settle at the bottom of the tank before being discharged to the sewer thus limiting any risks for the operator and damage to the environment.

The blowdown vessel complies with the PED Directive 2014/68/EU

Provided with:

- steel sheet supporting legs
- connections and fittings

Standard equipment

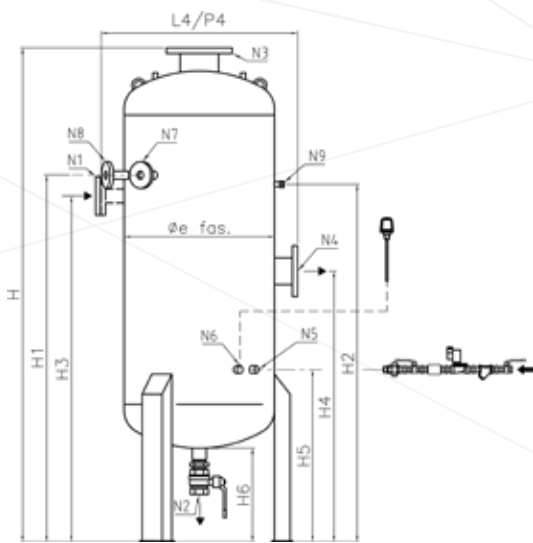
- Drain valve
- Cooling system by means of solenoid valve and thermostat

BOILERS THAT CAN BE MATCHED

Model	FX	FX DUAL	BNX	SIXEN	GSX	GSX P	GX
BDV 50	50 - 100 - 150	100 - 200 - 300	100 - 1700	350 - 1700	350 - 1500	500 - 1500	-
BDV 100	-	-	2000 - 3000	2000 - 5000	2000 - 5000	2000 - 5000	1000 - 3000
BDV 200	-	-	-	-	-	6000	3500 - 12000

PRODUCT CODES

Model	Code	Nominal pressure	Total volume H2O	Total weight
		bar	lt	kg.
BDV 50	85520064	12	500	250
BDV 100	85520085	12	1000	350
BDV 200	85520202	12	2000	650



Key:

- N1 Blowdown inlet
- N2 Drainage
- N3 Atmospheric vent
- N4 Overflow
- N5 Cooling system
- N6 Thermostat
- N7 Boiler level indicator blowdown connections
- N8 Boiler salinity blowdown connection
- N9 Manometer

DIMENSIONS

BDV	H	H1	H2	H3	H4	H5	H6	L4	P4	OD	N1	N2	N3	N4	N5	N6	N7	N8	N9
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	DN/ in	DN/ in	DN/ in	DN/ in	DN/ in	DN/ in	DN/ in	DN/ in	DN/ in
50	2174	1580	1540	1490	1165	740	400	934	934	650	50	2"	150	100	3/4"	3/4"	25	25	1/2"
100	2774	2130	2090	2040	1215	790	400	1082	1082	800	50	2"	150	100	3/4"	3/4"	25	25	1/2"
200	2934	2210	2170	2120	1295	870	400	1382	1382	1100	50	2"	150	100	3/4"	1"	25	25	1/2"



Highly-qualified services capable of meeting the requirements of the the heat and energy saving fields.

SERVICE AREA



⊕ SERVICES

p.

The provided figures and data are for reference only.

ICI CALDAIE SpA reserves the right to apply any modification it deems necessary to improve its products, without prior notice.



INDUSTRIAL AREA

The services on this page are available for:

Industrial start-up

The start-up assistance of an industrial line boiler (steam, super-heated water and waste-heat boilers) is divided into the following categories.

- Start-up assistance of boilers without GSS
- Start-up assistance of boilers with GSS24/GSS 72 module B+D
- Hot functional test of boilers with GSS24/GSS 72 module F
- Industrial start-up assistance abroad
- Industrial start-up assistance with performance test

Start-up assistance of boilers without GSS

The start-up assistance of a boiler without GSS is provided by specialised technicians of ICI Caldaie or authorised service centres at the customer's heating plant room.

During the start-up, the presence of a technician is not compulsory, but it is very useful as a training occasion for the maintenance technician.

With regard to boilers installed in Italy, the only obligation of the customer is the request of the boiler commissioning to the competent INAIL office as per Ministerial Decree No. 329 of 1 December 2004.

Start-up assistance of boilers with GSS24/GSS72

The start-up assistance of a boiler with GSS 24/72 is provided by specialised technicians of ICI Caldaie or authorised service centres at the customer's heating plant room.

During the start-up, the presence of qualified technicians is very useful as a training occasion.

Boilers with GSS 24/72 are supplied by ICI Caldaie already certified according to modules B+D as per PED Directive 2014/68/EU. With regard to boilers installed in Italy, the only obligation of the customer is the request of the boiler commissioning to the competent INAIL office as per Ministerial Decree No. 329 of 1 December 2004.

Hot functional test of boilers with GSS24/GSS 72 module F

The assembly test of a boiler with GSS 24/72 can be performed in the presence of an appointed Notified Body at the ICI Caldaie facilities or customer's heating plant room.

If the assembly test is performed at the ICI Caldaie facilities, the presence of a technician, after the installation of a boiler, is not compulsory, but it is useful as a training occasion for the maintenance technician.

Boilers with GSS 24/72 are certified by ICI Caldaie according to modules B+D as per PED Directive 2014/68/EU. The customer does not have to request the commissioning since the product is compliant with art. 5, letter D of the Ministerial Decree No. 329 of 1 December 2004. The only obligation of the customer is to notify boiler commissioning to the competent INAIL office.

Industrial start-up assistance abroad

Assistance activities during start-up will be carried out by an Italian technician appointed by ICI CALDAIE, who does not own licences or local permits to operate on steam generators.

During assistance activities the customer will have to ensure the presence of personnel authorised to operate on the above-mentioned boilers.

The activity will only have technical-functional valence but not regulatory valence.

The technician in charge cannot sign the documents having this kind of valence.

The start-up of the burner is not included, and will have to be carried out by the local service centre authorised by the manufacturer of the burner and appointed directly by the customer.

The burner technician will have to be present during the carrying out of all the assistance activities performed by the ICI CALDAIE technician.

Start-up Assistance with performance test

The performance test is performed by specialised technicians of ICI Caldaie or authorised service centres at the customer's heating plant room. It involves testing of noise and/or efficiency and/or performance values agreed at the time of sale.



INDUSTRIAL AREA

The services on this page are available for:

Preventive maintenance of steam, superheated water and WHB boilers

The customer can at any time sign with ICI an ordinary maintenance agreement that, thanks to the scheduled inspections, guarantees the boiler control and the purchased product trouble-free operation over time. The preventive maintenance requires an annual inspection by our authorised Technical Service Centres (CAT) including the following operations:

- Cleaning and visually checking the level probes
- Checking the instrument train
- Checking the safety device operation
- Checking the flue gas side
- Checking the supply pump operation through the sight glasses
- Checking the seals for any leak and replacing them if needed (material not included)
- Checking the turbulator conditions (if any)
- Checking the main control panel
- Checking the boiler functionality
- Checking the access door internal coating

Requalification of the boilers to avoid constant surveillance for 72 or 24 hours

The steam and super-heated water boilers, during their operation in a heating plant room, must be monitored by duly authorised control personnel. ICI Caldaie offers the possibility of requalification of said boilers and to extend such obligation to 72 or 24 hours by installing a Global Safety System (GSS72 or GSS24) for steam and super-heated water boilers; this system allows leaving the operating heating plant room “unattended” for maximum 72 or 24 operating hours. Such operation has a variable cost according to the accessories already present in the boiler.

Retubing Boilers

The service involves the replacement of the fire tubes of boilers by ICI Caldaie or third parties, where the presence of leaks was ascertained. The job involves the mechanical removal of the broken tube and subsequent replacement involving welding. Upon each step of the procedure, the necessary non-destructive tests required by law will be carried out to ensure the success of the work.



INDUSTRIAL AREA



RESIDENTIAL AREA

The services on this page are available for:

Warranty extension

ICI Caldaie allows extending the commercial warranty according to the selected duration, starting from the delivery date. The base warranty extension provides only the warranty extension.

No warranty is provided if the damage is caused by:

- improper or unsuitable use
- installation or first start-up performed by the purchaser or third parties in a wrong way
- use or presence of chemical substances, electro-chemical or electric flow, not due to us
- failure to comply with the instructions provided in the user manual, improper changes or modifications, in any case performed by the purchaser or third parties
- faults of the elements not supplied by ICI Caldaie
- aggressive or halogen vapours in the environment (combustion air)
- corrosion due to oxygen
- presence of limestone
- use of the product even if faulty
- wrong electric power supply or connections
- pressure or gas type different from the ones specified for the product

Warranty application is granted by ICI CALDAIE SPA and is subjected to standard conditions of sale shown in the PRODUCT CATALOGUE.

WARRANTY

Any faults detected must be reported immediately by registered letter sent to ICI CALDAIE which reserves the right to carry out an inspection using its own personnel (direct or appointed) at the heating plant room where the problem has arisen. The part to be tested must be sent, carriage paid, to the ICI CALDAIE SPA Service to be examined. Only after this inspection, it will be possible to establish whether the fault is due to faulty material and/or manufacture, or whether it is due to an external cause. After this verification, the customer will be informed of whether or not the fault is covered by the warranty.

Furthermore, the water circulating in the system must be analysed 2 or 3 weeks after the boiler has started operation. This analysis is to be carried out by the installing company which will also bear the relative costs and the results must be attached to the plant register and communicated to ICI Caldaie within two months following the start-up of the boiler. The analysis must comply with the characteristics identified in technical manuals.

The warranty will cover only the defective part; any other expense, for example labour used for the replacement, will be charged to the person requesting the replacement.

The services on this page are available for:



INDUSTRIAL AREA



RESIDENTIAL AREA

Warranty extension

WARRANTY LIMITATIONS

Defects due to different causes not resulting from manufacturing defects are excluded from this warranty, and in particular:

- Tampering or improper adjustment of the boiler performed by the purchaser or third parties who are not part of the network of authorised Technical Assistance Centres on behalf of ICI CALDAIE SPA.
- Conditions of use not envisaged in the instructions and warnings provided on the instruction booklets of ICI CALDAIE SPA supplied with the boiler.
- Use of non-original ICI CALDAIE SPA spare parts.
- System faults, installation errors or non-conformity of the system in relation to the instructions, warnings, Laws, Regulations and applicable Technical Standards (for example: incorrect regulation, boiler supplied with incorrect gas or electrical power, use outside of the boiler type-approval field).
- Absence of exchanger between the primary circuit and the secondary one.
- Thermal shocks due for example to sudden and continuous filling of cold water into the system.
- In the event of operation with pressure below or exceeding the pressure indicated on the data plate of the boiler.
- In the event of clogging from limestone, deposits and sludge, presence of corrosion, overheating of the boiler body.
- No water in the system.
- Use of a fuel other than the indicated one to supply the boiler.
- In the case of inappropriate installations, operation or maintenance which cause damage to the boiler installed, for example poor regulation of the burner, absence of the safety elements required by current Regulations such as safety valves or suitable expansion system, or inappropriate chemical cleaning of the system.
- Use of an unsuitable product for treating the water in the system or an anti-freeze which is incompatible with the construction materials of the system.
- Failure to remove the processing waste and residues in the case of new system or removal of sludge and subsequent cleaning in pre-existing system. In both cases, the operations recommended must be carried out before the boiler of ICI CALDAIE SPA is assembled.
- Wrongful or negligent behaviour, attributable to a seller or other person unrelated to ICI CALDAIE SPA, during the transportation, handling, storage, assembly, installation and adjustment of the boiler.
- The warranty extension only refers to the boiler and excludes the accessories and materials used for the construction of the system and electrical parts.
- Failure to perform the ordinary maintenance as required by current regulations in force for the type of system and as required by the product user manual.
- Events of force majeure (for example: lightning, floods, earthquakes) or vandalism.
- Normal wear of parts (electrodes, refractory products, gaskets, knobs, indicator lights...).

Any technical assistance required to eliminate defects or faults attributable to one of the exclusion causes indicated above must be agreed separately from this Warranty and all related charges and costs will be charged to the applicant according to the price list in force of ICI Caldaie.

The ICI CALDAIE SPA warranty on the manufactured products is limited to the replacement or repair of parts of the boiler identified as being faulty and it does not extend to the repair of other materials present in the system or damage which could be caused or be related to, directly or indirectly, with the faulty part, and not even if the faulty part, or part of it, is unavailable.



INDUSTRIAL AREA



RESIDENTIAL AREA

The services on this page are available for:

Assistance for positioning and/or accessory assembly

This service includes the assistance by one of our specialised technicians during the positioning phases of the boiler in the heating plant room or during the accessory installation in the boiler.

Accessory assembly

The service includes the assembly of the accessories to the boiler once the latter is positioned in the plant room. In this case, for transport reasons, for the boiler introduction in the plant room, or because of specific needs of the customer, the accessories are installed only once the boiler is in its final position.

The following are excluded:

- Connection to the control panel and cable ducts
- Hydraulic connections to the system
- Any building and civil works
- Any crane, platforms and machinery for handling rental

Synoptic diagram

ICI Caldaie can set up a synoptic diagram for all boiler panels already connected to the Internet, allowing the remote reading and management of the systems. The dedicated web page or pages will be created based on the supplied plant layout. The synoptic diagram will be available to be viewed on any PC, tablet or Smartphone connected to the Internet (with compatible browser). For a demo, visit the website <http://www.eterm.it/ita/sinottico/lista> by entering MCE2016 as username and password.

Operation

- Saving the log data.
- Exporting the log data in tables.
- Displaying of log data on graphs (histograms, lines, pie charts, etc.). It is also possible to have more variables on a same graph or graphs of variables that cannot be measured directly but need to be calculated with mathematical formulas.
- Checking the functionality of the panel and accessories connected to it.
- Personalised alarms.
- E-mail service activation for configured alarms.
- Possibility to request one year of remote service for configuration checks and changes.

Flue gas analysis

This service includes the combustion analysis using a certified instrument; at the end of the analysis, the plant register is filled in.

Welding

We can provide assistance for repairs and/or modifications on the boilers using professional and qualified wire, electrode and TIG welders.

This service can be combined with non-destructive tests in case the repairs or changes are requested or have to be performed with the presence of third-party supervisors.



INDUSTRIAL AREA



RESIDENTIAL AREA

The services on this page are available for:

Endoscopy

Our technicians can perform endoscopic visits on ICI products in order to detect any sludge deposit or scale build-ups that can be found on the internal surfaces over time thus reducing the efficiency and performance of the boilers and leading to possible failure. We always recommend a suitable water treatment to avoid the formation of deposits and build-ups.

Burner start-up

In Italy, the start-up of the burner is normally included in the burner price whereas abroad is to be listed separately depending on the country of destination of the parts.

Maintenance of hot water and WHC boiler

The customer can at any time sign with ICI an ordinary maintenance agreement that, thanks to the scheduled inspections, guarantees the boiler control and the purchased product trouble-free operation over time. The preventive maintenance requires an annual inspection by our authorised Technical Service Centres (CAT) including the following operations:

- Visual inspection of the flue gas side;
- Checking the turbulator conditions (if any);
- Checking the main control panel;
- Inspection of the boiler insulation;
- Inspection of the gate operation (only for WHC boilers).

Software license Eterm™

Eterm™PCmanager is a Windows software for PC that allows the configuration and remote control of all Eterm™ and Nereix equipment. This software can be connected to the equipment by means of:

- Direct USB connection to all equipment;
- RS232 (serial port) direct connection to eterm™ Master equipment;
- GSM modem for eterm™ Master equipment and Boiler Control Board;
- Internet connection after free-of-charge registration of the system on www.eterm.it.

Software licenses are available in three versions:

Eterm™PCmanager base version:

- permanent base version that allows configuration, management and remote control according to the above-mentioned methods. It does not allow reading, storing and processing consumption data.

Level 2 Eterm™PCmanager version:

- in addition to configuration, management and remote control according to the above-mentioned methods, this version allows reading, storing and processing consumption data. In order to be able to exploit the advantages of this software, it is advisable to participate in the training courses (subject to payment) that ICI Caldaie organises at its headquarters at 38 Via Giovanni Pascoli, situated in Zevio (Verona). Software license can be installed on a single computer and it provides for the management of a single system.

Synoptic configurator version:

- this software version enables the user to create a synoptic of the system, that is a scheme through which it is possible to view the system and data detected by the installed equipment. The whole process can be made via WEB without installing the eterm™PCmanager software.

The eterm™PCmanager software requires Windows operating system.



RESIDENTIAL AREA

The services on this page are available for:

Assembly

Some boilers can be assembled directly in the plant room. This service is provided for all those situations where it is impossible or too difficult and expensive to introduce the whole boiler in the plant room because of its dimensions or too limited access.

The assembly operations are performed by our reliable welders on site and consequently travelling expenses are excluded. With reliable welders we mean expert professional welders already certified to perform such delicate operation.

Some boilers can be assembled directly in the plant room.

Basic service Nereix (BSN)

The service is dedicated to condominiums where ICI Nereix modules are installed and tested.

It can be applied to residential buildings with heat meters with Meter Bus output, by installing the suitable centraliser.

The service consists in loading and saving on the website www.eterm.it the consumption data transmitted automatically by the system. On the website there is a web application (etermEASYmanager) that allows the users and administrator to view and download the consumption data.

This service does not include:

- allocation calculations;
- checking the data consistency;
- alarms for faults, errors and tampering;
- ordinary and extraordinary maintenance;
- warranty extension.

Advantages for the condominium:

- reading of consumptions and monitoring of historical data using graphs;
- sending of commands to the ICI Kronos and e-Kronos environment unit (if any).

Advantages for the administrator:

- reading and storing on the web the consumption data of all residential buildings;
- exporting the consumptions in Excel tables.

Should it be not technically possible to connect or configure the system from remote, ICI Caldaie will perform an on-site operation that will be invoiced in accordance with the rate book.

ICI Caldaie reserves the right to examine whether it is possible to provide the service, that is, network coverage GSM – GPRS, presence of the “master” control unit with modem and a bus network correctly wired and functioning.

Start-up of Nereix modules

In Italy, the start-up of Nereix modules is a necessary condition before drawing up a Basic Service Nereix (BSN) contract

The described service could be unavailable in some Countries.
Please, contact our commercial department for confirmation.

GENERAL CONDITIONS OF SALE

1) INTRODUCTION

The sale is carried out under the following general conditions, which form an integral part of the contract drawn up between the Parties. Entering into the contract decrees approval of the conditions below and any modifications of the aforesaid must be carried out exclusively in writing.

2) COMPLETION OF THE CONTRACT

The contract is completed when, after receiving a purchase order, the seller confirms its acceptance to the purchaser. This acceptance can be made by a sale confirmation or by the commencement of the contract without any obligation of having to give notice to the other party.

3) DESCRIPTIVE DOCUMENTS AND STRUCTURAL CHANGES

The weights, dimensions, capacity, price, performance, and any other data represented in catalogues, lists, circulars, advertisements, illustrations and price lists are for information purposes only and are not obligatory.

The seller reserves the right to make any structural changes to his products at any time, which is deemed necessary in order to guarantee operation and efficiency.

4) PACKAGING

Unless otherwise agreed upon, the prices listed in the offers also include standard packaging of the goods;

Maritime, wood, or any other type of non-standard packaging is deemed not included in the sale price, and is to be borne by the purchaser.

5) RISK TRANSFER

Unless otherwise agreed upon in writing, the goods are sold "ex works" with reference to the EXW Incoterms® 2010 clause.

In particular, the risk, transport expenses and other relative expenses to load the goods onto the vehicle are to be borne by the purchaser from the time in which the goods are made available in compliance with the contract, provided that the seller notifies the purchaser in writing with regard to the date from which the goods can be collected

6) DELIVERY

Unless otherwise agreed upon, the delivery period shall start from the later date from the following:

- the date of completion of the contract as stipulated in Art. 2;

- the date of receipt of any payment on account or deposit made by the seller, which is provided for in the contract prior to delivery of the goods;

Unless otherwise agreed upon in writing, the delivery conditions of the said goods to be sold are deemed estimated.

If, for whatever reason, which is not an action or negligence by the seller, the purchaser fails to collect the goods at the time and place agreed upon in the contract, he shall in any case effect all payment established in the contract as though the goods were delivered. In this case, when the goods are identified, the seller shall store them at the expense and risk of the purchaser.

The seller also has the right to reimbursement of all expenses incurred to enforce the contract and not covered by any payments received, with the exception of the right to compensation for damages.

7) PRICE AND PAYMENT

Unless otherwise agreed upon, the price for the goods is agreed upon as "Ex Works". Therefore, transport expenses and any additional expenses are therefore excluded, including taxes due as local taxes.

Payment is due by the date established in the contract, without any other request or formality by the seller. Delay in payment shall result in interest accrued pursuant to Italian Legislative Decree 231/2002, which adopts and implements EU directive 2000/35/EC.

If the purchaser delays any payment whatsoever, the seller, at his discretion, shall:

- suspend or postpone obligations held;

- declare the contract terminated by way of simple written notice without prejudice to his right to be reimbursed for all expenses incurred in the performance of the contract, except for the right to compensation for damages.

8) WARRANTY AND EXCLUSIONS

The seller shall undertake to repair faults resulting from design, material or processing defects, exclusively within the following limits.

The obligation undertaken by the seller is limited to defects that occur during the period called "warranty period", which shall come into effect from risk transfer, which corresponds to the provisions of Art. 5, until the expiry of the terms set forth below;

The parties agree that the warranty includes repairs or replacement of parts, which, at the discretion of the seller, are necessary for the proper operation of the product, within the said warranty conditions, in particular, the seller recognises each construction defect found, in the following terms, for:

- Commercial range steel boiler body 36 months

- Industrial range steel boiler body 12 months

- Condensing range boiler body 36 months

Storage tank body 12 months

- Electrical and electronic parts and/or accessories 12 months

from the aforesaid date of risk transfer.

The warranty does not include maintenance operations of the devices regarding the contract of sale, which shall be borne by the purchaser;

In order to make use of the warranty as indicated in this article, the purchaser shall, without delay, give notice in writing not later than eight days, under penalty of invalidation, from the date of delivery, the defects that were detected. This action is barred after a period of one year, or other period as indicated above;

The aforesaid notification shall not release the purchaser from his obligation of payment under the terms agreed upon. Delay, failure, or incorrect payment shall result in a disclaimer of the warranty referred to in this article.

Execution of the warranty shall take place upon technical verification and recognition of the alleged defect at the premises of the seller, and according to company procedure. The purchaser of the device is to pay the fixed minimum charge for any intervention required, of the cost of transport of the pieces to be replaced, of labour costs, with the exception of those related to any repairs and any travel, food and accommodation expenses of the seller's personnel using the rate in force. Technical personnel shall be sent within the time granted by organisational requirements.

Any replacements or repairs shall not modify the start date and duration of the warranty established in the sales contract or in these general conditions. The replaced parts and components shall be the property of ICI CALDAIE S.p.a. and must be returned by, and at the expense of, the purchaser.

The seller's responsibility is solely extended to defects that emerge in the operating conditions provided by the contract and used correctly, as specified in the relative user instructions in the installation manual that always precedes or accompanies the delivery of the product. The seller's responsibility is excluded for defects resulting from faulty installation, maintenance, and use; due to insufficient capacity or abnormality of hydraulic systems, fuel supply; for use that differs from what the product was built for; for unsuitability or otherwise erroneous and incorrect supply water treatment; for corrosion caused by water condensation and aggressiveness; for badly conducted treatments; for stray currents; for negligence or inability of use; due to frost; due to lack of water; for inefficiency of the chimneys or discharges; for tampering by unqualified or unauthorised personnel; for parts subject to normal wear and tear of use, for anodes, refractories, gaskets, knobs, warning lights, etc., and in any case, for reasons not to be ascribed to ICI CALDAIE S.p.A.

In the event of failure to find the manual of use mentioned in the previous point, the purchaser shall submit a notice in writing to the seller within a period of eight days from delivery of the product. Failure to submit the said notice shall imply the manual was delivered with one of the products.

Subject to what is provided in this article, from the risk transfer of the goods and also for defects whose cause is prior to the said transfer, the seller shall not undertake other responsibilities. It expressly provides that the purchaser cannot raise any claim for injury to persons or damage to property

The parties can also establish to limit the seller's responsibility of gross negligence, unwavering the significance of all references in this regard made in these general conditions.

After the warranty duration terms, technical assistance can be carried out by charging the purchaser for any replaced parts or for expenses related to repairs, provided that all labour and travelling expenses of personnel and transport of materials are to be borne by the purchaser according to the rate in force by the seller.

9) INSTALLATION AND OPERATION

ICI sells a product.

Installation is to be carried out by the purchaser, who must execute the provided technical provisions by the laws and regulations in force and, in any case, by the relative technical manual, including assembly, start-up, and operation.

10) REASONS FOR EXEMPTION FROM EXECUTION

A party is not responsible for the failed execution of any of its obligations should:

- Failed execution be due to an impediment beyond his control;

- The party, upon concluding the contract, could not be reasonably held to envisage the said impediment and its effects on the position to execute the contract;

- The party could not have reasonably avoided or overcome such an impediment or its effects;

A cause of exemption from liability pursuant to this article exempts the defaulting party from payment of damages, penalties and other contractual sanctions.

It also suspends the terms of execution of the contract for a reasonable period, excluding any counter-party's right to cancel or terminate it.

Each party can retain what he has held from execution of the contract before it was ended. The final payment must be effected without delay.

11) AMENDMENTS

Any amendment to these General Conditions of Sale can be effective only if made by means of a written act

12) APPLICABLE LAW AND PLACE OF JURISDICTION

With regard to any disputes, the parties agree that the contract shall be governed by the United Nations Convention on contracts for the international sale of goods, concluded in Vienna on 11 April 1980, signed by the Italian State on 30 September 1981, ratified by Law No. 765 on 11 December 1985, and entered into force on 1 January 1988.

The right to apply Italian law with regard to what is not expressly governed by the United Nations Convention on contracts for the international sale of goods shall be valid.

For any dispute or litigation that may arise or result from this provision, the Court of Verona shall have jurisdiction.



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