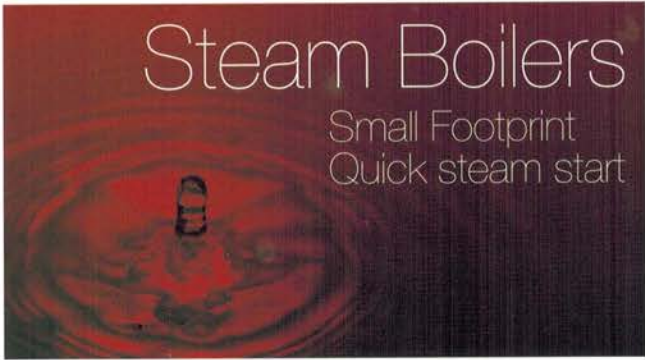


The Best Partner of  
Energy, Water and Environment

**MIURA**



# PRODUCT LINE UP



# Steam Boilers

Small Footprint  
Quick steam start

## SQ Series

Small Once-through Steam Boiler

Ultra low NOx and CO emissions

Maximum efficiency of 96%

- Ultra-low NOx emission of 25 ppm (SQ-2000ZS, SQ-2500ZS O<sub>2</sub>=0% conversion, actual measurement with natural gas)
- Inverter control for energy efficiency and low noise
- Color-coded indicator shows boiler status at a glance
- Full use of sensors for greater control

Gas fired (Low NOx)

SQ-800ZS SQ-1000ZS SQ-1200ZS  
SQ-2000ZS SQ-2500ZS



## SI Series

Small Once-through Steam Boiler

Eco-friendly low NOx boiler

Maximum efficiency of 95%

- All-new burners for low dust accumulation. Low NOx burner available as an option.
- Inverter control for energy efficiency
- Multi-control system for stable steam supply

Oil fired (Low NOx)

SI-1500VS SI-2000VR SI-2500R

Oil fired

SI-1500VH/VS SI-2000VH/VS SI-2500VS



## GC Series

Small Once-through Steam Boiler

Low excess air combustion

Maximum efficiency of 95%

Dual fuel boiler

- Simple one-touch fuel change over (natural gas (13A) ↔ kerosene and No. 2 fuel oil)
- Newly developed low NOx burner (for natural gas 13A only)

Gas fired Oil fired

GC-2000H/S



## SU Series

Simple Once-through Steam Boiler

More compact design over conventional boilers

Maximum efficiency of 96% Gas fired

Maximum efficiency of 95% Oil fired

- Simple, one-touch operation
- Eco-friendly with low NOx and low air ratio (13A)

Gas fired (Low NOx) SU-500ZH/ZS

Oil fired SU-500ZH/ZS SU-750ZH/ZS



## EI Series

Small Once-through Steam Boiler

Multi-control system for stable steam supply

Maximum efficiency of 96% Gas fired

Maximum efficiency of 95% Oil fired

- "Intelligent" control for safe operation
- Twin water level control
- Large multi-function display for accurate transmission of information

Gas fired (Low NOx) EI-1000HG EI-1500HG/SG EI-2000GU

Oil fired EI-1000HF EI-1500HF EI-2000SF



## EX Series

Simple Once-through Steam Boiler

Safe design prevents boiler overheating

Maximum efficiency of 95%

- ω (omega) flow construction increases boiler efficiency (oil fired)
- Twin water level control
- Soot cleaning system maintains high boiler efficiency
- Sensor monitors water concentration
- Comes standard with blowdown alarm and timer

Gas fired (Low NOx) EX-500H EX-750H



## EH Series

Simple Once-through Steam Boiler

Low-priced long-selling product with reliable functions

Maximum efficiency of 85%

- Fast steam output from cold start
- Soot cleaner for fuel economy
- Concentrated water alarm prevents unnecessary blowdowns (1000F and 1500X only)
- Quiet operation and low blower noise

Oil fired EH-500F EH-750F EH-1000F EH-1500X



## SZ Series

Simple Once-through Steam Boiler

Lower-capacity boiler that exploits all of the advantages of steam

Maximum efficiency of 90%

- Steam separator comes as standard for supply of superior steam
- Fail safe function ensures safe operation

Gas fired (Low NOx) SZ-60 SZ-120 SZ-160 SZ-60L

Oil fired (Low NOx) SZ-100 SZ-160 SZ-200 SZ-100L



## SU Series

Simple Once-through Steam Boiler

Eco-friendly with low NOx (13A) and low air ratio

Maximum efficiency of 90%

- Optimal O<sub>2</sub> for combustion control
- Eco-friendly low NOx specifications (13A)
- Steam separator comes as standard for supply of superior steam
- Fail safe function ensures safe operation

Gas fired (Low NOx) SU-250 SU-350



## SU Series

Simple Once-through Steam Boiler

Steam separator comes as standard for supply of superior steam

Maximum efficiency of **90%**

- Fail safe function ensures safe operation

Oil fired

SU-160 SU-200 SU-300 SU-400



## AI-S Series

Large Once-through Steam Boiler

Simple operation and precise heat control

- Ideal for multiple-installation base-load boilers
- Equipped with AI self-diagnostic function

Gas fired

Oil fired

AI-2500 AI-3000 AI-4000



## RV Series

Simple Once-through Steam Boiler

Quiet operation for a comfortable work environment

Maximum efficiency of **90%**

- Continuous supply of very dry, superior steam
- Eco-friendly clean combustion

Gas fired

Low NOx

RV-120Z RV-160Z



## AI / SI Series

High-Pressure Once-through Steam Boiler

Suitable once-through construction for high-pressure use

- Max. allowable working pressure: 1.57 MPa (16 kgf/cm<sup>2</sup>), 1.96 MPa (20 kgf/cm<sup>2</sup>)
- Space-saving design
- AI self-diagnostic function

Gas fired

Oil fired

AI-500 AI-750 AI-1000 AI-1500 SI-2000  
AI-2500 AI-3000 AI-4000



## FK Series

Simple Once-through Steam Boiler

Easy operation

Maximum efficiency of **90%**

- Equipped with horizontal separator
- Loaded with many safety features
- Easy delivery, light and compact
- Quiet operation that is considerate of the neighborhood

Oil fired

FK-100



## MSH Series

Superheated Steam Generator

More dryness

- Actual steam output: 200-1000 kg/h
- Steam outlet temperature: 200-450°C
- Steam outlet pressure: 0.39-0.88 MPa
- Generation of superheated steam from saturated steam with the attached burner

Gas fired

MSH-200LG/HG MSH-300LG/HG MSH-400LG/HG  
MSH-500LG/HG MSH-750LG/HG MSH-1000LG/HG

Oil fired

MSH-400HF MSH-500HF MSH-750LF/HF MSH-1000LF/HF



## GX Series

Simple Once-through Steam Boiler

Eco-friendly low NOx specification (except models 40, 60 and 90)

Maximum efficiency of **88%**

- Special sound-absorbing boiler body and low-noise burner for quiet operation
- Space-saving gas-fired boiler
- Easy installation

Gas fired

Low NOx

GX-40S GX-60S GX-90S GX-120S GX-160S  
GX-250S GX-350S



## NRB

Clean Steam Generator

Supplies safe and hygienic clean steam

- Uses steam as a heat source to heat feed water
- Provides clean steam in accordance with feed water quality as chemicals are not needed

NRB-200



## ME Series

Simple Once-through Steam Boiler

No emissions

Electric

- Maintains high efficiency with low heat loss
- Compact, space-saving design
- Safety design features: safety valve and overheat protection thermostat
- Simple installation without chimney

Electric type

ME-10 ME-20 ME-30 ME-40 ME-50



## MSG Series

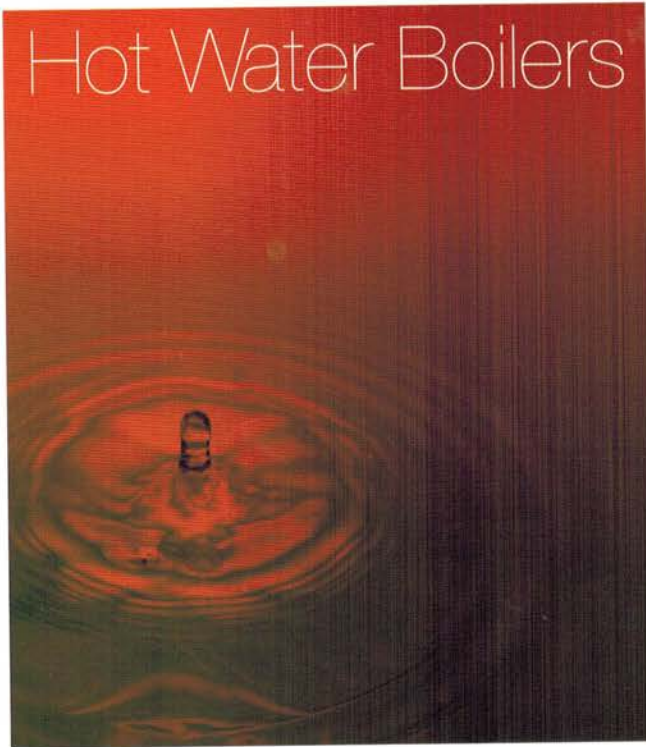
Clean Steam Generator

Clean, easily handles load fluctuations

- Equivalent evaporation: 600, 1200 kg/h
- Supplies clean, safe steam for food processing, air conditioning and humidifying

MSG-600 MSG-1200





## NT Series

Hot Water Heater

Microcomputer controlled hot water for simple operation

- Safe water discharge with microcomputer control
- Compact design
- Hydraulic head pressure up to 0.98 MPa (100 mAq):  
Model H, 0.49 MPa (50 mAq);  
Model W. (NT-65H and NT-85H: 0.69 MPa (70 mAq))
- Models for outdoor use also available

Oil fired

NT-65H/W NT-85H/W NT-120H/W NT-170H/W NT-200H/W



## NT-N Series

Hot Water Heater

Compact design

- Safe water discharge with microcomputer control
- Supplies clean hot water with a long boiler life through indirect heating using a highly efficient stainless steel heat exchanger

Oil fired

NT-65NS NT-85NS NT-120NS NT-170NS NT-200NS



## UT Series

Hot Water Heater

Microcomputer control for safe, reliable supply of hot water

- Quiet operation
- Clean burning with low NOx and CO
- Slim, space-saving unit
- Hydraulic head pressure up to 0.98 MPa (100 mAq):  
Model H, 0.49 MPa (50 mAq);  
Model W. (UT-65H and UT-85H: 0.69 MPa (70 mAq))
- Models for outdoor use also available

Gas fired Low NOx

UT-65H/W UT-85H/W UT-120H/W UT-170H/W UT-200H/W



## UT-N Series

Hot Water Heater

Highly efficient stainless steel heat exchanger for clean hot water and long boiler life

- Quiet operation
- Slim, space saving unit

Gas fired Low NOx

UT-65NS UT-85NS UT-120NS UT-170NS UT-200NS



## EW Series

Small Once-through Hot Water Boiler

Heat-efficient water-tube construction for outstanding energy savings

- Can be used for heating with a hydraulic head pressure up to 0.98 MPa (100 mAq)
- Very safe multi-tubular once-through hot water boiler
- Heating only: dual heating and hot water systems available

Gas fired

EW-30H/W EW-40H/W EW-50H/W EW-60H/W EW-80H/W

Oil fired

EW-30H/W EW-40H/W EW-50H/W EW-60H/W EW-80H/W



## EWN Series

Hot Water Heater

Simple operation

- Arrays of special fins for high heater efficiency
- Supplies clean hot water with a long boiler body life through indirect heating using a highly efficient stainless steel heat exchanger

Gas fired

Oil fired

EWN-30 EWN-40 EWN-30S/W EWN-40S/W  
EWN-30G EWN-40G



## Multiple Hot Water Boiler Controller

For high pressure hot water (up to 150°C)

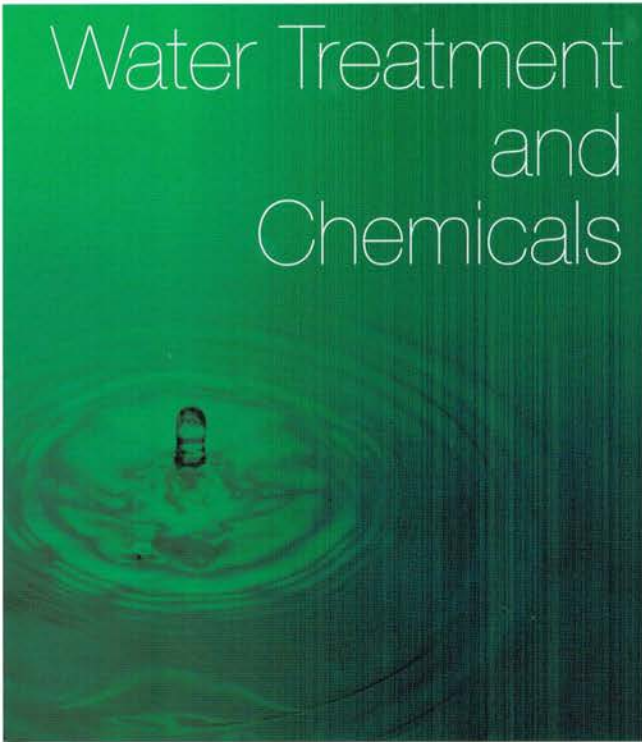
- Control through the main controller and a terminal unit on each boiler
- When extra boilers are required simply add an additional terminal unit (up to a maximum of 14)
- Backup function for when abnormalities occur and an automatic rotation function

Terminal unit  
MH1-200S



Main controller  
MH1-200M

# Water Treatment and Chemicals



## MFI / MFS Series

Equipment to Remove Iron and Manganese, Sand Filter

Ideal for boiler water pretreatment

- Application: Boiler feed water treatment  
Cooling water for cooling towers  
(MFI) Removes iron and manganese from well water  
(MFS) Removes suspended solids in water

- Starts wash cycle manually or automatically with a timer
- Number of wash cycles can be set with the timer
- Piston-operated control valve for easy operation



## MS / MS-N Series

Fully Automatic Water Softener

Automatic with a timer

- Application: Boiler water treatment
- MS-5-15 have an integrated brine tank
- Can set regeneration timing to meet work cycles
- Main components are made of corrosion-proof plastic
- Space-saving design with compact control valve



## DOR Series

Deoxidation Unit

Stable supply of low DO water

- Application: Boiler water treatment and ultrasonic cleaning
- Space saving and easy expansion (P Series)



## MS Series

Fully Automatic Water Softener

Interior surface of the control valve is teflon coated

- Application: Boiler water treatment
- Five models with a water flow volume from 2.4 m<sup>3</sup>/h to 9.0 m<sup>3</sup>/h and a maximum working water pressure of 0.49 MPa (5.0 kgf/cm<sup>2</sup>)
- Automated regeneration steps (5): feed water supply, back washing, brine regeneration, rinse and rapid rinse
- Brine regeneration regulator
- The brine tank and valve are made of plastic



## MFF Series

Tower Filtration equipment

Automatic labor-saving equipment

- Application:
  - (MFF-M) Removes iron and manganese from well water
  - (MFF-S) Removes suspended solids in water
- Solid filter pretreatment system
- Wash water for production processes
- Water for linen
- Safe, reliable system resulting from considerable experience and know-how
- Equipment of reliable quality born of a proven track record



## MS-200 Series

Fully Automatic Water Softener

The brine tank and valve are made of plastic

- Application: Boiler water treatment
- Seven models with a water flow volume from 15 m<sup>3</sup>/h to 28 m<sup>3</sup>/h and a maximum working water pressure of 0.49 MPa (5.0 kgf/cm<sup>2</sup>)
- Automated regeneration steps (5): feed water supply, back washing, brine regeneration, rinse and rapid rinse
- Brine regeneration regulator
- Interior surface of the control valve is teflon coated



## MFC Series

Fully Automatic Activated Carbon Filter

Activated carbon absorbs residual chlorine

- Application: Removes residual chlorine (pretreatment for RO equipment)

- Automatic back washing
- Starts wash cycle manually or automatically with a timer
- Number of wash cycles can be set with the timer
- Piston-operated control valve for easy operation



## MSR Series

Water softner system

Twin water softener system suitable for 24-hour operation (Model W)

- Application: Boiler water treatment
- LCD display of softener status
- Historical data stored on a microcomputer enabling prompt maintenance



## WP1-200

Enhanced control unit for water treatment

Configure the most suitable and stable boiler water treatment system

- Application: Boiler room water treatment equipment control
- Control of feed water supply regardless of water treatment equipment or water level monitoring method
- MI chemical feeding for up to 3 systems. Control of header chemical feeding for up to 2 of those 3 systems
- Regulate discharge of initial drain (optional)



## MIN Series

CO<sub>2</sub> Neutralizer

Management is simple and safe as strong acid is not used

- Application: Boiler alkali waste water treatment
- Less low pH and secondary pollution
- No adverse affects on peripheral equipment
- No effort required with automatic control
- Can set pH level to meet effluent standards
- For outdoor use



## CMU 224HE

Hardness leakage monitor

Automatic monitoring system for water hardness leakage

- LCD display of concentration assessment results
- Equipped with a reporting function
- One-touch chemical reagent cartridge replacement
- Compact design



CMU-224HE

## CPI-MI/CPI-W Series Chemical Feed System for MI Control Units

Comes standard with electronic level sensor

- Automatic and manual operation possible through a pulse signal
- Large 125 ℓ blow-molded tank
- 500 ℓ tank available for Model W
- Can use with a connection between a single communication line and a single chemical feed hose



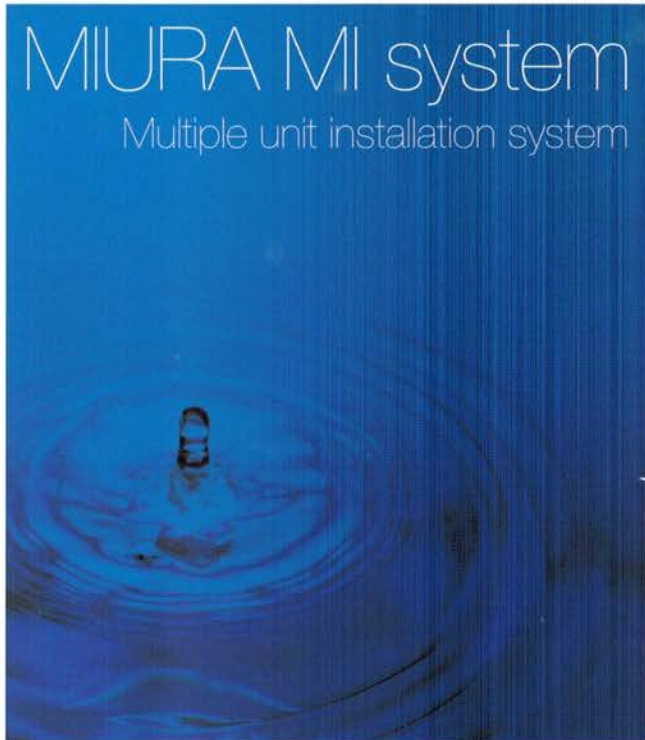
## CPI Series

Chemical Feeder

Protects the boiler with exceptional reliability

- Space-saving wall-hanging type (CPI-S)  
Can optionally configure an electronic level sensor
- \*CPI-10L, 30L, 70L





# MIURA MI system

Multiple unit installation system

## MP1-200

MI terminal pressure controller

Pressure controller for control of multiple boilers

- Transmits a signal from the pressure sensor to each control unit
- Assigns priority sequence and distributes control pressure to meet boiler conditions

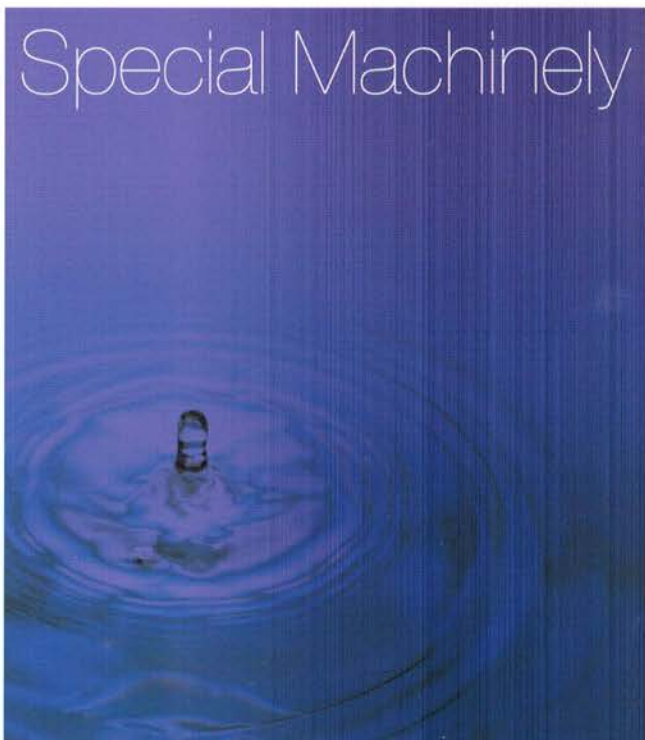


## MT1-200

MI terminal

Accurate firing instructions to boilers based on data from the pressure controller

- Monitors boiler status and initiates backup when required
- System expansion achieved simply by adding an MI Terminal to each boiler



# Special Machinery

## KX Series

Thermal oil heater

Maintains consistent temperatures as high as 300°C. Attains cost reduction by minimizing heat loss.

- High temperature obtained safely at normal pressure.
- Reduced running cost due to extremely low heat loss
- Thermal oil eliminates pipe corrosion worries and enables an extremely long service life time
- Stable supply of thermal oil at varying temperatures for diverse applications



Gas fired

Oil fired

KX-8 KX-10 KX-15 KX-17 KX-20 KX-25  
KX-30 KX-40 KX-50 KX-60 KX-75 KX-100  
KX-125 KX-150 KX-200

# Presenting Miura's Proven and Reliable Support

## Miura Maintenance Program

- Support Feature 2**
- Warranty**
- ① Warranty includes the boiler pressure vessel and economizer
  - ② Reduces cost of replacement parts, repair and labor

- Support Feature 3**
- Maintenance**
- ① Maintain safety through inspection of safety equipment
  - ② Maintenance and support of performance and functions
  - ③ Extend boiler and ancillary equipment service life through water quality analysis and internal boiler checks

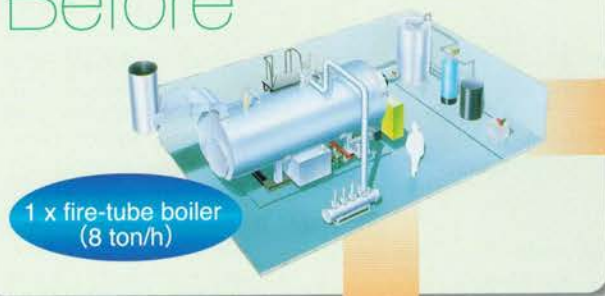
- Support Feature 1**
- Inspection**
- ① Conduct manufacturer's inspection for preventive maintenance
  - ② Description of boiler condition provided in inspection report

\* Contact Miura for details.

## For a boiler installation that meets site requirements

Proposals based on available space and local code and regulations

Before



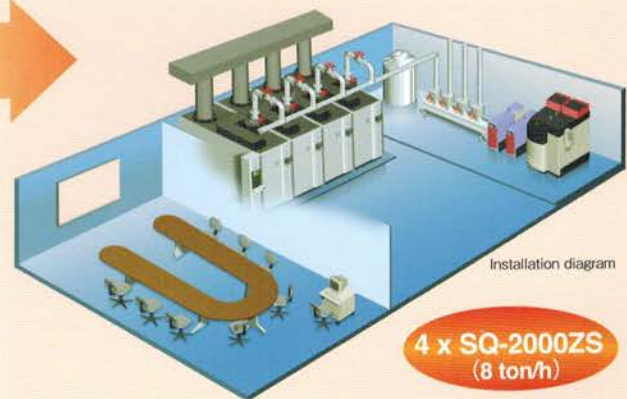
After ver.1



**4 x AI-2000 (8 ton/h)**

- High-efficiency operation with multiple boilers
- Reduces risk of breakdowns
- Space-saving

After ver.2



**4 x SQ-2000ZS (8 ton/h)**

Space-saving

### Scrummed multiple boiler installation

- Significant space-savings  
An additional space saving over standard multiple installation systems (comparing Miura products) is possible enabling creation of a spacious working area.
- High-efficiency operation with multiple boilers
- Reduces risk of breakdowns



# MI System: high efficiency and excellent follow control

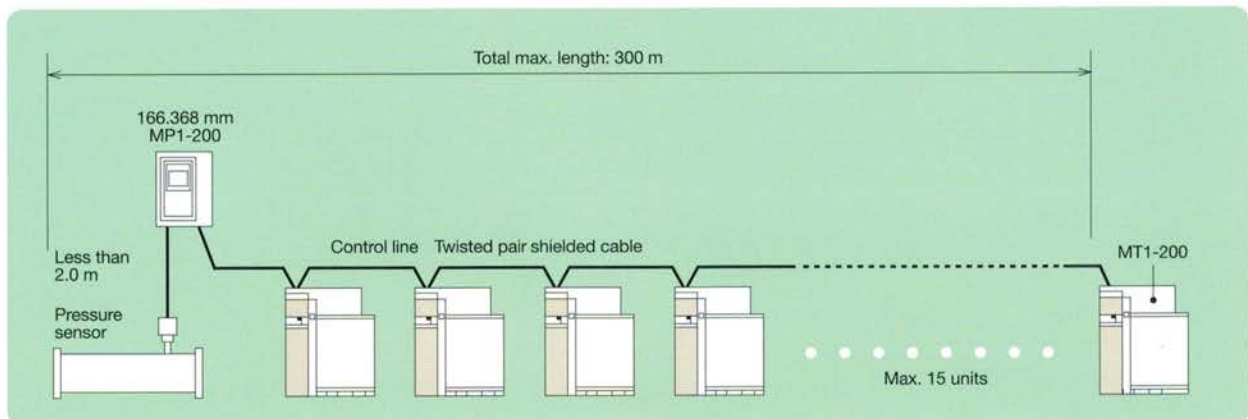
- Improves system efficiency by bringing boilers online when needed, and only when needed.
- A boiler system can be controlled using just one pressure controller and an MI Terminal for each boiler.
- System expansion can be achieved simply by adding an MI Terminal. (Maximum 15 boilers.)

Service efficiency increases when a single boiler is operated at a higher load factor.

Operating with only the required number of boilers in a multiple unit installation of smaller capacity boilers provides a better combustion efficiency by far than modulating the firing rate of a single large capacity boiler.

The concept of this MI System has made Miura the industry leader.

The system provides a reliable steam supply and energy savings by operating with multiple boilers used in rotation.



## ● Priority combustion immediately after a complete blowdown.

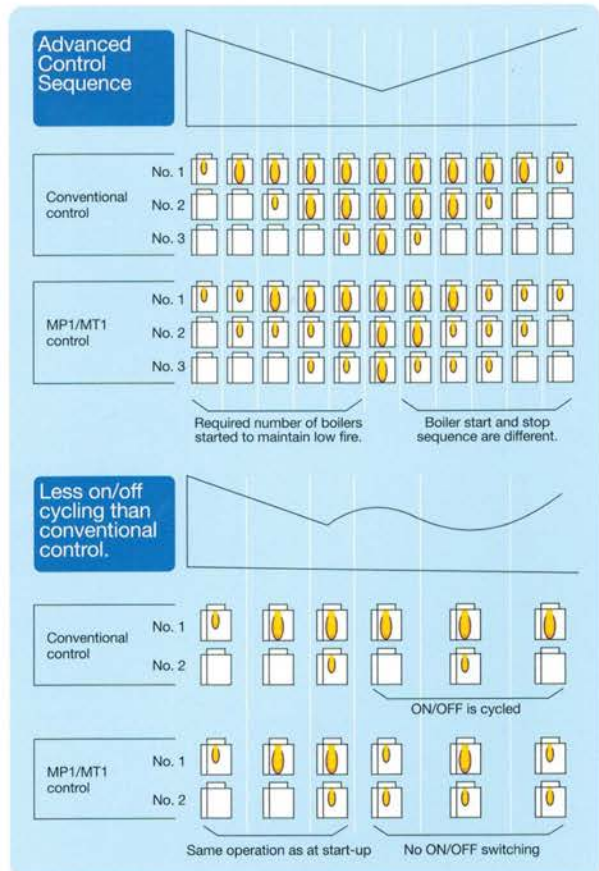
Priority combustion can be performed for a fixed duration immediately after a complete blowdown. This enables quick return of boiler water to the appropriate condition.

## ● Automatic Rotation

The order of precedence is automatically set at a 1 to 7 day interval so that operation of each boiler is uniform. It is also possible to set the order of precedence of a specific boiler.

## ● Backup Function

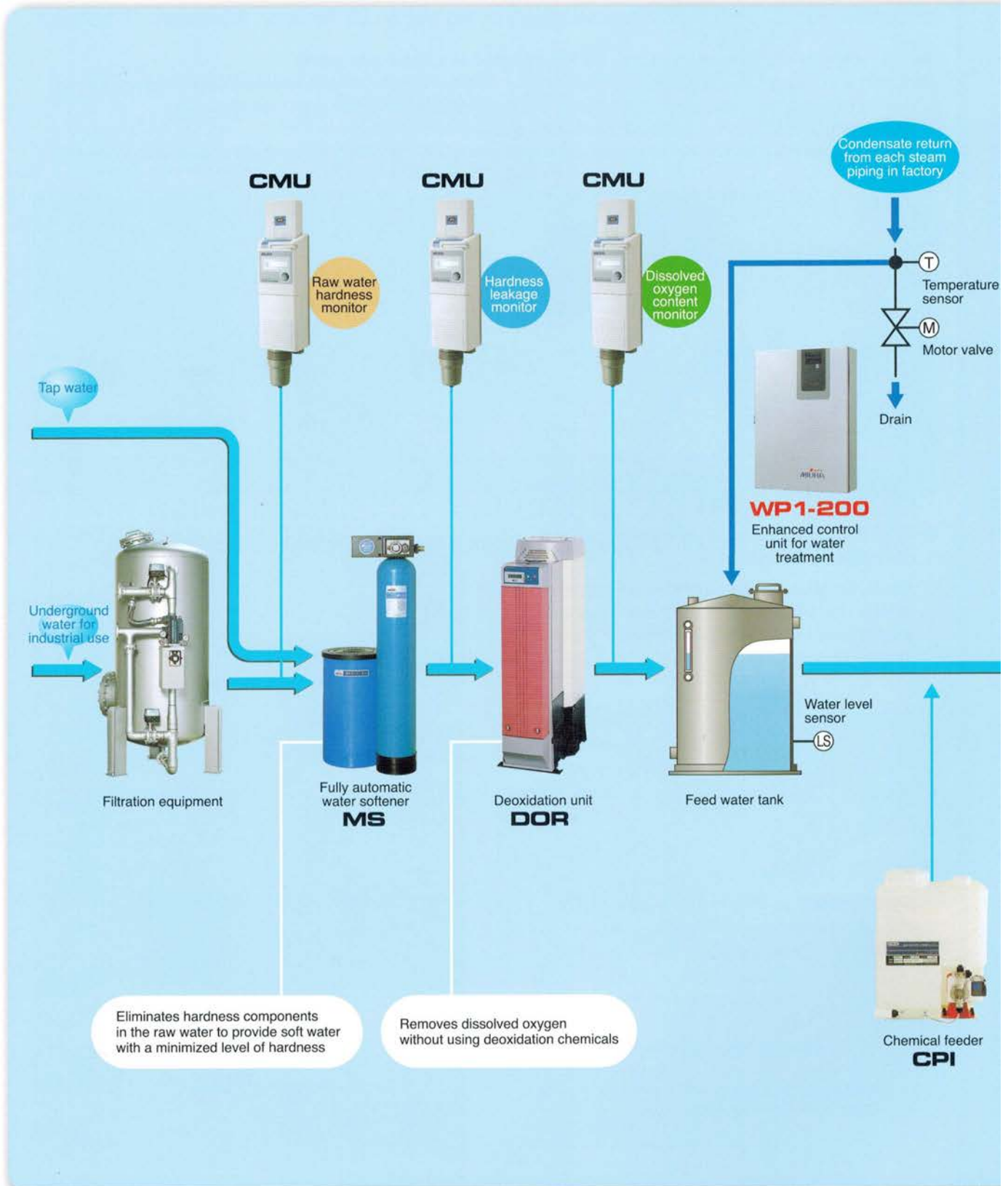
Should a boiler go off line due to a malfunction, inspection, or other cause, backup is initiated by redistributing pressure to the remaining boilers.



# Miura Steam Providing System

As a total steam system provider, we offer you the ideal system proposal.

Our highly efficient, energy saving, and space efficient system is friendly to both people and the environment.



**Analysis of the current system**

Analysis of water quality



**Fundamental tests**

Corrosion and scale tests under certain conditions

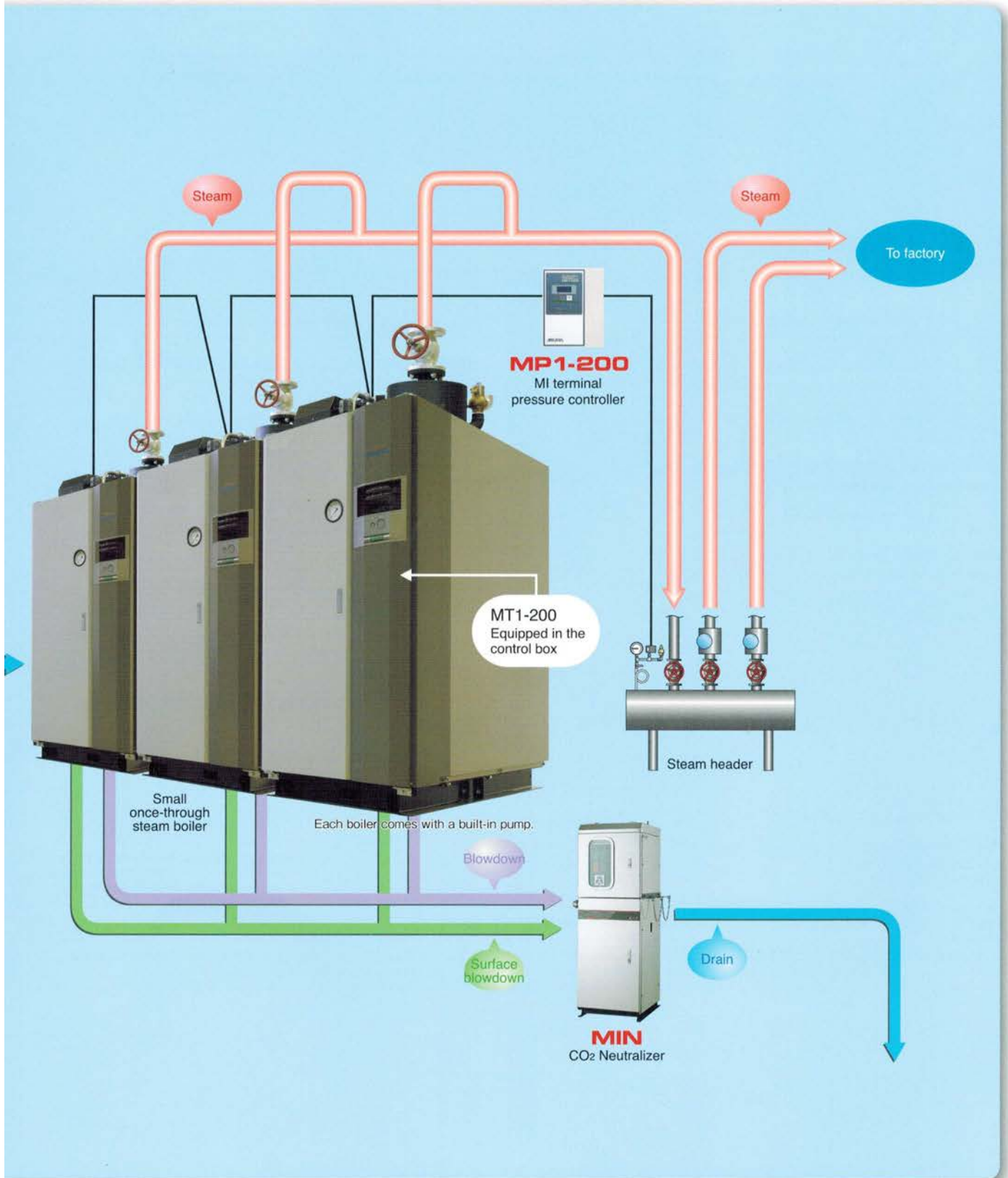
**Experience**

Maintenance know-how



**Reliable water treatment system design**

For more than 50 years, Miura has analyzed water while researching and developing small once-through boilers. Through this experience, we offer the water treatment plan optimized for each application.





## Overseas affiliated companies

Please address inquiries about Miura products to the nearest Miura Group company.

### [KOREA] KOREA MIURA Co., Ltd.

大韓民国ソウル特別市永登浦区文來洞3街55-20 ACE High tech City 3棟 701-1  
701-1 Building 3 ACE Hightech City, Street 3 55-20  
Mullae-Dong Yeoung Deung Po-Gu, Seoul Special City, Korea  
TEL 82-2-2671-2410 FAX 82-2-2671-0019  
<http://www.miura.co.kr>

### [CHINA] MIURA INDUSTRIES (SUZHOU) Co., Ltd.

中華人民共和國蘇州市蘇州工業園區南前巷8番 215024  
No. 8 Nanqian Lane, Suzhou Industrial Park, Suzhou, People's Republic of China. 215024  
TEL 86-512-8816-8892 FAX 86-512-8816-8893  
<http://www.miura-cn.com>

### [TAIWAN] MIURA BOILER Co., Ltd.

台北市信義區基隆路2段133號4F 11053  
4F NO.11053 KEELUNG RD, SEC.2 133 TAIPEI TAIWAN  
TEL 886-2-2735-9991 FAX 886-2-2735-9832  
<http://www.miuraz.com.tw>

### [SINGAPORE] MIURA SOUTH EAST ASIA Pte. Ltd.

26 Boon Lay Way, #01-81 Tradehub 21, Singapore  
TEL 65-6465-1147 FAX 65-6465-1148

### [THAILAND] MIURA SOUTH EAST ASIA Pte. Ltd.

**THAILAND OFFICE**  
32/33 12th Floor, Zone C Unit A, Sino-Thai Tower, Sukhumvit 21 Road (Soi Asok)  
Klongtoey-Nua, Wattana, Bangkok 10110, Thailand  
TEL 66-2-661-6354 FAX 66-2-661-7461

### [INDONESIA] PT. MIURA INDONESIA

Setiabudi Building 2, 1st floor, # 102 A, Jl. HR Rasuna Said,  
kav.62, Kuningan, Jakarta, 12920 Indonesia  
TEL 62-21-5290-6985 FAX 62-21-5290-6984

### [CANADA] MIURA BOILER Co., Ltd.

8 Copernicus Boulevard, Brantford, Ontario N3P 1Y4 Canada  
TEL 1-519-758-8111 FAX 1-519-758-5294  
<http://www.miuraboiler.com>

### [U.S.A.] MIURA NORTH AMERICA Inc.

1945 South Myrtle Avenue, Monrovia, California, 91016-4854 U.S.A.  
TEL 1-626-305-6622 FAX 1-626-305-6624  
<http://www.miuraboiler.com>

### [U.S.A.] MIURA MANUFACTURING AMERICA Co., Ltd.

2200 Steven B. Smith Blvd., Rockmart, GA 30153 U.S.A.  
TEL 1-678-685-0929 FAX 1-678-685-0930

### [MEXICO] MIURA BOILER MEXICO, S.A. DE C.V.

Calle Hacienda de Temixco, numero 28, oficina A4, Colonia Bosque de Echegaray  
Municipio de Naucalpan de Juarez, C.P. 53310, Estado de Mexico  
TEL 52-55-5360-5939

## MIURA Co., Ltd.

7 Horie, Matsuyama, Ehime 799-2696, Japan  
TEL 089-979-7123  
FAX 089-979-7117

Product upgrades may be made without notice.  
Please address any enquiries concerning this catalog  
to your nearest Miura distributor or sales office.

### Safety Precautions

In order to use the product safely, please read the Instruction Manual first.

⊙ Export Precautions: Products in this catalog which fall under the export controls in the Foreign Exchange and Foreign Trade Act require a license from the Japanese government for export outside of Japan. If you are considering export, please consult your Miura Sales Representative.