



PT. INDIRA MITRA BOILER

EXPERT IN INDUSTRIAL ENERGY



GENERAL CATALOG

PT. INDIRA MITRA BOILER

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**Emerald Residence Sepatan Ruko 8i, RT.026/RW.005,
Kosambi, Kec. Sukadiri, Kabupaten Tangerang, Banten 15530**



OUR PRODUCT



FIRE TUBE STEAM BOILER

Brand: Indira Mitra Boiler.
Firetube Boiler products supported by modern technology for the industrial market in Indonesia



WATER TUBE STEAM BOILER OUNCE TROUGH

Brand: Indira Mitra Boiler.
The main advantages are **rapid steam generation** (instant load response), **high efficiency at extreme pressures**, and **enhanced operational safety** due to the minimal water volume within the system



HOT WATER BOILER GENERATOR

Brand: Indira Mitra Boiler.
Hot Water Generator (Industrial Water Heater) is its efficiency and safety for applications that require hot water without the need to convert it into steam.

Firetube Steam Boiler

Model: IMB-FT

Winsketel is a legendary boiler brand in Indonesia that was founded by Ir. Gunawan, many steam boilers have been produced and have spread throughout Indonesia. One of its superior products is firetube type boiler with Gas fuel (LPG, CNG, PGN) and Light Oil.

At present, PT Indira Mitra Boiler (PT IMB) is present in partnership with Winsketel boiler into a joint team to realize superior Firetube Boiler products supported by modern technology for the industrial market in Indonesia. In this collaboration PT IMB will serve Firetube Steam Boiler fabrication which has a capacity ranging from 500kg to 10Ton / h with a working pressure of up to 20 barg.

Advantages of IDM-FT

- Easier access and lower maintenance cost.
- Three passes economic design.
- High heating surface.
- Lower metal temperature effect lower heat losses and cooler boiler room.
- Eliminate refractories, insulator and baffles.
- Increased radiant surface and bigger furnace diameter.
- Conformity with Rules, Standards and Regulations.
- Constructed and factory tested under a total Quality Management System.
- High quality fittings and components.
- Full year warranty provided by qualified after sales service.
- Large shell diameter and water line to dry steam production and large reserve.





Data for Burner Determination Boiler Model: IMB-FT

| Steam output kg/h | Heat output KW | Burner Input kW | Length of flame tube w.o. rear reversing chamber mm | Length of rear reversing chamber mm | Inner flame tube diameter mm | Draught loss mbar |
|----------------------|-------------------|--------------------|---|---|------------------------------------|----------------------|
| 500 | 326 | 364 | 1400 | 350 | 576 | 5,8 |
| 800 | 522 | 583 | 1400 | 350 | 576 | 7,3 |
| 1000 | 652 | 728 | 1700 | 350 | 626 | 5,9 |
| 1250 | 815 | 910 | 1700 | 350 | 626 | 6,2 |
| 1600 | 1043 | 1165 | 1920 | 350 | 722 | 8,5 |
| 2000 | 1304 | 1457 | 2170 | 350 | 722 | 11,0 |
| 2500 | 1630 | 1820 | 2420 | 350 | 722 | 11,0 |
| 3200 | 2090 | 2335 | 2750 | 500 | 780 | 10,0 |
| 4000 | 2608 | 2914 | 3250 | 500 | 864 | 11,2 |
| 5000 | 3260 | 3640 | 3740 | 500 | 864 | 13,2 |
| 6000 | 3910 | 4369 | 4400 | 500 | 874 | 12,0 |
| 8000 | 5216 | 5828 | 4640 | 600 | 1060 | 14,1 |

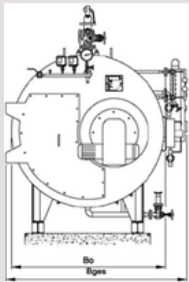


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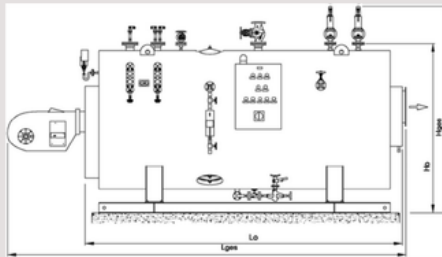
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FIRETUBE STEAM BOILER – IMB-FT500 to IMB-FT8000

Boiler Dimension Three Pass Boiler Model: IMB-FT



FRONT VIEW



SIDE VIEW



| Size | Steam output | Heat output | Water Content | Transport weight | Operating weight | Hges | Ho | Lges | Lo | Bges | Bo |
|------|--------------|-------------|---------------------|------------------|------------------|---------|---------|---------|---------|---------|---------|
| 500 | 0,5 t/h | 0,33 MW | 0,9 m ³ | 2,3 t | 3,6 t | 1975 mm | 1590 mm | 3230 mm | 2720 mm | 1600 mm | 1450 mm |
| 800 | 0,8 t/h | 0,52 MW | 1,1 m ³ | 2,6 t | 4,2 t | 2125 mm | 1740 mm | 3230 mm | 2720 mm | 1750 mm | 1600 mm |
| 1000 | 1,0 t/h | 0,65 MW | 1,4 m ³ | 3,8 t | 5,8 t | 2285 mm | 1900 mm | 3600 mm | 3020 mm | 1860 mm | 1710 mm |
| 1250 | 1,25 t/h | 0,82 MW | 1,4 m ³ | 4,5 t | 6,5 t | 2285 mm | 1900 mm | 3700 mm | 3020 mm | 1860 mm | 1710 mm |
| 1600 | 1,6 t/h | 1,05 MW | 2,4 m ³ | 4,6 t | 7,8 t | 2535 mm | 2090 mm | 3700 mm | 3220 mm | 2050 mm | 1900 mm |
| 2000 | 2,0 t/h | 1,31 MW | 2,4 m ³ | 5,3 t | 8,6 t | 2535 mm | 2090 mm | 3900 mm | 3480 mm | 2050 mm | 1900 mm |
| 2500 | 2,5 t/h | 1,63 MW | 2,6 m ³ | 5,4 t | 8,9 t | 2620 mm | 2090 mm | 4600 mm | 3730 mm | 2050 mm | 1900 mm |
| 3200 | 3,2 t/h | 2,09 MW | 3,1 m ³ | 6,6 t | 10,8 t | 2720 mm | 2190 mm | 5100 mm | 4230 mm | 2200 mm | 2000 mm |
| 4000 | 4,0 t/h | 2,61 MW | 4,8 m ³ | 8,2 t | 14,4 t | 2925 mm | 2340 mm | 5600 mm | 4730 mm | 2400 mm | 2150 mm |
| 5000 | 5,0 t/h | 3,27 MW | 5,2 m ³ | 9,5 t | 16,3 t | 2925 mm | 2340 mm | 6130 mm | 5230 mm | 2400 mm | 2150 mm |
| 6000 | 6,0 t/h | 3,92 MW | 8,1 m ³ | 11,6 t | 21,8 t | 3175 mm | 2590 mm | 6450 mm | 5750 mm | 2600 mm | 2350 mm |
| 8000 | 8.0 t/h | 5,23 MW | 10,6 m ³ | 17,7 t | 32,6 t | 3605 mm | 2890 mm | 7320 mm | 6250 mm | 3000 mm | 2700 mm |

WATER TUBE STEAM BOILER

IMB 300 – IMB 5000



The main advantages of a Once-Through Water Tube Boiler are:

- **Extremely Fast:** Generates steam within minutes (instant load response).
- **High Efficiency:** Capable of operating at very high pressures (supercritical) to save fuel.
- **Safe:** Very low risk of major explosions because the water volume inside the tubes is minimal.
- **Compact:** Space-saving design that does not require a large steam drum.
- **Automated:** Usually equipped with advanced control systems for easy operation.

Technical Specifications - Capacity and Consumption

| TECHNICAL DATASHEET | | | | | | | | |
|--------------------------------------|---------------------------------------|---------|---------|----------|----------|----------|----------|----------|
| Features | Unit | IMB 300 | IMB 500 | IMB 1000 | IMB 1500 | IMB 2000 | IMB 3000 | IMB 5000 |
| Steam production | Kg/h | 300 | 500 | 1000 | 1500 | 2000 | 3000 | 5000 |
| Design pressure | bar | 12 | 12 | 12 | 12 | 12 | 12 | 12 |
| Max working pressure | bar | 10 | 10 | 10 | 10 | 10 | 10 | 10 |
| TOTAL ELECTRIC POWER | | | | | | | | |
| Heavy fuel oil | KW | 4,3 | 5,3 | 9,6 | 12,9 | 16,0 | 24,0 | 32 |
| Natural gas or diesel oil | KW | 2,3 | 2,3 | 4,6 | 5,9 | 7,0 | 12,0 | 18 |
| FUEL CONSUMPTION AT 100% OF THE LOAD | | | | | | | | |
| Heavy fuel oil | Kg/h | 22 | 36 | 72 | 110 | 145 | 218 | 363 |
| Natural gas | Nm ³ /h | 25 | 41 | 81.5 | 124.5 | 164 | 247 | 411 |
| Diesel oil | kg/h | 23 | 38 | 76 | 116 | 153 | 230 | 383 |
| FUEL CALORIFIC POWER | | | | | | | | |
| Heavy fuel oil | Kcal/kg | 9500 | | | | | | |
| Natural gas | Kcal/Nm ³ | 8400 | | | | | | |
| Diesel oil | Kcal/kg | 9000 | | | | | | |
| Standard electric power data | 380 V / 50 Hz / 3 phases with neutral | | | | | | | |
| Auxiliaries voltage | 220 V | | | | | | | |

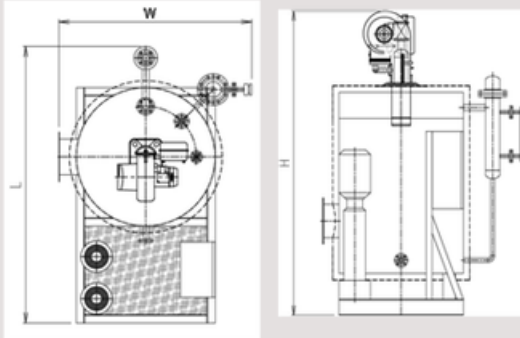


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Dimensions of flash coil steam generators IMB300-5000

Vertical Design



| OVERALL DIMENSIONS AND CONNECTIONS OF STEAM GENERATORS IMB 300-5000 | | | | | | | | |
|---|----------------|---------|---------|-----------|----------|----------|----------|----------|
| MODEL | | IMB 300 | IMB 500 | IMB 1000 | IMB 1500 | IMB 2000 | IMB 3000 | IMB 5000 |
| VERTICAL VERSION DIMENSIONS | | | | | | | | |
| L | Length | mm | 1650 | 1900 | 2200 | | | |
| W | Width | mm | 1080 | 1180 | 1600 | | | |
| H | Height | mm | 1950 | 2400 | 3050 | | | |
| HORIZONTAL VERSION DIMENSIONS | | | | | | | | |
| L | Length | mm | | | 2400 | 2900 | 3550 | 4100 |
| W | Width | mm | | | 1280 | 1400 | 1500 | 1750 |
| H | Height | mm | | | 1650 | 1700 | 1850 | 2200 |
| GENERAL TECHNICAL DATA | | | | | | | | |
| Stack connection | mm | 250 | 250 | 320 | 385 | 385 | 485 | 485 |
| Steam outlet | DN | 25 | 40 | 50 | 65 | 80 | 100 | 125 |
| | PN | 16 | 16 | 16 | 16 | 16 | 16 | 16 |
| Safety valve | DN | 20/40 | 20/40 | 20/40 | 25/40 | 25/40 | 40/50 | 50/65 |
| | PN | 25/16 | 25/16 | 25/16 | 25/16 | 25/16 | 25/16 | 25/16 |
| Natural gas connection | | 1" G | 1 ½" G | 2" G | 2" G | 2" G | 2 ½" G | 2 ½" G |
| Feed water inlet | | 1" G | 1" G | 1" G | 1" G | 1 ½" G | 1 ½" G | 2" G |
| Total volume | l | 208 | 370 | 620/850 | 1100 | 2400 | 2710 | 3100 |
| Pipes diameter | mm | 60.3 | 60.3 | 60.3/50.8 | 50.8 | 50.8 | 50.8 | 50.8 |
| Heating surface | m ² | 6 | 8.8 | 14 | 18 | 32 | 34 | 34 |
| Empty weight | Kg | 750 | 900 | 1100 | 2200 | 2800 | 3400 | 4300 |



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HOT WATER BOILER

IMB 70 TO IMB 5000



advantages of a Hot Water Generator can be summarized as follows:

- **Enhanced Safety:** It has a very low risk of explosion because it operates at low pressures and does not produce steam.
- **Energy Efficiency:** It is more efficient than steam systems because it doesn't require the extra energy (latent heat) needed to convert water into vapor.
- **Stable Temperature:** It is highly accurate at maintaining a consistent and uniform water temperature.
- **Easy Maintenance:** Its simple design, without complex components like steam drums or steam traps, makes it easier and cheaper to maintain.
- **Space-Saving:** It is typically more compact than traditional steam boilers, requiring less installation space

OVERALL DIMENSIONS AND CONNECTIONS OF STEAM GENERATORS IMB70-3000

| MODEL | | IMB 70 | IMB 200 | IMB 500 | IMB 1000 | IMB 1500 | IMB 2000 | IMB 3000 | |
|--------------------------------------|----------------|--------|---------|---------|-----------|-----------|----------|----------|------|
| VERTICAL VERSION DIMENSIONS | | | | | | | | | |
| L | Length | mm | 1350 | 1650 | 1900 | 2200 | | | |
| W | Width | mm | 900 | 1080 | 1180 | 1600 | | | |
| H | Height | mm | 1850 | 1950 | 2400 | 3050 | | | |
| HORIZONTAL VERSION DIMENSIONS | | | | | | | | | |
| L | Length | mm | | | | | 2400 | 2900 | 3550 |
| W | Width | mm | | | | | 1280 | 1400 | 1500 |
| H | Height | mm | | | | | 1650 | 1700 | 1850 |
| GENERAL TECHNICAL DATA | | | | | | | | | |
| Stack connection | mm | 250 | 250 | 250 | 320 | 320 | 385 | 385 | |
| Steam outlet | DN | 25 | 25 | 40 | 50 | 50 | 65 | 80 | |
| | PN | 16 | 16 | 16 | 16 | 16 | 16 | 16 | |
| Safety valve | DN | 20/40 | 20/40 | 20/40 | 20/40 | 20/40 | 25/40 | 25/40 | |
| | PN | 25/16 | 25/16 | 25/16 | 25/16 | 25/16 | 25/16 | 25/16 | |
| Natural gas connection | | 1"G | 1"G | 1 ½"G | 2"G | 2"G | 2"G | 2"G | |
| Feed water inlet | | 1"G | 1"G | 1"G | 1"G | 1"G | 1"G | 1 ½"G | |
| Total volume | l | 208 | 208 | 370 | 620/850 | 620/850 | 1100 | 2400 | |
| Pipes diameter | mm | 60.3 | 60.3 | 60.3 | 60.3/50.8 | 60.3/50.8 | 50.8 | 50.8 | |
| Heating surface | m ² | 6 | 6 | 8.8 | 14 | 14 | 18 | 32 | |
| Empty weight | Kg | 600 | 750 | 900 | 1100 | 1100 | 2200 | 2800 | |



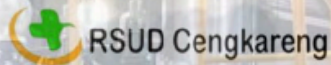
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CUSTOMER LIST



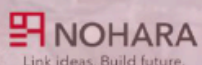
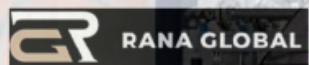
sahabatutama



Badan Pertkajian Dan Penerapan Teknologi



PT Widya Sapta Contractor



Grand Zuri



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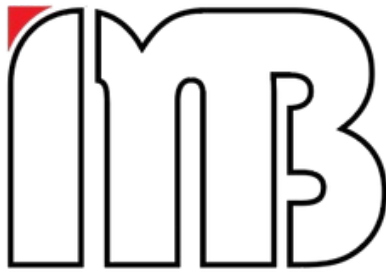
PROJECT REVERENSI

GENERAL INDUSTRY



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