APEIRON ENERGY

Crop drying

APEIRON
ENERGY

INNOVATIVE AND QUALITY PRODUCTS

Apeiron Energy is an industry leading provider of innovative equipment, commited to offering exceptional power, temperature control, and safety solutions. As our name suggests, Apeiron is prides itself on services and solutions that are guaranteed to maximalize your resources through their lasting quality.

CERTIFIED SOLUTIONS

As the exclusive distributor of Thermobile products in Canada and the U.S, we supply UL and CSA certified, rental-ready, products and systems; engineered to meet the unique demands of your application.

EQUIPMENT ENGINEERING EXPERTISE

Whether a business operates in oil and gas, construction, mining, or the telecommunications industry, those who require power, temperature control or safety solutions for mission critical applications will always choose expert-engineered equipment combined with Apeiron Energy know-how and support.

UNPARALLELED AND COST-EFFECTIVE EFFICIENCY

We supply versatile solutions that operate more efficiently and conserve significantly more energy than traditional products, while also providing unmatched cost-savings as a result. Our leasing and maintenance options also provide peace-of-mind for your unique equipment needs.

INDEX

Diesel/heating oil

Propane

Wood pellets

Electricity

Kerosene

Natural gas

Bio oil

ITA | Oil fired with flue connection

ITA-45

Features

- Equipped with a high pressure pump for diesel or paraffin with a 1-way pipe system (conversion to a 2-way pipe system for connection with separate fuel tank available).
- The ITA Robust version is supplied with a very robust bumper, large ball bearing wheels, forklift slots and tank heating.
- Outlet temperature with ΔT of about 50°C.
- High efficiency heat exchanger (91% Min).

Advantages

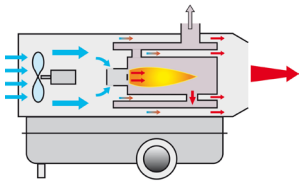
- Durable phosphated body panels with powder coating.
- Maintenance friendly and easy to install and operate.
- Large fuel tank for at least 16 hours of operation.
- Air hoses can be mounted in order to supply heat to specific areas.

Applications

- Storage of flower bulbs without risk of harmful ethylene emission.
- Heating of greenhouses and polytunnels without risk of harmful CO_2 and CO emission.
- Heating of construction sites, tents, showrooms halls, warehouses and workshops.
- Drying of agricultural produce, construction - and renovation projects.

Working principle

Indirect diesel fired heater that produces 100%, clean and dry, warm air by blowing air alongside a heat exchanger with a powerful axial fan.



Technical specifications

ITA SERIES	45	75	400
Heat output (Btu/hr)	154.000	240.000	400.000
Approx. fuel consumption (gal/hr)	1.20	1.85	2.60
Heated airflow (CFM)	1.850	2.350	3.350
Flue connection Ø (Inch)	16	16	20
Power	120/60HZ	120/60HZ	120/60HZ
Run time on full tank (hr)	17	17	24
Outlet cone Ø (Inch)	6	7	7.8
Max. duct length	60	80	60
Tank capacity (gal.)	21	32	62
Dimensions L*W*H (inch)	64*24*35	81*25*54	77*37*57
Weight (lbs)	231	289	400

IMA-111 RAD

Features

- Fully automatic burner control with thermostat connection.
- The combustion chamber is heat resistant up to 850°C.
- Equipped with overheat protection and temperature limitation of warm air.
- Supplied with Intercal industrial burner with flow control. Alternative burners available (Riello oil- or gas burner for instance).
- Outlet temperature ΔT of about 47°C.
- The EC fan is equipped with built-in soft starter and phase control as a standard.
- High efficiency heat exchanger (92% Min).

Advantages

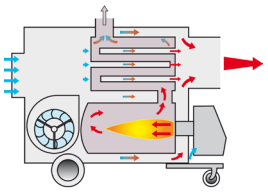
- Maintenance friendly, easy to install and operate.
- Economic thanks to the high efficiency heat exchanger and the possibility of recirculation.
- Can be easily transported.

Applications

- Storage of flower bulbs without risk of harmful ethylene emission.
- Heating of greenhouses and polytunnels without risk of harmful CO_2 and CO emission.
- Heating of construction sites, tents, showrooms halls, warehouses and workshops.
- Drying of agricultural produce, construction - and renovation projects.

Working principle

Indirect diesel fired heater that produces 100%, clean and dry, warm air by blowing air alongside a heat exchanger with a powerful radial fan.



Technical specifications

IMA SERIES	111 OIL	111 GAS	185 OIL	185 GAS
Heat output (Btu/hr)	370.000	370.000	700.000	700.000
Approx. fuel consumption	2.83 GHP	NG: 352 CFH LP: 4.04 GPH	2.83 GPH	NG: 352 CFH LP: 4.04 GPH
Heated airflow (CFM)	5.330	5.330	7.660	7.660
Power	240V/60HZ	240V/60HZ	240V/60HZ	240V/60HZ
Heat rise (ft)	95	95	104	104
Outlet cone Ø (inch)	20	20	24	24
Max. duct length (ft.)	100	100	150	150
Flue connection Ø (inch)	8	8	8	8
Dimensions L*W*H (inch)	87*31*51	87*31*51	107*36*60	107*36*60
Weight (lbs)	728	728	944	944

IMAC | Oil fired with flue connection containerized

IMAC-4000

Features

- Equipped with overheat protection, phase control and temperature limitation of warm air.
- Units with EC ventilator and IMAC-4000 are equipped with soft starter.
- Automatic burner control with thermostat connection.
- Supplied with Intercal industrial burner with flow control. Alternative burner available (Riello oil- or gas burner for instance).
- High efficiency heat exchanger (92% Min).
- Outlet temperature ΔT of about 47°C.
- Stainless steel bodywork.

Advantages

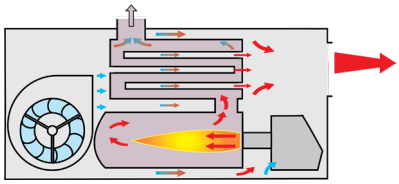
- Easily transportable with box girders and forklift slots.
- Protection against non-professional operation because of the lockable central control box and burner area.
- Maintenance friendly, easy to install and to operate.
- Economic thanks to the high efficiency heat exchanger and the possibility of recirculation.
- Logistic and storage advantages because of its very robust stackable construction.

Applications

- Storage of flower bulbs without risk of harmful ethylene emission.
- Heating of greenhouses and polytunnels without risk of harmful CO_2 and CO emission.
- Heating of construction sites, tents, showrooms halls, warehouses and workshops.
- Drying of agricultural produce, construction - and renovation projects.

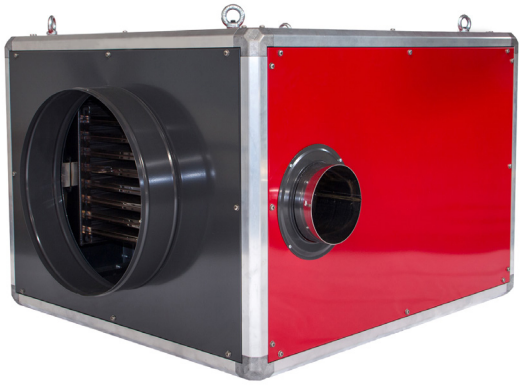
Working principle

Indirect diesel fired heater that produces 100% clean and dry, warm air by blowing air alongside a high efficiency heat exchanger with a powerful radial fan.



Technical specifications

IMAC SERIES	2000S	4000E
Heat output (Btu/hr)	700.000	1.300.000
Approx. fuel consumption	4.85 GPH; NG: 610 CFH LP: 235 CFH	9.5 GPH; NG: 1.266 LP: 14.5 GPH
Heated airflow (CFM)	7.060	14.120
Power	1X208-230V/60HZ	3X208-230V/60HZ
Heat rise (ft)	120	120
Outlet cone Ø (inch)	24	2X24
Max. duct length (ft.)	200	200
Flue connection Ø (inch)	8	10
Dimensions L*W*H (inch)	95*31*54	151*47*75
Weight (lbs)	1.201	2.100



ISA-65

Features

- Durable phosphated body panels with powder-coating.
- Automatic burner control with thermostat-connection.
- Hanging model, supplied with suspension eyes.
- Equipped with overheat-protection and temperature limitation of warm air.
- Supplied with Intercal industrial burner with flow control. Alternative burner available (Riello oil- or gas burner for instance).
- High efficiency heat exchanger (92°C)
- Outlet temperature of delta ΔT 35°C

Advantages

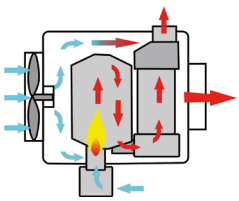
- Economic thanks to the high efficiency heat exchanger.
- 100% clean and dry heat.
- Operation with thermostat.

Applications

- Heating of greenhouses and polytunnels without risk of harmful CO_2 and CO.
- Heating and keeping free from frost of sheds, warehouses and stables.

Working principle

Indirect diesel-fired heater that produces 100% clean and dry warm air by blowing air alongside a high efficiency heat exchanger with a powerful axial fan.



Technical specifications

ISA SERIES	65
Heat output (Btu/hr)	222
Fuel consumption oil Max. (gal./hr)	1.2
Heated airflow (CFM)	1.5
Power	4/230V
Max. ventilator back pressure (Pa)	200
Outlet cone Ø (Inch)	19.7
Flue connection Ø (Inch)	7.1
Thermostat connection	✓
Dimensions (L*W*H) cm	55*53*32
Weight (kg)	88.5kg

ITLE | Indirect gas fired heater

ITLE-80

Features

- Heaters can be serial connected, remote monitoring with the latest technology available as an option.
- Wall mounted gas-fired heater with 2 axial fans.
- Efficient air distribution with minimal temperature differences inside.
- Access and operation from the outside, the ITLE is mounted in the wall with an access in- and outside the building.
- Highly efficient tubular heat exchanger.
- Suitable for gas G25, G20 and G31.
- Modulating burner control.

Advantages

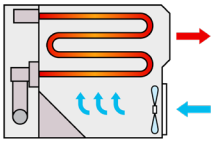
- Improves the air quality inside the house compared to direct fired heaters.
- The wall mounted model saves space inside the pig- or poultry house.
- Less ventilation needed, less fuel costs.
- No CO_2 emission in the house. (therefore reducing the risk of getting crop diseases)
- Easy to clean.

Applications

Specifically designed for the heating of pig and poultry houses.

Working principle

Two powerful axial fans recirculate air alongside a tubular heat exchanger to increase the temperature of the air inside. Flue gasses are discharged outside. Remote control and monitoring of heater capacity.



Technical specifications

ITLE SERIES	80
Heat output (Btu/hr)	204-273
Gas consumption Max. (m³/hr) G20/25)	8-9
Gas consumption Max. (kg/hr) G31	6
Air throw (ft.)	82
Heated airflow CFM	0.2
Power consumption	4/230V
Flue connection Ø (Inch)	3.2
Dimensions L*W*H (Inch)	44*44*45
Weight (lbs)	573

AGA-111

Features

- Supplied with fresh air intake connection as a standard.
- Outlet temperature between 100°C - 130°C.
- Full humidity and dust proof control panel.
- Burner with electronic ignition, ionization protection and thermostat connection.
- Separate fan for optimization of fresh air supply to the burner. (except 100E)
- Direct heat, 100% efficiency.

Advantages

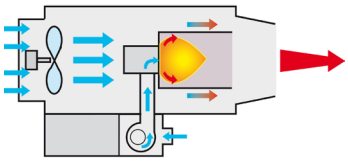
- All models can function both horizontally and vertically.
- Easy and quick access for service and maintenance.
- Lowers risk of disease/crop damage.
- Large air throw.

Applications

- Heating of pig and poultry houses.
- Drying of agricultural produce.
- Heating of greenhouses and polytunnels (NB: guard CO_2 en CO levels).

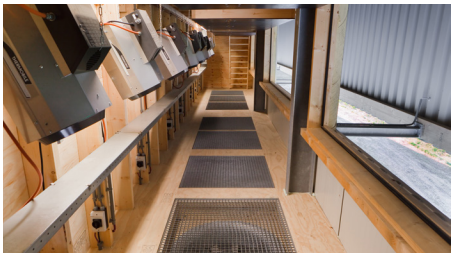
Working principle

A direct gas-fired heater.
Attention: this product requires ventilation of the area at all times. Installation by qualified personnel only.



Technical specifications

AGA SERIES	45	75	100	102	111
Heat output (kW)	154	75	358	358	358
Gas consumption Max. (m³/hr) Gas 25	5.0	8.3	11.2	6.0-13.9	11.2
Gas consumption Max. (m³/hr) Gas 20	4.0	7.1	9.1	4.3-11.2	9.0
Gas consumption Max. (m³/hr) Propane	3.2	5.4	7.5	-	7.5
Heated airflow (CFM)	694	1250	1944	1944	1944
Power consumption	1.0	1.9	4.8	5.5	5.3
Air throw (ft.)	49	82	131	131	131
Gas connection Ø (Inch)	1/2	1/2	1/2	1/2	1/2
Thermostat connection	✓	✓	✓	✓	✓
Dimensions (L*W*H) cm	42*27*16	43*32*21	54*24*34	54*28*34	54*22*34
Weight (kg)	82	115	154	190	185



GA-60 E

Features

- All GA models can be connected to a modulating system.
- Supplied with burner relay, ionization flame protection, thermostat connection and hose breakage protection.
- Clean combustion air through fresh outside air supply.
- Service-friendly, humidity- and dust proof control panel.
- Adjustable capacity.
- KIWA certified

Advantages

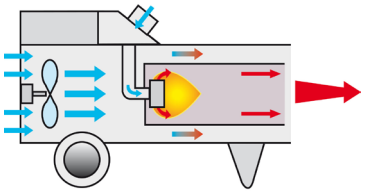
- Can be installed both horizontally and vertically to supply warm air to the fans of drying installations.
- Suspension brackets and wheel sets available as an option. (wheel set standard on GA-110)
- Large capacity.

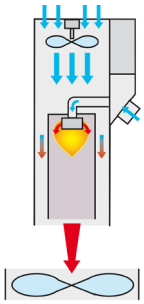
Applications

- Heating of greenhouses and polytunnels (control of CO_2 en CO levels imperative).
- Heating of pig- and poultry houses.
- Drying of agricultural produce.

Working principle

A direct gas-fired heater.
This product requires ventilation of the area at all times.
Installation by qualified personnel only.





Technical specifications

GA SERIES	24	42	60	85	110
Heat output Min. (Btu/hr)	54.6	61.4	92.1	133.1	184.3
Heat output Max. (Btu/hr)	105.8	150.1	215	317.3	443.6
Fuel consumption gas Min. (kg/hr)	1.1	1.4	1.9	2.8	3.9
Fuel consumption gas Max. (kg/hr)	2.1	3.2	4.6	6.7	9.3
Heated airflow (m^3/hr)	211	211	667	667	1111
Power consumption	0.60	0.60	0.64	0.64	2.20
Gas connection Ø (inch)	1/2	1/2	1/2	1/2	1/2
Gas pressure on heater (bar)	0.4-1.5	0.4-1.5	0.4-2.0	0.4-2.0	0.4-2.0
Thermostat connection	✓	✓	✓	✓	✓
Dimensions L*W*H (inch)	23*15*18	23*15*18	43*18*18	23*15*18	47*21*24
Weight (lbs)	42	42	79	79	121

Features

- A system consists of a servo motor with valve, a temperature management unit and a sensor.
- Parts of the unit can be connected with an external computer to serve larger temperature management systems.
- Several heaters can be connected depending on the system chosen with the possibility to manage different sections if required.
- Complete system for drying of agricultural produce, available in 3 versions.
- Modulation gas valve available in different power supplies (24/230V)
- Fire security system available.

Advantages

- Delivers a stable temperature in the space to be heated.
- The continuous functioning reduces restarting of the burners and increases the life time span of the heaters.
- Ensures a continuous air flow.
- Reduces humidity.

Applications

For drying of agricultural produce, including but not limited to, potatoes, onions, carrots, and cannabis.

Working principle

Our modulating system continously adjusts the burner capacity of Thermobile heaters, by monitoring gas-pressure relative to the pre-set temperature values required for your specific agricultural drying processes.

Max. quantity of GA heaters to be connected

GA SERIES	24	42	60	85	110
MS/G 20	9	6	4	2	2
MS/G 40	19	12	8	5	4
MS/G 60	28	18	12	8	6

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