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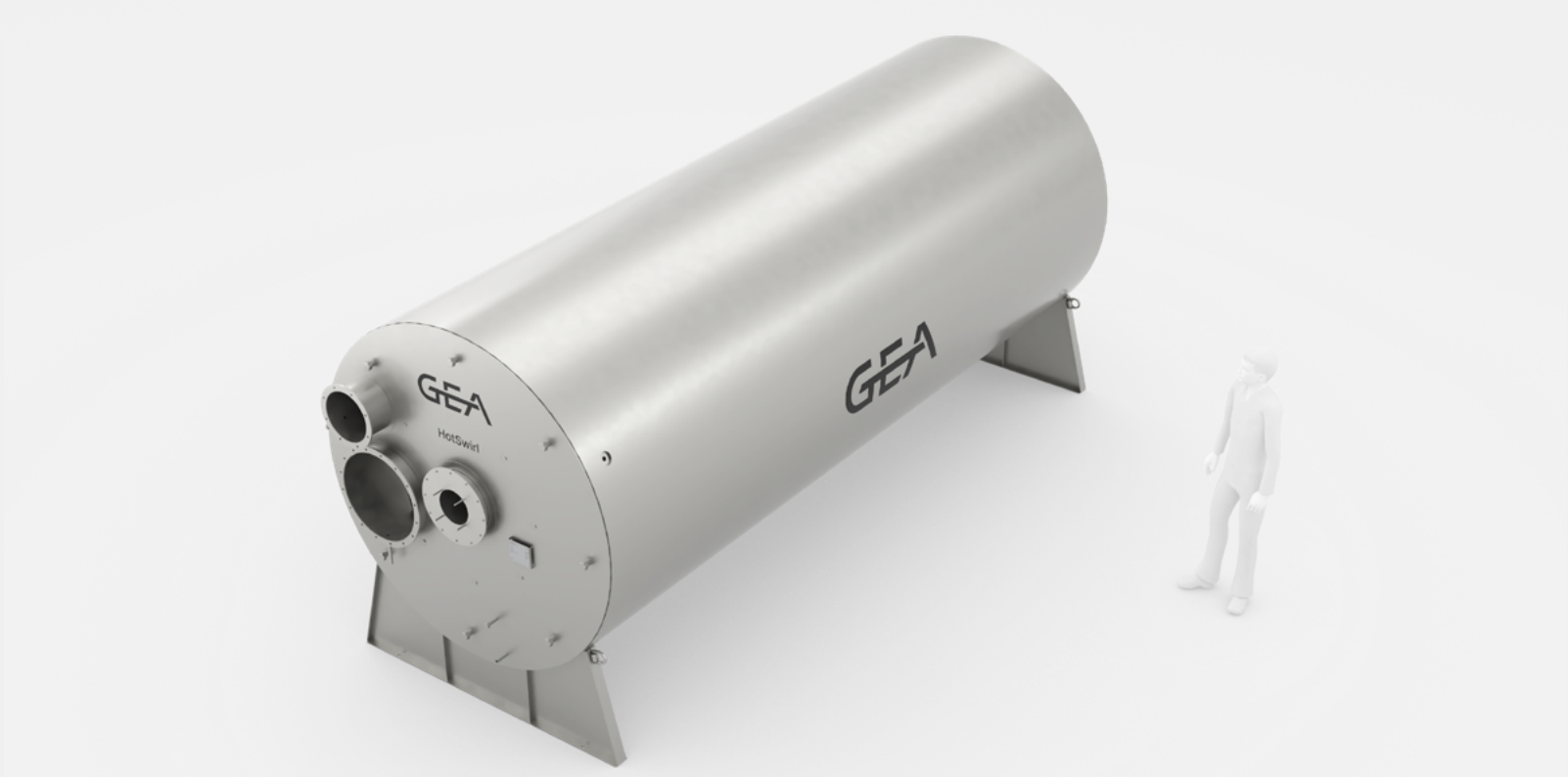
GEA HOTSWIRL INDIRECT HEATER

Reliable hot air for spray and fluid bed dryers.



The GEA HotSwirl Indirect Heater provides reliable hot air at a consistent volume and temperature for GEA's range of spray dryers. As original equipment, the GEA HotSwirl complements GEA dryers perfectly ensuring compatibility, security of supply and simpler ongoing maintenance for customers.

Quality, reliability and efficiency

The air heater is critical in all spray drying operations so, in developing HotSwirl, GEA engineers have focussed their attention on engineering quality and mechanical integrity. This means the heater will provide ongoing, reliable service throughout the service life of the entire installation. HotSwirl is highly efficient; heat recovery can be selected as an integral part of the heater. This recovers heat from the exhaust gasses and returns it through the air inlet to minimize fuel costs; it saves CO2 and helps provide the lowest possible TCO (Total Cost of ownership).

HotSwirl at a glance:

- Provides hot air at consistent temperature and volume for GEA spray dryers,
- GEA-engineered for proven reliability,
- High efficiency, comparable with best in class,
- Long service life,
- Single source supply for simple ongoing support from GEA,
- Horizontal or vertical orientation for easy installation,
- Can be located inside or outside,
- Available for new projects and retrofit,
- Wide range for all spray drying applications,
- Low NOx burner as standard.

GEA HotSwirl the practical option.

New build or retrofit

GEA supplies HotSwirl with all new spray dryer installations to provide customers with the most cost-effective and practical heating option. Customers can also retrofit HotSwirl to existing plants during system upgrades especially where directly fired heaters are still being used.

HotSwirl range

The HotSwirl range of 14 heaters supplies hot air at 220°C – 250°C, at capacities from 2500Kg/hour to 50,000Kg/hour for larger installations. The standard pressure loss for all sizes is in the range of 20 mbar. Two heaters or more can be used in parallel to supply the required volume of hot air for very large spray drying plants. Parallel configuration improves significantly the HotSwirl's ability to operate efficiently at part load.

HotSwirl range and capacities

HotSwirl [size]	Max air flow [kg/h]	Inlet [°C]	Outlet [°C]	Diameter [Øm]	Length [m]	Emergency load [kg]
1	2500	20	20-250	1.0	2.4	986
2	3150	20	20-250	1.1	2.7	1207
3	4000	20	20-250	1.3	2.9	1488
4	5000	20	20-250	1.4	3.3	1813
5	6300	20	20-250	1.6	3.7	2271
6	8000	20	20-250	1,7	4.1	2859
7	10000	20	20-250	1.9	4.6	3665
8	12500	20	20-250	2.2	5.1	4596
9	16000	20	20-250	2.4	5.7	5626
10	20000	20	20-250	2.7	6.3	7059
11	25000	20	20-250	3.0	7.1	9079
12	31500	20	20-250	3.3	8.0	12172
13	40000	20	20-250	3.7	9.0	15352
14	50000	20	20-250	4.2	10.1	21563

The heater can run up to an outlet temperature of 325°C, but at different flow conditions as stated in table.

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EN 05/2025