



HYFRA Gamma

Efficient and integrable immersion coolers
for water, oil and emulsions

Customized. Cooling. Solutions.

 HYFRA

Easily integrated. Customized. Powerful.

The HYFRA Gamma series can be installed and easily integrated into machines and production layouts. With cooling capacities ranging from 5 to 160 kW/1 to 45 Tons, HYFRA Gamma models are suitable for various applications in mechanical engineering and are used in particular in filtration.

HYFRA Gamma immersion chillers

The HYFRA Gamma series consists of immersion chillers for water, oil and emulsions. As a plug & play solution, it covers a wide power range from 5 – 160 kW/1–45 Tons.

Outputs of up to 28 kW/8 Tons are possible on a stand area of only 0,5m²/5,4 sq.ft due to the compact design. This results in considerable flexibility advantages in the planning of the production area layout and a significant increase in productivity, as there is room for more machines can be accommodated. With the compact HYFRA Gamma models, a horizontally installed condenser also considerably reduces heat generation. Internal components thus remain unaffected by the waste heat.

A robust agitator ensures a uniform media temperature in the lubricant tank in all models of the series.

For regular cleaning, the HYFRA Gamma series can be easily lifted out of the tank with fixed crane eyes for regular cleaning.

FleXX technology for demand-controlled operation and 70 % refrigerant reduction through microchannels

Thanks to the industry-leading HYFRA Microchannel-technology, these units reduce refrigerant use by up to 70% compared to conventional chillers. HYFRA Gamma models are also offered with the innovative HYFRA FleXX technology, which provides demand-controlled, energy-efficient and extremely precise operation.



Key data immersion chillers HYFRA Gamma

- ✓ **Power range:**
5 – 160 kW (1 - 45 Tons)
- ✓ **Medium:**
Water, oil and emulsion
- ✓ **Footprint:**
5 – 28 kW on footprint of 0.5 m²;
(1 - 8 Tons on 5.4 sq.ft)
Up to 80 kW power in only 1 m²
(23 Tons on 10.8 sq.ft)
- ✓ **Optimized:**
Equipped with HYFRA FleXX technology
and various control options
- ✓ **Application:**
Filtration and mechanical engineering

More flexibility through Intelligent control

HYFRA FleXX technology

With the FleXX technology, HYFRA is responding to the different market requirements of machine manufacturers and operators.

Its high degree of flexibility and adaptability provides a decisive competitive advantage. Thanks to the demand-dependent operation of various components, chillers with FleXX technology are not only extremely energy-efficient, economical and quiet, they also run with very little wear and tear and significantly reduce life cycle costs considerably.

Optional control

The chillers of the HYFRA Gamma series are equipped with Free Smart controllers. These are freely programmable and has analogue and digital inputs and outputs, an external display and an FDO interface (Fast Digital Output) for controlling pulsed valves or heaters (PWM).

HYFRA chillers in comparison

		 HYFRA Alpha Circulating chillers	 HYFRA Gamma Immersion chillers	 HYFRA Sigma Recooling systems	 HYFRA eChilly, eChilly+ Recooling systems
	Reduced footprint	✓	✓	✓	
	Compact version	✓		✓	
	FleXX technology	✓	✓	✓	
	Water	✓	✓	✓	✓
	Oil	✓	✓		
	Emulsion	✓	✓		
	Cooling capacity	5 – 320* kW / 1 - 91 Tons	5 – 160 kW / 1 – 45 Tons	5 – 320 kW / 1 – 91 Tons	1 – 6 kW / 0.3 – 2 Tons

* Emulsion/Oil 5-160kW / 1-45 Tons

Technical data: HYFRA Gamma

HYFRA Gamma model no. (kW)	5	13	22	34	52	80
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400V/50Hz

Performance data

Ambient °C / °F	Refrigerant °C / °F		Cooling capacity kW / Tons					
	Emulsion/Water	Oil						
32 / 90	15 / 59	20 / 68	4.4 / 1.3	11.9 / 3.4	20.7 / 5.9	30.6 / 8.7	46.2 / 13.1	75.5 / 21.5
	20 / 68	25 / 77	4.9 / 1.4	13.0 / 3.7	22.4 / 6.4	34.2 / 9.7	52.5 / 14.9	84.5 / 24.0

Technical Data

Refrigerant		R134A	R410A				
Max. power consumption (emulsion/water)	kW	3.0	6.5	9.2	12.4	18.0	30.2
Max. power consumption (oil)	kW						
Max. airflow rate	m³/h / cfm	4500 / 2647		6800 / 4002	10800 / 6357	15500 / 9123	

460V/60Hz

Performance data

Ambient °C / °F	Refrigerant °C / °F		Cooling capacity kW / Tons					
	Emulsion/Water	Oil						
32 / 90	15 / 59	20 / 68	3.9 / 1.1	10.7 / 3.0	18.1 / 5.1	27.0 / 7.7	43.8 / 12.5	65.4 / 18.6
	20 / 68	25 / 77	4.7 / 1.3	13.3 / 3.8	22.4 / 6.4	32.8 / 9.3	50.3 / 14.3	74.9 / 21.3

Technical Data

Refrigerant		R134A	R410A				
Max. power consumption (emulsion/water)	kW	3.4	6.5	10.0	13.0	19.9	30.7
Max. power consumption (oil)	kW						
Max. airflow rate	m³/h / cfm	4950 / 2913		7480 / 4403	11880 / 6992	17050 / 10035	

Maße und Gewicht

Length	mm / in	785 / 30.9			1085 / 42.7		
Width	mm / in	785 / 30.9			1085 / 42.7		
Height	mm / in	1320 / 52.0	1420 / 55.9		1940 / 76.4		
Empty weight (emulsion/water)	kg / lbs	130 / 287	150 / 331	170 / 375	280 / 617	320 / 705	350 / 772
Empty weight (oil)	kg / lbs	140 / 309	160 / 353	190 / 419	320 / 705	360 / 794	390 / 860

For detailed technical data, see: www.hyfra.com

We are HYFRA

- ✓ *HYFRA is your partner for individual process cooling. Our range extends from ready-to-connect compact units to customised systems with comprehensive services.*



The name HYFRA stands for long-term and sustainable partnership. We aim to always offer our customers the best solutions for process cooling. With every consultation, with every move, with every system delivered and commissioned, and with our service available at all times, we support our customers in achieving lasting success.

Made in Germany since 1981

Our highly efficient chillers and air heat exchangers are decisive for the reliable protection of processes. With over 40 years of experience, highly trained employees and our own production at our production in Krunkel, Rhineland-Palatinate, we guarantee the highest quality „Made in Germany“ for all HYFRA systems.

Worldwide service availability

Whether remote diagnosis via data transmission or on-site repair: The HYFRA service is available worldwide and always finds a quick solution in case of malfunctions. In addition, we support our customers with regular maintenance and servicing. Qualified service teams take over the complete installation of our refrigeration systems, if required.

Customized service solutions for all requirements



Turnkey Solutions

Rely on security and leave the entire project management to our experienced experts - from plant planning to acceptance. We take care of the material supply for you during plant construction and carry out the complete installation with our technicians. With our help, you will receive an operational cooling system from a single source in the shortest possible time.



Training

In order for a cooling system to develop its full potential and operate trouble-free at all times, it must be optimally operated and maintained. We offer customised training for your operating personnel and maintenance technicians. We train you thoroughly in the use of our systems so that your company benefits from perfect production results in the long term.



Maintenance & Service

In order to deliver the best performance over the long term, cooling systems need to be maintained regularly. This effectively avoids costly repairs and unexpected production downtimes. The life cycle of the system can also be significantly extended through maintenance measures. At HYFRA you can choose between various service packages with a one-year term, which in addition to maintenance also include services such as commissioning and training.



Repair & Maintenance

To ensure that we can guarantee 100% system availability again as quickly as possible in the event of malfunctions, HYFRA Service is there for you worldwide. Our own service team and experienced refrigeration technicians from our local partners provide a quick solution in case of breakdowns. We inform you transparently about the costs and duration of the maintenance measures at any time.



Modification & Customization

HYFRA standard models can be individually adapted to your specific needs. A wide range of equipment and control options are available for this purpose. On request, we can also put together modification kits for changed operating conditions.

The HYFRA Service promise

Competent

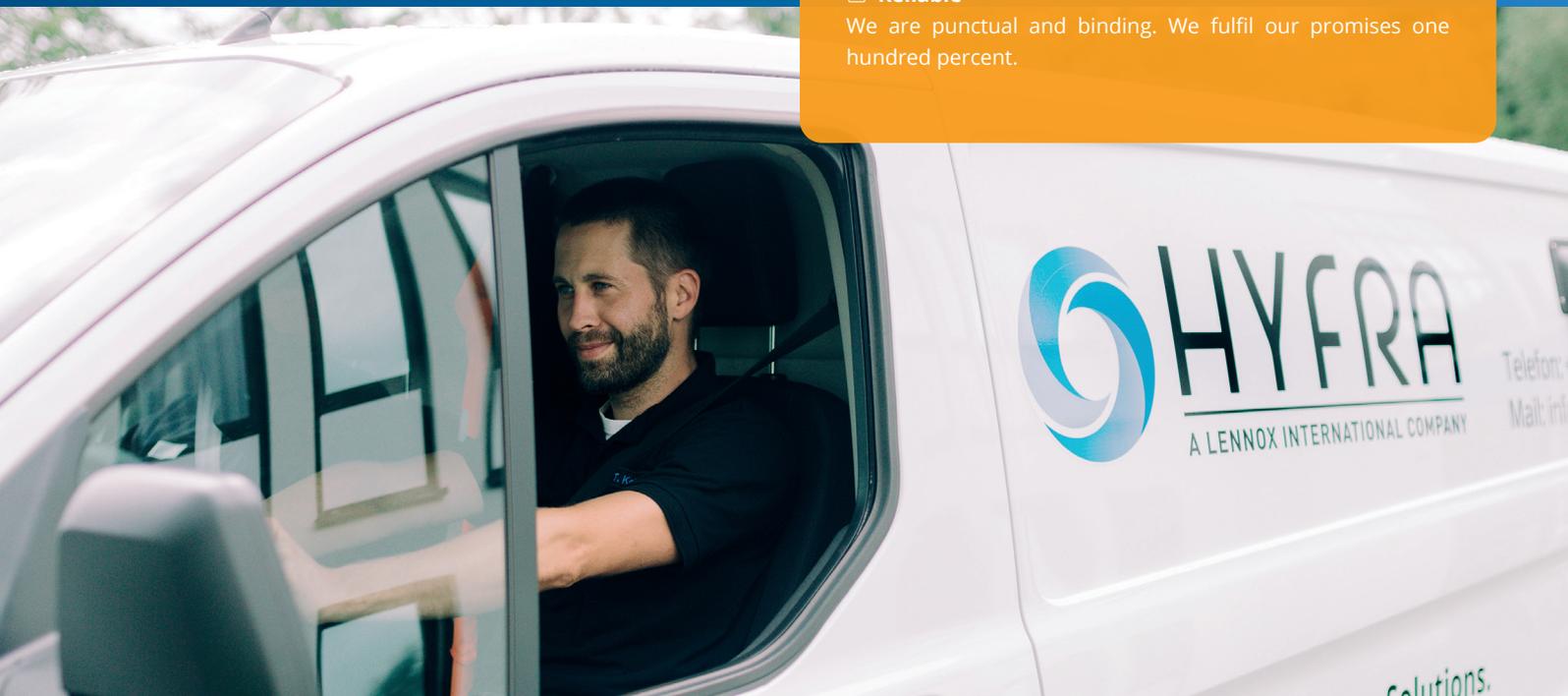
Our service team and the staff of our local partners are highly trained and regularly attend training courses.

Economical

Commissioned work is carried out quickly to enable the fastest possible system availability.

Reliable

We are punctual and binding. We fulfil our promises one hundred percent.



Customized. Cooling. Solutions.

HYFRA is one of the most experienced suppliers of individual refrigeration solutions. We cover the entire range of industrial process cooling: from the ready-to-connect unit to the customised system with comprehensive services. Our highly efficient and reliable machines are crucial for the success of our customers.

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