

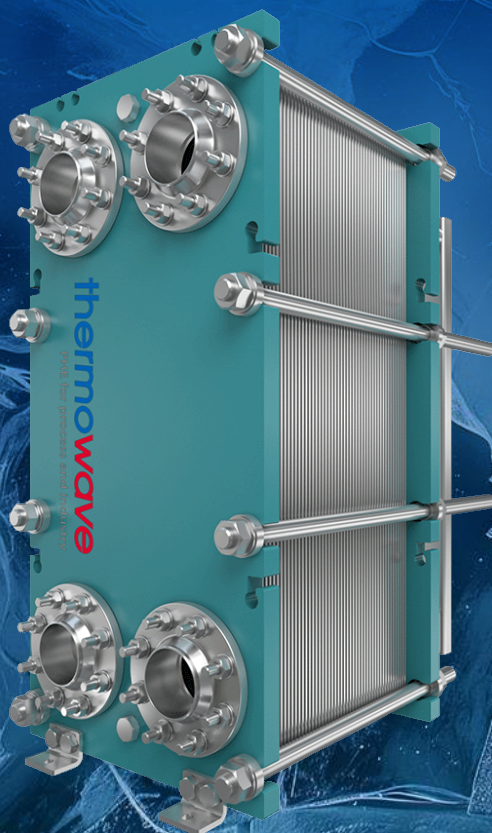
thermowave
Brand of Nexson Group

Product

thermolineVARIO

Plate heat exchangers

DN25 - DN500





thermowave GmbH is a leading manufacturer of plate heat exchangers configured according to customer specifications in a wide range of materials, frame designs and sizes. Its head office is in Berga halfway between Göttingen and Leipzig.

The product portfolio covers everything from standard heat exchangers for HVAC applications to highly specialised apparatuses for industrial refrigeration, the food and beverages industry, the chemical and process industry, and the energy sector.

10 000 sqm
Production area

3000
Units per years



30
years

A quarter-century quality and experience

Rapid expansion of product portfolio and equipment

The product portfolio was already undergoing expansion as a laser-welding machine now complemented the machine park, making it possible to also offer welded modules.

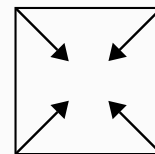
The product range as well as the technical equipment of the production facilities also continued to grow continuously in the subsequent period. Three product lines leading to the company's decision to build a second production hall for even more sophisticated plate heat exchangers.

Quality experience

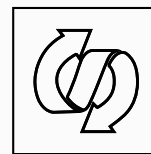
Qualified and motivated staff ensure a consistently high level of quality across all products to the benefit of their customers. thermowave's experience in the industrial transfer of heat allow them to develop new innovative products to launch onto the market.

thermolineVARIO Hybrid design

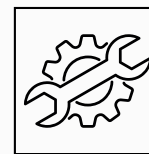
Gasketed & Semi-welded



COMPACTY



VERSATILITY



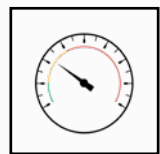
EASY
MAINTENANCE



HIGH TRANSFER
EFFICIENCY

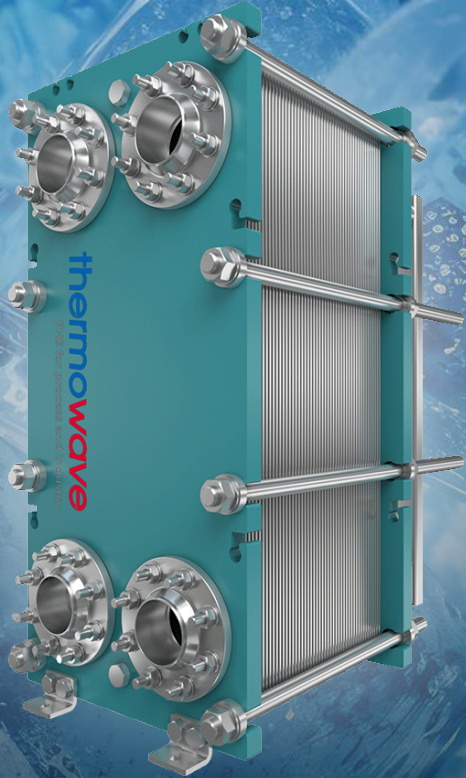


HYBRID DESIGN



HIGH PRESSURES
-1/30 BAR

Key features



Cooling foodstuffs, process media, rooms, and buildings places particularly high demands on thermodynamic and hydraulic design, which ultimately result in process safety.

thermowave plate heat exchangers from the thermolineVARIO product range are extremely flexible in design. This allows us to respond to the specific needs of our customers at all times.

Advantages

- High resistance to corrosion
- Fail-safe operation
- Capacity can be adjusted subsequently by adding or removing plates
- Excellent fouling resistance
- Easy to maintain
- Energy-efficient
- Production based on a variety of structural specifications
- Up to 30 bar

Service friendly

- Low weight
- Compact design
- Low maintenance
- Easy to clean

Available accessories

- Stainless steel protection sheet
- Counter flange and screw
- Stainless steel drip tray
- Tightening bolts covers
- Hook wrench
- Disk spring packs

Energy-saving operation

- Efficient heat exchanger for small Δt_m
- Ideal ratio between heat transfer and pressure drop

Rack frames

- Painted carbon steel

Connection variants

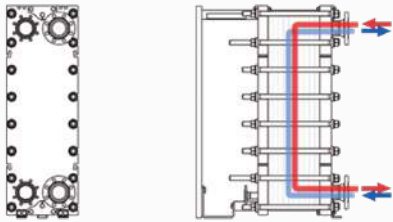
- Welding neck flange
- Stud bolts with lining
- Lapped flange with plain collar
- Threaded coupling

Gaskets

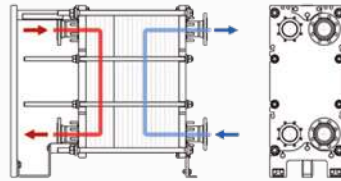
- NBR
- EPDM
- Chloroprene
- Butyl
- FKM (Viton)
- FEPM
- HNBR

Frame types

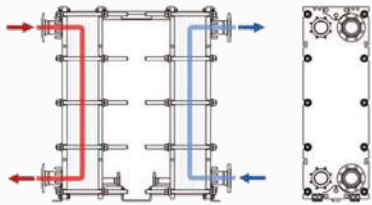
Standard configuration



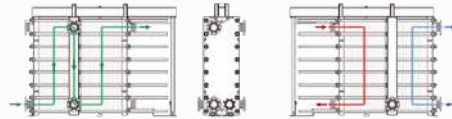
Two in one configuration



Tandem configuration



Multisection configuration



Plates range

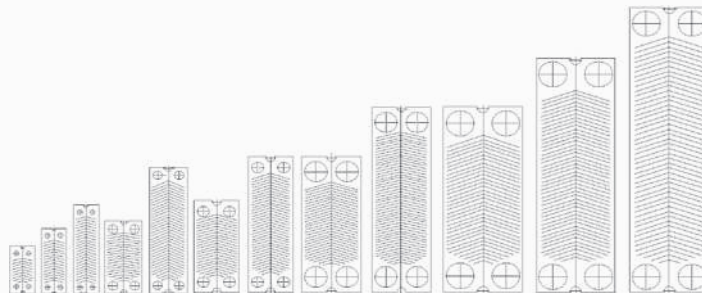


Plate type	0050	0090	0150	0200	0400	0250	0500	0650	0850	1100
Port diameter (DN)	40	40	40	80	80	100	100	200	200	250
Length (mm)	519	721	981	795	1383	1014	1495	1495	2034	2034
Width (mm)	244	244	244	369	369	437	437	586	586	774
Length / Width	2.13	2.95	4.02	2.15	3.75	2.32	3.42	2.55	3.47	2.63

Plates types



StandardLine plates

Thermodynamically soft pattern
 High flow rate
 Low pressure drop
 Wide range of applications
 Also suitable for viscous fluids and shear-sensitive media
 Gentle treatment of products
 Corrugation depths from 3.5 to 4 mm

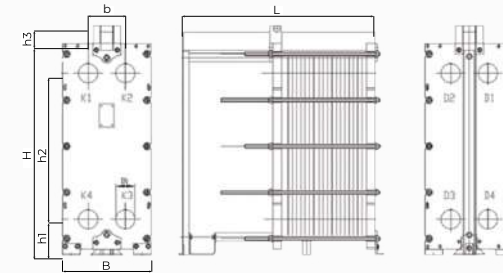
PowerLine plates

Thermodynamically hard pattern
 Very high heat transfer coefficients
 High thermal efficiency
 Low filling volume
 Suitable for homogeneous and low viscous fluids
 Corrugation depths from 2.0 to 2.5 mm

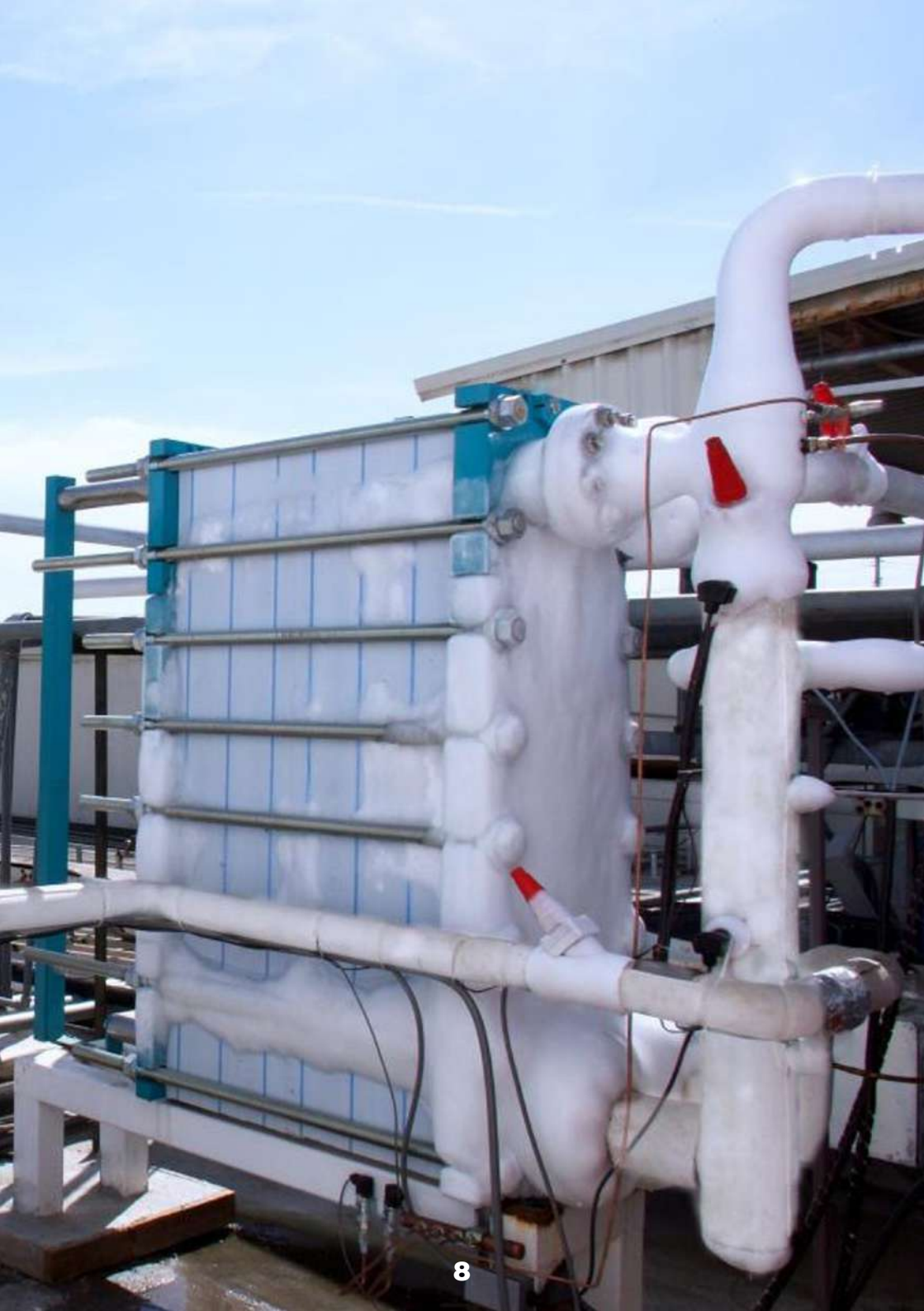
PS-modules

Semi-welded modules comprising a PowerLine and a StandardLine plate
 Combines the advantages of both corrugation structures
 Extends the range of applications
 Reduced surfaces, lower costs and filling volumes

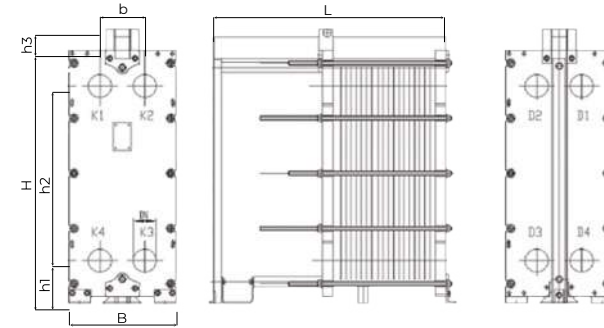
Standardized apparatuses



TL	Frame type	H	B	L	h1	h2	b	Nominal width	bar	m ²	kg	dm ³
90	M	845	315	500-1000	152	565	125	DN 40	-1 / 25	21	380	44
150	M	1105	315-325	500-1000	152	825	125	DN 40	-1 / 25	32	545	64
400	M	1600	450-465	500-2000	206	1207	212	DN 80	-1 / 25	163	1970	340
250	M	1140	520-535	500-2000	193	774	256	DN 100	-1 / 25	116	1660	250
500	M	1620	520-550	500-2000	193	1255	256	DN 100	-1 / 25	207	2540	414
650	M	1750	695-700	500-1750	297	1205	305	DN 150 DN 200	-1 / 25 -1 / 25	163	2750	424
850	M	2290	695-700	500-1750	297	1745	305	DN 150 DN 200	-1 / 25 -1 / 25	263	3830	604



High flexibility and versatility



Technical data - Gasketed

TL	Frame type	H	B	L	h1	h2	h3	b	Nominal width	bar	m ²	kg
90	T	845	335	250-2000	152 145	565 578	0-135	125	DN 40 DN 25	-1 / 30	43	120-600
150	T	1105	335	250-2000	152 145	825 838	0-135	125	DN 40 DN 25	-1 / 30	70	160-830
250	T	1140	550	500-4000	192	774	0-215	256	DN 100	-1 / 30	236	510-1820
400	T	1600	475	500-4000	206	1207	0-210	212	DN 80	-1 / 30	334	390-2100
500	T	1620	550	500-4000	192	1255	0-215	256	DN 100	-1 / 30	425	690-4160
650	K	1750	730	500-4000	323 297	1153 1205	0-230	305	DN 200 DN 150	-1 / 30	381	700-4700
850	K	2290	730	500-4000	323 297	1693 1745	0-230	305	DN 200 DN 150	-1 / 30	536	1000-7000
1100	K	2290	940	500-4000	335	1670	0-300	450	DN 250	-1 / 30	596	1900-9500

Technical data - Module welded

TL	Frame type	H	B	L	h1	h2	h3	b	Nominal width	bar	m ²	kg	dm ³
90	T	845	335	250-2000	152 145	565 578	0-135	125	DN 40 DN 25	-1 / 30	52	120-600	0-55
150	T	1105	335	250-2000	152 145	825 838	0-135	125	DN 40 DN 25	-1 / 30	83	160-830	0-83
250	T	1140	550	500-4000	192	774	0-215	256	DN 100	-1 / 30	265	510-1820	0-287
500	T	1620	550	500-4000	192	1255	0-215	256	DN 100	-1 / 30	476	690-4160	0-477
650	K	1750	730	500-4000	323 297	1153 1205	0-230	305	DN 200 DN 150	-1 / 30	450	700-4700	0-585
850	K	2290	730	500-4000	323 297	1693 1745	0-230	305	DN 200 DN 150	-1 / 30	727	1000-7000	0-874
1100	K	2290	940	500-4000	335	1670	0-300	450	DN 250	-1 / 30	580	1900-9500	0-1086

Your applications at a glance

PRODUCT	APPLICATION	MEDIA	
		Refrigerant	Coolant
thermolineVARIO	Evaporating	NH ₃ CO ₂ Propan R22 R134A R404A R407C R502 R507	Water
	Condensation		Oil
	Desuperheating		Ethylene Glycol
	Oil Cooling		Propylene Glycol
	Cooling		NaCl
	Heating		CaCl ₂
	System Separation		Pekasol
	Free Cooling		Tyfoxit
	Heat Recovery		Tyfocon
	District Cooling		Dowcal
	District Heating	And other synthetic refrigerants	Tempering

References

Siemens Tulip Oil



Cooperl



Verbio AG





Website



LinkedIn

EXPERT OF PLATE HEAT EXCHANGERS

Makes life fresh



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