

COUNTER-FLOW MICRO HEAT EXCHANGER

WT-SERIES

03



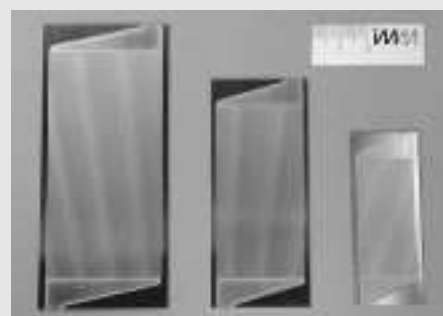
Counter-flow Micro Heat Exchanger group class (WT-series), WT-404, WT-304, WT-204 (from left to right)

Principle

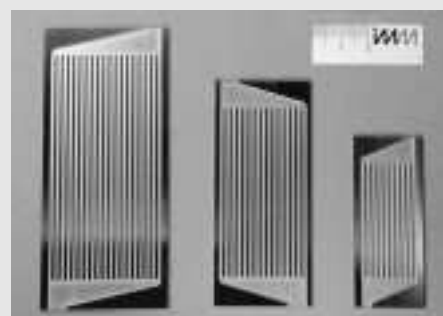
The novel WT-series was developed as a heat exchanger for liquid/liquid, gas/liquid or gas/gas applications and can also serve for evaporation or condensation. They comprise a laser welded stack of arranged microstructured plates enabling a counter- or co-current flow scheme. Being assembled with conventional 1/4" or 3/8" tubes, easy integration into the existing tubing system of pilot- or small-scale production plants is possible.

The core elements are chemically

etched microstructured plates, sealed by high-precision laser welding. These new heat exchangers are normally designed for flow rates between 1 l/h up to 400 l/h; higher flow rates of up to 1000 l/h are possible at moderate pressure drops. The high efficiency and heat transfer coefficients of the micro channels are even more enhanced compared to conventional heat exchangers due to the low material thickness (low heat resistance) and high inner specific surface.



Single plates of the WT...04-series



Single plates of the WT...08-series



Special type HxA



Special Heat Exchanger, also for condensing



HCOMH

Technical Data

Name	Micro Heat Exchanger Series	Micro Heat Exchanger Series	Micro Heat Exchanger Series
Order number	WT 204	WT 304	WT 404
Size (L x B x H)	60 x 24 x 23	80 x 34 x 32	100 x 44 x 42
Connectors (Inlet/Outlet)	1/4" / 1/4"	3/8" / 3/8"	3/8" / 3/8"
Material	1.4571	1.4571	1.4571
Number of heat exchanger plates	34	50	66
Dimensions of heating channels (µm)	800 x 400	800 x 400	800 x 400

Operating Conditions

Temperature (°C)	up to 500	up to 500	up to 500
Pressure stability (bar)	5	5	5
Flowrate (l/h)	0.5 – 50	2.5 – 250	6 – 600
Leakage Class	L _{0.1}	L _{0.1}	L _{0.1}