

Swimming Pool Heat Exchangers

QWT 100/WTI 100

SWT 100/SWT 100 Titanium



The energy resources of our planet are limited. And they will become ever more expensive.

In particular, for the energy-intensive handling of heat generation and heat recovery this fact means that we have to be clearly focused on ever greater efficiency. The future challenge for BEHNCKE's engineers is how to optimize what is already a good product for an even higher degree of efficiency. Besides the application of state-of-the-art process technologies at our Putzbrunn site near Munich, rational and innovative detailed developments are continually being integrated into our products. Made in Germany.

QWT 100 - the highest quality standard, optimal economic efficiency, constant operating dependability.

The QWT 100, a sophisticated system component that is ideal for connection to high-temperature energy sources. The use of stainless steel with the quality standard AISI 316 - perfectly finished - also guarantees an extremely long service life, because it is resistant to calcification.

The counterflow principle perfected by BEHNCKE, in which hot and cold water are conducted past one another in banks of bare tubes without making contact, achieves a very high degree of efficiency. The specially fabricated banks of bare tubes, which achieve a constant and therefore almost loss-free working pressure, are the central component of this system. Extremely flexible applications result from this due to its small overall dimensions. For cost-effective installation the glued connection is already pre-installed on the WTI 100, for example. Furthermore, the welded-in thermowell enables the uncomplicated installation of a temperature sensor.

WTI 100 - the special unit made of titanium for extremely demanding applications.

Years of experience and both mechanical and technical expertise are required to be able to process the extremely tough material titanium. BEHNCKE has had both components at its disposal for the past 50 years. The WTI 100 is therefore a highly specialized variant that is suitable for the most demanding of requirements, such as sea water systems, salt water pools or therapy facilities with a high disinfection potential.

Swimming pool heat exchanger QWT 100/WTI 100 (titanium) - Technical specifications

Model	QWT 100-20	QWT 100-30	QWT 100-40	QWT 100-70	QWT 100-104	QWT 100-140	QWT 100-209
Model	WTI 100-20	WTI 100-30	WTI 100-40	WTI 100-70	WTI 100-104	WTI 100-140	WTI 100-209
Heating flow output 160°F	54,59 BTU/h	68,24 BTU/h	102,36 BTU/h	170,61 BTU/h	307,09 BTU/h	392,39 BTU/h	682,43 BTU/h
Minimum pumping output							
Heating gpm	9	9	9	13	22	2 x 13	2 x 22
Heating psi	1.1	1.6	2.6	2.1	2.8	2.1	2.8
Pool water gpm	44	44	44	53	66	88	110
Pool water psi	0.11	0.14	0.16	0.21	0.28	0.71	1.42
QWT pool connection	1 1/2"	1 1/2"	1 1/2"	1 1/2"	2"	2"	2"
QWT heater connection	3/4"	3/4"	3/4"	1"	1"	1"	1"
WTI pool connection	PVC 1 1/2"	PVC 1 1/2"	PVC 1 1/2"	PVC 2"	PVC 2"	PVC 2"	PVC 2"
WTI heater connection	3/4"	3/4"	3/4"	1"	1"	1"	1"

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In the foreseeable future fossil energy forms will give way to renewable energy concepts. For a sustainable future.

In the near future the supply of fossil fuels will be exhausted. At the same time emissions have to be restricted to a considerable extent in order to prevent further global warming. This finding puts the focus clearly on renewable energy. For BEHNCKE's technicians this means: targeted development and innovations that relate to solar energy and alternative low-temperature heating systems.

SWT 100 - specially designed for existing and alternative energy sources of the future.

Due to its large-dimensioned and detail-optimized transfer area the SWT 100 is resolutely geared to solar systems, heat pumps and low temperature heating systems. A high-quality standard was already established as the basis for the material.

The outer jacket as well as the perfectly welded-in coiled tube made of passivated stainless steel (AISI 316) guarantee constant operating dependability and extreme durability. An enormously high working pressure of 138 psi (on the heating face) and 44 psi (on the water face) clearly underline BEHNCKE's premium standard in this segment.

Calcification-proof in continuous operation, innovative in detail, complete in terms of the scope of supply.

Compared with many cheap competitor products on offer the SWT 100 made of stainless steel is characterized above all by innovative and rational solutions relating to details. BEHNCKE's heat exchanger has combination nozzles for extremely variable connection facilities and easy installation. Rubber coated pipe clamps reduce the vibration and noise level to an absolute minimum. Equipped as standard with a welded-in thermowell for the accommodation of a temperature sensor, the SWT 100 comes complete with all necessary installation accessories and easy to understand installation and operating instructions.

SWT 100 Titanium - more quality is not possible.

The BEHNCKE SWT 100 Titanium, with its jacket and coiled tube made of extremely high-quality titanium, sets quality standards in terms of durability and therefore operating dependability as well. This predestines the SWT 100 Titanium for the fulfilment of very unusual requirements, especially in areas of application involving high chloride and disinfection concentrations.

Swimming pool heat exchanger SWT 100/SWT 100 Titanium – Techn. specifications

Model	SWT 100-20	SWT 100-25	SWT 100-40	SWT 100-52	SWT 100-20 Titanium	QWT 100-40 Titanium
Heating flow output 120°F	68,24 BTU/h	119,43 BTU/h	153,55 BTU/h	221,79 BTU/h	68,24 BTU/h	136,49 BTU/h
Minimum pumping output						
Heating gpm	5.3	7.9	9.7	15.9	5.3	9.7
Heating psi	1.4	4.0	1.4	2.1	1.4	1.4
Pool water gpm	44	44	44	44	44	44
Pool water psi	1.4	1.4	1.4	1.4	1.4	1.4
Pool connection	1 1/2"	1 1/2"	1 1/2"	1 1/2"	PVC 1 1/2"	PVC 1 1/2"
Heating connection	3/4"	3/4"	1"	1"	3/4"	1"