



Swimming-pool heating

Using plate heat exchangers to heat swimming pools has become common practice because of its unquestioned thermodynamic advantages and low cost compared to conventional shell-and-tube heat exchangers.

At heat transfer level, the problem is maintaining temperatures steady. Accordingly, it is important that the heat exchanger be dimensioned as suggested in our selection tables.

It's important to remember that additions of chlorine should take place after the water has passed the heat exchanger to avoid a high concentration of chlorine flowing through the exchanger from coming into contact with the plates and causing cracking.

Alfa Laval offers a compact system for reheating and maintaining the temperature of water in swimming pools of any dimension – the AquaPool.

The AquaPool can be connected to any primary heat source, such as a local boiler, a solar installation, a heat pump etc.

The AquaPool system consists of a gasketed plate heat exchanger, with plates in either stainless steel or titanium, an electronic control panel, a primary pump and various valves.

The AquaPool is extremely simple to use, robust, compact and highly reliable.

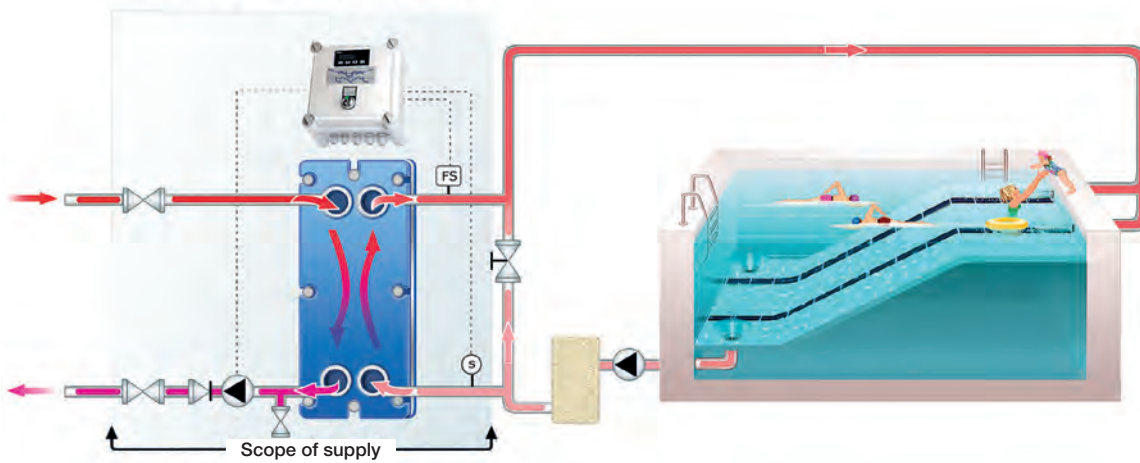


3 key parameters for the right AquaPool selection:

1. Volume of the swimming pool
2. Temperature rises necessary
3. Time required to heat up the pool



Working principle AquaPool



AquaPool selection tables

Model	90°C				80°C				70°C				55°C							
	kW	Primary		Swim. pool		kW	Primary		Swim. pool		kW	Primary		Swim. pool		kW	Primary		Swim. pool	
		m³/h	kPa	m³/h	kPa		m³/h	kPa	m³/h	kPa		m³/h	kPa	m³/h	kPa		m³/h	kPa	m³/h	kPa
AquaPool-7	30	0,5	44	1,3	41	30	0,9	24	1,3	41	30	1,2	6	1,3	41	17	1,2	6	0,7	18
AquaPool-11	52	0,9	41	2,2	43	51	1,4	25	2,2	41	50	1,8	5	2,2	41	30	1,8	5	1,3	19
AquaPool-17	82	1,3	36	3,5	43	79	1,9	19	3,4	40	76	2,5	6	3,3	38	46	2,5	6	2	18
AquaPool-23	111	1,7	30	4,8	43	104	2,3	18	4,5	38	96	2,9	6	4,1	33	58	2,9	6	2,5	16
AquaPool-29	140	2,2	26	6,0	43	125	2,7	18	5,4	34	111	3,2	6	4,8	28	69	3,2	6	3	14
AquaPool-35	166	2,6	22	7,1	42	144	3,0	15	6,2	32	123	3,5	5	5,3	27	78	3,5	5	3,4	12
AquaPool-41	194	3,1	16	8,3	42	164	3,4	11	7,1	30	134	3,6	6	5,8	21	84	3,6	6	3,6	11
AquaPool-49	222	3,5	11	9,5	41	184	3,6	11	7,9	28	146	3,8	5	6,3	19	96	3,8	5	4,1	9
AquaPool-55	246	3,8	5	10,6	41	199	3,8	5	8,6	27	151	3,8	5	6,5	16					

Note: Secondary conditions: 27/47°C (if primary at 70°C, 80°C or 90°C)
20/40°C (if primary at 55°C)