

# W.E.T.pool



## Bad Aibling Thermal Spa

The newly built thermal spa at the gates of Munich in Bad Aibling was completely equipped with ultrafiltration.

15 pools were constructed with a total water surface of 1082 m<sup>2</sup> in combination with 5 ultrafiltration systems in full flow from 18 m<sup>3</sup>/h to 285 m<sup>3</sup>/h with a total flow rate of 800 m<sup>3</sup>/h.

At present, Bad Aibling thermal spa is the biggest swimming pool completely operated with ultrafiltration, and also the biggest ultrafiltration circuit with 285 m<sup>3</sup>/h is in operation there.

The circuits are being operated partially with fresh water and partially with thermal brine. The plant is constructed in three lines, the filtered water of two treatment lines is being used for backwashing the third line. Coated steel filters with a gravel filling are being used as protective filters upstream the ultrafiltration units. A flocculating agent is being dosed upstream the recirculation pumps and activated carbon powder for the reduction of bound chlorine is being injected downstream the pumps. Both will be filtered out again by ultrafiltration. Chlorine gas is being used for basin chlorination and for the chemical cleaning of the membranes.

The pneumatically operated valves are equipped with ASi-Bus. Therefore only one cable and one air hose are required which are being led from valve to valve.

In all pools the direction of flow is vertical, with 100 % recirculation over the overflow channel. Numerous attractions, operated with air or water, are integrated into the basins.

pool

# Bad Aibling Thermal Spa

## Plant Characteristics

5 Ultrafiltration circuits

**Total flow rate**                      **800 m<sup>3</sup>/h**

**Total surface of pools**              **1082 m<sup>2</sup>**



### Circuit 1

Wellness pool, adventure pool, Jacuzzi, children's pool

Medium	Well water 32°C
Pre-filtration	2 gravel filters, 1.4 m Ø each
Ultrafiltration, 3 lines	27 modules, 1350 m <sup>2</sup> filter surface
Flow rate	240 m <sup>3</sup> /h

### Circuit 2

Brine pool, outdoor thermal pool, hot thermal pool

Medium	Thermal brine 36°C
Pre-filtration	2 gravel filters, 1.4 m Ø each
Ultrafiltration, 3 lines	24 modules, 1200 m <sup>2</sup> filter surface
Flow rate	210 m <sup>3</sup> /h



### Circuit 3

Kneipp pool, cold pool, immersion pool sauna outside

Medium	Well water 15°C
Pre-filtration	2 disc filters, 0.3 m Ø each
Ultrafiltration, 2 lines	2 modules, 100 m <sup>2</sup> filter surface
Flow rate	15 m <sup>3</sup> /h



### Circuit 4

Outdoor pool sauna

Medium	Thermal brine 34°C
Pre-filtration	1 gravel filter, 1.0 m Ø
Ultrafiltration, 3 lines	6 modules, 300 m <sup>2</sup> filter surface
Flow rate	50 m <sup>3</sup> /h

### Circuit 5

Swimmer's pool, non-swimmer's pool, water chute pool, children's pool

Medium	Well water 26°C
Pre-filtration	2 gravel filters, 1,4 m Ø each
Ultrafiltration, 3 lines	33 modules, 1650 m <sup>2</sup> filter surface
Flow rate	285 m <sup>3</sup> /h