



AMAYA

CERAMIC MEMBRANE FILTRATION

AMAYA presents a **microfiltration technology** using **ceramic membranes** with a preceding coagulation stage. The ceramic membrane reliably removes suspended micro-particles, turbidity, microorganisms, and, where applicable, other contaminants from the treated water. The water source may be either groundwater or surface water (river, reservoir). The **AMAYA** technology can also be used in wastewater recycling, thereby supporting water reuse, for example in industrial facilities.

AMAYA

for municipalities, towns, and industry

- A reliable long-term supply of high-quality drinking water for residents.
- Option to integrate additional treatment for the removal of micropollutants (such as pesticides and pharmaceuticals) and PFAS from drinking water.
- Use as a quaternary treatment stage for wastewater at wastewater treatment plants.
- Application in water recycling within industrial facilities.

AMAYA

mobile unit in an ISO container

- Emergency supply of drinking water.
- Immediate provision of drinking water for sporting and cultural events.

AMAYA

for pilot-scale testing

- Verification of AMAYA's performance during the pre-design phase of large water treatment plants and in the design of water recycling systems.



Klenovec WTP (SK)



Bolevec Pond WTP (CZ)



Hrobice WTP (CZ)



ADVANTAGES OF AMAYA TECHNOLOGY

- High quality of treated water.
- Low operating costs – electricity consumption approx. 0.1 kWh/m³; water consumption for backwashing approximately 0.5 – 1.0 % of produced water.
- Treatment of both groundwater and surface water in a single stage.
- Smaller built-up area compared to conventional technologies.
- Possibility of shutdown without the need for membrane preservation.
- Membrane service life exceeding 25 years.
- Fully automated operation.
- System sizing design and turnkey delivery.

Pilot-scale testing at Aqualand Moravia (CZ)



Mobile unit in a 20' ISO container

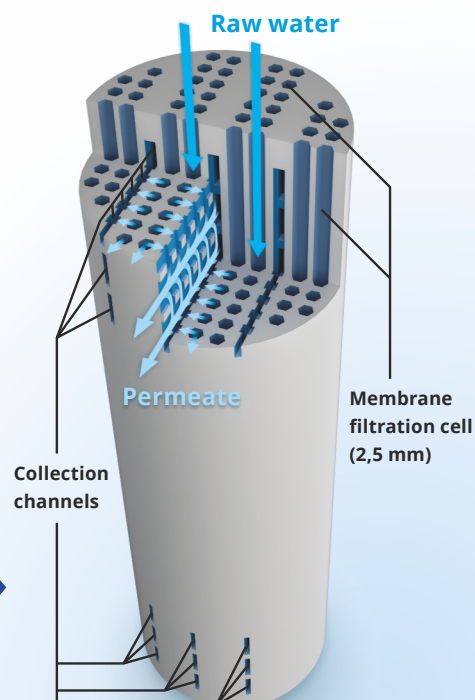


Technical specification of mobile units

Parameters	AMAYA 5	AMAYA 10	AMAYA 25
Maximum capacity (m ³ /h)	3.6	4.3	13
Daily capacity (m ³ /d)	82.8	98.9	299
Drinking water tank (l)	1 000	3 000	5 000
Installed power (kW)	8	10	16
Operating power (kW)	< 4	< 4	< 7
Treatment unit weight (kg)	3 000	6 500	10 000
Treatment unit placement	on the frame	ISO 20' HC	ISO 40' HC
Built-up area (m ²)	8	15	30

* Treatment plants can be individually designed according to client requirements.

Ceramic membrane element of AMAYA WTP



CERAMIC MEMBRANE ELEMENT

At the heart of the AMAYA treatment system is a **ceramic element** with a total surface area of **25 m²**, featuring pores of **0.1 μm** (flux 160 l/m²·h). The number of individual elements depends on the maximum required water flow rate.

