

# Microtunneling underneath the Seine river in Paris in preparation of the **2024 Olympics**



In preparation of the 2024 Summer Olympics, work began in Paris on a vast programme to make the Seine more swimmable. As part of this, the City of Paris planned the construction of a storage-treatment-restoration basin at Austerlitz and several collectors on the banks of the Seine, an exceptional project of unprecedented size in a city as dense and constrained as Paris. The interceptor, constructed by the trenchless microtunneling method, plays a key role in this by carrying untreated water to the Austerlitz basin.

The Microtunneling Support System (MSS) in combination with the Hydraulic Joint allowed the contractor to monitor and counter several challenging aspects such as the large pipe joint articulation angles resulting from the tight S-curve radii. This was crucial considering the external ground water pressure of up to 3 bar.



## AT A GLANCE

<b>Project name</b>	Stockage Austerlitz
<b>Project location</b>	Paris, France
<b>Time of completion</b>	2022
<b>Time of completion</b>	2016–2017
<b>Specialties</b>	Large diameter pipes, tight curve radii, large overburden, high ground water pressure
<b>Total length</b>	608 m / 1995 ft.
<b>Pipe ID</b>	2500 mm / 98.5 in.
<b>Pipe OD</b>	3000 mm / 118 in.
<b>Alignment</b>	S-Curve
<b>Min. curve radius</b>	200 m / 656 ft.
<b>Pipe material</b>	Reinforced Concrete
<b>Pipe length</b>	2 m / 6.56 ft.
<b>Geology &amp; groundwater</b>	Loam (Silty Sand), Limestone, Sandy Clay
<b>Hydraulic Joint</b>	JC260, single loop, admissible jacking force in curve: 14'000 kN
<b>Guidance system</b>	Gyro
<b>TBM</b>	Herrenknecht AVND2500
<b>Owner</b>	Ville de Paris
<b>Designer</b>	Prolog Ingénierie / Artelia
<b>Contractor</b>	Bessac / SADE