GSS-500T Technical Pack

Slurry separation system for tunneling and microtunneling

The GLADIATOR GSS-500T combines screening, desanding and desilting in a three-level slurry separation system.



GLADIATOR GSS-500T concept rendering.

Processing capacity	System cut point	Total power
500 m³/h	15–30 microns	194 kW

Total weight: 25,500 kg. Three principal shipping modules plus two additional component packages. Full equipment specifications, dimensions and shipping details follow.

Technical specifications and system drawings | 16 October 2026

System and equipment specifications

System capacity, installed equipment and operating dimensions for the GLADIATOR GSS-500T.

System parameter	Value
Processing capacity	500 m³/h
System separation cut point	15–30 microns
Mud tank capacity	24 m³
Total installed power	194 kW
Operating dimensions	8543 × 4465 × 7729 mm
Total weight	25,500 kg

Double layer vibrating screen

Parameter	Value
Model	GNZS1836-2C
Structure	Two-tier structure
Screen area	2 × 6.48 m²
Vibration motors	2 × 7 kW
Mesh gap	0.5–6 mm

Slurry pumps

Parameter	Value	Unit
Quantity	2	pcs
Model	CVL-150TZS-PD-4-90KW	
Power	90	kW
Flow	500	m³/h
Lift	28	

Cyclones and shipping schedule

Cyclone parameter	Desanding	Desilting
Function	Sand removal cyclone	Mud removal cyclone
Model	FX500-GX	FX150-GX
Size	20 inch	6 inch
Quantity	2 pcs	14 pcs
Cut point	55–100 microns	15–30 microns

Shipping dimensions and weights

The system ships as three principal modules plus two additional component packages. Dimensions and weights are listed below.

Module or package	Dimensions in mm	Weight in kg
Lower tank unit	6058 × 2438 × 2800	8500
Middle-layer screening unit	6058 × 2438 × 3200	9000
Top cyclone unit	4058 × 2438 × 3259	3800
Other components 1	4500 × 1600 × 1800	1500
Other components 2	3200 × 1100 × 1800	2200

Total weight

25,500 kg.

Dimensions and connections

Dimensions in mm

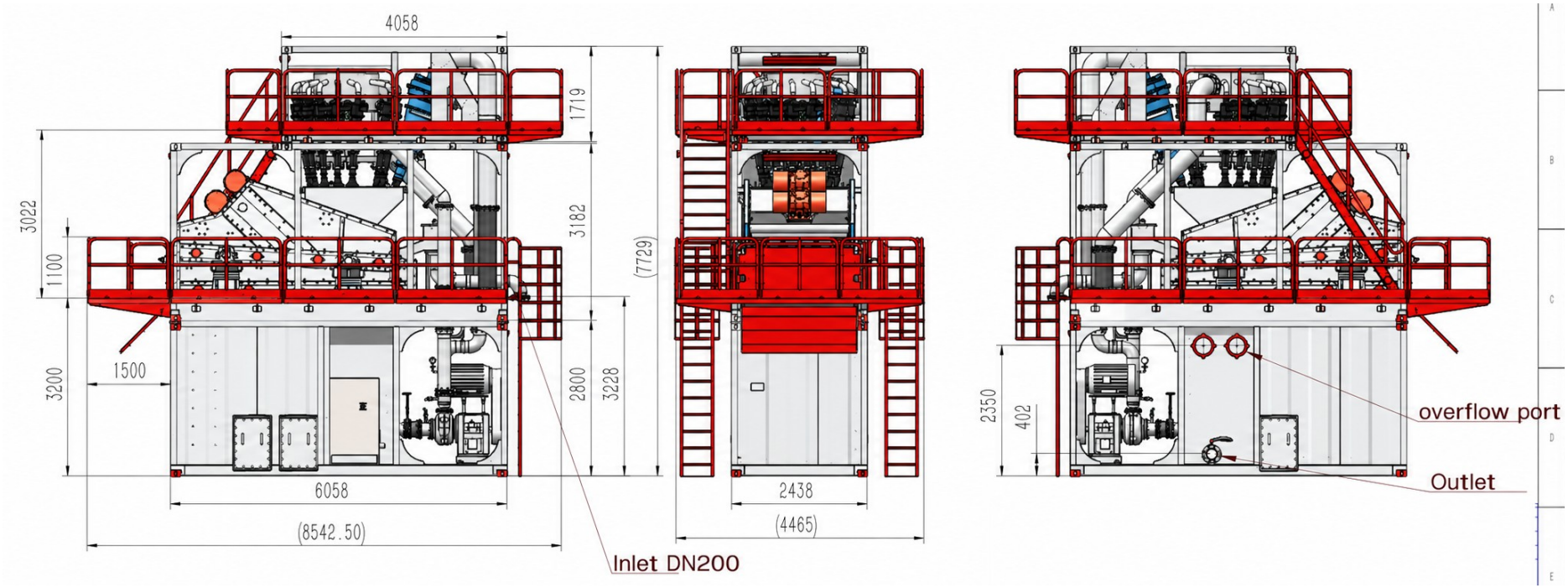
View or location	Callouts as shown
Left elevation, horizontal	4058; 1500; 6058; (8542.50)
Left elevation, left vertical	3022; 1100; 3200
Left elevation, right vertical	1719; 3182; 2800; 3228
Overall height beside centre elevation	(7729)
Centre elevation, horizontal	2438; (4465)
Right elevation, vertical	2350; 402

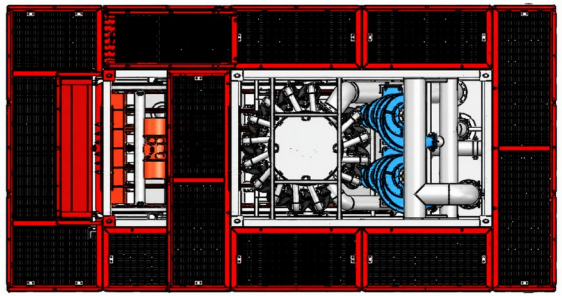
Connections

Drawing annotation	Description	Connection detail
Inlet DN200	Slurry inlet	DN200
overflow port	Overflow connection	
Outlet	Outlet connection	

General arrangement and dimensions

GSS-500T | Not to scale

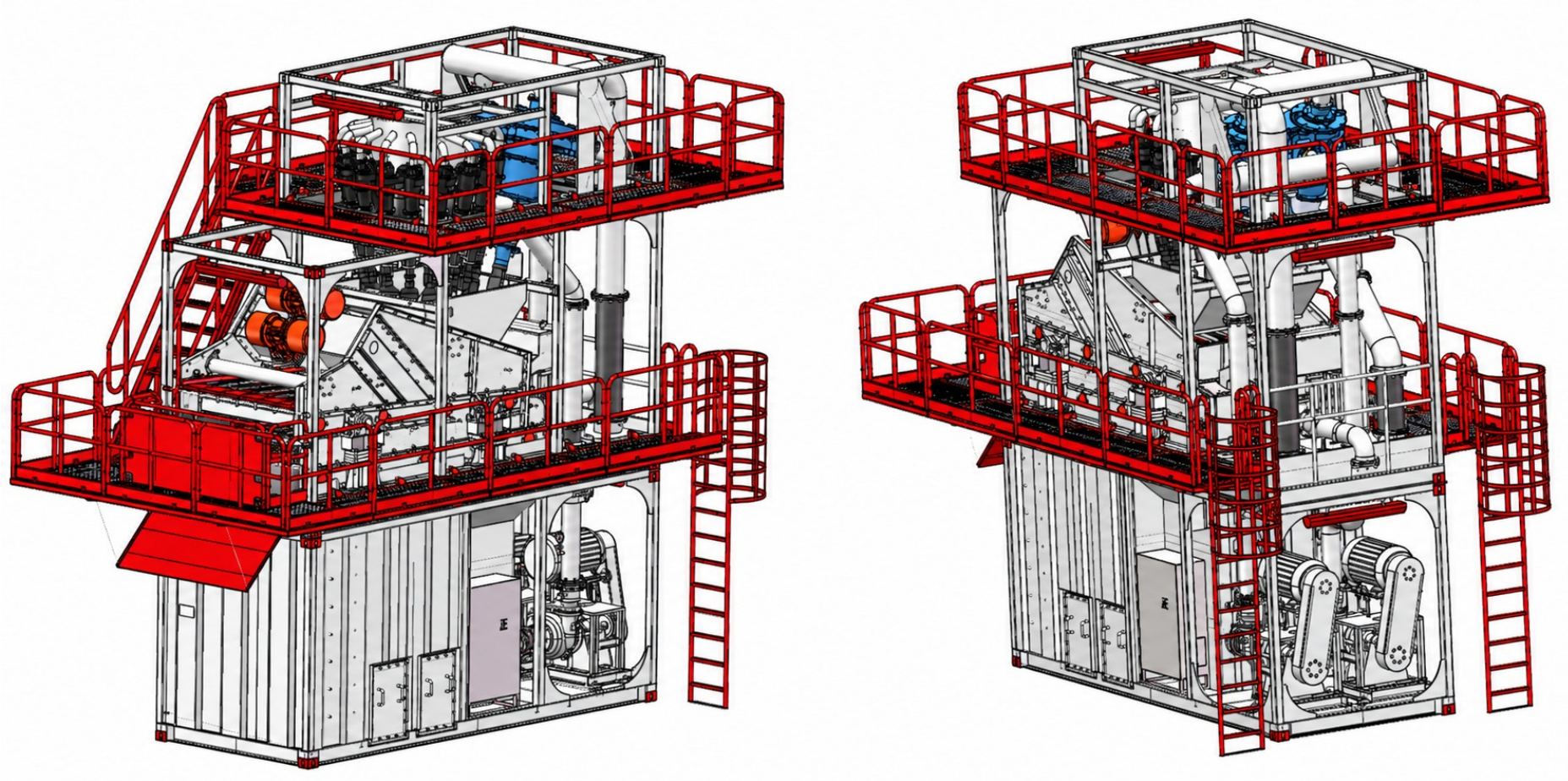




Three elevations and plan view. Inlet DN200; overflow port; outlet. Total weight: 25,500 kg.

Equipment perspective views

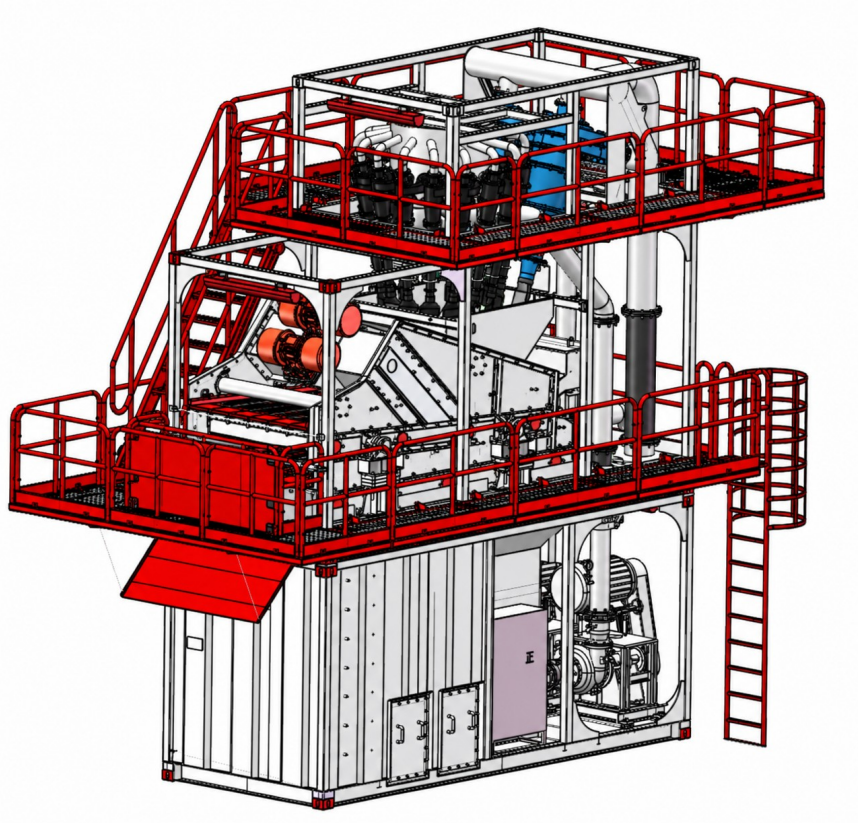
GSS-500T | Not to scale



Two perspective views showing the three-level system, stairs, access ladders, platforms, vibrating screen, cyclone arrangement, tank and pumps. Total weight: 25,500 kg.

System assembly

GSS-500T | Not to scale



GLADIATOR GSS-500T slurry separation system

THREE LEVEL SEPARATION SYSTEM

Screening stage: GNZS1836-2C double-layer vibrating screen; 2 × 6.48 m² screen area; 0.5–6 mm mesh gap; 2 × 7 kW vibration motors.

Desanding stage: two FX500-GX cyclones, 20 inch; cut point 55–100 microns.

Desilting stage: fourteen FX150-GX cyclones, 6 inch; cut point 15–30 microns.

Slurry handling: two CVL-150TZS-PD-4-90KW pumps. Listed power 90 kW and flow 500 m³/h; lift 28.

System capacity: 500 m³/h. Mud tank capacity: 24 m³. Total power: 194 kW. Total weight: 25,500 kg.

Operating dimensions: 8543 × 4465 × 7729 mm. Full shipping dimensions and weights are provided in the shipping schedule.