#### Dimensions















#### Main Specification for SEM816 & SEM822

Model	SEM816	SEM816LGP	SEM822	SEM822LGP	
Operating Weight	17,230 kg	19,720 kg	23,680 kg	25,400 kg	
Ground Pressure	68 kPa	31.5 kPa	70 kPa	39 kPa	
Ground Clearance	410 mm	435 mm	394 mm	394 mm	
Max.Slope	30°	30°	30°	30°	
Engine				1	
Model	Weichai WD10G178E25	Weichai WD10G178E25	Weichai WD12G240E26	Weichai WD12G240E26	
Flywheel Power	120 kW / 160 hp	120 kW / 160 hp	162 kW / 220 hp	162 kW / 220 hp	
Working Tool					
Blade Type	SU (S Blade is Option)	S	SU (U Blade is Option)	S	
Blade Capacity	4.3 m <sup>3</sup> (S 3.4 m <sup>3</sup> )	3.4 m <sup>3</sup>	6.4 m <sup>3</sup> (U 7.5 m <sup>3</sup> )	5.5 m <sup>3</sup>	
Blade Width	3,140 mm ( S 3,490mm )	4,227 mm	3,720 mm (U 4,015 mm)	4,617 mm	
Blade height	1,240mm (S 1,165mm)	1,000mm	1,511 mm (U 1,420 mm)	1,345 mm	
Max. Blade Digging Depth	430 mm	470 mm	563 mm	600 mm	
Max. Blade Lift Ground Clearance	1,041 mm	1,055 mm	1,140 mm	1,165 mm	
Max.Output Rimpull	280 kN	280 kN	350 kN	350 kN	
Maximum Digging Depth Of Ripper	584 mm	N/A	650 mm	N/A	
Maximum Clearance Under Tip	615 mm	N/A	640 mm	N/A	
Powertrain					
Гуре	Electronic control, Dual-path, Hydrostatic Drive		Electronic control, Dual-path, Hydrostatic Drive		
Travel Speed- F/R	0 - 10 km/hr (Infinitely Variable Speed Control)		0 - 11.5 km/hr (Infinitely Variable Speed Control)		
Steering & Brake	Hydrostatic Steering, Wet, Multiple-Disc Brakes		Hydrostatic Steering, Wet, Multiple-Disc Brakes		
Minimum Streeing Radius	3610 mm (Counter-rotated avaliable)	3,740 mm (Counter-rotated avaliable)	4,225 mm (Counter-rotated avaliable)	4,300 mm (Counter-rotated avaliable)	
Undercarrige					
Track Shoe Width	510 mm	1,050 mm	560 mm	915 mm	
Track Shoe Quantity	37 piece	42 piece	40 piece	45 piece	
ength Of Track On Ground	2,430 mm	2,925 mm	2,948 mm	3,488 mm	
Track Gauge	1,880 mm	2,300 mm	2,000 mm	2,340 mm	
Track Roller Quantity	6/Side	7/Side	7/Side	8/Side	
Carrier Roller Quantity	2/Side	2/Side	2/Side	2/Side	
Hydraulic System		1		1	
Туре	Pilot Control	Pilot Control	Pilot Control	Pilot Control	
mplement Hydraulic System Pressure	19 Mpa	19 Mpa	19 Mpa	19 Mpa	
Service Refill Capacities					
Cooling system	45 L	45 L	45 L	45 L	
Hydrostatic Oil	40 L	40 L	62 L	62 L	
Implement Oil	60 L	60 L	110 L	110 L	
Fuel	320 L	320 L	460 L	460 L	
Pivot Shaft Case (each side)	1.2 L	1.2 L	0.8 L	0.8 L	

### Ontional Accessories

Standard, O = Optional, - = #N/A	816	816 LGP	822 STD	822 LGP
WDEC (Tier II)	S	S	S	S
SU Blade*	S	-	S	-
S Blade*	S	S	S	S
SG Shoe	S	0	S	0
APEX Shoe	-	S	-	S
Carrier Roller	S	S	S	S
Track Roller (One Side 7 units)	S	-	S	-
Track Roller (One Side 8 units)	-	S	-	S
Hystat Powertrain	S	S	S	S
Normal Start (>=-20℃)	S	S	S	S
STD Cab	S	S	S	S
Drawbar	S	S	S	S
Cab Heater	S	S	S	S
Cab HVAC	S	S	S	S
Cold Start	0	0	0	0
Cold Weather Oil	0	0	0	0
Artic Oil	0	0	0	0
Rear Ripper w/3 Teeth	0	-	0	-
ROPS & FOPS	0	0	0	0

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Materials and specifications are subject to change without notice. Featured machines in photos may include optional equipment.See your SEM dealer for available options.

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#### DEALER NAME Address:

Telephone: Fax: Email: Website:

ealer Logo Are

# SEM816/822 rack Type Tractor

# **SEM816 SEM822**

Efficient: The electronically controlled hydrostatic drive system and multi functional joystick provide high levels of performance and maneuverability.

Comfortable Operation: The cabin is economically designed for increased operator comfort and visibility. The advanced monitoring system tracks machine operating conditions and keeps the operator informed of all vital machines functions.

Reliable: The proven hydrostat design along with world class pump and motors provide a highly reliable tractor. The undercarriage components are designed for longer life versus the leading competitor.

Serviceability: The SEM816 is designed for safe and easy access to reduce overall maintenance time. The machines electronic control model allows for quick troubleshooting.



#### http://www.semmachinery.com/en-en/

#### SEM816/822



#### Hydrostatic Drive System



#### Hydrostatic drive with electronic control technology

- Hydrostatic system delivers higher efficiency and maximum output traction force of 280KN.
- Maintenance costs are reduced by 60% when compared to competitors with torque converter and transmission design.
- Counter-rotation and power turn feature delivers excellent maneuverability on job sites.

#### **Comfortable Operation**



- **Counter-rotation**—move joystick left/right to end, realize counter-rotation.
- Power turn—automated manner, more powerful turn when loaded.
- Cruise control—Press yellow button 5 seconds can set travel speed automation work, make operation easy.
- Multiple function operator joystick allows for counter-rotation, power turn and cruise control.
- Pilot joystick control provides comfortable precise blade operation.

#### Semi-Universal Blade



#### Semi-Universal (SU) blade

- SU blade combines the best between straight and universal, both S blade excellent penetration and U blade high capacity features.
- 4.3m<sup>3</sup> design for superior load retention and penetration in tightly packed materials. L-shaped push arms bring the blade closer to the machine, providing excellent maneuverability, balance and blade penetration.
- Blade designs feature a strong box-section design, made from steel with high tensile strength to stand up to the most severe applications.

#### Undercarriage







- Undercarriage provided by a world class supplier ensures high reliability and resistance to wear.
- Carrier rollers, track rollers and idle rollers all maintenance free design.
- Planetary final drive design delivers increased torque ratio for higher transmission efficiency and lower maintenance cost.
- Durable final drive bearings and multiple wet disc brakes provide reliability, reduces system heat and extends life.

Machine structures are analyzed using Finite Element Analysis (FEA) and On Machine Stress Analysis (OMSA) to identify and protect high stress areas.

Advanced structure welding technique, relieving welding stress.

## Modular Radiator



New advanced cooling system designed to meet -43°C to +50°C ambient temperature capability. Modular designed radiator, easy to maintain, remove and repair.

Radiator grill provides better heat dissipation, easy access for maintenance.

#### Maintenance



- Electronic Control Module (ECM) fault diagnosis system, automatic diagnosis 8 key parameters.
- Monitoring system provides three levels of alarm, to indicate fault diagnosis.
- 2000hrs hydrostat service interval reduces maintenance time by 50%.
- Implement valve mounted outside of hydraulic tank provides easy access to check and service.

#### **Blade Options**



Semi-Universal blade (with hydraulic tilt)

Straight blade



U Blade



Waste Handling Arrangement



ROPS/FOPS Cab

Multi-Shank Ripper(3 ripper shanks)

Air Conditioning

Cold Weather / Artic Oils