

SEM Machinery

DOZER

SEM 832F



A Caterpillar Brand



www.semmachinery.com

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The SEM 832F features the brand-new F series design and Perkins 1706D engine, which complies with Tier III emission standards and delivers a gross power of up to 253kW/339hp. The machine employs an electronically controlled hydrostatic transmission system, which enhances productivity and maneuverability. Additionally, a range of track shoe widths from 560mm to 760mm, along with various blade options including SU, S and U blades, as well as a single-shank ripper, are available to cater to the diverse needs of our customers.



Proven Performance

- Boost productivity with fully hydrostatic transmission
- Effortless counter rotations, power turn, and infinitely variable speed control
- Versatile operating modes for more efficient operations
- World-class engine delivers superior durability and excellent fuel efficiency

Comfortable Operation

- Spacious cab with easy-to-operate controls
- Stylish design from the new F series
- Six-way adjustable seat for quick customization according to the operator's preferences
- Exceptional visibility for enhanced on-site awareness

Exceptional Reliability

- World-class original pumps and motors
- Standard configuration tubular track roller frame and Sealed and Lubricated Track (SALT)
- Reinforced structures, analyzed using Finite Element Analysis (FEA)
- Final drive with triple-stage reduction and dual-motor input
- Modular cooling system designed to endure -40°C to +50°C ambient temperatures



1

Enhanced Reliability

- Dual-path, hydrostatic drive system with electronic control technology, featuring a single pump and dual-motor design per side from a world-class supplier delivers industry-leading reliability
- The Perkins engine, widely used in industry, offers classic durability and dependability
- Final drive adopts a triple-stage reduction featuring four planetary gears to ensure a longer lifespan
- Machine structures are analyzed using Finite Element Analysis (FEA) and On Machine Stress Analysis (OMSA) to identify and reinforce high-stress areas
- Sealed and Lubricated Track (SALT) chains, offered in the standard configuration, significantly extend overall longevity
- Equalizer bar with rubber pad and pivot shaft are pinned to the Tubular Track Roller Frame, minimize impacts and prolong the undercarriage's life
- Wet type multi-disc brake system, featuring two brakes per side, delivers exceptional reliability and high braking performance, even under challenging operating conditions





2

Outstanding Versatility and Productivity

- Compared to powershift machines, Caterpillar's proven hydrostatic transmission load-sensing system delivers heightened productivity
- Achieve seamless operations with functions like infinitely variable speed, counter rotation, and power turn, ensuring improved operational efficiency
- Double-pump confluence hydraulic system and quick drop valve reduce cycle time while minimizing fuel consumption
- Modular and single-plane cooling system, coupled with a hydraulic demand fan with piston pump, can endure extreme ambient temperatures ranging from -40°C to +50°C while offering superior fuel efficiency



3

Enhanced Operating Comfort

- Ample cabin space and fabric-covered seat offer a welcoming operational environment, delivering exceptional comfort and visibility
- Multi-functional joystick ensures precise performance and maneuverability
- The brand-new F Series showcases a stylish design
- Exceptional visibility for enhanced on-site awareness

4

Reduced Operational Costs

- Integrated hydrostatic oil tank and hydraulic oil tank allow for longer maintenance intervals and reduced maintenance costs
- Electric Pressure Override (EPOR) function prevents high-pressure overflow and reduces heat load



5

Leading in Class Serviceability

- Maintenance-free and lifetime-lubricated idlers and track/carrier rollers provide simplified servicing, providing real value to our customers
- The Implement Distribution Valve, featuring a pressure testing port, is installed outside of the hydraulic oil tank for easy access to reduce overall maintenance time
- Diagnostic codes covering both the engine and hystat system allow for quick troubleshooting

Main Specifications

	STD	DS	CH	WH
Operating Weight (w. SU blade, Ripper)	38,710 kg	39,390 kg	39,455 kg	40,110 kg
Ground Pressure (GB/T 30965)	83 kPa/77 kPa	63 kPa	78 kPa	64 kPa
Minimum Ground Clearance (Excludes Grouser Height)	370 mm			
Gradeability	30°			

Engine

Model	1706D-E93TA
Advertised Power (ISO 14396)	253 kW/339 hp
Rated Speed	2,200 r/min

Powertrain

Transmission Type	Dual-path, closed loop electronically controlled hydrostatic drive system
Travel Speeds - Forward and Reverse	Infinitely variable speeds 0-11 km/h
Steering and Brake	Hydrostatic steering, wet, multi-disc brake, bellville spring actuated and hydraulically released

Implement Hydraulic

Type	Double pump confluence, pilot control
System Pressure	20 MPa
Pump Type	Gear pump

Blades

Blade Type	SU	S	Coal	S-WH
Blade Capacity (ISO 9246)	9.6 m ³	7.8 m ³	12.9 m ³	18.6 m ³
Blade Width (w/End Bit)	4,180 mm	4,290 mm	4,760 mm	4,335 mm
Blade Height	1,710 mm	1,590 mm	1,710 mm	2,350 mm
Blade Lifting Height	1,206 mm			
Blade Digging Depth	558 mm			
Blade Tilt Height (Middle Hole)	905 mm	930 mm	1,030 mm	945 mm
Blade Weight (w/o Push Arm)	3,020 kg	2,840 kg	3,550 kg	3,300 kg
Minimum Turning Radius	4,590 mm	4,475 mm	4,990 mm	4,485 mm

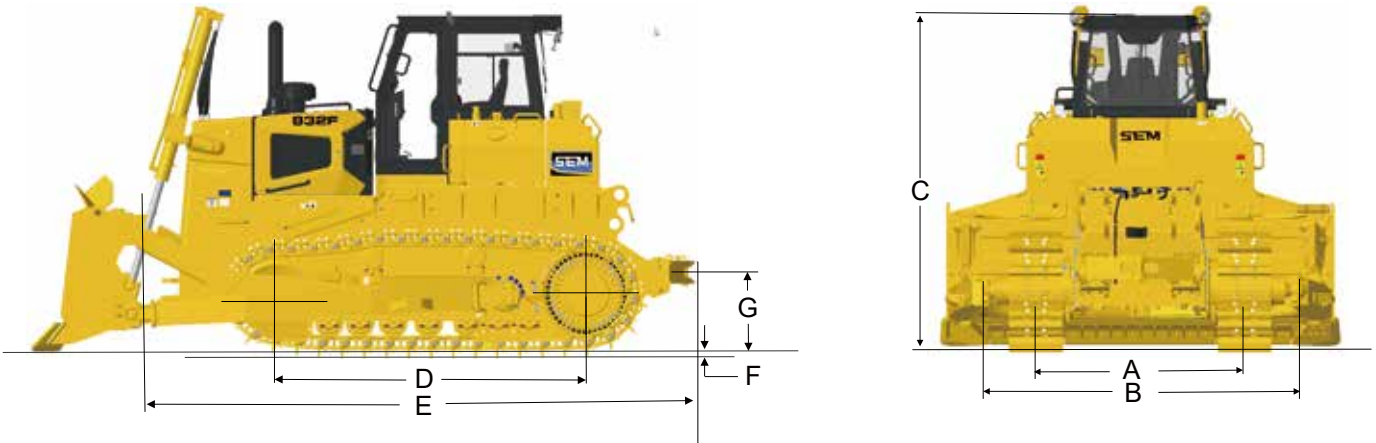
Single Shank Rippers

Type	Parallelogram (No pitch adjustment)
Maximum Penetration (Shank Pinned in the Top Hole)	1,216 mm
Maximum Clearance Under Tip (Shank Pinned in the Bottom Hole)	812 mm
Ripper Weight	4,160 kg

Undercarriage

Track Shoe Width	560 mm/610 mm	760 mm	610 mm	760 mm
Track Shoes Number (Each Side)	41			
Track Rollers Number (Each Side)	7			
Carrier Roller Number (Each Side)	2			

Dimensions



	STD	DS	CH	WH	
A	Track Gauge		2,180 mm		
B	Width of Tractor, Trunnions Outside		3,280 mm		
C	Machine Height, w/o Grouser		3,440 mm		
	Rops, w/o Grouser		3,445 mm		
	Alarm, w/o Grouser		3,590 mm		
	Exhaust Stack, w/o Grouser		3,385 mm		
D	Length of Track on Ground		3,200 mm		
E	Length of Basic Tractor, w. Drawbar		5,645 mm		
With Following Attachments, add:					
	SU Blade	1,175 mm	1,175 mm	1,175 mm	N/A
	S Blade	965 mm	965 mm	N/A	N/A
	U Blade	1,575 mm	N/A	1,575 mm	N/A
	WH Blade	N/A	N/A	N/A	965 mm
	Single-Shank Ripper	2,020 mm	2,020 mm	2,020 mm	N/A
F	Grouser Bar Height		80 mm		
G	Drawbar Height (Pin Center)		800 mm		



The SEM 832F dozer is designed for a wide range of applications, including dozing, grading, stockpiling, material spreading and ripping. Its target customer industries had expanded to encompass general and heavy construction, road construction, mining, coal handling, and agriculture.



Standard Equipment

ENGINE

- Final Drive
- Coupling Group

UNDERCARRIAGE

- Equalizer Bar
- Track Roller Frame

HYDRAULICS

- Lifting Cylinder
- Tilting Cylinder
- Hydraulic Fan, Single Shank

ELECTRICAL

- Electric System
- Work Lights, LED,8

LIGHT STRUCTURE

- Engine Hood
- Filter Box
- Fuel Tank
- Right Box
- Hydraulic Tank
- Fender

OPERATOR ENVIRONMENT

- Standard Sealed Cab
- Dashboard Group
- HVAC
- Radio

GUARDS

- Front Guard
- Bottom Guard

FRAME

- Case Frame

BLADES

- L Shaped Push Arm

Optional Equipment

WEATHER ARRANGEMENT

- Ether Cold Start

ELECTRICAL

- Warning Beacon
- Rear Camera
- Blade Light
- Product Link

FIRE SUPPRESSION

- Extinguisher

GUARDS

- Guards Track

Mandatory Attachment

Select one from each group. Mandatory and optional equipment may vary. Consult your dealer for specifics.

ENGINE

- Air Filter
- Air Filter, High Position

TRACKS

- Track, 560mm
- Track, 610mm
- Track, 760mm

HYDRAULICS

- Hydraulic, 2V
- Hydraulic, 3V

CABS

- Cab, Rops
- Cab, Non Rops

AIR FRESHER

- Seals Group
- Air Fresher

GLASS DOOR

- Glass Door, Cab
- Glass Door, Cab w/ Wiper

STARTING AIDS

- Starter
- Starter, Cold Weather

REAR ATTACHMENT

- Drawbar
- Ripper, Single Shank

BLADES

- SU, 9.6m³
- S, 7.8 m³
- U, 12.9 m³
- WH, 18.6 m³

EMPOWER YOUR SUCCESS

We steadfastly uphold our service promise – “SEM Services, Full Commitment”, with an unwavering focus on customer satisfaction. Through our comprehensive “Five Strengths” approach, which encompasses responsiveness, maintenance, reliability, professionalism, and assurance, SEM offers seamless support from pre-sales to after-sales for our rapidly growing global customer base. We pledge top-tier response times, exceptional service capabilities, and premier spare parts solutions. At the same time, in order to better assist customers, minimize equipment downtime, streamline equipment management, and maximize customer value, we have deeply integrated digital technology with traditional construction machinery aftermarket services, and with the launch of the SEM eService APP, we now provide a comprehensive online solution for parts and technical information.

We are dedicated to providing a range of diversified and competitive aftermarket solutions, which encompass our Customer Service Agreement (CSA), SEM SELECT parts, service options, SEM Extended Protection (SEP) and more. Our aim is to deliver the utmost value to customers. With a global parts distribution network comprising over 20,000 types of spare parts, we assure unparalleled service and availability to SEM customers in a timely and dependable manner. Moving forward, we will continue to deliver reliable aftermarket support carefully tailored to your needs.



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