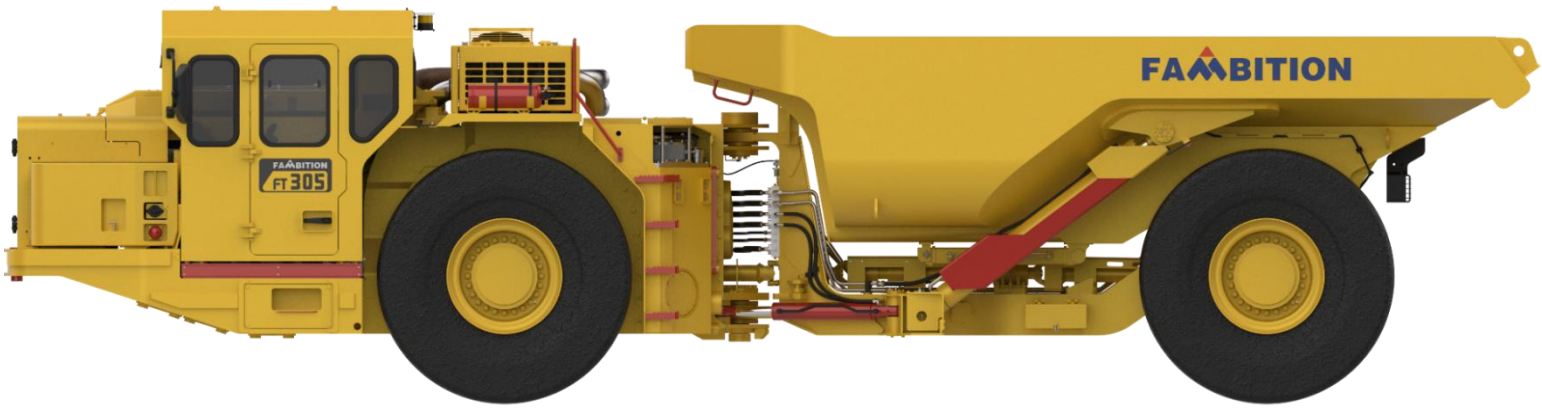
FAMBITION

QINGDAO FAMBITION HEAVY MACHINERY CO.,LTD.

FT305 TECHNICAL SPECIFICATION



High-efficiency Equipment, Made by FAMBITION

FAMBITION FT305 underground diesel mining truck has a standard dump box of 16 m^3 and a payload capacity of 30 tons, primarily used for transporting hard rock in underground non-coal mines. The recommended matching LHD of FAMBITION is FL105.

Features:

- Central articulated vehicle, manufactured with high-quality alloy steel, advanced machining and heat treatment processes
- Innovative and compact design, with key components reinforced to ensure robust and durable body structure
- Core components of internationally renowned brand for high-performance China Stage IV emission power and stable operation
- Fully enclosed air-conditioned cabin with FOPS/ROPS certificate, luxurious interior, circulating air duct and defrosting & defogging function
- Sound-absorbing & noise-reducing interior materials and rubber shock absorption between cab and seat for minimized vibration and enhanced driving comfort
- CAN-bus technology, greatly simplified wiring harness, with strong anti-interference ability for signal transmission
- Self-developed FET (FAMBITION Electronic Technician) technology for real-time monitoring of equipment operation status and intelligent fault self-diagnosis, escorting efficient equipment operation throughout the process
- Independently developed FAMBITION Data Transmission System for real-time acquisition and analysis of operation data, realizing transparent management of equipment operation, production and efficiency

Version number: 202601
Address: No.31, Beijing East Road, Longshui Subdistrict Office, Laixi City, Qingdao, Shandong, China.
E-mail: info@fambition.com Tel: +86(532)87900000 Website: Http://www.fambition.com

Basic dimensions	
Max. length	10 551 mm
Max. width	2 978 mm
Cabin height	2 670 mm
Dumping angle	61°
Dump position max. height	5 652 mm
Ground clearance	395 mm
Steering angle	42.5°
Inner turning radius	4 808 mm
Outer turning radius	8 788 mm

Operating weights	
Total operating weight	30 600 kg
Front axle load (empty)	22 060 kg
Rear axle load (empty)	8 540 kg
Loaded weights	
Total loaded weight	60 600 kg
Front axle load (loaded)	30 250 kg
Rear axle load (loaded)	30 350 kg
Dumping time	8 sec

Production capacity	
Standard dump box (SAE)	16 m^3
Payload capacity	30 000 kg
Max. traction force	280 kN
Grade ability	25 %

Speeds forward & reverse (level/loaded)	
1st gear	5.9 km/h
2nd gear	10.2 km/h
3rd gear	17.7 km/h
4th gear	25.0 km/h

Operational conditions	
Environmental temperature	-20°C~+55°C
Standard operating altitude	-1500 m~+3000 m @ 25°C No power loss

Design standards
AQ 1043-2007 Mining Products Safety Label
GB 20891-2014 Limits and Measurement Methods for Exhaust Pollutants from Diesel Engines of Non-road Mobile Machinery
GB 21500-2008 Trackless Tyred Mining Truck for Underground Mines—Safety Requirements
GB 7679.4-2005 Mining Machinery Terminology—Part 4: Mine Hauling Equipment
JB/T 8436-2015 Tyred Mining Truck for Underground Mines
JB/T 5946-1991 Construction Machinery—General Technical Specifications for Painting

Engine	
Brand&model	Volvo TAD1382VE
Rated power	315 kW @ 1 900 rpm
Output torque	2 175 Nm @ 1 200 rpm
Cylinders	Inline six-cylinder
Displacement	12.78 L
Cooling system	Liquid cooled
Combustion principle	4-stroke, electric fuel injection with turbo
Air intake system	Two stage filtration, dry type, air-cooler
Operating voltage	24 V
Emissions standard	China Stage IV, Euro Stage V
Exhaust system	DOC+DPF+SCR+ASC
Average fuel consumption (at a 40% load)	39 L/h
Fuel tank refill capacity	430 L
Urea tank	38 L

Power train	
Transmission	Dana 6000 series
Torque converter	Dana CL8000 series
Gear shifting type	Electric gear shift control Manual/automatic
Axles	Kessler D101
	SAHR Standard slip differentials

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	Rear axle fixed, front axle oscillating ±8°
	Electrical pump for brake release system
Tires	26.5R25

Cabin (enclosed)
Fully enclosed forward-facing cabin
FOPS certified in accordance with ISO 3471
ROPS certified in accordance with ISO 3449
Heating, ventilation and air conditioning (HVAC)
Built-in air conditioning air duct
Two-sided laminated tampered glass window
Sound-absorbing, noise-reducing and heat-insulating interior
Trelleborg rubber shock absorption
Fully electric cabin
Emergency outward-push escape window
Three-point contact access system to quickly get into the cabin
Emergency stop switch
Grammer suspension shock-absorbing seat
Two-point safety belt
Cabin door safety interlock
Gradienter
Tool box

Hydraulics	
Steering hydraulics	
Fully hydraulic powered steering, double-acting steering cylinder, adjustable steering angle, priority flow steering Oil flows to the dump box hydraulic system from the pump when the steering system is not in use.	
Steering cylinder	Ø100 mm, 2 pcs
Steering gear	Danfoss
Dump box hydraulics	
Hydraulic pilot proportional control Oil flows to the dump box hydraulic system from the pump when the steering system is not in use.	
Lift cylinder	Ø140 mm, 2 pcs
Main valve	Parker
Brakes	
Charging valve	Sun
Service brake valve	Mico
Brake accumulator	Parker
Cooling system	
Hydraulic oil radiator	Parker
Intercooler&oil cooler assembly	Hengtong (copper tube)
Radiator&oil cooler assembly	Hengtong (copper tube)
Steering&main valve	Parker variable displacement piston pump
Engine cooling&brake charging pumps	Parker tandem variable displacement piston pump
Hydraulic oil tank	
Working hydraulic oil tank	262 L
Brake hydraulic oil tank	76 L
Others	Electrical pump for brake release system
	O-LOK fittings
	Zinc-nickel plated fittings
	Hydraulic hoses with wear-resistant and flame-retardant sleeve

Electrical system	
Generator	28 V, 150 A
Battery	2*12 V, 150 Ah
Starter	24 V/5.5 kW
Circuit breaker	ABB
Electric relay	Bosch
Connector	TE
Controller	EPEC SL84
360° around view monitor	Standard
FAMBITION electrical technician (FET) technology	Real-time monitoring of system operation
	Fault diagnosis prompts
	Fault indicator light
	Historical fault records
	Operation data download

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Display	EPEC 6807 7” color display
	Adjustable display brightness
	Language options including Chinese, English, Russian and Spanish

Safety	
Portable fire protection	1*6 kg
Emergency stop button	1 pc in cabin 2 pcs on the front frame
LED lamp	6 pcs on the front frame 1 pcs on cabin 2 pcs on rear frame
Supporting bar for repair	1 pc
Frame lock lever	1 pc
Flashing beacon	1 pc
Turn signal and brake light	4 pcs
360° around view monitor	Standard
Neutral brake	Standard

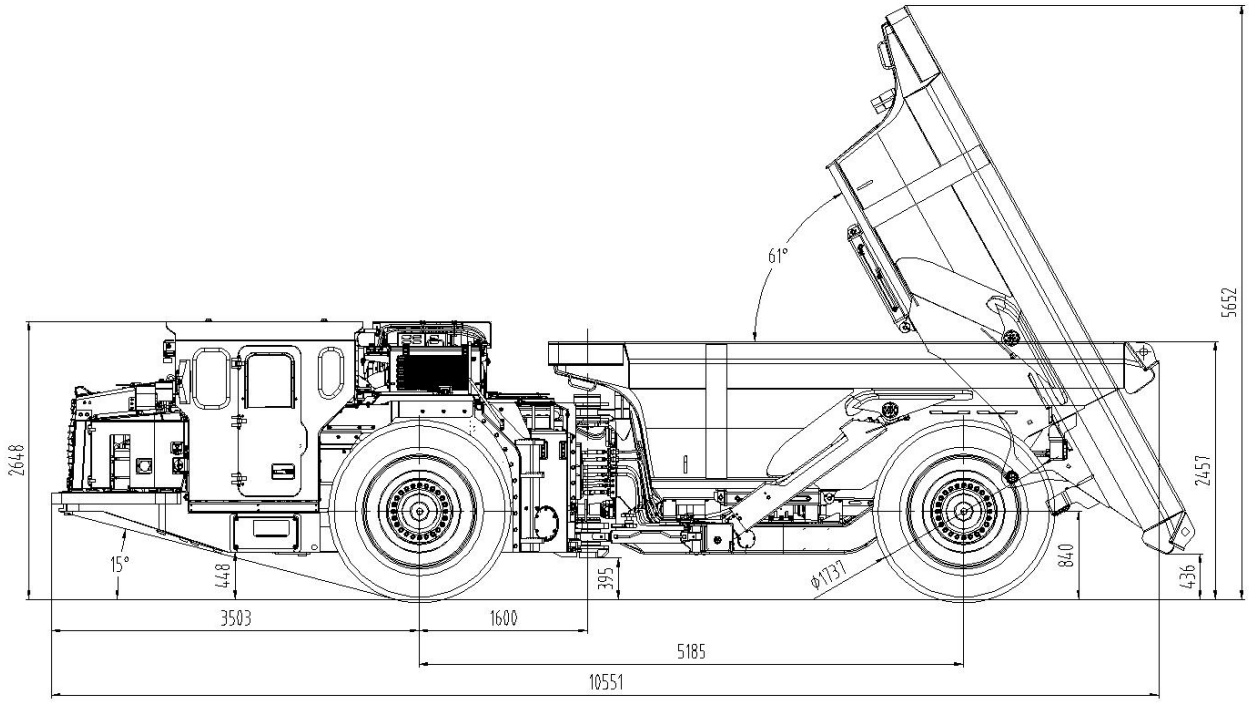
Options
16 m³ dump box with tailgate
18 m³ dump box
Wheel chock
Pneumatic suspension seat
Emergency steering
Electric filling pump
Tires made in China
In-cab monitoring system
Tyre pressure monitoring
Harmful gas detection
Trailer socket (jump start)
Cab heater
Selectable maximum gear
SKF automatic central lubrication system
Protecfire automatic fire suppression system
Tele-remote control system
Huarui weighing system
Arctic package (preheater for hydr. oil, fuel and engine coolant)
FAMBITION Data Transmission System

Manuals	
Spare parts manual	Chinese/English version
Operation and maintenance manual	Chinese/English version
Electronic manual	USB stick in pdf format

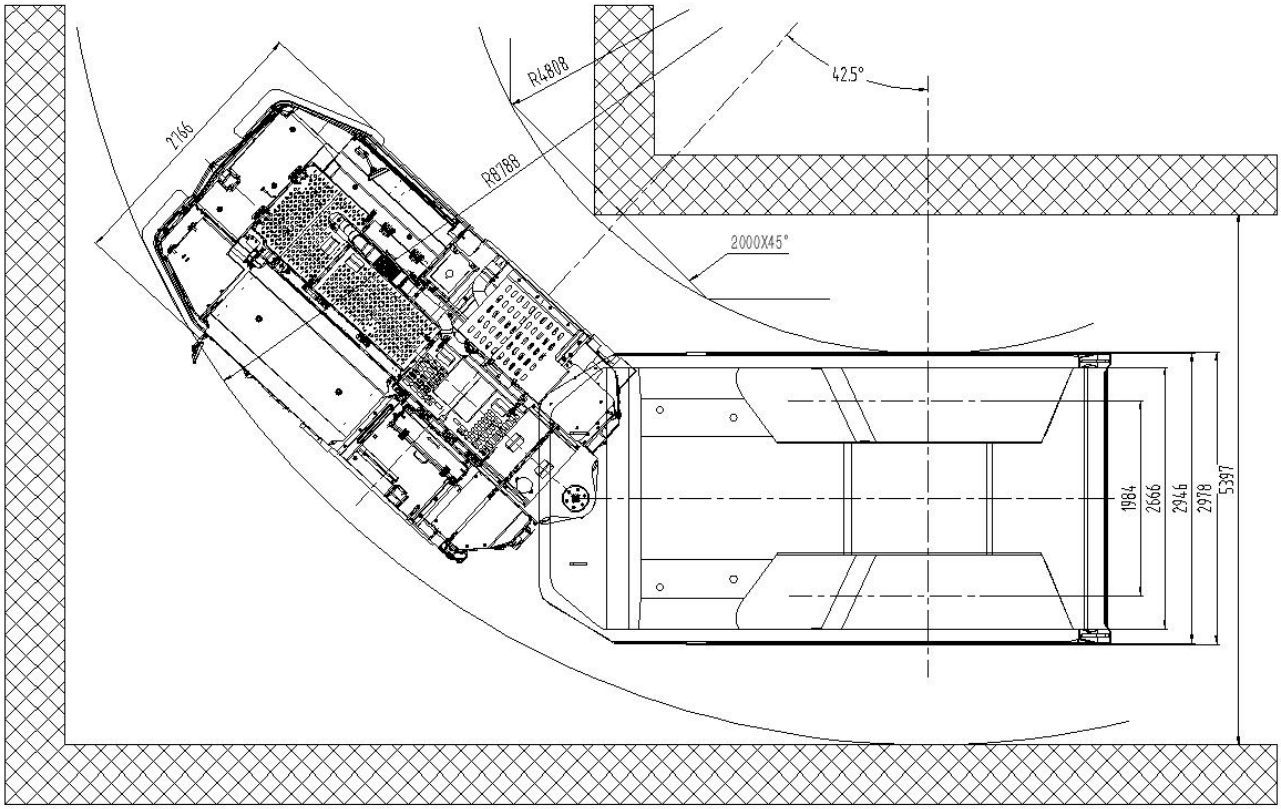
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FT305 grade&speed									
Empty									
Percent grade	0	2.0	4.0	6.0	8.0	10.0	12.5	14.3	17.0
Ratio					1:12	1:10	1:8	1:7	
1st gear (km/h)	6.1	6.0	5.8	5.7	5.7	5.7	5.6	5.5	5.4
2nd gear (km/h)	10.7	10.3	10.0	10.0	9.7	9.5	9.3	9.2	9.0
3rd gear (km/h)	18.2	17.8	17.5	17.0	16.4	15.5	14.3	13.3	11.5
4th gear (km/h)	31.8	30.0	28.0	25.0	23.0	19.0			
Loaded									
Percent grade	0	2.0	4.0	6.0	8.0	10.0	12.5	14.3	17.0
Ratio					1:12	1:10	1:8	1:7	
1st gear (km/h)	5.9	5.7	5.6	5.5	5.4	5.3	5.2	5.0	4.8
2nd gear (km/h)	10.2	9.9	9.5	9.3	9.0	8.4	7.5	7.0	5.2
3rd gear (km/h)	17.7	17.0	15.3	13.5	11.3	9.0	5.0		
4th gear (km/h)	30.4	25.0	19.0	9.7					

Optional dump box capacity				
Dump box capacity	m^3	16	16 (with tailgate)	18
Ore density	(t/m^3)	1.9	1.9	1.7
Dump box width	mm	2 978	3 154	2 978



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