

SANDVIK

DT1132i TUNNELING DRILL



INCREASED PRODUCTIVITY

Sandvik DT1132i is a fully automated i-series tunneling jumbo equipped with three electro-hydraulic booms for fast and accurate drilling in tunneling and cavern excavations.

This tunneling drill rig has automatic drilling functions and boom positioning. Thanks to the automated drilling of pre-planned drilling patterns combined with an extensive data collection and reporting system, DT1132i enables continuous control of productivity, quality and efficiency.



AUTOMATIC DRILLING FUNCTIONS

DIESEL ENGINE
LOW EMISSIONS

MAIN BENEFITS

VERSATILE AND HIGHLY PRODUCTIVE

Equipped with RD535 rock drill, Sandvik DT1132i has more rock drill power to reduce the drilling time and increase advance meters per cycle, saving time and money.

In addition to face drilling, this unit can also be utilized in other applications such as: long-hole drilling, cross-cutting and bolt hole drilling.

Up to **20%*** higher penetration rate

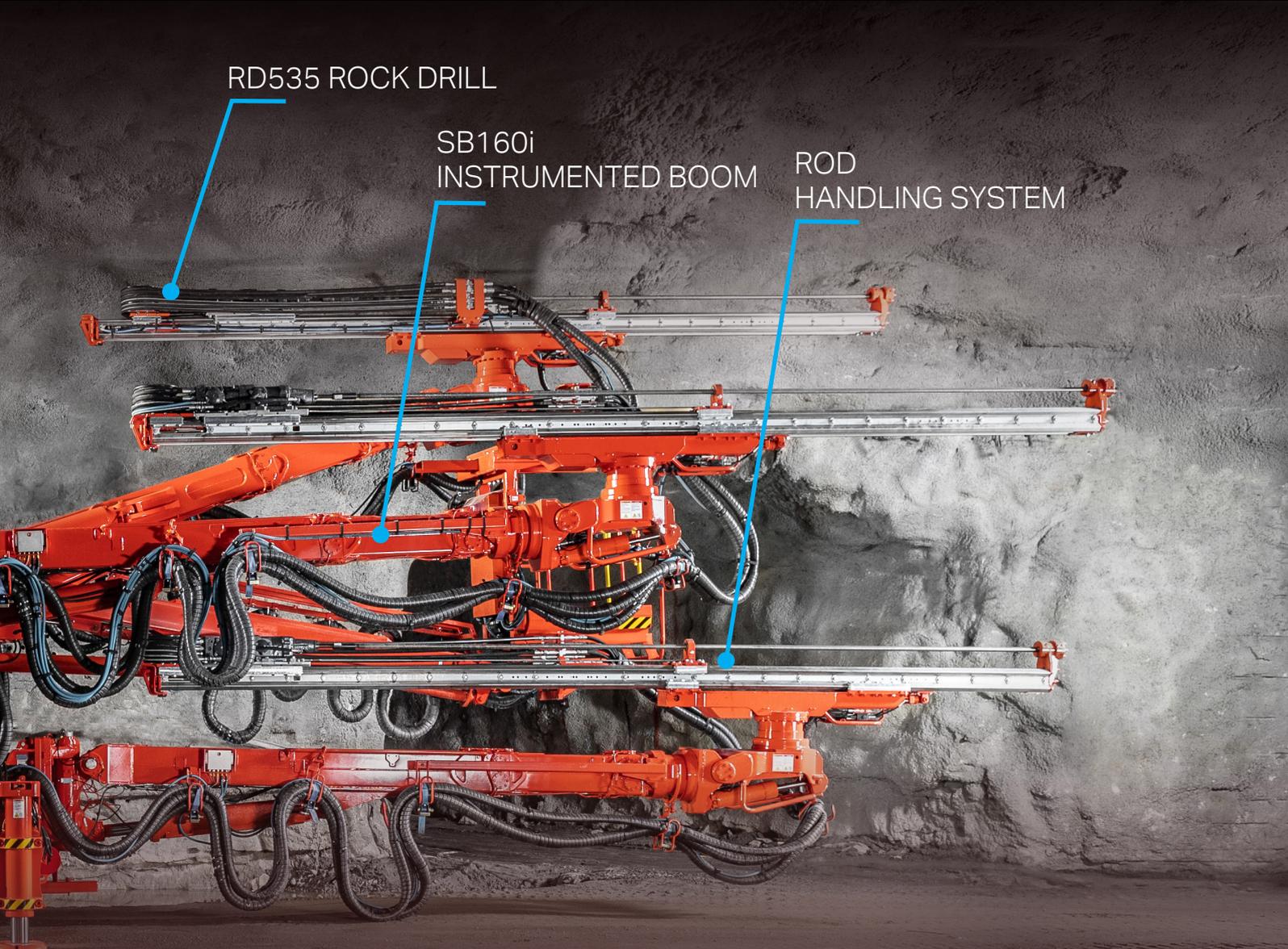
IMPROVED PRODUCTIVITY

IMPROVED ERGONOMICS & SAFETY

Up to **40%*** better filtration in exhaust particles

Up to **25%*** bigger side coverage

MAXIMIZED UTILIZATION



RD535 ROCK DRILL

SB160i
INSTRUMENTED BOOM

ROD
HANDLING SYSTEM



SB160i INSTRUMENTED BOOM

The 3 meter telescopic SB160i boom with double roll-over for mechanized tunneling, drifting, cross-cutting and bolt hole drilling uses a fully proportional boom control for accurate and fast manual boom handling.

Computer aided boom movements make the use of the boom simple and logical.



ERGONOMIC CABIN

The ergonomic vibration-dampened cabin provides an open, spacious operator environment with excellent all-round visibility, low noise level and a filtration system to minimize dust inside. Doorways have been located in the rear to minimize any disturbance for the operator, whilst safety has been maximized with a FOPS-compliant cabin.



SUPERIOR DRILLING ACCURACY

The Alpha360 bits and GT38 rods are optimized for RD535 high power rock drill. The optimized rod diameter together with coupling guide and the bit gives superior drilling accuracy in face drilling.



SANDVIK 365 PARTS & SERVICES

PROUDLY KEEPING YOU ON TRACK!

Sandvik 365 Parts & Services offer a variety of possibilities to enhance your Sandvik DT1132i drill's performance. As an OEM, we provide the best-suited choices to preserve your machine's high performance throughout its lifetime. These consist of highly skilled service specialists supporting you 365 days a year, all using Sandvik Genuine parts and components complemented by a range of robust tools. In addition, you get to enjoy the benefits of advanced digital services and a global infrastructure dedicated to keeping your Sandvik fleet on track.

TECHNICAL SPECIFICATION

HYDRAULIC ROCK DRILL

Type of rock drill	RD535 (TS2-427)
Percussion power	31 kW
Percussion pressure	Max. 225 bar
Percussion rate	107 Hz
Stabilizer	Hydraulic (two stage)
Rotation speed	Max. 280 rpm (with OMS125)
Rotation torque	625 Nm (with OMS125)
Hole size (face drilling)	45 - 64 mm
Hole size (cut hole)	76 - 127 mm
Recommended rod	T38-R42-Alpha360 T38-R39-Alpha360
Shank adapter	T38 (male)
Weight	232 kg
Length	1 010 mm
Profile height	90 mm

FEED

Type of feed	Feed force (Max.)	Total length	Hole length	Rod length	Net weight (kg)
TF535i-12' (opt)	30 kN	5 330	3 440	3 700	500
TF535i-14' (opt)	30 kN	5 940	4 050	4 305	530
TF535i-16' (opt)	30 kN	6 550	4 660	4 915	560
TF535i-18' (std)	30 kN	7 160	5 270	5 525	590
TF535i-20' (opt)	30 kN	7 770	5 880	6 135	620
TF535i-21' (opt)	30 kN	8 075	6 180	6 440	640

BOOM

Type of boom	SB160i (TS2-418)
Parallel coverage	166 m ²
Parallelism	Electric
Boom extension	3 000 mm
Feed extension	1 850 mm
Boom weight, net	3 500 kg
Roll-over angle	358°

UTILITY BOOM (OPTIONAL)

Type of utility boom	SUB5i A/B (TS2-311)
Boom extension	2 x 3 000 mm
Boom weight, net	2 635 / 2 895 kg
Basket swing	± 45° in B - model
Max. allowed load	510 kg
Max. allowed load with safety canopy	400 kg

HYDRAULIC SYSTEM

Powerpack	HPP575 (3 x 75 kW)
Percussion and feed pump	180 cc (variable)
Rotation pump	71 cc (variable)
Utility boom	26 cc (gear)
Filtration size (pressure / return)	20 μ / 10 μ
Oil tank volume	480 liters
Filling pump for hydraulic oil	Electric
Cooler for hydraulic oil	1 x OW200P oil-to-water cooler

CONTROL SYSTEM

Type of control system	SICA platform
Higher level in automation	Upgradable
Diagnostic system	Comprehensive
Variety of drilling controls	Advanced torque control system, feed / percussion, manual control
Boom control	Fully proportional
Touch screen display	15" full color
Control system software	Support and maintenance package include during 12 months (TS15-019)
OptiMine®	With configuration readiness
Cable kit	Spare parts programming
Total station navigation set	Excl. total station

ELECTRIC SYSTEM

Standard voltage	Multivoltage 400 V only with RD525 rock drill 575 V - 1 000 V with RD535 or RD525
Total input power	270 / 325 kW (RD525 / RD535)
Main switch	MSE30
IP classification	Specification TS2-132
Starting method	DOL (direct on line)
Automatic cable reel	TCR5 CD
Cable reel control (in / out)	Operator station
Electric current reducer unit	3 pcs
Front lights (combined working and driving)	12 x 50 W LED (12 x 4 200 lm)
Rear lights (combined working and driving)	4 x 50 W LED (4 x 4 200 lm)
Rear brake / park lights	2 x Red LED
Stair and service lights	1 x LED (24V)
Amber flashing light	1 x Beacon (24V)

AIR AND WATER SYSTEM

Flushing type	Flushing low control / monitoring
Water booster pump type	WBP4 HP
Water pump capacity	400 l/min
Water pump inlet pressure	2 - 7 bar (Min.)
Flushing water pressure	25 - 30 bar
Shank lubrication device	Air / oil mist, SLU-3
Air compressor	CT28 (2.8 m ³ /min at 7 bar)
Oil consumption	180 - 250 g/h
Air consumption	250 - 350 l/min

TRAMMING AND OPERATOR STATION

Safety cabin	FOPS (ISO 3449)
Cabin height in tramming / inside height	3 790 / 2 000 mm
Cabin elevation	1 000 mm
Sound pressure level according to EN 16228	Operator station: 75 dB(A) Emitted: 126 dB(A)
Seat	Fully adjustable seat
Floor	Water-washable
Air conditioning / heating	During tramming and drilling
Cabin audio system	CD / MP3 player with radio
Electricity outlets	1 x 12 V and 2 x 240 V (16A)
Boot washer	At cabin each entrance

TECHNICAL SPECIFICATION

CARRIER

Type of carrier	C1000
Rear oscillation	± 8°
Ground clearance	400 mm
Diesel engine	QSB6.7, 164 kW, Tier 3, Stage III
Transmission	Hydrodynamic, Spicer T14
Axles	Dana Spicer 43R (front) / 213 (rear)
Tires	14.00-24 28RL (4 x front, 2 x rear)
Service brakes	Hydraulically operated wet disc brakes
Parking / emergency brakes	SAHR type, fail safe wet disc brakes
Fuel tank	150 liters
Tramming speed	15 km/h (Horizontal) 3.5 km/h (14%=1:7=8°)
Longitudinal / sideways tilt	Max. 11° / 5°
Carrier stabilization with 400 mm ground plates	TJ60 (front), TJ75 (rear)
Hand throttle	Standard
Hand held fire extinguisher	1 x 7.7 or 9 kg (type ABC)
Tramming alarm	Standard
Wheel chocks and holders	2 Sets
Measurement adapter kit	Cables and connectors for spare parts maintenance measurements
Knowledge Box™	Connectivity solution (TS2-535)
Colour scheme	Sandvik standard
Documentation	1 x Operator's manual 1 x Maintenance manual 1 x Technical manual (in English only) 1 x Parts manual (in English only) 2 x Toolman USB key

OPTIONAL ITEMS

Rock drill

*Type of rock drill	RD525, 75 kW HPP
Power extractor	For RD535 or RD525

Feed

*Feed length	12', 14', 16', 20', 21'
*Telescopic feed	TFX12/18
Rod retainer	SCR with TF feed (incl. safety wire)
Rod handling system	SRH (incl. SCR + PE for 8' or 10' extension rods, 8 + 1 extension rods)
AT pipe umbrella system	AT-114 or AT-139 (TS2-536)

Utility boom

Safety canopy	Fixed or sliding, FOPS approved
Spot lights	2 x 17 W LED
Remote control for spot lights	2 pcs
Rod racks	For 4 pcs of 10 or 12 ft rods
RX expansion bolt kit	D30 mm or D41 mm

Hydraulic system

*Filling pump for hydraulic oil	Manual
*Cooler for hydraulic oil	OA40 oil-to-air (3 x 40 kW)
Biodegradable oils	Sandvik hydraulic oils
Vacuum pump	For hydraulic oil
By pass hydraulic oil filter	

Control system

Access detector or protector	Specification TS2-211
User interface	2nd operator (standing)
3D scanning system	Requires iSURE IV (TS2-388)
GeoSURE	Requires iSURE IV (TS2-280)
iBOLT	Systematic Bolting
Data transfer	WLAN including remote GUI view

Cleaning system

Low pressure system with reel	Up to 15 bar (TS2-343)
High pressure system with reel	Up to 180 bar (TS2-343)

OPTIONAL ITEMS

Greasing systems

Manual system	Greasing unit with pump, reel and nozzle (TS2-463)
Automatic system	For carrier, boom, rod handler and utility boom (Lincoln)

Electric system

*Electric cables	Specification TS2-121
Spooling device for cable reel	For voltages 690 - 1 000 V
Ground fault and overcurrent unit	VYK
Electricity outlet in front carrier	2 x 110 V (15 A) or 2 x 230 V (16A)
Dewatering pump outlet	8 kW, 400 V, 50 Hz (incl. transformer) 8 kW, voltage 380 - 690 V (50 Hz)
Indicator light	For jacks up and down
Remote control for reel(s)	At rear machine
Working lights on boom support	2 x 170 W LED (2 x13 500 lm)

Air and water system

Air mist flushing kit	Ext. air / water supply (incl. IP5)
External air supply	IP5 air cleaner with connection
End of hole flushing	2 x 80 liters receiver with IP5
Water hose reel	THR5E + hose Ø45 mm (1 ¾"), 60 m
Water hose with hooks	45 mm (1 ¾"), 60 m
Water loss measurement system	

Operator's safety cabin

Reduced tramming speed	3rd gear lockout
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Fire suppression system

Manual or automatic system	Ansul (TS2-460)
Automatic system	Sandvik Eclipse™ (TS2-461)

Carrier

*Diesel engine	B6.7, 168 kW, Tier 4F, Stage V
Exhaust catalyzer	For Tier 3 engines
Rod rack on carrier side	12 to 21 ft rods
Power supply for MiniSSE	
Tramming cameras	Rear and side
Wheel chocks and holders	2 pieces

Extra items

Spare rock drill	RD535 or RD525
Spare wheel assembly	14.00-24 28RL
Special tools for rock drill	Field tool set, complete tool set
Tunnel laser set	
Documentation	Extra manuals
iSURE®	iSURE II Plus annual license (Advanced drill and blast design including round reports) iSURE III Premium annual license (MWD including pull out analyses) iSURE IV Pro annual license (Tunnel development KPI's)
Package: Country specific options	EUR package
Package: Automation package	Platinum level
Package: Anti-freezing	Block heater for engine, heater for hydraulic oil, water circuit flushing with air, antifreeze adding in water circuit.

**) Replaces standard feature*

AUTOMATION PACKAGE : GOLD (STANDARD)

Boom electric parallelism	
Drill plan visualisation on-board	
Display of drill bit location vs. given drill plan	
iSURE I Basic (Drill plan design)**	
Drill rig suitable with various navigation methods	
Advanced MWD data collection (iSure option)	
DrillConnect mobile application : Connectivity through Knowledge box™ for easy data transfer to and from the rig	

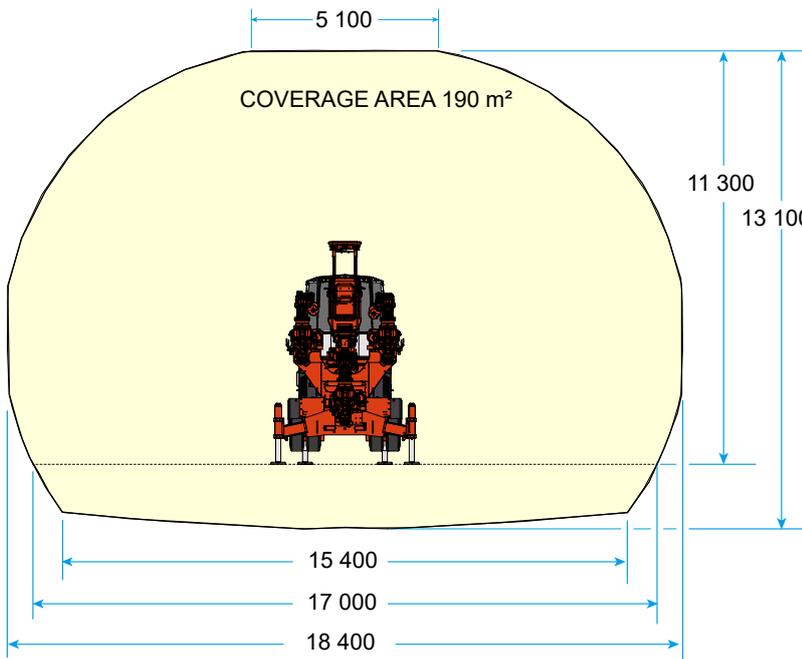
****) Licence for one year included*

AUTOMATION PACKAGE : PLATINUM (OPTION)

Automation Gold package content	
Semi-automatic face drilling	
Full automatic face drilling	

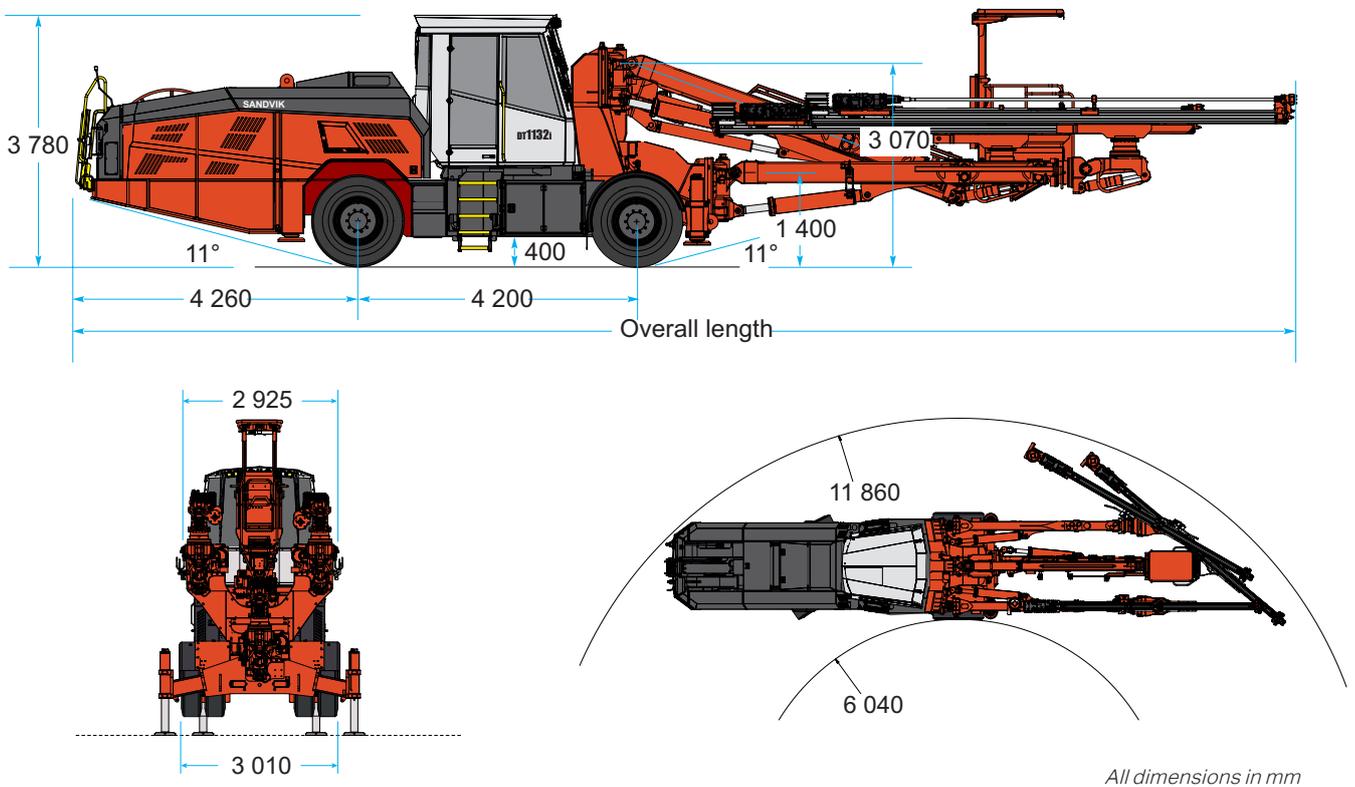
MAIN DIMENSIONS

The dimensions are indicative only - All dimensions in mm

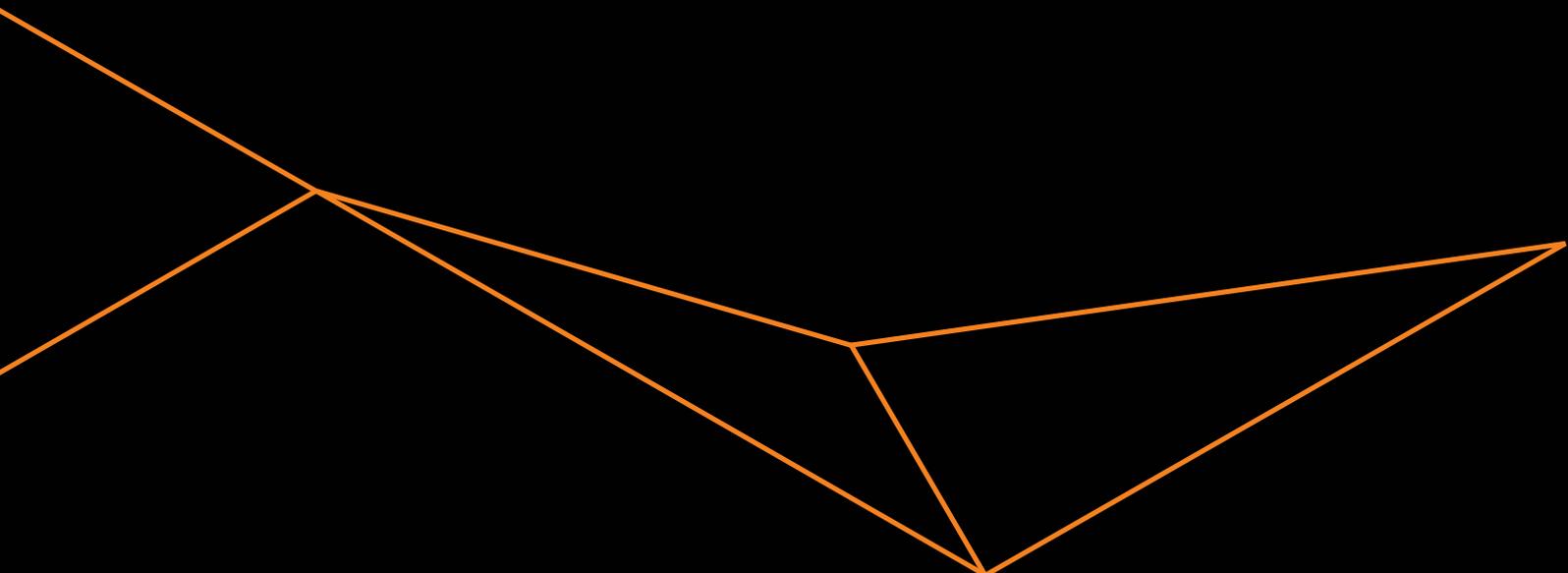


Width (W)	
Front frame with 4 x wheels	3 010 mm
Height (H)	
Cabin with lifting system	Min. 3 780 mm Max. 4 780 mm
Weight	
Total weight	50 000 - 56 000 kg depending on options

	TF535i-14'	TF535i-16'	TF535i-18'	TF535i-20'	TF535i-21'
Feed length	5 940 mm	6 550 mm	7 160 mm	7 770 mm	8 075 mm
Overall length	18 560 mm	19 160 mm	19 600 mm	20 360 mm	20 560 mm



All dimensions in mm



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