



*ROAD & CONSTRUCTION
RAIL & INFRASTRUCTURES
FOUNDRY & STEEL MILL
MINING & FORESTRY*



UDS 214
UDS 211
UDS 232

Multi-purpose telescopic excavator
on automobile chassis

UDS 211 Multi-purpose telescopic
excavator on caterpillar chassis

UDS 232 Multi-purpose telescopic
excavator on wheel chassis.





UDS 214

Multi-purpose telescopic excavator

is self-propelled multi-purpose landscaping machine mounted on automobile chassis TATRA 158 Phoenix (alternatively other type- MAN, IVECO, KAMAZ, KRAZ, MERCEDES, RENAULT). The machine is designed for finishing earthworks and excavation work, with the use of a suitable tool, it is also suitable for other work, such as dredging of base grooves and channels, building and maintenance of engineering networks, repairs of oil and gas pipelines.

Application:

- » Building and maintenance of infrastructure
- » Excavating and finishing earthworks
- » Cleaning of banks, rivers and streams
- » Road maintenance and drainage channels
- » Building of engineering networks
- » In unrestrained disasters and natural catastrophes

The great advantage of the machine UDS on the automobile chassis is:

- » fast deployment and movement also under extreme conditions
- » excellent machine passage even on heavy terrain
- » wide reach of the work tool
- » To operate and control the vehicle directly from the superstructure cabin
(with microtravel mode for works where frequent movement to the short distance is required)



Main advantages

- › Mobility
- › Working range
- › Microtravel
- › Rotating head

› **Mobility**

Telescopic excavator on automotive chassis, large working radius with fast moving between positions. Excellent passability in difficult terrain, thanks to the automobile chassis.

› **Working range**

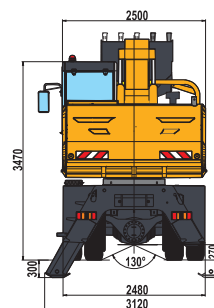
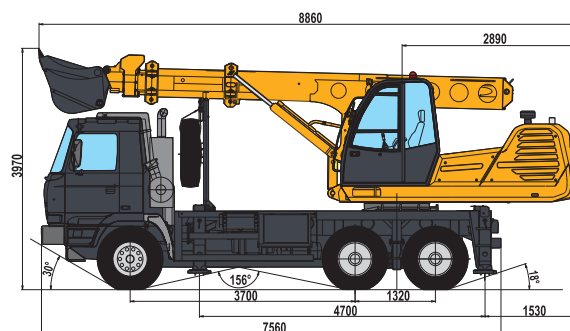
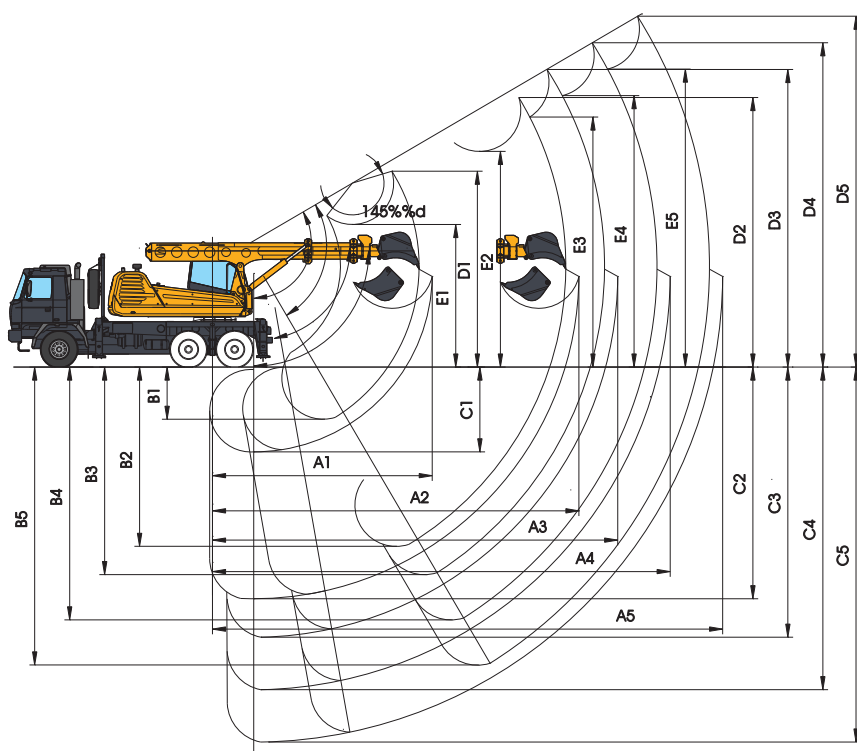
The unique construction of the telescopic boom with a sophisticated extension arms system allows to reach a horizontal range up to 14.6m

› **Microtravel**

The ability to control the chassis from the excavator cabin increases work productivity and UDS operability at the workplace. The movement, turning and stabilization of the machine is controlled by the operator without getting into the chassis cabin.

› **Rotating head**

The ability of rotating the tool in the full range $n \times 360$ degrees increases machine variability during excavation works or with the use of additional attachments, e.g. hydraulic hammer, mulcher, nippersetc.



Technical specifications

Working range

A Horizontal reach

A1 with retracted telescope	6,3m
A2 with extended telescope	10,5m
A3 with 1,5 m extension arm	11,6m
A4 with 3,0 m extension arm	13,1m
A5 with 4,5 m extension arm	14,6m

D Dumping height

D1 with retracted telescope	3,4m
D2 with extended telescope	5,5m
D3 with 1,5 m extension arm	6,6m
D4 with 3,0 m extension arm	7,4m
D5 with 4,5 m extension arm	8,2m

B Depth reach

(at telescopic arm range 0°, - 90°)

B1 with retracted telescope	2,9m
B2 with extended telescope	7m
B3 with 1,5 m extension arm	8,2m
B4 with 3,0 m extension arm	9,7m
B5 with 4,5 m extension arm	11,2m

E Height reach

E1 with retracted telescope	5m
E2 with extended telescope	7m
E3 with 1,5 m extension arm	8m
E4 with 3,0 m extension arm	8,7m
E5 with 4,5 m extension arm	9,5m

C Depth reach

(at telescopic arm range 30°, - 60°)

C1 with retracted telescope	2,1m
C2 with extended telescope	5,7m
C3 with 1,5 m extension arm	6,6m
C4 with 3,0 m extension arm	7,9m
C5 with 4,5 m extension arm	9,2m

Dimnnensions

» Machine length:	10200 mm
» Machine width:	2550 mm
» Machine height:	3900 mm
» Height of chassis above ground:	285 mm

Working parameters

» Output at shovelling (excavating):	115 m3.h-1
- retracted telescope:	7 000 kg
- extended telescope:	2 600 kg
» Maximum total excavating force from thrust and retraction of the boom:	85KN
» Load capacity on the tilting point of the telescope (without the use of extension arms)	
» Superstructure revolutions:	8 ot.min-1
» Tool revolutions:	20 ot.min-1
» Maximum travel speed:	100 km.h-1
» Climbing ability on a hard surface:	50,7 %
» Overall machine weight:	24 800 kg

TATRA 815 chassis

» Three axles, with permanent drive of both rear axles, with possibility to engage the front axle drive and differential closures. 6x6 drive, chassis engine output:	230 kW
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Superstructure engine

» Engine:	93 - 104kW pri 2200 ot.min-1
» General description:	compression ignition, four-stroke with direct fuel injection, in-line, vertical
» Cooling:	liquid-type with forced circulation and thermo regulator
» Lubrication:	engine oil circulation under pressure
» Number/ volume of cylinders:	4 / 4,5 dm3
» Hydraulic system:	REXROTH

Working equipment

A telescopic boom - basic working range:	+ 30°, -60°, when readjusted positioning arm: 0°, - 90° from the horizontal plane.
The range of tool tilting:	145°, 145°, both directional 360°rotation of the tool
Additional hydraulics:	for hydraulically controlled attachments is mounted in the working tool rotation circuit (as a standard for modification 41 and on request for modification 42) and enables the use of hydraulically driven attachments.

Operation modes of UDS 214 modification 41

The UDS 214 modification 41 machine can operate in two modes:

- » „WORK“mode - working with the superstructure
- » „DRIVE“mode - enables control of the auxiliary drive - microtravel (to cover short distance on site), as well as the stabilizing supports directly from the superstructure cabin, without the need to start the undercarriage engine.

The UDS 214 modification 42 is without microtravel function (auxiliary drive).

Hydraulic power units

» double hydro-generator A8 VO 107	
» gear hydro-generator 1PF 2G2 - 016:	non-regulatory
Distributors:	seven-circuit monoblock 7M8-22



UDS 211

The multi-purpose finishing machine on the caterpillar chassis is suitable for difficult terrain for precise finishing earthworks. It has an excellent stability and overcomes any terrain ruggedness. Thanks to our additional attachments, it has wide application in various areas, e.g. building sites, in quarries or in steel-mill plants.

Advantages of the machine:

- » Machine versatility thanks to additional attachments
- » Long working range up to 14.6 m
- » Deep countermine up to 90°
- » The tool can be rotated in the full 360 ° range
- » The unique in finishing earthworks



Basic parameters

Engine:	JohnDeere 4045 HF C04 93kW pri 2200 ot.min-1 EU STAGE4
Max speed:	3,7 km.h-1
Max horizontal reach:	14,6 m
Depth reach :	7 m
Output at shovelling (excavating):	115 m3.h-1
Weight:	18 000 kg



UDS 232

The multi-purpose finishing machine on wheel chassis that ensures perfect mobility and travel both on the road and on the terrain. The machine is suitable for precise finishing earthworks, in the final modifications in the contact of building site with the surrounding terrain. Thanks to the wide range of our additional attachments that allow that the machine can be used for various purposes. The machine is on a wheel chassis and is suitable for the forest, respectively finds its use in mining, extraction or petroleum industry, or at finishing earthworks.

Advantages of the machine:

- » **Machine versatility thanks to additional attachments**
- » **Long working range up to 14.6 m**
- » **Deep countermine up to 90°**
- » **The tool can be rotated in the full 360 ° range**
- » **Wide variability of the machine thanks to additional and attachment devices**

UDS 232

Mining



Basic parameters

Engine:	JohnDeere 4045 HF C04 93kW pri 2200 ot.min-1 EU STAGE4
Max speed:	25 km.h-1
Max horizontal reach:	10,5 m
Depth reach:	6,6 m
Output at shovelling (excavating):	115 m3.h-1
Weight:	18 000 kg



UDS 211

Foundry



Forestry

UDS 211



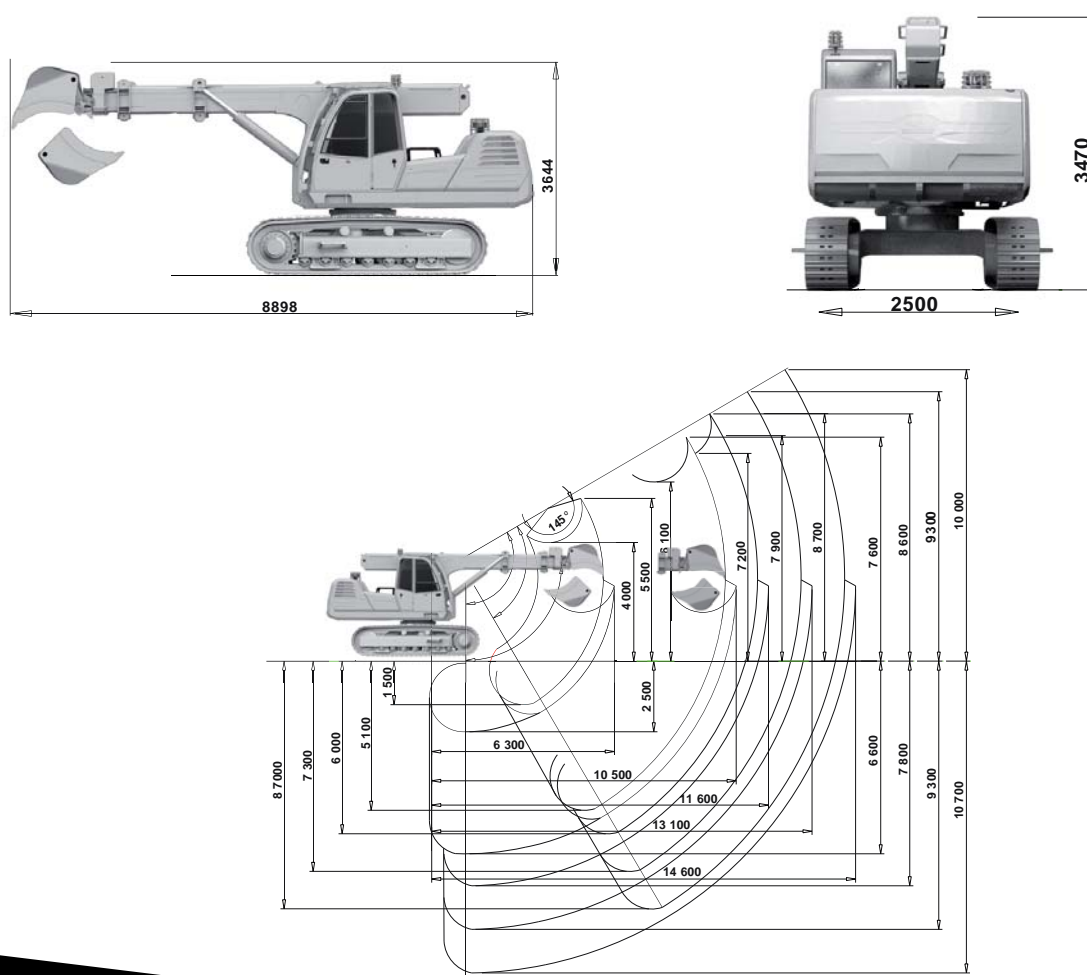
Road & Construction

UDS 211



UDS 232

Rail &
Infrastructures



Technical specifications

Weights and loads

Machine operating weight	17 300 kg \pm 3%	Force during telescope extension	78 kN
Front axle load	79 kN	Force during telescope retraction	68 kN
Rear axle load	99 kN	Rotation time of the superstructure by 360°	7,5 sec
Max. pulling force	100 kN	Rotation time of the tool by 360°	3,0 sec
		Auxiliary hydraulics - flow rate	210 l/min. pri 150 bar

Driving features

Steering axle	CARRARO ALPP 125
Max. transport speed	20 km/h
Front approach angle	26 °
Rear overhang angle	20 °
Longitudinal crossing angle	146 °
Lateral crossing angle	125 °

Working parameters

Maximum total excavating force from thrust and retraction of the boom	85 kN
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Downforce on the quick coupler:

» retracted telescope	60 kN
» extended telescope	40 kN
» with 1,5 m extension arm	35 kN
» with 3 m extension arm	30 kN
» with 4,5 m extension arm	27 kN
Tilting moment on the quick coupler	58 kNm
Max. Superstructure revolutions	8 ot./min
Max. Tool revolutions	20 ot./min
Conversion of the rotating head	1:37
Reduced moment on the tool axis rotation	5,5 kNm

Engine / JOHN DEERE 4045 HF C04

Number of cylinders	4
Volume	4,5 dm ³
Compression rate	17,0:1
Fuel consumption at work	219 \pm 2,5% g/kWh
Output at rated revolutions 2 200 ot/min	93 +5% kW

Hydraulic system

Travel / BOSH REXR0TH A6VM140HA1R2

Working hydraulics / BOSH REXR0TH A8V0140LAKH3

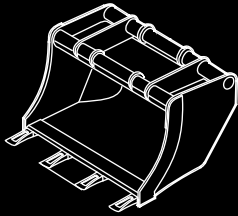
Electrical installation

Voltage of electrical equipment	24V
Ground pole	negative
Batteries 2, connected in series	6T 175 Ah

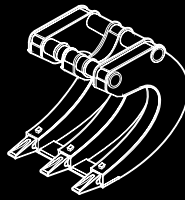
UDS 232

Wheel dual assembly	10,00-20 16 PR
Wheel disk	7,5 x 20

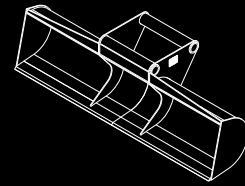
Additional attachments



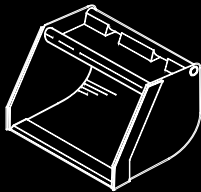
Shovel



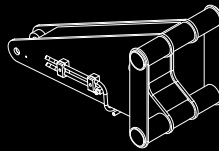
Pavement-tearing shovel



Leveling shovel



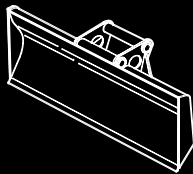
Tooth-free shovel 0,63m



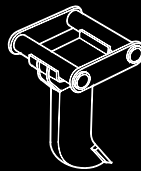
Clamshell shovel adapter



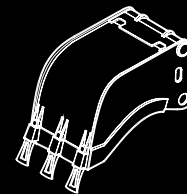
Rock Nippers



Ploughshare



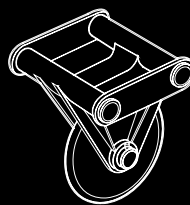
Scarifying Tool



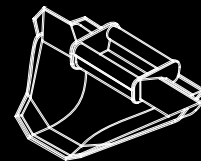
Drain drag shovel
0,4 m / 0,5 m / 0,65 m



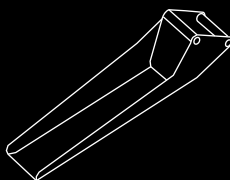
Nordstahl H7X / HRK 0800
hydraulic crusher adapter



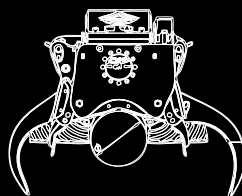
Asphalt cutter



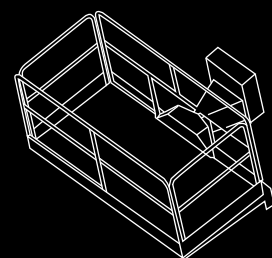
Profile shovel 0,35 m / 0,5 m



Mining adapter



Harvester



Workbench

UDS in the world

Slovakia
Czech Republic
Hungary
Poland
Ukraine
Serbia
Bosnia and Herzegovina
Russia
Greece
Lithuania

Belarus
Turkey
Kazakhstan
Azerbaijan
Uzbekistan
Turkmenistan
Iran
Iraq
Syria
Jordan

Libya
Lebanon
Israel
Kuwait
Qatar
United Arab Emireates
Egypt
Saudi Arabia
Eritrea
Angola



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