

UDS

DEFENCE



UDS 214
BELARTY
UPV R3000

Multi-purpose telescopic excavator
Universal demining machine
All-terrain vehicle





UDS 214

Self-propelled, multi-purpose landscaping machine mounted on TATRA T 815 721 chassis (alternatively other type chassis MAN, MERCEDES, RENAULT). The machine is primarily intended for support of engineer troops and finds its application wherever there is a need for immediate action to save lives and property, during natural disasters. It also plays an important role in military deployment, in securing technical means and structures supporting the operation of combat units.



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 Tatra chassis.

› **Working range**

The unique construction of the telescopic boom allows in the basic design horizontal reach 14.6 m.

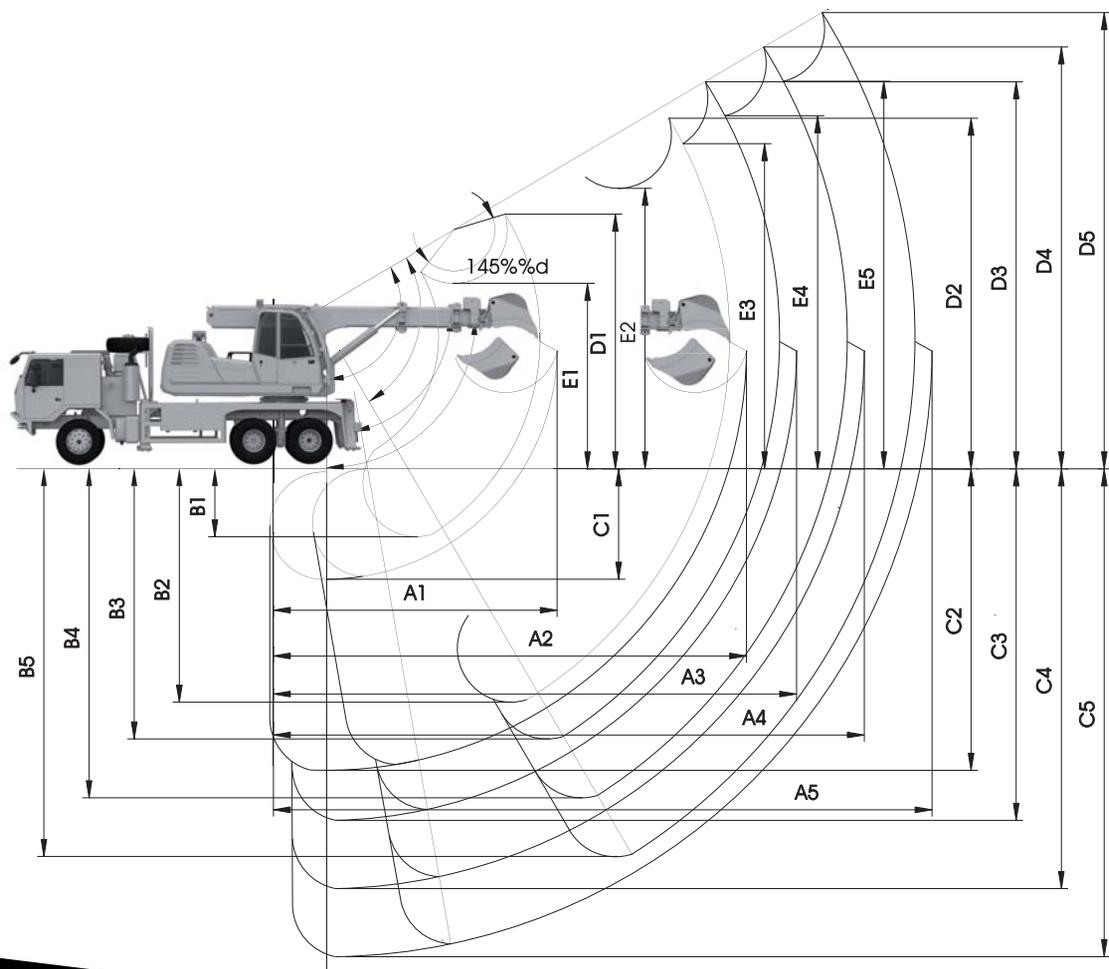
› **Microtravel**

The possibility of controlling the chassis from the excavator cab increases the work productivity and UDS operability in the workplace. An operator controls movement, turning and stabilization of the machine without getting into the chassis cab.

›

Rotating head

The possibility of rotating the tool in the full range of 360 degrees increases machine variability during excavation works or in the use of additional equipment, 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

Dimensions

» Machine length:	9450 mm
» Machine width:	2500 mm
» Machine height:	3980 mm
» Height of chassis above ground:	365 mm

Working parameters

» Output at shovelling (excavating):	115 m ³ .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 dm ³
» 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



BELARTY

Universal demining machine.

UOS 155 is special earth machine with mine clearing tank copying terrain surface. It consist of tank undercarriage T72 at which the armored superstructure of telescope excavator UDS 214 is installed instead of tank turret.

1. Demining of hard hard-to-reach places

Demining works by a telescopic boom allows the deblocking anti-tank mines even in hard-to-reach places and terrains such as slopes, ditches and light forest stands.

2. Protection and security

Machine robustness and delamination with the help of a boom provides protection not only the crew but also the engineers.

3. Versatility

In addition to demining works, the machine can also be used for earthworks with a full scale of additional UDS devices.



Technické špecifikácie

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D3 with 1,5 m extension arm	6,6m
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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

Working range with demining equipment

Horizontal reach	
M_z » with retracted telescope	8,4m
M_y » with extended telescope	12,5m
Depth reach	
N_z » with retracted telescope	4,1m
N_y » with extended telescope	7,7m
Výškový dosah	
V_z » with retracted telescope	8,6m
V_y » with extended telescope	10,6m

Technical specifications

» Output at digging(excavating)	115 m ³ /hod
» Maximum total excavating force from thrust and retraction of the boom	85 kN
» machine weight	38.400 kg

Demining by boom disengagement

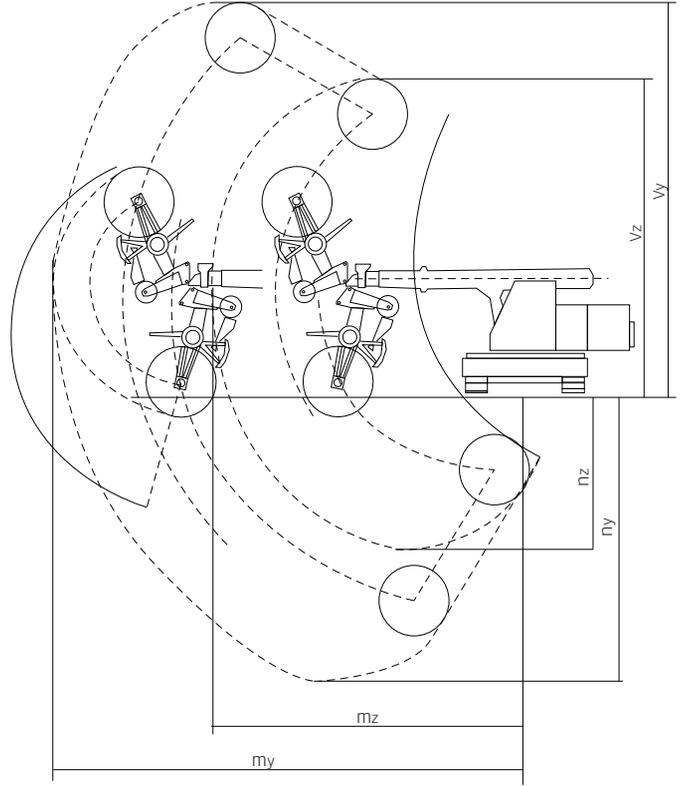
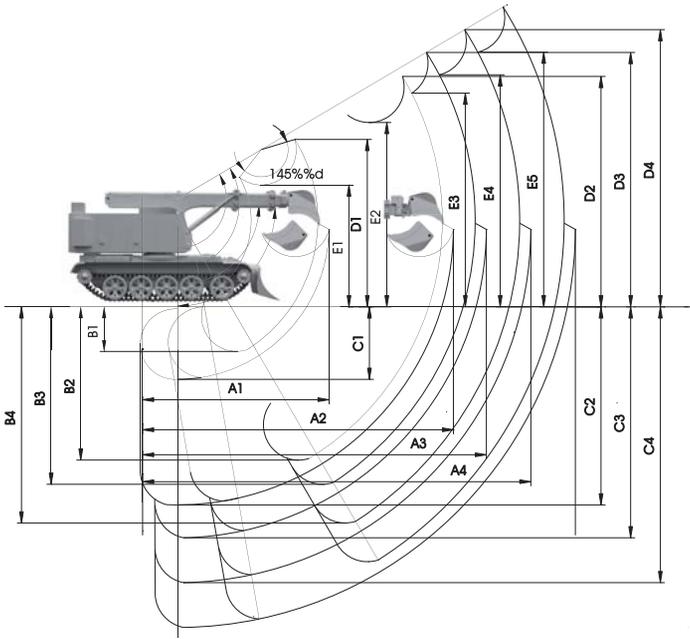
Max. movement velocity of demining device	250 m/hour
Max. demining performance	400 m ² /hour
Intensity of hammer strokes in machine movement direction	7 mm

Demining by machine travel

Max. demining velocity	8-10 km/hour
Intensity of hammer strokes in machine movement direction	280 mm

Mine clearing device

Circular diameter of activated flails	1.854 mm
Max. shaft revolutions	600 rpm
Power effect of activated flails	4000 N/one hammer
Width of shot mine cleaning device	2.987 mm





UPV R3000

All-terrain vehicle is designed for every terrain. It offers attractive powerful engine mix, live and maneuverable hydrostatic drive as well as extreme terrain performance. Thanks to the eight powered wheels and the lightweight bodywork has increased throughput in the field. In winter, the vehicle is equipped with special snow bands. Using additional work superstructures and attachments, the UPV R3000 has a wide range of uses in on any challenging terrain.

Engine

PERKINS 854E-E34TA:

Max transport speed :

Climb ability:

Nosnost

Operating weight of the machine

Machine length in transport position

Machine height in transport position

Machine width in transport position

75 kW / 2250 rpm

25 km/hour

40°

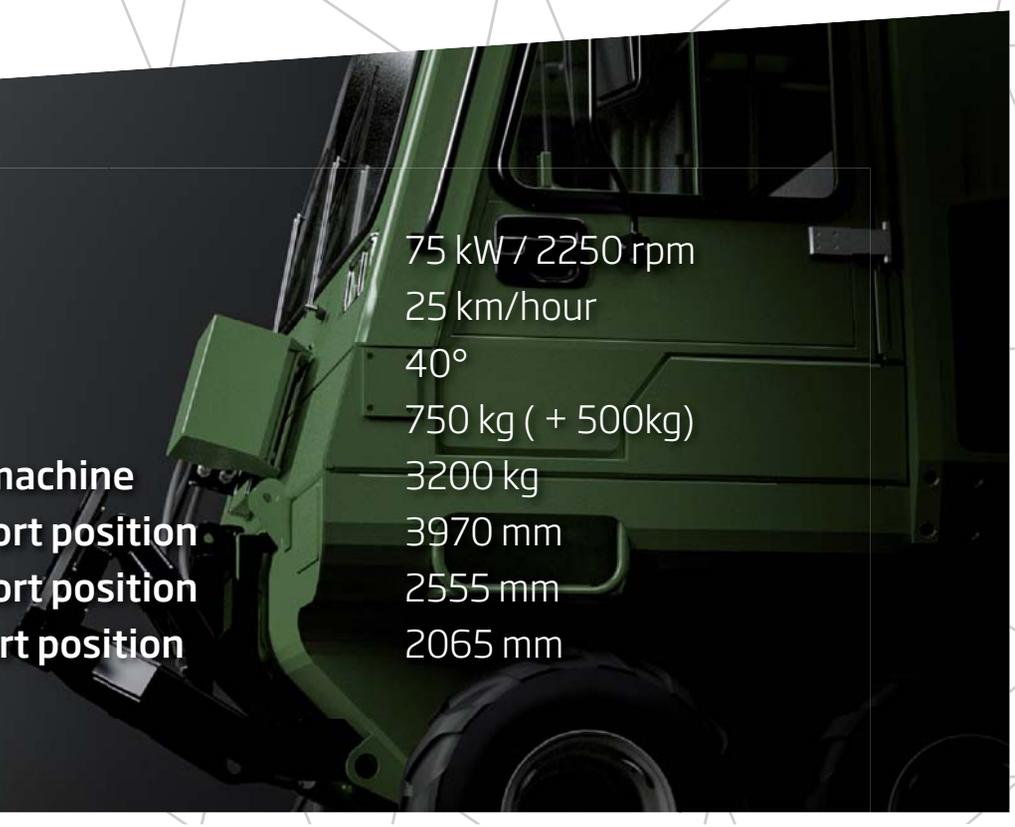
750 kg (+ 500kg)

3200 kg

3970 mm

2555 mm

2065 mm



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 Emirates
Egypt
Saudi Arabia
Eritrea
Angola



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