Humanitarian - BOZENA

Remotely controlled mechanical demining system — mini and medium class.

Humanitarian demining projects in more than 30 countries (more than 200 systems deployed), UN agencies, NGOs, NATO missions etc.
Total weight of BOZENA 5 system
12,340 kg

Engine
TATRA T3C-928-81 turbo
8 cylinder, diesel
with direct injection, air-cooled
Rated power output at 2,500 rpm 270kW / 362HP
Fuel consumption 35.0 l/h

Flail unit
Width of clearance 2.65 m
Soil depth penetration up to 30 cm
Operating RPM 350 - 500 min⁻¹
Driving speed max. 9 km/h

Working speed
Light soil / small vegetation up to 5,900 sqm/h
Medium soil and vegetation up to 3,100 sqm/h
Heavy soil / dense vegetation up to 1,500 sqm/h

Remote control
max. range 2,000 m

NSN: 1385-40-000-0616
Working tools

- Flail system

This working tool is designed to crush, destroy and collect CBU's from the solid surface (airfield) without any damage of surface which delivers armor installed collector that is available as a part of entire Flail Collector. The height of tool is adjustable to effectively strike all residues just above the surface — ground level. The rotation of flail shaft is bi-directional.
CBU Collector & Dispenser Attachment is a special auxiliary attachment designed for clearance of airfield runways in case of contamination as a result of Cluster Bomblet Units (CBU), alternatively Improvised Explosive devices (IED) and Unexploded Ordnance/Unexploded Bombs (UXO/UXB).
Working tools

- **CBU Collector & Dispenser**

This attachment is capable to clear at the speed up to 9 kph approximately 40,000 – 50,000 m² in 1 hour of operation. At the speed of 6 kph is competent to de-contaminate approximately 36,000 m² in one hour. CBU Collector & Dispenser Attachment contains 3 brushes with bi-directional rotation, bucket for collection and dispense of accommodated CBUs.
Special devices

• Video Surveillance System

The operator is able to monitor and check surrounded area of the vehicle as well as working tools/attachments to keep situational awareness of the operator, using protected lights, PTZ and fixed cameras that are easy to change in case of damage. The cameras are supported by IR (Infra-red) capability and additional illumination.

Placement and performance:
• PTZ surveillance cameras placed on the top of the vehicle are able to read a 2 inch marking from a distance of 50 meters in zoom mode, with covering the view of 360° by combination of front, rear and side cameras.
• Stationary tool cameras are capable to monitor entire spectrum of tool operations.
• An additional camera behind the collector is fitted for locating the dugout pit before dispensing the collected CBU’s / UXB.
Special devices

- GPS Navigation Aid

The vehicle is equipped with following sensors for aid of the operator:
- GPS with embedded maps and Navigation Aids.
- Vehicle surround sound.
- Vehicle pitch and roll angle sensor.
- Hydraulic pressure sensors in different critical areas.
- Fuel level sensor.
- Hydraulic oil level sensor.
- Temperature sensors for hydraulic system and engine.
- RPM sensors for various tools / attachments and the engine.
- Distance sensor for tool clearance from the ground or target UXB / CBU.