

Indigenously Produced **UXOR Robot**



Unexploded Ordnance Handling Robot

Designed for high-stakes missions, the UXOR is your frontline solution for neutralizing unexploded ordnance (UXO) with maximum safety and operational efficiency.

Overview

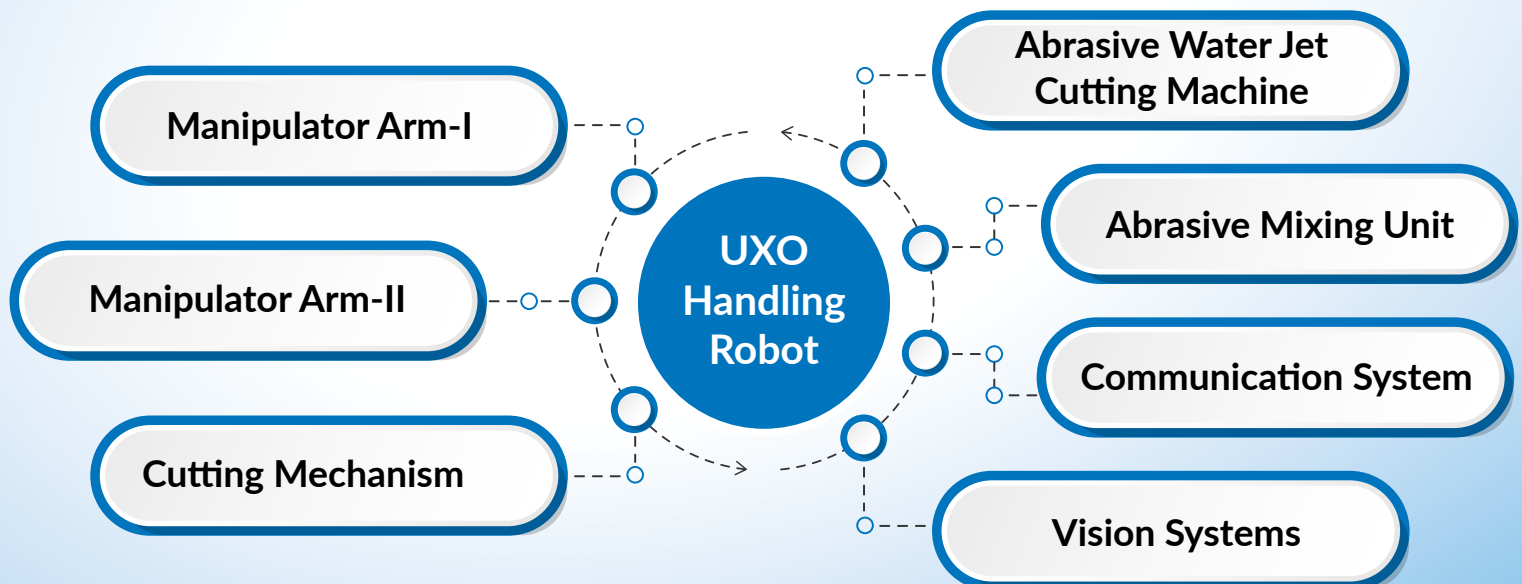
The UXO handling Robot (UXOR) is a remotely operated vehicle used to handle and defuse Unexploded Ordnance (UXO) up to 1000 kg remotely from a distance of 1 km Line of Sight. The UXOR system consists of Robot, container based Master control station and carrier vehicle. The UXOR is based on a skid steer loader platform with seven axis manipulator arm and Abrasive Water Jet Cutting machine, which can cut through the steel casing of UXO. It can be transported to the site on a specially designed Carrier Vehicle cum Master Control Station.



UXO Handling Robot

UXO handling Robot is based on skid steer platform, which is converted for drive by wire for remote operation. Skid steer platform's loader arm is termed as Manipulator Arm-I for handling UXO weighing up to 1000 kg. A 7-axis manipulator namely Manipulator Arm-II is mounted on this platform on which end effectors are cutting mechanisms and gripper. This multi-axis manipulator is used to lift UXO and bombs weighing up to 20kg. Cutting mechanism mounted on this manipulator. It can be aligned towards UXO using different joints. UXO handling Robot also carries Abrasive water jet cutting machine and high pressure hose to nozzle mounted on cutting mechanism, which performs the actual cutting operation of UXO.

UXO handling Robot being a skid steer platform can turn on the spot. It has maximum speed up to 9 kmph on flat hard surface. UXOR is provided with 300 litre water for cutting operation. Cameras and night vision devices are placed at suitable positions so that operator can move the platform remotely by viewing through cameras.



Carrier Vehicle Cum Master Control Station

The Carrier Vehicle of UXOR is specifically designed for transporting UXOR from one location to another.



Major Sub-System of Carrier Vehicle

Base Platform 8 x 8

Hydraulically Operated
Rear Door Cum
Ramp Assembly

Platform Base Structure Assembly
And Collapsible Canopy Assembly

Water Tanks

5 KVA Single Phase
Genset

Applications

Handle,
Defuse Bombs
& Missiles on
Runway Strips

01

Handle,
Defuse Bombs
Buried During
War Time

02

Handle,
Defuse
unexploded
Bombs, Mortar
& Missiles

03

Handle,
Defuse Expired
Bombs &
Missiles

04

Features

Capable Day, Night &
All Weather Operation

Profile Cutting
Customized

Location Identification
Using UAV

Platform
Skid Steer Loader

Mobility
Cross Country

Can Operate
Submerged Explosive

Audio & Video
Real Time

Transportation
Carrier Vehicle/ Air Lift

Specifications

Explosive Lifting capacity
1000 Kg

Operation Range
1 Km (LOS) Remotely

Endurance
6 hours

Power Backup
16 hours

Cutting Thickness
50 mm

No. of Cameras
13

Operating Temperature
20°C to +55°C

Manipulator Arm
02 Arms (7 DOF & 3 DOF)

Why Choose UXOR?

When it comes to EOD operations, reliability and safety are paramount. UXOR combines military-grade engineering with state-of-the-art technology to deliver a robust, efficient, and adaptable solution for UXO handling and neutralization.



Equip. Execute. Neutralize.



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