



UNITED STATES DEPARTMENT OF DEFENSE

HUMANITARIAN DEMINING R&D PROGRAM

Remote controlled demining excavator for area preparation and clearance tasks

REX

The REX is a small, light weight (8 ton class), armored excavator designed to clear vegetation, reduce obstacles, and mechanically remove and neutralize anti-personnel (AP) landmines and unexploded ordnance (UXO). The HD R&D Program developed and integrated two important modifications to the commercial Terex TC75 excavator to create the REX. These include the addition of remote control and armor protection for the operator when manually operated. The REX features several attachments including sifting buckets, a grinding bucket, a vegetation cutter, a grapple and standard excavating buckets.

STATUS

Cambodia: REX completed an operational field evaluation with the Mines Advisory Group (MAG) in 2014, during which the system cleared over 118,700 m² of mine-suspect area while clearing 51 mines and UXO.

Angola: An operational evaluation with MAG began in February 2016, where the REX has cleared 188 mines and UXO over 118,300 m² to date.

Sri Lanka: MAG and The HALO Trust are conducting a joint evaluation to maximize utilization of the REX. The two NGOs have cleared a combined total of 62 mines and UXO from over 220,271 square meters to date.



REX with its mine sifting bucket attachment in Angola during initial operator training with MAG deminers

Cutting-Edge Solutions
DEMINING TECH
MINE CLEARANCE & AREA PREP



FEATURES

- Remote-controlled operation with video monitoring
- Manual operation capability
- Reach-in technology allows for safe operation of vehicle without entering the minefield
- Small, robust remote allows easy operation
- Excavator platform allows tailored tool options, including vegetation cutting, obstacle removal, excavation, sifting, and grinding



REMOTE VIDEO STATION



TRENCH DIGGING



ALPINE GRINDING ATTACHMENT



RIDDLE SIFTING ATTACHMENT

SPECIFICATIONS

Operating Weight	7,750 kg (17,086 lb)
Width	2.30 m (7' 6")
Min Height	4.30 m (14' 3")
System Pressure	280 bar (4060 psi)
Diesel Engine Power	53 kw (72 HP)
Fuel Capacity	140 L (34 Gal)
Max Travel Speed	5.2 km/hour
Vegetation Cutting Capacity	20 cm
Hyd Flow Rate	27 GPM
Max. Remote Control Distance	1000 m
Transit/Operational Speed	2.7 Km/hour
Max Dig Depth	4.44 m (14' 7")
Max Reach	7.44 m (24' 5")

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