

RXR-YM100000D-AHHC

Fire Exhaust and Fire Fighting Robot

It is an intelligent multi-functional fire robot with functions such as smoke exhaust, fire fighting, air supply, cooling, dust removal, obstacle clearance, environmental detection, image acquisition, wireless information transmission, and self-walking over obstacles. It can replace firefighters in dealing with fire accidents. It can be applied to road tunnel fires, underground facilities and freight yard fires, large-span space fires, petrochemical oil depots and refinery fires, large-scale toxic gas and smoke accidents, and fire fighting and rescue where personnel are not easy to access. It can also be used in decontamination operations when hazardous chemical disasters cause serious environmental pollution.

Widely applied in:

- Large-scale toxic gas and thick smoke accidents
- Underground facilities and freight yards
- Petroleum oil depots
- Highway (railway) tunnels



CHASSIS PARAMETERS

Machine weight	5000kg
Overall dimensions (L* W*H)	3375*1900*2711mm
Driving speed	0-6km/h
Engine power	104kW
Hydraulic oil tank capacity	160L
Climbing ability	35°
Side tilt stability angle	35°
Max. wading depth	400mm
Obstacle crossing ability	200mm
Turning performance	Can turn 360° in place
Traction force	≥30kN
Min. ground clearance	≥230mm
Remote control distance	1000m
Hose dragging capacity	4 pieces of 100 m DN80 water hoses

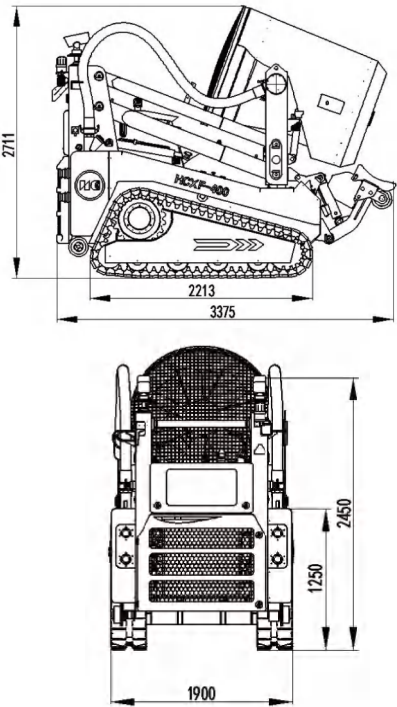
SYSTEM PARAMETERS

Rated working pressure	Water ≤1.2 MPa
Range	Water ≥60 m
Flow rate	≥80L/s
Pitch angle of the fire cannon	-20°~40°
Water mist	10L/s
Max. smoke exhaust volume	≥100000m³/h
Pitch angle of the fan	-20°~40°
Max. lifting height of the fan	3800mm

ACCESSIBILITY PARAMETERS

Angle of the pushing shovel	0~40°
Lifting height of the rear camera pan-tilt	4400mm
Slewing angle of the rear camera pan-tilt	360°
Pitch angle of the rear camera pan-tilt	-40°~28°
Lifting height of the spotlight pan-tilt	4400mm
Slewing angle of the spotlight pan-tilt	360°

SIZE



PRODUCT ADVANTAGES

- It adopts the design of a triangular tracked carrier mechanism to improve the walking stability of the robot.
- The power system is designed with a diesel engine driving a dual-variable pump, which provides strong power and a long endurance capacity.
- The wind cannon adopts the design of a hydraulic lifting and pitching mechanism, which can spray fine water mist for multi-dimensional fire-fighting smoke exhaust and eliminate toxic and harmful smoke particles. The design of an intelligent linkage hidden independent water cannon is not affected by water pressure, which improves the fire fighting efficiency.
- The front end of the robot is equipped with a pushing shovel device, which can be used for obstacle clearance work in complex fire scenes.
- External rescue devices such as a hydraulic shear with a working pressure of 60 MPa can be quickly installed, which reduces the rescue difficulty and improves the rescue efficiency.
- The system adopts a high-temperature resistant design and is equipped with multiple sets of self-spraying cooling devices.
- The closed fan drive and the load-sensitive interlocking dual-circuit hydraulic system have high transmission efficiency and generate less heat.
- The electro-hydraulic combined servo control system can precisely control the robot to walk in a straight line.