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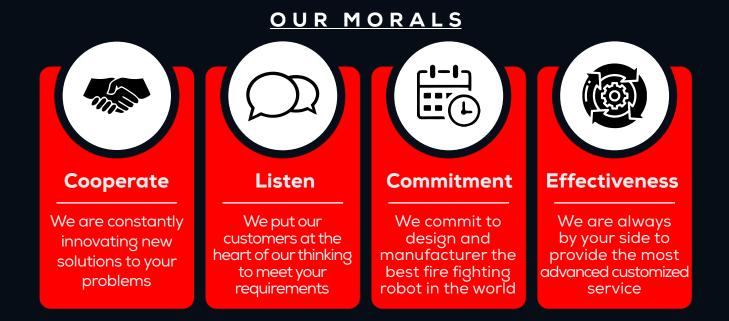
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# FIREFIGHTING ROBOTS MANUFACTURING

The first company with a Arabian investment Since its inception, the company has sought to manufacture, design, and assemble robotics technologies, with a focus on attracting local and international competencies and expertise, inspired by its vision from the passion of the company's founding team, and the company's investors' aspiration towards local Arabian technical content.



## WITH THE DIVERSITY AND MULTIPLICITY OF TYPES OF FIRES

- Whether in warehouses containing highly flammable goods
- Or those with toxic substances or those that affect human life, or those that contain fuel tanks and others
- In the worst cases and scenarios, the fire takes a heavy toll financially and leads to loss of life

### So

- Robots are the best possible way to protect the lives, wealth and surroundings of humans
- Using robots makes it easier and safer for firefighters to put down developed fires

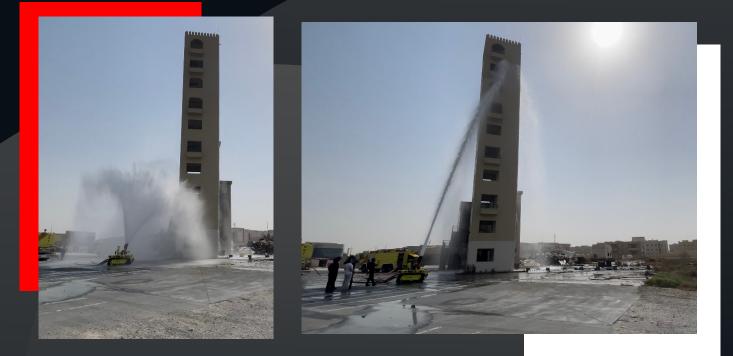
# OUR ROBOT IS SUITABLE FOR FIRE FIGHTING EXTREMELY DANGEROUS SITUATIONS

- Ammunition stores explosions
- Poisonous Chemical Fires
- Nuclear rectors with radio active materials fires
- High temperatures oil companies fire
- collapsing buildings dangerous fires



#### Oil & Gas companies safety

WABEL-8000 is a remotely operated robot with enhanced navigation capabilities designed to assist fire-fighters during operations. Its primary function : To strengthen the safety of fire men, Assist them with dangerous, difficult and physically demanding tasks. FFB-8000 is designed and Manufactured in DUBAI, United Arab Emirates.



- Flow Rate 8000 LPM.
- 6 cameras covering 4 directions
- Thermal Camera for detecting fire
- Control Range up to 1000 meters
- GPS system build routing and maps for robot location and facilitate navigation
- 4 port breeching inlet
- Top sprinkler and front sprinkler act as a shield to protect robot from heat radiation and the flames





# WABEL-8000 SPECIFICATION

WABEL-8000 Robot can work indoor and outdoor

Flow Rate 8000 LPM

Total Weight 1100 KG Carry up to 300 KG

Climb up the stairs up to 25 Degrees\*

4 speeds selectable up to 3 KM/H

Controlled wirelessly by control station

Control Range up to 1000 meters

Full Control using Industrial Remote Control

6 cameras covering 4 directions (front - back - right-left)

Thermal Camera for detecting fire sources inside smoke

Dedicated Camera for extinguisher target direction

Inbound Audio Channel Enables The controller to hear sounds around the robot

GPS system build routing and maps for robot location and facilitate navigation

Digital Compass acknowledges the Operator with Robot (Yaw - Pitch - Roll)

15 Temperature sensing points for motors - Battery - electronic components - robot body - outer temperature

Powerful front flash lights & water monitor lights enables the controller officers see clearly during the heavy smoke

Emergency Flashing Orange and Red Lights encourages the viewers to have caution

Siren for Audible warning that helps locate the robot in smoky or low visibility places plus warning the inhabitants with fire existing



## **Civil Defence**

WABEL-4500 is a remotely operated robot with enhanced navigation capabilities designed to assist fire-fighters during operations. Its primary function : To strengthen the safety of fire men, Assist them with dangerous, difficult and physically demanding tasks. FFB-4500 is designed and Manufactured in DUBAI, United Arab Emirates.

- Flow Rate 4500 LPM.
- 6 cameras covering 4 directions
- Thermal Camera for detecting fire
- Control Range up to 1000 meters
- GPS system build routing & maps for robot location and facilitate navigation
- 2 port breeching inlet
- Top sprinkler and front sprinkler act as a shield to protect robot from heat radiation and the flames



**Uses Foam & Water** 



# WABEL-4500 SPECIFICATION

WABEL-4500 Robot can work indoor and outdoor

Flow Rate 4500 LPM

Total Weight 700 KG Carry up to 500 KG

Climb up the stairs up to 28 Degrees\*

4 speeds selectable up to 3KM/H and 5 KM/H

Controlled wirelessly by control station

Control Range up to 1000 meters

Full Control using Industrial Remote Control

6 cameras covering 4 directions (front - back - right-left)

Thermal Camera for detecting fire sources inside smoke

Dedicated Camera for extinguisher target direction

Inbound Audio Channel Enables The controller to hear sounds around the robot

GPS system build routing and maps for robot location and facilitate navigation

Digital Compass acknowledges the Operator with Robot (Yaw - Pitch - Roll)

15 Temperature sensing points for motors - Battery - electronic components - robot body - outer temperature

Powerful front flash lights & water monitor lights enables the controller officers see clearly during the heavy smoke

Emergency Flashing Orange and Red Lights encourages the viewers to have caution

Siren for Audible warning that helps locate the robot in smoky or low visibility places plus warning the inhabitants with fire existing



# **TROLLEY-1000 SPECIFICATION**

Trolley-1000 Robot can work indoor and outdoor

Total Weight 500 KG Carry up to 1000 KG

Climb up the stairs up to 28 Degrees\*

4 speeds selectable up to 3KM/H

Controlled wirelessly by control station

Control Range up to 1000 meters

Full Control using Industrial Remote Control

6 cameras covering 4 directions (front - back - right-left)

Inbound Audio Channel Enables The controller to hear sounds around the robot

GPS system build routing and maps for robot location and facilitate navigation

Digital Compass acknowledges the Operator with Robot (Yaw - Pitch - Roll)

15 Temperature sensing points for motors - Battery - electronic components - robot body - outer temperature

Powerful front flash lights enables the controller officers see clearly during the heavy smoke

Emergency Flashing Orange and Red Lights encourages the viewers to have caution

Siren for Audible warning that helps locate the robot in smoky or low visibility places



# **CONTROL STATION (i72) SPECIFICATION**

#### **PROCESSING UNIT**

Processor : Intel Core i7 8-Core (10th Gen) RAM: 16GB DDR4 Hard disk: 512GB M.2 Solid State Drive

#### DISPLAY

2 Screens Each 24 Inch with high and low brightness mode plus eye saver mode. 2 Black Board tablet for notes taking and reading with writing pen and eraser Interface

#### **PORTS**:

4 Ports (USB2) with adaptors to (VGA - HDMI - Lan - RS232 - Serial - Audio - WiFi) 2 Ports Super Speed (USB 3.2). DC Charging port 29.4v 15A.

#### **HUMAN-COMPUTER INTERACTION:**

Industrial control keyboard. Industrial control NumPad. Industrial control touch panel. 3 Analog joysticks each with 2 Top Digital Buttons. Customizable 24 Digital buttons. Customizable 8 Analog Potentiometer. Customizable 8 power button.

#### WIRELESS

Two ways Digital Data Link ( Signals frequency 2.4 Ghz). Advanced Encryption Algorithm. Three Video Stream Links ( Signals frequency 5 Ghz).

#### SECURITY

RFID Access control. Password Login with Advanced Data Encryption algorithms. Battery And Power Unit

#### **BATTERY ENDURANCE**

Time: 12 hours Battery Capacity 30A. Display content Current voltage, current remaining capacity. Management system protection, Over current protection, over voltage protection, low voltage protection, over capacity protection, over power protection. Battery protection Over current protection, over temperature protection, over voltage protection, low voltage protection. Case And Protection

#### **BOX TYPE:**

Military waterproof safety box Six Press & Pull Latches Lightweight Strong HPX® Resin Two Double-layered, Soft-grip Handles Vortex<sup>™</sup> Valve Two Padlockable Hasps Powerful Hinges O-ring seal Case Dimensions: 119.9 x 41.9 x 17 cm Overall weight: 26 KG Operating temperature: -10 ° C to 60 ° C Color Type: Matte Black Operation panel : Panel material 3K carbon fiber plate Other Equipments

#### INDUSTRIAL COOLING FAN.

Temperature and Humidity Sensor. High Quality Speakers. Adjustable Screen Angle. Blue Back Lights for clear vision and night.

## We have experience and ability in design and manufacturing Specialized in manufacturing fire fighting robot technologies



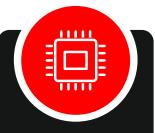
## **Mechanics**

By designing the mechanical parts ourselves, we push the boundaries of optimization, enabling us to offer the most compact and efficient robot on the market



### Software

We also designed the software that drives the robot and are constantly adapting it to the specific operational requirements of each of our customers



### Electronics

We've designed a computer optimized specifically for the uses and limitations of our bot. It allows full control of every function of the robot according to the wishes of our customers



### Support

We care about supporting our customers before, during and after their robot purchase. That's why we've developed a suite of programs and processes to improve pre- and post-sales support







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