

Technical specification for firefight monitor  
Installed on upper level of Jetty 2 Eilat

EAPC wants to purchase and replace the firefight monitors that cover the upper level of jetty 2 in Eilat. Hence, the need for a price offer for a firefighting monitor as described in the following specification.

Firefight monitor material resistant to seawater and all existent foam additive by means of material properties and not by some kind of inner coating.

Remote controlled firefight monitor allowing following movements:

- horizontal swivel movement (355 degrees)
- at least 60 degrees up and down movement
- jet spray
- Speed of swivel and up-down movement around a four (4) degrees / min change, Jet – Fog change in seconds, definitely less than one minute.

The movement shall be executed by means of ATEX zone 2 suitable electrical motors.

Each action should have a limit switch or a suitable device that stops the motor movement when reaching the physical end of run.

The supplier will include external dimensions and envelope of safe movement for the monitor, to be checked on the installation site.

The remote control panel will be fixed, located about 300 meters from the monitors that are mounted on towers on the upper level of pier 2, near the FF pumping units.

The cables will be supplied and installed by EAPC and are not part of the offer, but the supplier will present a connection diagram.

The control panel will include six (6) handles, three handles (3) for each monitor, with the following position switches:

- Swivel movement: South / Stop / North
- Vertical movement: Up / Stop / Down
- Fog - Jet : Jet / STOP/ Fog

The control panel should allow for a RF mobile remote control connection that can command the monitors after a suitable switch enables that from the main control panel. Range of the RF mobile remote control should be mentioned in the offer, as the correspondent RF station will be located in the main fixed control panel

the offer will include jet coverage graph and an expected recoil force mentioned.

The monitor shall be designed as a 90 degrees elbow, at the lower part, a flange connection and anchor points to neutralize the recoil effect, upper part to be free to swivel as mentioned before.

The producer will mention the size of the anchor points needed for firm anchoring of the monitor in its offer.

Mechanical connection to a 4" #150 flange according to ASME B16.5.

Required minimal flow of 2500 l/min at pressure of 7 bar.

The monitor body shall be designed to a minimum 19 bars operational pressure.

## **APPROVALS AND LISTING**

1. The proposed monitors in combination with the nozzles shall be UL listed and FM approved. The electric system shall be ATEX zone 2 approved
2. Eur1 or US Certificate of Origin will be required

### **1. GUARANTEE**

- 1.1. The supplier guarantees that the equipment furnished is free from faults in design, workmanship and material, and is of sufficient size and capacity to meet the requirements of this specification.
- 1.2. Should any defect in design, material, workmanship, installation or operating characteristics develop during the first year of operation, the supplier agrees to make all necessary or desirable alterations, repairs and replacement of equipment, free of charge.
- 1.3. Vendor is required to keep in stock a sufficient number of spare parts for all components.
- 1.4. Vendor is required to supply spare parts for service within 48 hours upon request.

### **2. DATA TO BE SUBMITTED WITH OFFER**

- Data sheet
- Complete and detailed technical description of monitor and nozzle (including dimensions & weight )
- Complete and detailed technical description of remote control including wireless remote control
- General arrangement drawings with foundation requirements and process connections, including material specification.
- Characteristic curve (range of jet versus pressure, vertical angle and flow rate).
- Total Static Pressure Drop & Friction Loss curves versus flow rate.
- Instructions for installation, operation and maintenance.
- Reaction forces.
- Material specification for main parts.
- Itemized price list of recommended spare parts for two years.
- Catalogues.

**BILL OF QUANTITIES**

<b>EAPC Firefighting monitor for jetty 2</b>					
<b>Item</b>	<b>Type</b>	<b>Size/Class/ Ends</b>	<b>Qty</b>	<b>Unit Price</b>	<b>Total Price</b>
1	Firefighting monitor	UL listed and FM approved, end connection flanged according to ASME B16.5 4" class 150.	2		