



NAFFCO JET TURBINE (NJT)

WORLD'S MOST POWERFUL
FIREFIGHTING TURBINE



www.naffcoaviation.com



NAFFCO Aviation is a division of NAFFCO Group worldwide specialized in mobile services solutions system for Civil & Military Airports.

With the most talented and dedicated employees from around the world, NAFFCO has over 15,000 team members including 2,000 passionate engineers and over 8.5 million square feet of manufacturing and services facilities, we are currently exporting globally to over 100 countries.

In recognition of our outstanding growth and commitment to quality, we have been certified with AS9100 quality management system for aerospace industry and awarded with the prestigious MRM Business Excellence Award for four consecutive years in areas including manufacturing and exports.

With your continued support and trust, NAFFCO is now poised to further grow its international network. To that end, we appreciate your business and your commitment to safety in the workplace and look forward to serving you for decades to come.



NAFFCO JET TURBINE (NJT)

WORLD'S MOST POWERFUL FIREFIGHTING TURBINE

NAFFCO Jet Turbine is equipped with a CIVILIAN AIRCRAFT ENGINE coupled with spray jet monitors for fire suppression, fire fighting, 3D cooling & Ventilation purpose. It is developed on a German based technology while putting research & development of over 20 years.



TECHNOLOGY

NAFFCO Jet Turbine "civilian aircraft engine is coupled with two water monitor in the top. The swirling of air water mixture creates trillion of small water droplets with a sizing of 400 μm , which are transported over a very long distance & rain down in a targeted manner with high precipitation.



AREAS OF APPLICATION:

Industrial



Tunnels



Oil & Gas /
Petrochemical



Civil Defense



Ports / Sea Ports



Wild Fire



NAFFCO JET TURBINE ENSURES:



Precipitation of
toxic clouds



Dilution of toxic
gases

Washing out of
hazardous gases



Cooling of 3-D
objects



Direct cooling

Shielding by water
curtain



Firefighting



Fires and wildfire

Pool fires



Pressurised
ventilation



Large storage
buildings



Large-scale
disinfection



Decontamination



KEY COMPONENT



NJT4000 Mount

Pivoting range of the mount:

- 290 ° horizontal plane (from right to left)
- + 60 ° vertical plane upwards
- - 10 ° vertical plane downwards

Jet engine

The box is equipped with a civilian turbofan engine that is used worldwide in aviation and has been approved by the manufacturer for diesel operation.

Water management

The water supply is provided by means of an A or two B hoses outside the box.



Fuel system

A 1,200 l fuel tank is installed. The fuel consumption of the engine is approx. 450 - 500 l/h. This means that the box can be operated for at least two hours without refueling. (On-board refueling system optionally possible).



Construction

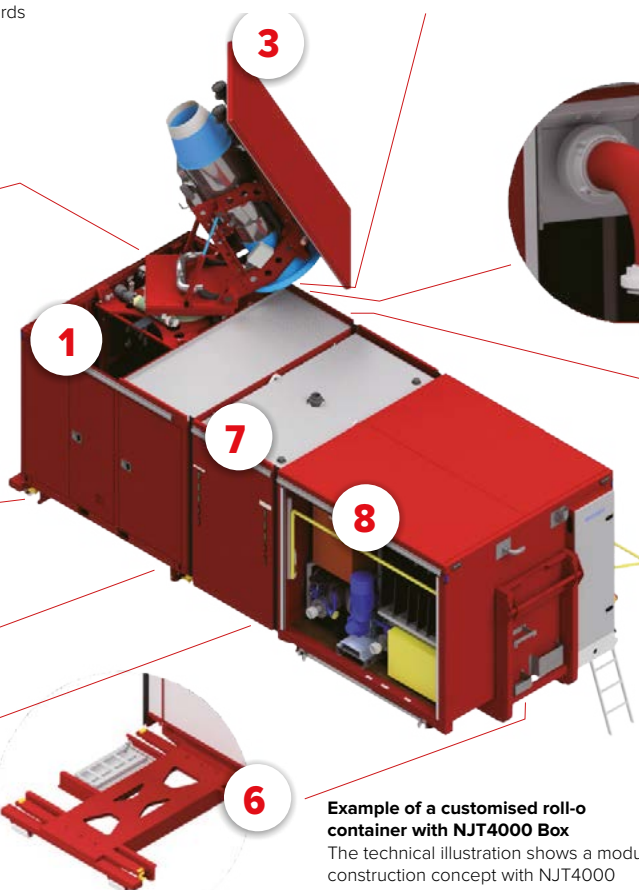
The box impresses with its solid steel and aluminum construction in container design.

Pump unit

Fire-fighting centrifugal pump coupled to a diesel engine (EURO 6) Foam proportioner, pump premixing system, electronically controlled.

Foam tank

Holds 4,500 l, with dome lid and electronic fill level indicator.



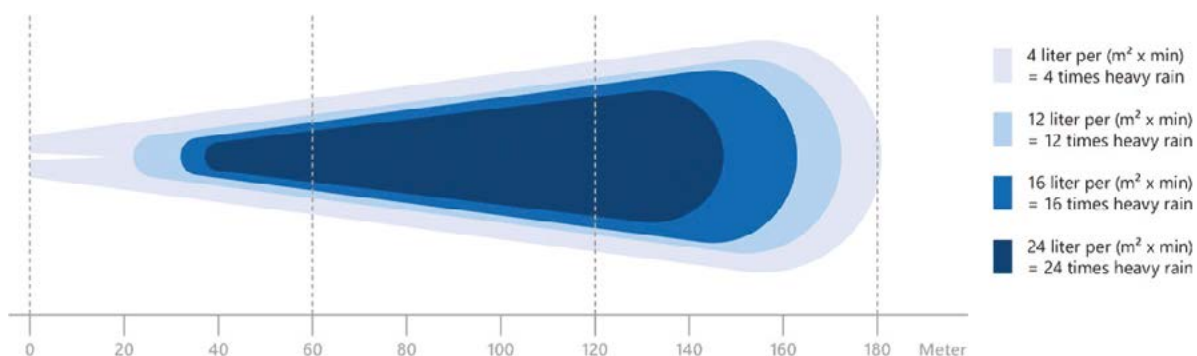
Example of a customised roll-o container with NJT4000 Box

The technical illustration shows a modular construction concept with NJT4000 box + pump system + foam tank.



NJT 4000 NJT 8000

Power	approx. 3,000 HP	approx. 6,000 HP	Power
Air flow	approx. 1,700 m ³ /s	approx. 3,400 m ³ /s	Air flow
Spray length	approx. 120 m	approx. 180 m	Spray width
Spray height	approx. 90 m	approx. 120 m	Spray height
Spray surface, fixed carriage	approx. 1,500 – 2,000 m ² Spray	approx. 3,000 – 4,000 m ² Spray	Spray surface, fixed carriage
Spray surface, rotary carriage	approx. 15,000 - 36,000 m ²	approx. 30,000 - 72,000 m ²	Spray surface, rotary carriage
Spray rate	approx. 800 - 4,000 l/min	approx. 1,200 - 8,000 l/min	Spray rate
Precipitate	approx. average 4 -6 l (m ² x min)	approx. average 6 -8 l (m ² x min)	Precipitate
Foam concentration	approx. 0-6%	approx. 0-6%	Foam concentration
Fuel tank	approx. 1,200 l	approx. 1,200 l	Fuel tank
Noise level at 100% power	≤ 105 dB	≤ 105 dB	Noise level at 100% power



AFTER-SALES DEPARTMENT

NAFFCO not only offers a product, but also back-up what we sell with full service, maintenance, and training options.

We have a separate department totally dedicated for maintenance of the products and solutions we offer.

We offer the service of our Engineers and Technicians round the clock (24 hours) for emergency requirements.

Further, we also undertake annual and half-yearly maintenance contracts, which will ensure smooth functioning of the products throughout the year.



“

...round the clock (24 hours)
for emergency requirements

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BETTER ORGANISED, DUE TO PROTECTIVE COMMUNICATION SYSTEM SMART REMOTE CONTROL

The extremely simple operation minimises time-consuming instructions.

CONTROL SYSTEM

Controls and monitors all functions and safety elements of the NJT4000 box. It performs the following tasks:

- Extension/retraction of the mount; movement of the mount; start/stop power control of the engines.
- Error and status display on the remote control
- Error and status display of all inputs and outputs of the control system on the display in the control cabinet
- Remote maintenance with access to control and display
- Logging of system faults in electrical and hydraulic units and on the powerplant as well as warnings and indication on the display in the control cabinet
- Monitoring by sensor defence.

Engine and all electronic and hydraulic systems are controlled by PLC and monitored via a modem by remote diagnosis. The control system is designed as a safety control (SIL2/PLd) (cf. articulated masts and ladders).



REMOTE CONTROL

- Wire/Wireless High-End Remote Control
- Operating/transport position
- Rotate / tilt the mount
- Start-stop of the engine power and power regulator of the jet engine
- Emergency stop
- Close with "autopilot button"



CONFIGURATION OPTIONS

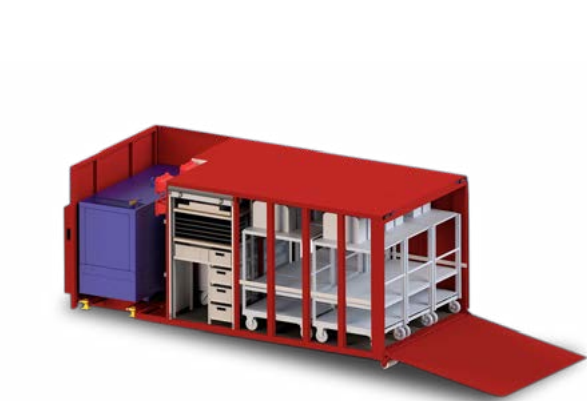
TRUCK



TRAILER



RORO



ALL TERRAIN TRACKED CARRIER



COMPLETE AIRPORT SOLUTION UNDER ONE ROOF

RUNWAY RUBBER REMOVAL



HIGH SPEED AIRFIELD
SWEEPING MACHINE



AIRPORT RUNWAY FRICTION
TESTING EQUIPMENT



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NAFFCO has the right to change specifications without prior notice.

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