

The MeeFog Wet Compression Pump Skid

Optional Shade Roof (not shown)

PROGRAMMABLE LOGIC CONTROLLER

software for skid control and fog staging control, and color HMI operator interface

STAINLESS STEEL PUMPS

water lubricated pumps provide 8,000 hours service cycle

HIGH-PRESSURE FILTERS

10 micron high-pressure filters with pressure gauges before and after



VARIABLE FREQUENCY DRIVES (OPTIONAL)

adjust motor speed and control staging, energy saving feature

WELDED STAINLESS STEEL FRAME

rugged design, won't rust, open frame design for easy maintenance

INLET WATER FILTER

sub-micron replaceable filter elements and pressure gauges at the inlet and outlet

MeeFog Wet Compression Systems

Wet compression consists of injecting pure water fog into the inlet of a gas turbine engine in order to improve output and heat rate. When the water droplets evaporate inside the compressor, they reduce the temperature and significantly reduce the work of compression, which means more power is available at the output shaft.

Wet compression produces a power boost of 5% to 10% for each one-percent (of the air mass flow) of water injected. MeeFog Wet Compression Units have been operating on over 300 gas turbines, in some cases for as long as 20 years.

When Wet Compression is used with a MeeFog evaporative cooling system, the power boost can be greater than provided by chillers for a fraction of the cost. Wet compression have also been installed downstream of existing chiller coils and evaporative cooling systems.

MeeFog wet compression nozzles produce a fog spray with 90% of the water mass flow being droplets of 20 microns or less. Small droplets prevent erosion of compressor blades and ensure the most efficient wet compression system.

MEEFOG PUMP SKID FOR WET COMPRESSION

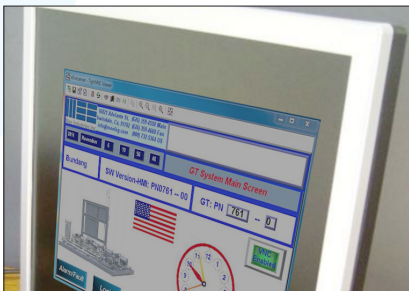
Model	WC-30	WC-60	WC-90	WC-120
Pump Unit Capacity	30 GPM	60 GPM	90 GPM	120 GPM
	6.8 M ³ /HR	13.6 M ³ /HR	20.4 M ³ /HR	27.3 M ³ /HR
Motor	50 HP	2 X 50 HP	3 X 50 HP	4 X 50 HP
	37 KW	75 KW	112 KW	150 KW
Power	380V 3PH 50HZ			
	460 3PH 60HZ			
Max Temp. (Ambient)	120 °F			
	50 °C			
Pump Unit Dimensions (WC 120)	123 IN LONG X 82 IN WIDE X 71 IN HIGH			
	312.42 CM LONG X 208 CM WIDE X 180 CM HIGH			

Advantages of MeeFog Wet Compression

- Low cost and easy to install. Nozzle manifolds can be installed with a few days of outage.
- Power boost of 10% or more.
- Fog staging allows load following in increments of 1% of plant output or smaller.
- Wet compression control can be tied to Automatic Generation Control for fully automatic operation.
- Load following with Wet Compression reduces thermal stresses on the gas turbine.



Control panel includes a PLC with color user interface screen and allows communication to control room.



The data from the local PLC may be transferred via fiber optics to a dedicated host computer in the control room and can be monitored on a large screen operator interface.



MeeFog Nozzle Manifolds

MeeFog impaction pin nozzles are constructed from 316 SS. Nozzle manifolds are 1/2" or 3/4" 316L tubing with compression fittings. Nozzle adapters are TIG-welded to the manifold tubes and contain an o-ring seal and lock washer or tie wire.