

OPTICOOL EVAPORATIVE PLASTIC COOLING PAD SYSTEM TY. EXCEPTIONAL SERVIC

SS QUALIN

RELENTLE

The LUBING OptiCOOL evaporative plastic cooling pad climate system is used in areas where highly efficient cooling is required.

THE TECHNOLOGY OF EVAPORATIVE COOLING

Water is transported through the system from a pump station and directed onto the pads from above with a water distribution pipe and water deflector.

The water then flows over the corrugated surface of the pad where it's surface area is maximized to efficiently remove heat from the air flowing through it, resulting in some evaporation. The remaining water is used to clean the pads and flows back to the supply unit via a water channel system.

The thermal energy required for evaporation comes directly from the air. Therefore, the air coming out of the pads is cooled and humidified at the same time without any additional external energy supply for the evaporation process.

ADVANTAGES

- Plastic pad offers extended life expectancy and are easier to clean over paper pads
- The Pad system is available in different sizes and power levels
- The pad system is available in different pad heights and system lengths
- System design allows for easy installation
- All parts are made of stainless steel or PVC, preventing corrosion to system
- Newly designed clip profiles provide easy installation
- No corrosion: All parts are made of PVC or stainless steel
- No external water tank required
- Deflector design with integrated hinge system provides the ideal water distribution over the entire pad length

SYSTEM COMPONENTS

The components of the LUBING plastic cooling pad system are engineered for fast and easy assembly, and for a long service life with little maintenance required.



• Special distribution pipes • Newly developed deflector

Water distribution

- Even water distribution over the entire pad length
- Distribution pipe provides even water flow over pads along entire system length



- Ball valves • 2" ball valve in-line for fine adjustment of water flow



rate • 1" ball valve (T-piece) for adjustment of permanent water drain (bleed-off)

Deflector





- Newly developed deflector profile with integrated hinge system • Easy access, quick
- inspection and easier cleaning
- Integrated hinged deflector allows easy access for cleaning and inspection

Dirt trap

- Collects debris from the distribution pipe
- Allows manual flushing of the distribution pipe



Water gutter

- Water gutter for complete water demand of the system - no external water tank necessary
- Holder for securing the water gutter to the wall or floor
- Gutter offers adequate capacity for entire system without need for external tank

Header bracket

- All profiles with clip function for easy attachment to the pipe holder
- Pad guides provide high stability
- Easy exchange of pads
- Clip features in bracket offer easy attachment of head pipe and guide rails



Water pumps

- Pumps available in three different sizes and voltages to suit your required system length (see back side)
- Centrifugal pump includes integrated skimmer and 2" ports









Supply unit

- Delivers completely assembled
- Float valve maintains constant water level in the system by controlling incoming water supply

Splash Guards

- Captures excess water from pads and returns the water to the water gutter
- Reduces the amount of water on ground/floor around cooling pad system



THE BENEFITS OF OPTICOOL PLASTIC PADS

- Excellent cooling capacity patented design: The special layout of solid surfaces and mesh structures ensures ideal water distribution through the Pad.
- Easy to clean: The use of welded, highly resistant PPE polymer sheets allows the plastic pad to be easily cleaned without damaging the Pads
- Long service life: The use of PPE polymer sheets in combination with thermal welding guarantees best stability and a long service life
- **Reduction of Light:** The pad's geometry substantial diminishes light into the facility

- Low static pressure loss: At an air velocity of 300 ft / min (1.5 m/s) the plastic pad's pressure drop is only at .4 inches of water (10 Pa.) lowering energy consumption substantially
- **High UV resistance:** The use of UV-stabilizing additives ensures outstanding resistance to UV light for years.
- Impermeable to light: The plastic pad's geometry blocks out light from the outside
- **Chemical resistance:** The plastic pad is made of Polypropylene, which is highly resistant to most chemicals.
- Pad width: Pads are offered in 23.8" wide sections

VERSIONS

Dimensions	ltem #
6" X 23.8" X 2' (150mm X 605 mm X 610 mm)	7988-610
6" X 23.8" X 3' (150mm X 605 mm X 914 mm)	7988-914
6″ X 23.8″ X 4′ (150mm X 605 mm X 1219 mm)	7988-1219
6" X 23.8" X 5' (150mm X 605 mm X 1524 mm)	7988-1524
6" X 23.8" X 6' (150mm X 605 mm X 1829 mm)	7988-1829

Other dimensions upon request.



Outside conditions: 90.3° F (32.4°) at 36.7% RH Inside conditions: 76.1° F (24.5° C) at 73.0% RH





