MHM · MCT-R SERIES · FOUNDATION & PIPING

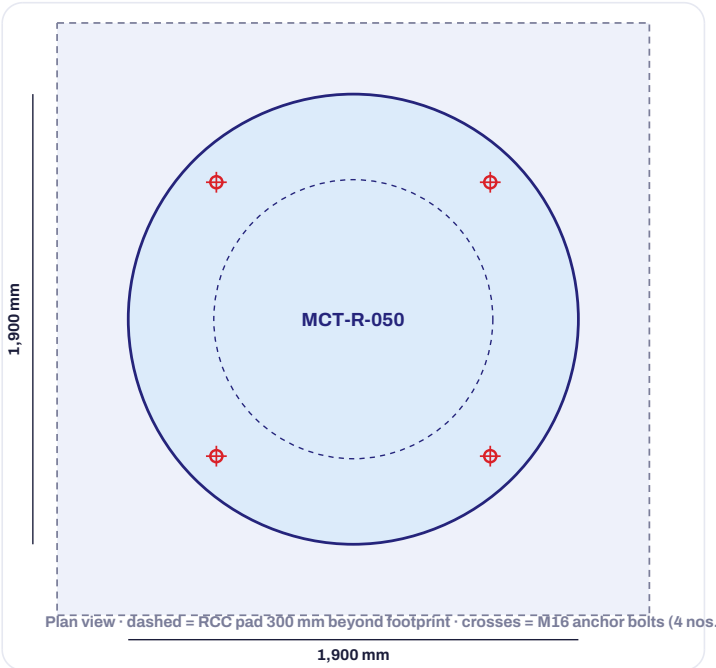
MHM FRP Counter-Flow Cooling Tower

Foundation plans, anchor-bolt layout and piping connection schematic for models MCT-R-050, MCT-R-100, MCT-R-200, MCT-R-300, MCT-R-500, MCT-R-800. Dimensions in millimetres; drawn from the model data sheet.

General foundation requirements

- Reinforced-concrete pad (M20, 150 mm thick minimum, 300 mm beyond the footprint on every side) on compacted fill or a structural roof slab checked for the operating weight (dry weight + water).
- Level within 2 mm over the footprint; four M16 anchor bolts (J-type, 250 mm embedment) at the positions shown; grout under the base frame after alignment.
- Provide a drain channel around the pad and a floor drain for basin overflow/blow-down; keep 1 m clear access for maintenance on all sides.
- Vibration: use neoprene pads under the frame on roof installations; keep pipe supports independent of the unit.

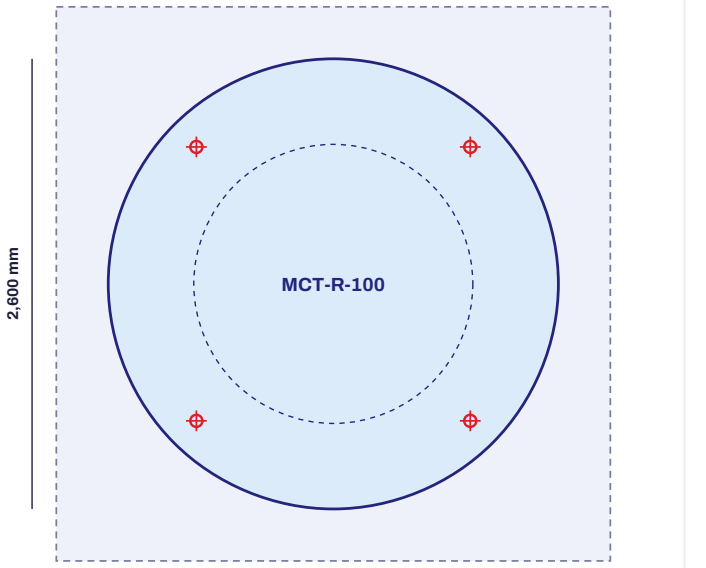
MCT-R-050 — foundation plan



Plan view · dashed = RCC pad 300 mm beyond footprint · crosses = M16 anchor bolts (4 nos.)

Unit footprint	**Ø 1,900 mm × 2,600 mm high**
RCC pad (min.)	**2,500 × 2,500 mm**
Dry weight	**380 kg dry**
Design water flow	**39 m³/h**
Anchor bolts	**4 × M16, J-type, 250 mm embedment**
Access clearance	**1,000 mm all sides; 3,000 mm above fan discharge**

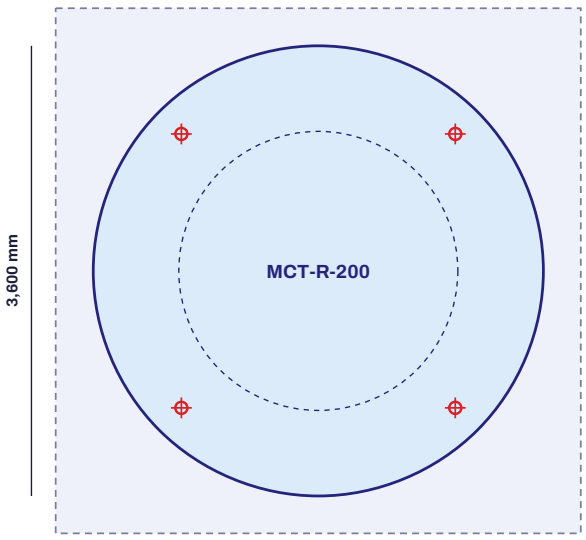
MCT-R-100 — foundation plan



Plan view · ~~dashed = RCC pad 300 mm beyond footprint · crosses = M16~~ anchor bolts (4 nos.)

Unit footprint	**Ø 2,600 mm × 3,000 mm high**
RCC pad (min.)	**3,200 × 3,200 mm**
Dry weight	**640 kg dry**
Design water flow	**78 m³/h**
Anchor bolts	**4 × M16, J-type, 250 mm embedment**
Access clearance	**1,000 mm all sides; 3,000 mm above fan discharge**

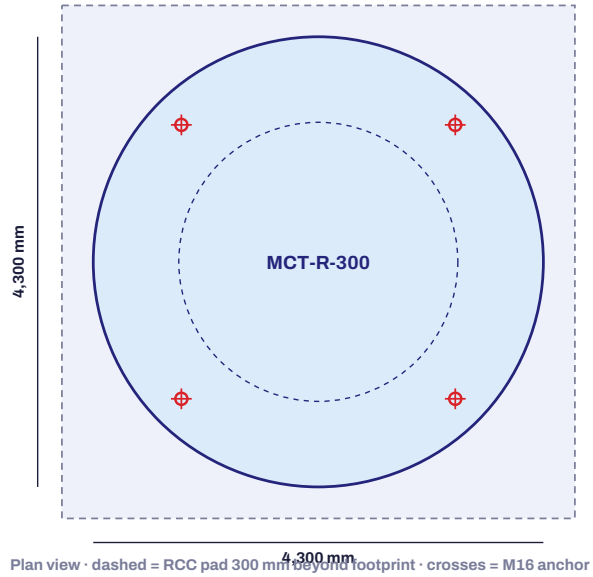
MCT-R-200 — foundation plan



Plan view · dashed = RCC pad 300 mm beyond footprint · crosses = M16 anchor bolts (4 nos.)

Unit footprint	**Ø 3,600 mm × 3,600 mm high**
RCC pad (min.)	**4,200 × 4,200 mm**
Dry weight	**1150 kg dry**
Design water flow	**156 m³/h**
Anchor bolts	**4 × M16, J-type, 250 mm embedment**
Access clearance	**1,000 mm all sides; 3,000 mm above fan discharge**

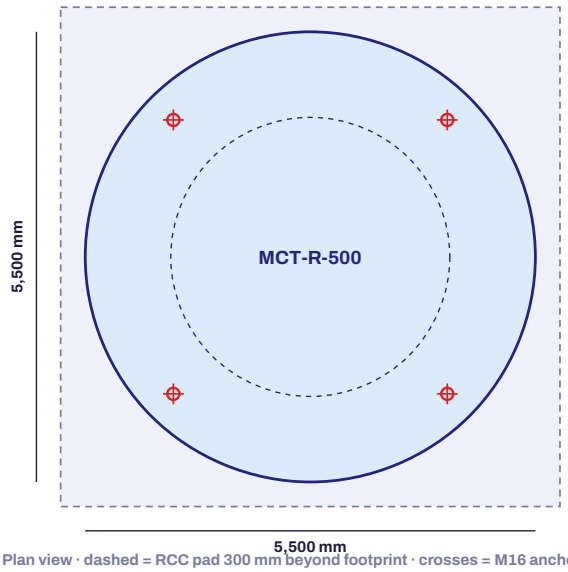
MCT-R-300 — foundation plan



Plan view · dashed = RCC pad 300 mm beyond footprint · crosses = M16 anchor bolts (4 nos.)

Unit footprint	**Ø 4,300 mm × 3,900 mm high**
RCC pad (min.)	**4,900 × 4,900 mm**
Dry weight	**1650 kg dry**
Design water flow	**234 m³/h**
Anchor bolts	**4 × M16, J-type, 250 mm embedment**
Access clearance	**1,000 mm all sides; 3,000 mm above fan discharge**

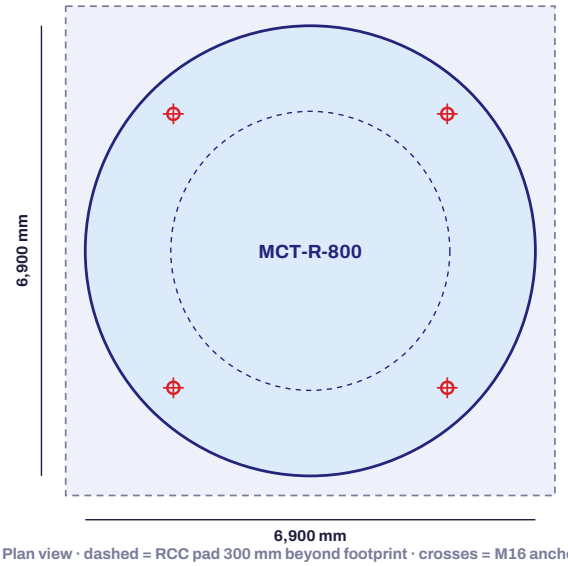
MCT-R-500 — foundation plan



Plan view · dashed = RCC pad 300 mm beyond footprint · crosses = M16 anchor bolts (4 nos.)

Unit footprint	**Ø 5,500 mm × 4,400 mm high**
RCC pad (min.)	**6,100 × 6,100 mm**
Dry weight	**2700 kg dry**
Design water flow	**390 m³/h**
Anchor bolts	**4 × M16, J-type, 250 mm embedment**
Access clearance	**1,000 mm all sides; 3,000 mm above fan discharge**

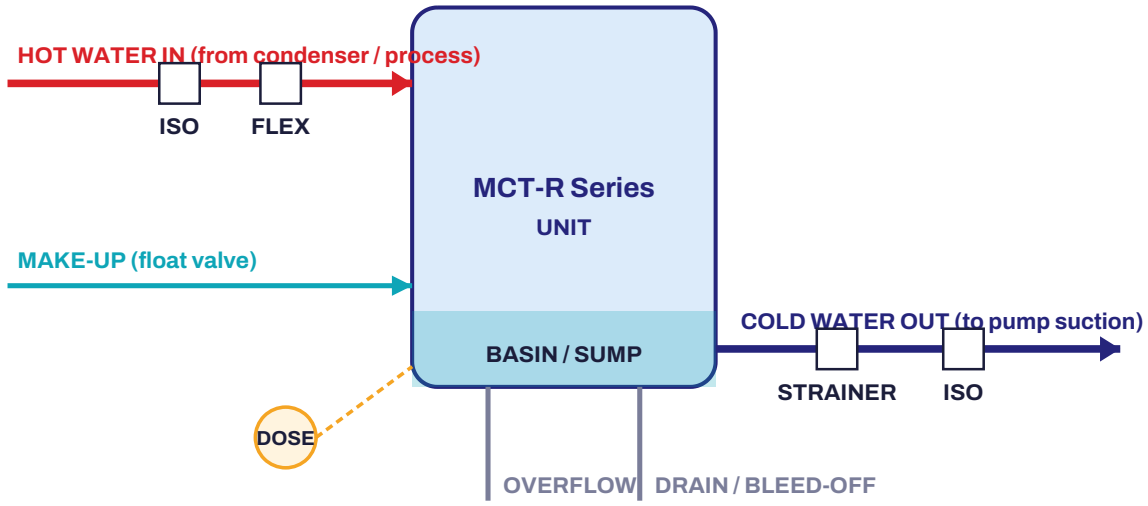
MCT-R-800 — foundation plan



Plan view · dashed = RCC pad 300 mm beyond footprint · crosses = M16 anchor bolts (4 nos.)

Unit footprint	**Ø 6,900 mm × 5,200 mm high**
RCC pad (min.)	**7,500 × 7,500 mm**
Dry weight	**4300 kg dry**
Design water flow	**624 m³/h**
Anchor bolts	**4 × M16, J-type, 250 mm embedment**
Access clearance	**1,000 mm all sides; 3,000 mm above fan discharge**

Piping connection schematic



Schematic only — pipe sizes, valve schedule and sensor positions per the project drawing. Support pipework independently of the u

- Hot-water inlet to the distribution basin/sprinkler: isolation valve, flexible connector, thermometer well and pressure gauge; slope the line toward the tower.
- Cold-water outlet from the sump with anti-vortex plate, strainer, isolation valve and a straight run before the pump suction; equalising line between cells.
- Make-up through a float valve with an isolation valve and water meter; overflow and drain to the nearest floor drain; bleed-off valve on the pump discharge for cycles control.
- Chemical dosing point in the sump or on the pump discharge; conductivity probe in the cold-water line for automatic bleed.

Project-specific drawings

MHM issues stamped GA, foundation and P&ID drawings with every order after site survey. Send your layout to sales@mhmmachineries.com for a coordinated drawing set.