

# FXT

## Open cooling towers



### Key benefits

- Easy installation
- Energy-saving
- Easy maintenance

#### Configuration

Cross flow

#### Fans system

Axial fan, forced draft

#### Capacity range

3 - 145 l/s

#### Water distribution

Gravity

#### Maximum entering water temperature

50°C standard fill

55°C with alternative fill

#### Typical applications

- Small to medium industrial applications



## Easy installation

- FXT towers are factory-assembled for **easy on-site assembly** with smaller cranes.

## Energy-saving

- **Evaporative cooling** for system-wide energy saving at lower operating temperatures.
- **Axial fan** uses **half the energy** of similar centrifugal fan units.
- **BACross fill** – factory-configured for maximum water/air contact and low air pressure drop for **optimal cooling tower efficiency** with limited energy consumption.
- **Save pump kW!** Less pump head for this gravity water distribution system.

## Easy maintenance

- You can inspect the **water distribution system** (hot water basin and nozzles) outside the unit, **during operation**.
- Easy **access to fill and drift eliminators** from outside.
- Easy **removable air inlet screens** for access to fans, bearings, motor and drive.

## Long service life

- Various corrosion-resistant materials, including the unique **Baltibond hybrid coating** for guaranteed long service life.

You want to use the FXT cooling tower to cool your process water? Contact your local **BAC representative** for more information.

## Downloads

- [Operating and Maintenance FXT](#)
- [Rigging and Installation FXT](#)
- [FXT Open cooling tower](#)



# Principle of operation

## Open cooling towers

### Principle of operation

Warm process **water (1)** from the heat source enters the **water distribution system (2)** at the top of the cooling tower where it is distributed over the **fill (3)** or heat transfer media . At the same time the **axial fan (4)**, located at the side of the unit, blows the **air (5)** over the fill. While the warm process water contacts the cold air the latter heats up and part of the process water is evaporated which removes the heat from the remaining water. The **tower sump (6)** or basin collects the cooled water after which it returns to the **heat source of the process (7)**. The warm saturated **air (8)** first passes through the **drift eliminators (9)**, which remove water droplets from the air, and then exits the tower at the opposite side of the fan.

**You want to use the FXT cooling tower to cool your process water?**  
Contact your local [BAC representative](#) for more information.

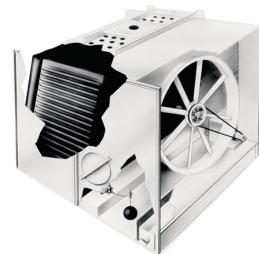
# Construction details

## Open cooling towers

### Construction details

#### 1. Material options

- Heavy-gauge hot-dip galvanized steel is used for external unit steel panels and structural elements featuring [Baltiplus Corrosion Protection](#).
- The unique [Baltibond hybrid coating](#) is an optional extra. A hybrid polymer coating for longer service life, applied pre-assembly to all hot-dip galvanized steel components of the unit.



#### 2. Heat transfer media

- Our heat transfer media is patented [BACross fill](#) with integrated **drift eliminators** certified by Eurovent. In comprehensive [lab thermal performance tests](#) it showed proved thermal cooling tower performance and offers you unrivalled system efficiency.
- The fill pack includes individual **sheets** which are easy to dismantle for inspection and cleaning, eliminating the need for frequent fill replacement.
- In self-extinguishing **plastic**, which will not rot, decay or decompose.
- For operation above 50°C, try our **optional high temperature fill**, usable with intake water up to 55°C.



### 3. Air movement system

- FXT features a **V-belt-driven axial fan system**.
- The **low kW fan** fits in a fan cylinder for streamlined air entry and is mounted on a horizontal shaft supported by **heavy-duty ball bearings**. Together with the **extended lubrication lines** and the **moisture protected motor**, this guarantees optimal and year-round operational efficiency.
- Easy removable safety **screen** protects the fan system. Fan motor is accessible from outside the unit.



### 4. Water distribution system

These consist of:

- **Low pump gravity water distribution basin** with wide non-clog plastic nozzles for uniform water distribution. You can easily clean and flush both nozzles and basin.
- A **cold water basin** with **circular access** door, anti-vortexing **strainers** and **make up** both easily accessible from air inlet side.



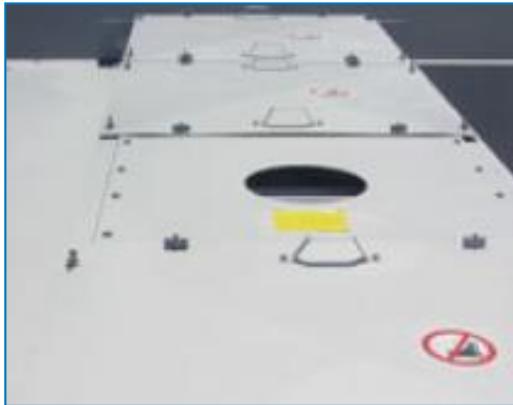
Need more information? Contact your local [BAC representative](#).

# Options and accessories

## Open cooling towers

### Options and accessories

Below is a listing of the main FXT options and accessories. If your required option or accessory is not listed, look no further than your [local BAC representative](#).



#### Distribution basin covers

Distribution basin covers on unit tops **prevent debris collecting** in unit water distribution basins.



#### Electric water level control package

**For perfectly precise water level control**, replace the standard mechanical valve with our electrical water level controller.



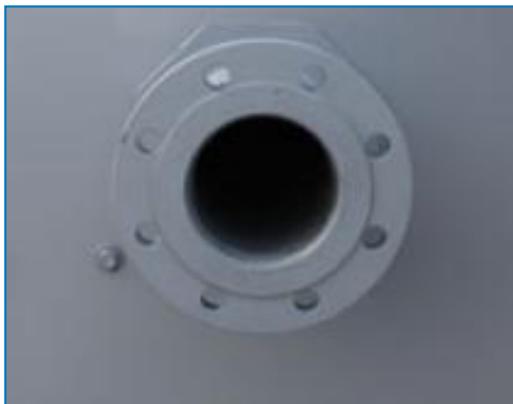
## Basin heater package

Thanks to our factory-installed heaters, the water stays at 4°C and **never freezes**, even during tower downtime and however cold it gets outside.



## Vibration cut out switch

When excessive vibration occurs, this switch shuts down the fan, ensuring your cooling equipment **operates safely**.



## Flanges

Flanges facilitate **piping connections** on-site.



## Remote sump connection

The best way to **prevent a sump freezing** is to use the auxiliary remote variety within a heated area. Shutting off the circulating pump allows all the water in the water distribution, as well as that in suspension and the sump to drain freely to the auxiliary sump.



## Filter

Separators and media filters efficiently **remove suspended solids** in the recirculating water, reducing system cleaning costs and optimizing water treatment results. Filtration helps you keep the recirculating water clean.



## Sump sweeper piping

Sump sweeper piping **prevents sediment collecting in the cold water basin** of the unit. A complete piping system, including nozzles, is installed in the basin of the tower **for connection to side stream filtration** equipment.



## Water treatment equipment

Devices to control water treatment are needed to ensure proper **cooling tower water care**. Not only does this help protect the components and fill pack, controlling corrosion, scaling and fouling, it also avoids the proliferation of harmful bacteria, including **legionella**, in the recirculating water.



# Special needs?

## Open cooling towers

### Special needs?

#### Energy saving

FXT uses evaporative cooling technology for lower operating temperatures than other cooling methods. With the following options, reduce energy costs still further:

- Thermostat

#### Year-round reliable operation

Inspect and maintain your cooling tower and protect it against extreme weather for year-round reliability. The options below help keep your cooling tower running smoothly and reliably and facilitate maintenance.

- [Remote sump connection](#)
- [Water treatment equipment](#)
- [Sump sweeper piping](#)
- [Filter](#)
- [Distribution basin covers](#)
- [Vibration cut-out switch](#)
- [Basin heater package](#)
- [Electric water level control package](#)
- [Baltibond hybrid coating](#)

**Do you too want to benefit from the above solutions?** Contact your [local BAC representative](#) for more information.



# FXT 27 - 500

Open cooling towers

## Engineering data

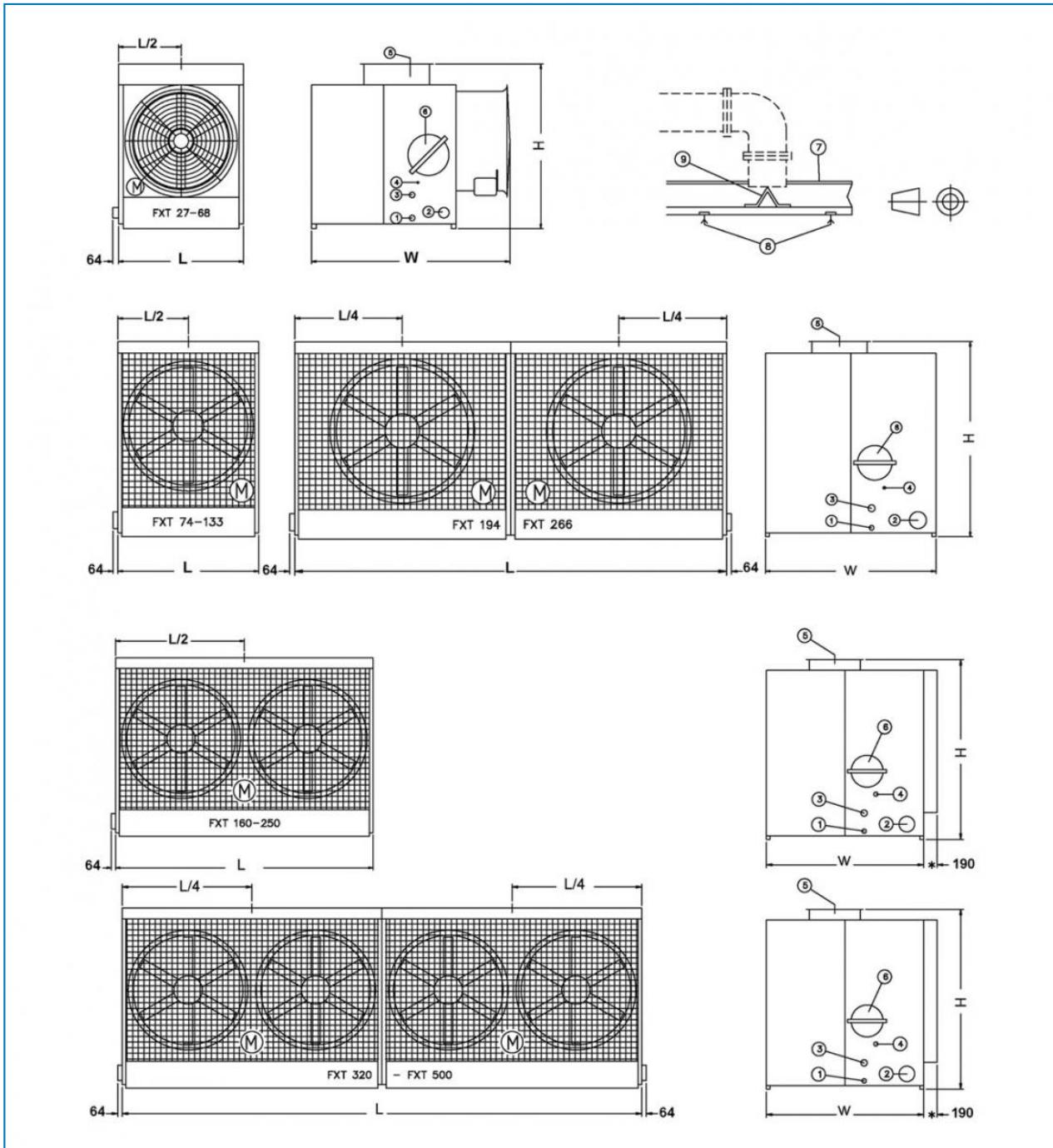
**REMARK:** Do not use for construction. Refer to factory dimensions & weights. This page includes data current at time of publication, which should be reconfirmed at the time of purchase. In the interest of product improvement, specifications, weights and dimensions are subject to change without notice.

### General notes

1. Unless otherwise indicated, all connections ND100 and smaller are MPT and connections ND125 and larger are beveled for welding.
2. Operating weight is for tower with water level in the cold water basin at overflow.
3. Unit height is indicate, for precise value refer to certified print.
4. Inlet piping must rest on the flow divider. The inlet piping to the distribution box must be the correct size as indicated in the table.

Last update: 01/08/2022

**FXT 27 - 500**



1. Drain; 2. Water outlet; 3. Overflow; 4. Make up; 5. Water inlet; 6. Access door; 7. Top of distribution box; 8. Metering orifices; 9. Flow divider; \* External screen section only on FXT 211, 250, 422, 500.

Model	Weights (kg)			Dimensions (mm)			Air Flow (m³/s)	Fan Motor (kW)	Fluid Inlet ND (mm)	Fluid Outlet ND (mm)	Make Up ND (mm)
	Oper. Weight (kg)	Ship. Weight(kg )	Heaviest Section (kg)	L	W	H					
FXT 27	945	425	425	1374	2414	1810	4.85	(1x) 0.75	(1x) 100	(1x) 100	(1x) 15
FXT 32	950	430	430	1374	2414	1810	5.32	(1x) 1.1	(1x) 100	(1x) 100	(1x) 15
FXT 43	1100	455	455	1374	2414	2216	7.08	(1x) 1.5	(1x) 150	(1x) 150	(1x) 15
FXT 51	1110	465	465	1374	2414	2216	8.11	(1x) 2.2	(1x) 150	(1x) 150	(1x) 15
FXT 60	1425	555	555	1832	2181	2216	9.93	(1x) 2.2	(1x) 150	(1x) 150	(1x) 15
FXT 68	1430	560	560	1832	2181	2216	11.76	(1x) 4.0	(1x) 150	(1x) 150	(1x) 15
FXT 74	1920	780	780	1832	2219	2540	11.03	(1x) 2.2	(1x) 200	(1x) 200	(1x) 25
FXT 88	1925	785	785	1832	2219	2540	13.07	(1x) 4.0	(1x) 200	(1x) 200	(1x) 25
FXT 97	2755	1000	1000	2772	2219	2540	14.68	(1x) 2.2	(1x) 200	(1x) 200	(1x) 25
FXT 116	2765	1010	1010	2772	2219	2540	17.4	(1x) 4.0	(1x) 200	(1x) 200	(1x) 25
FXT 133	2780	1025	1025	2772	2219	2540	19.93	(1x) 5.5	(1x) 200	(1x) 200	(1x) 25
FXT 194	5505	1995	1000	5556	2219	2540	29.36	(2x) 2.2	(2x) 200	(2x) 200	(1x) 50
FXT 232	5525	2015	1010	5556	2219	2540	34.81	(2x) 4.0	(2x) 200	(2x) 200	(1x) 50
FXT 266	5565	2055	1030	5556	2219	2540	39.85	(2x) 5.5	(2x) 200	(2x) 200	(1x) 50
FXT 160	3640	1310	1310	3660	2219	2540	24.1	(1x) 5.5	(1x) 200	(1x) 200	(1x) 25
FXT 173	3655	1325	1325	3660	2219	2540	26.53	(1x) 7.5	(1x) 200	(1x) 200	(1x) 25
FXT 320	7285	2615	1310	7334	2219	2540	48.19	(2x) 5.5	(2x) 200	(2x) 200	(1x) 50
FXT 346	7320	2650	1325	7334	2219	2540	53.04	(2x) 7.5	(2x) 200	(2x) 200	(1x) 50
FXT 211	4275	1620	1620	3660	2219	3356	30.22	(1x) 7.5	(1x) 200	(1x) 200	(1x) 25
FXT 250	4295	1640	1640	3660	2219	3356	34.6	(1x) 11.0	(1x) 200	(1x) 200	(1x) 25
FXT 422	8545	3230	1620	7334	2219	3353	60.44	(2x) 7.5	(2x) 200	(2x) 200	(1x) 50
FXT 500	8590	3275	1640	7334	2219	3353	69.19	(2x) 11.0	(2x) 200	(2x) 200	(1x) 50