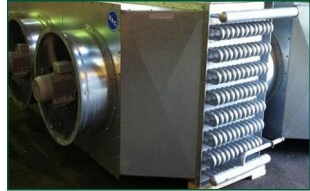
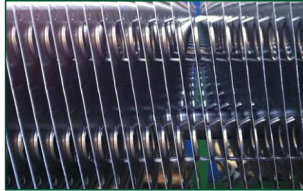




# HDG evaporator

## Evaporators



### Key benefits

- Guaranteed thermal performance
- Low maintenance
- Long service life

#### Configuration

- Propeller fans
- Steel tubes and fins
- Medium to large size

#### Refrigerant type

- ammonia pump (recirculation and flooded)
- glycol

#### Application

- Blast freezers
- Cold storage
- Meat and Fish processing



## Guaranteed thermal performance

- **Tubes** spacing is designed to ensure maximum air turbulence and coil heat transfer efficiency for a rectangular pattern.
- **Fins** are pressed formed to minimise resistance to airflow and improve cleanability. They provide performance comparable to corrugated fins at a give horsepower.
- **Fans** are selected and positioned to maximize fan performance and efficiency.

## Low maintenance

- The **coil** improves cleanability by reducing cavities.
- **Fan plenum** smooth bottom slopes into the drain pan allowing any condensation to drain into the drain pan.
- **Drain pans** are furnished with an extra large drain connection that, when coupled with the flatness and smoothness of the sloped pan, permits swift and total drainage.

## Long service life

- A conventional choice for decades, **carbon steel coils** are hot-dip galvanized for **corrosion protection**.
- **Coils and headers** are designed and manufactured according to the stringent requirements of ASME B31.5
- The **coil** incorporates a heavy-duty structural frame, improving rigidity, squareness and long-term stability.
- **Casings and drain pans** are constructed of durable, corrosion resistant and self healing [Baltiplus 800™](#) or constructed of heavy-gauge, corrosion resistant Type 304 [stainless steel](#).
- **Load carrying components** are engineered with reinforcing panel breaks and hardware particularly suited for the application.

## Year-round reliable operation

- **Fans** are direct-drive and are individually compartmented.
- **Motors** are SATMOS treated, furnished with low temperature grease as standard and designed to ensure reliability and longevity in harsh environments.

## Safe and hygienic operation

- Easy access to rigging points permit **safe and easy hanging**.
- The drain pan has a flat and smooth surface and is sloped for **easy drainage**.

You want to benefit from BAC's evaporators? Contact your [local BAC representative](#) for more information.



## Downloads

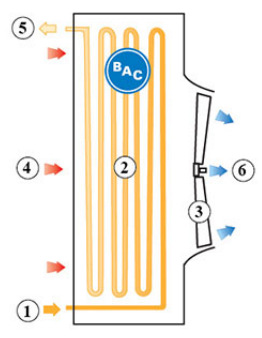
- [S - Evap](#)

# HDG evaporator

## Evaporators

### Principle of operation

**Refrigeration fluid (1)** enters through a **evaporator coil (2)**. At the same time the **fans (3)**, located at the side of the unit, draw the outside ambient **air (4)** passing it over the extended surface coil. Heat is collected from the surrounding air to the refrigerant fluid circulating in the coil tubes and turning it into vapor. The vapor then **exits the unit (5)**. The **cold air (6)** is then blown into the environment.



**Interested in BAC evaporators?** Contact your local BAC representative for more information.

# **HDG evaporator**

## Evaporators

### Construction details

#### Casing

- **Standard** - Steel panels and structural elements are constructed of durable, corrosion resistant and self healing [Baltiplus 800™](#).
- **Optional** - Steel panels and structural elements are constructed of corrosion resistant [stainless steel](#) type 304.

#### Coil configurations

- **Coils** are manufactured according to ASME B31.5; pressure tested to 26 Bar with air under water and can be shipped with a nitrogen holding charge.
- Coils are **hot-dip galvanised** after fabrication, permanently bonding the fin to the tube.
- Each coil is **individually circuited** to suite specific applications, be it pumped recirculation or gravity fed systems.
- **Tubes** are constructed of 25.4 mm diameter, carbon steel.
- **Fins** are constructed of carbon steel, die-formed, in flat pattern.
- **Headers** are constructed of schedule 40 pipe as required by ASME B31.5
- Liquid header designed and manufactured to allow **complete draining**, suitable for hot gas coil defrost as standard.



#### Drain Pan

- **Standard** - Drain pan is constructed of durable, corrosion resistant and self healing [Baltiplus 800™](#).
- **Optional** - Drain pan is constructed of corrosion resistant [stainless steel](#) type 304.
- **Defrost**- Electric heating elements or hot gas coil with double skin.
- **Drain pan insulation** is available in [Baltiplus 800™](#) or [stainless steel](#) type 304
- **Drain pans** are furnished with an extra large drain connection.



## Fans & motors

- **Fans** are direct-drive, cast aluminium blade or polyprop (optional).
- **Fan motors** are foot-mounted on steel base plates, supported by fan housing constructed of heavy-gauge self healing [Baltiplus 800™](#). Motors are IP 55, totally enclosed, fan cooled (TEFC), furnished with low temperature grease and SATMOS treated.

**Interested in BAC evaporators?** Contact your [local BAC representative](#) for more information.



# HDG evaporator

## Evaporators

### Options and accessories

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

#### **Reheat coil**

Finned reheat coils produce continuous dehumidification and reduce sweating by heating the air after it leaves the cooling coil section. The reheat section is separated from the cooling section by an air break.

#### **Variable fin spacing**

Variable fin spacing is available for severe frost applications, where fins on the air inlet face of the coil have wider spacing than the remainder of the coil.

#### **Drain pan electrical defrost**

Electric elements are clamped to the bottom of the drain pan, effectively heating the pan bottom to provide quick defrost.

#### **Drain pan hot gas defrost**

A hot dipped galvanized hot gas circuit is provided and clamped to the bottom of the drain pan for maximum heat transfer to the pan.

#### **Drain pan insulation**

The drain pan can be insulated when either hot gas or electric defrost is required to contain the heat inside the drain pan or if there is a risk of condensation occurring on the underside of the drain pan. Insulation covers are constructed from self-healing [Baltiplus 800™](#).

#### **Air discharge alternatives**

These include:

- Fans selected for external static pressure



- Splayed fan plenums that can tilt the fans up to 30 degrees from the horizontal plane.
- Draw through and blow through options are available.

#### **Additional uses**

Increasingly, our product has also found use more industrial applications such as oil coolers for transformer oil and heat recovery applications.

**Want to know more about HDG evaporator options and accessories?** Contact your [local BAC representative](#) for more information.