

ACC Plant cycle

DIRECT DRY COOLING SYSTEM

The traditional A-Frame is the state-of-the-art air cooled condenser (ACC). It's suitable for small to large power plants in a large variety of site conditions (low ambient temperature, high wind, high seism, low noise and many others). ACCs directly condense the steam turbine exhaust flow and return condensate to the boiler without water loss. The steam is directly condensed inside air-cooled finned tubes without using an intermediate surface condenser. ACCs are used in power, industrial and renewable markets and for large or small-sized plants.

THE FEATURES OF THE A-FRAME ACC



Single-Row Condenser tubes (SRC®)

The heat exchanger's finned tube, which is the core technology of the air cooled condenser, is the Single-Row Condenser(SRC®) tube. This is an elongated aluminium cladded carbon steel flat tube with brazed aluminium fins.

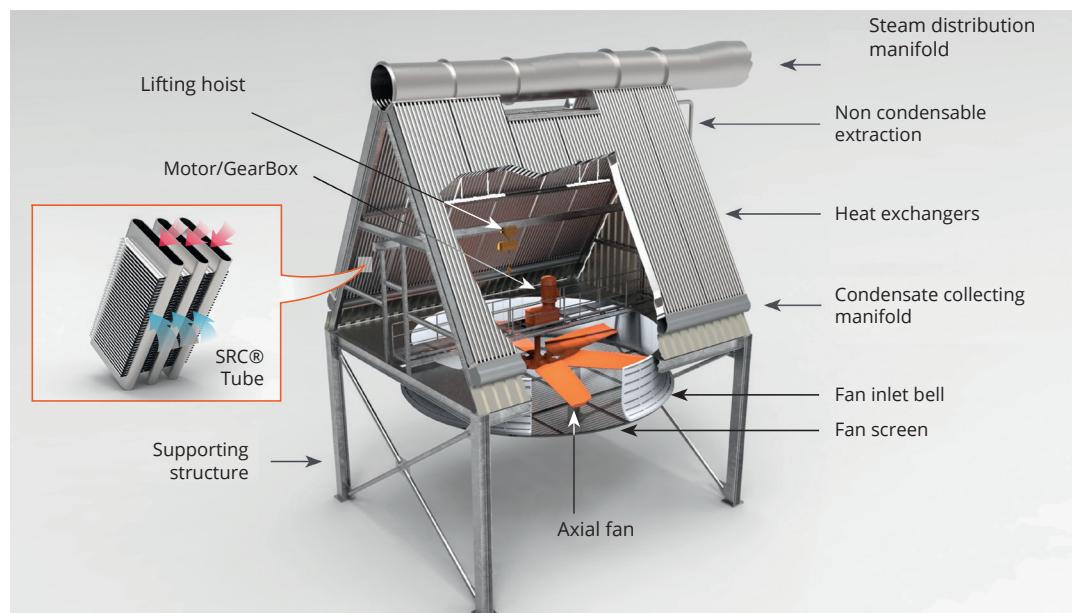
The excellent corrosion and freeze resistant SRC® finned tubes are manufactured at SPG Dry Cooling's fully owned state-of-the-art factories.

Heat exchangers are supported by an A-Frame structure, which can be mounted on concrete or steel. Both primary and secondary type heat exchangers are provided to ensure good non-condensable gas extraction to the air evacuation unit.

Air flow is delivered by forced draft axial fans, driven by electric motors and gearboxes, and installed below the heat exchangers. A-Frame ACCs are available from 2 to more than 80 modules per unit and with a fan size from 28ft to 38ft.

The typical scope of an ACC installation includes the heat exchangers, the fan motor groups, the supporting structure, and the steam ducting from the steam turbine interface. We also offer auxiliaries such as condensate and drain pumps, condensate tanks, air evacuation units (and related piping works), and electrical and instrumentation – (see below).

With over 200 SRC ACC installations, SPG Dry Cooling has extensive experience in designing, manufacturing, delivering and constructing A-Frame ACCs all over the world.



A-Frame ACC module Overview

A-FRAME ACC MAJOR BENEFITS



01

Flexibility in module arrangement selection for the best usage of available plot

02

Excellent corrosion and freeze resistance

03

Long-term mechanical and thermal integrity

04

More uniform steam distribution and total absence of backflow of steam, resulting in better performance and avoiding air accumulation, flooding, sub-cooling and freezing

05

An A-Frame supported heat exchanger with independent finned tubes, which allows free thermal expansion for maximum reliability

06

Finned tubes with excellent cleaning ability – either a manual or semi-automatic cleaning system

More information about our patents:
<https://spgdrycooling.com/ip-legal/patents/>

A GLOBAL PARTNER WITH THE PROMISE OF EXCELLENCE

Global Locations

SPG Dry Cooling Headquarters Brussels

Paharpur Global Locations

Manufacturing Plants

Joint Venture

Bridgewater, USA
Overland Park, USA
Mexico City, Mexico
Stabio, Switzerland
Madrid, Spain
Izmir, Turkey
Lagos, Nigeria
Baroda, India
Zhangjiakou, China
Beijing, China
Shanghai, China
Seoul, Korea
Taipei, Taiwan

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