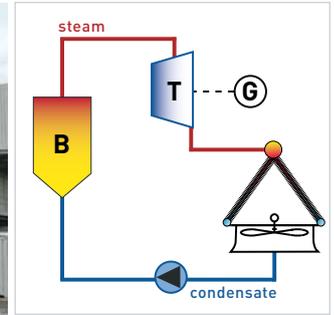


**SPG
DRY
COOLING**



PRODUCT

MODULEAIR®



ACC Plant cycle

DIRECT DRY COOLING SYSTEM

ModuleAir® is an innovative modular air cooled condenser (ACC) that directly condenses steam turbine exhaust flow, condensate returns to the boiler without water loss, as it does with the traditional ACC. With factory pre-assembled structural components and modular heat exchangers that are integrated with steam and condensate manifolds, construction costs are far lower than conventional A-frame ACC designs. What's more, construction time can be reduced by several months for large power plants. ModuleAir® can achieve lower steam turbine back pressure and can increase power production at low ambient air temperatures.

MODULEAIR® FEATURES

Advanced design ModuleAir® ACC modules are made up of standard finned tubes approximately 2 meters in length, arranged in several delta shapes on top of a supporting structure. A large portion of the steel structure is made up of factory pre-assembled steel trusses that make assembly on site easier.

Air flow is delivered by forced draft axial fans, driven by electric motors and gearboxes that are installed below the heat exchangers.

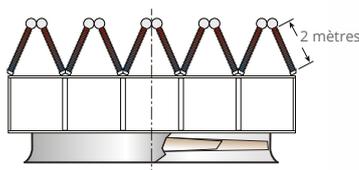
The factory pre-assembled ModuleAir® fin tube bundles with Single-Row Condenser (SRC®) tubes include steam and condensate manifolds, which eliminate site welding and ensure excellent quality. Both primary and secondary finned tube zones are provided to ensure good non-condensable gas extraction to the air evacuation unit.

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

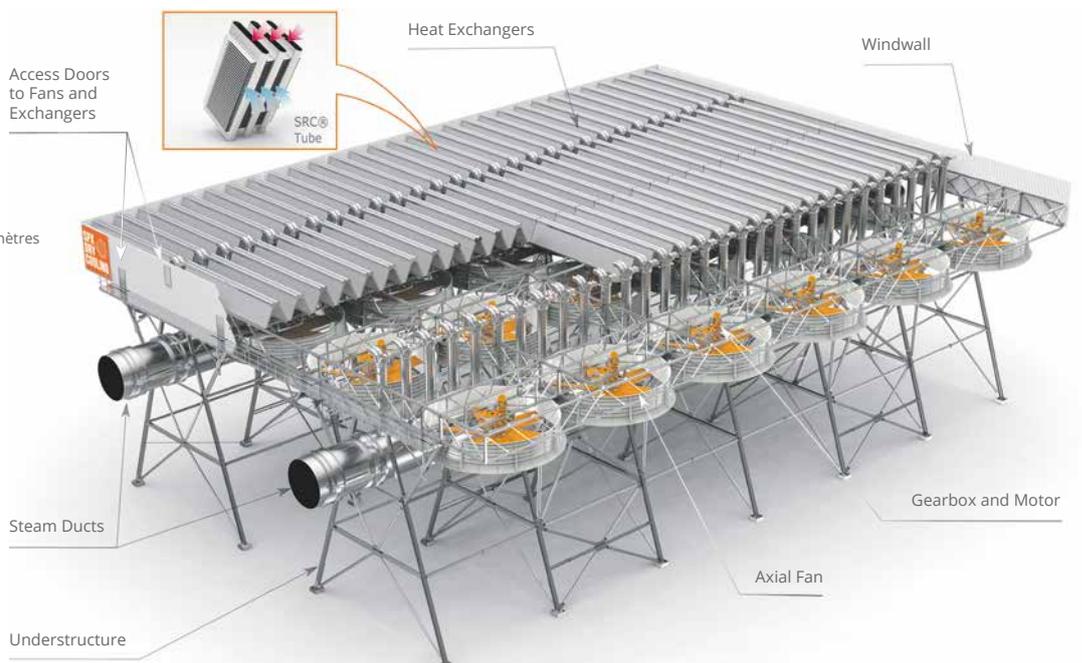
SPG Dry Cooling has extensive experience in designing, manufacturing, delivering and constructing ACCs all over the world.



Single-Row Condenser tubes (SRC®)



ModuleAir®
Module Design



ModuleAir® ACC Overview

MODULEAIR® MAJOR BENEFITS



Full heat exchangers including steam and condensate manifolds are factory tested underwater to insure weld integrity	Lower steam velocity in the finned tubes reduces the risk of flow accelerated corrosion inside the finned tubes	Enhanced annual average power plant output, thanks to a lower back pressure achievable at low ambient temperatures	Construction savings of up to 25% when compared to a standard A-frame design	A reduction of steam duct site welding by up to 50%. Tube sheet welding to steam and condensate manifolds are not required
A smaller footprint	A reduction in duct weight	A smaller number of foundations	Fewer lifting operations	Reduced structural steel weight
Excellent corrosion and freeze resistance	Reduced visual impact, lower overall height	Long-term mechanical and thermal integrity	Efficient, safer, and shorter construction	Reduction by up to 50% of steel parts assembled on site

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 Headquarters Kolkata
- Manufacturing Plants
- Joint Venture



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