Air-Cooled Condensers











Environmentally Friendly Air-Cooled Condensers

Air-cooled condensers for an 850 MW combined cycle power plant



A-Frame design



V-Frame design



Δ-Frame design

Global Cooling Competencies

SPIG S.p.A. (B&W SPIG) operates globally supplying an extensive range of turnkey cooling systems. Since 1936, we have designed, engineered and installed many state-of-the-art projects for a wide range of industries, including oil and gas, petrochemical, power generation, cogeneration and combined cycle, and district heating and cooling, to name a few.

Our experience includes wet, dry and wet/dry hybrid cooling solutions as dictated by site-specific requirements. We can supply both mechanical and natural draft systems and design for a wide range of project specifications such as high seismic loads, vibration control, corrosion, noise control, sub-freezing operation, and sea water use.

Dry cooling technology, both air-cooled condensers (ACC) and air-finned coolers (AFC), represent a substantial portion of B&W SPIG's global business, as water preservation is increasingly becoming a priority for plant owners and operators.

B&W SPIG Air-Cooled Condenser Design

The increasing demand for dry cooling solutions has given B&W SPIG the opportunity to offer its experience, expertise and customized engineered solutions for energy efficient and high performance air-cooled condensers.

B&W SPIG's high efficiency air-cooled condensers are flexible and customized, and can be supplied with A-frame, V-frame or Δ -frame configurations according to any plot plan restrictions. Special considerations for low noise, low fan power consumption, corrosion resistance, and extreme temperature applications are also available. Customers realize benefits from long life operation, minimized downtime and maximized plant performance and availability.

Our expertise includes both multi-row and the advanced single-row technology. Multi-row tube technology design features round and elliptical tube geometry, round tube with aluminum fin, fin bond type G-fin, L-fin and extruded or elliptical tube with hot-dip galvanized steel fins to help protect against corrosion.

The single-row aluminum fin tube design is state-of-the-art technology in vacuum steam condensers. The multiple rows, circular or elliptical tubes of the multi-row design are replaced with one larger flat tube. The main advantages of the single-row design include increased thermal efficiency, lower fan power consumption, non-freezing ability, higher resistance against corrosion and a smaller plot area. The B&W SPIG design is developed through in-house software for thermal rating as well as international HTRI® thermal software. SPIG is also a proud member of the ACC Users Group.







B&W SPIG single row condenser tube bundles are manufactured in its China location in Shanxi Province. The entire operation is ISO9001:2008 certified, from raw material to production processes and testing, including general management.











Single-row tube air-cooled condenser



B&W SPIG single-row manufacturing facility





UNICO installation on an air-cooled condenser



Air-cooled condenser service

Expert Service

To help avoid unscheduled downtime and achieve optimal plant performance, B&W SPIG offers a wide range of services for aircooled condensers such as maintenance, overhaul, revamping, spare parts supply, and online remote monitoring. B&W SPIG's comprehensive service portfolio includes inspections, structural and thermal repairs, upgrades, refurbishment and the addition of new cells.

In addition, a customized online continuous monitoring system is available to improve plant efficiency by processing parameters and mechanical equipment conditions. The UNICO smart system is suitable for optimizing air-cooled condenser operation.

B&W SPIG provides flexible, customized technical solutions to satisfy any customer requirement.





Cleaning systems

About B&W SPIG

B&W SPIG, a subsidiary of The Babcock & Wilcox Company, is an Arona, Italy-based global provider of custom-engineered cooling systems and services. Established in 1936, B&W SPIG has project-related operations in nearly 50 countries and employs approximately 250 people in locations worldwide. We have been providing an increasingly extensive range of high quality cooling towers, air-cooled condensers and related services.

USA

9988 Hibert Street, Suite 102 San Diego, California 92131 Ph. +1 877 955 7744 Fax +1 858 260 2104

TURKEY

Sair Esref Bulv. No: 22/812 35230 Izmir Ph. +90 232 441 08 46/47 Fax +90 232 48 373 20

INDIA

608, Palmspring Link Road, Malad (W) Mumbai 400064 Ph. +91 (22) 40 890 500 Fax +91 (22) 40 890 599

BRAZIL

Rua Severino Tescarollo, 861 - Distrito Industrial Alfredo Rela - CEP: 13255-410 - Itatiba/SP Ph. +55 11 4594 9988 Fax +55 11 4487-7009

RUSSIA

105082, Moscow, Bolshaya Pochtovaya 26V Building 2, office 400 Ph. +7(495)545-43-76 Fax +7(495)545-43-76

CHINA

Dongcun Industrial Park Dingxiang, Xinzhou Shanxi Ph. +86 35 03 323 223 Fax +86 35 03 323 208

GERMANY

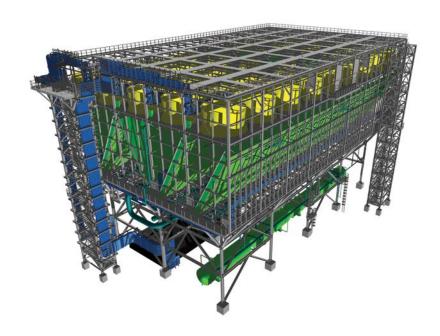
Im Lipperfeld 25 D-46047 Oberhausen Ph. +49 (0)208 94 1884-0 Fax +49 (0)208 94 1884-10

U.A.E.

Lob 7 - Office No: 7F09 - Opp. Post Office Jebel Ali Free Zone Dubai - U.A.E. Ph. +971 4881 7202 Fax +971 4881 7223

KOREA

#702, 7th Floor Kangnam-officetel, 40 Seocho-Daero, 73-Gil, Seocho-gu Seoul, 137-857, Korea Ph. + 82 (10) 32486489



SPIG S.p.A.

Piazza San Graziano 31 28041 Arona (NO) Italy Phone: +39 0322.245401











The information contained herein is provided for general information purposes only and is not intended nor to be construed as a warranty, an offer, or any representation of contractual or other legal responsibility.

HTRI is a trademark of Heat Transfer Research, Inc.



ENERGY | ENVIRONMENTAL

B&W SPIG is a subsidiary of The Babcock & Wilcox Company (B&W). Established in 1867, B&W is a global leader in advanced energy and environmental technologies and services for the power and industrial markets, with operations, subsidiaries and joint ventures worldwide.

For more information, or a complete listing of our sales and service offices, send an e-mail to info@spig-int.com, or access our website at www.spig-int.com.