

AIRCO·FIN



Finned Tubes

Louvres

Supports & Specials

Introduction

Established in 1979 in Nieuwe Pekela, The Netherlands, Airco-Fin is specialized in providing high-quality finned tubes and aluminium louvers to heat exchanger manufacturers, contractors, and refineries worldwide. Over the years, Airco-Fin has significantly enhanced its production capabilities, positioning itself as a world-leading producer of finned tubes. With facilities in The Netherlands, Poland, and India, we have successfully expanded our reach to serve customers globally.

Our extensive knowledge and experience in finned tubes and air-cooled heat exchangers allow us to support customers throughout the entire process, from budgeting and design to the final delivery of finned tubes. At Airco-Fin, we prioritize key performance indicators, ensuring that all finned tubes meet the most stringent quality standards or the specific standards of our customers. Additionally, timely delivery is a paramount commitment that we uphold for every project.

This brochure aims to provide comprehensive information about our products and showcase Airco-Fin as a reliable and innovative company. For any inquiries or further information, please feel free to contact us. We look forward to the opportunity to assist you.





Quality Management Excellence

At Airco-Fin, we serve as a premier supplier of finned tubes and aluminium louvers to the end-users within the chemical and petrochemical industries. Recognizing the stringent quality standards set by these industries, particularly for pressure parts such as Air-Cooled Heat Exchangers, we are dedicated to continual improvement in our quality management processes. Central to our commitment is the enhancement of communication lines within the company and the continual maintenance and improvement of our operational procedures. Airco-Fin proudly holds the ISO9001:2015 certification, and in collaboration with customer qualifications, we strive for the highest quality in our finned tubes.

Throughout the production process, various standard inspection tests are conducted to ensure the quality, traceability, and precise measurements of the finned tubes. The final inspection guarantees the quality, and upon approval, the products are released for shipment. At Airco-Fin, our focus on quality management underscores our dedication to delivering excellence to our clients in the chemical and petrochemical industries.

Environmental Responsibility

Airco-Fin proudly maintains ISO14001:2015 certification as a testament to our commitment to environmental stewardship. In our daily operations, we actively strive to minimize and eliminate any potential harm to both people and the environment. We actively support research projects geared towards making a positive impact on the environment.

Our production involves the use of various oils and chemicals for manufacturing finned tubes and aluminium louvers. In this regard, we are dedicated to adopting a sustainable production approach, carefully assessing the environmental impact and prioritizing the well-being of our employees and the surrounding community.

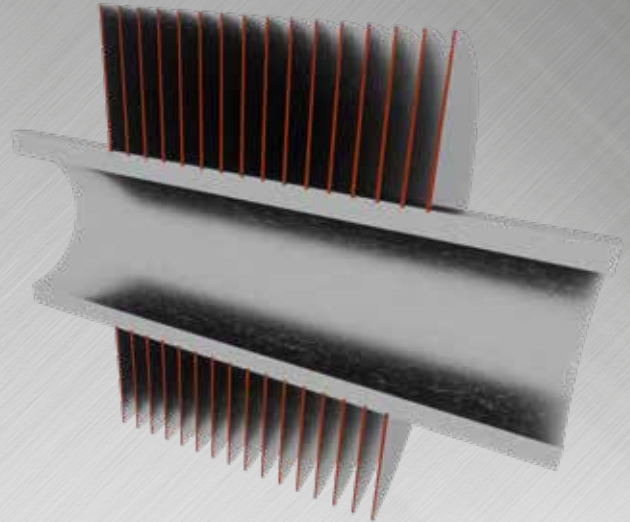
In handling oils and chemicals, we adhere strictly to the requirements outlined by REACH (Registration, Evaluation, Authorisation, and Restriction of Chemicals) to ensure full compliance. Throughout all stages of our processes, from the procurement of raw materials to production, storage, and transportation of our products, we continuously seek innovative solutions that contribute positively to the environment. At Airco-Fin, environmental responsibility is at the forefront of our operations.



G-FIN (Embedded) Technology

Description: The grooved fin is mechanically bonded into the tube wall, guaranteeing optimal heat transfer and bonding capabilities up to 400°C.

Production: During production, a groove is precisely machined into the tube wall with a depth of 0.25 (+/- 0.05) mm. Subsequently, the aluminium strip is carefully rolled into the groove, and the groove is sealed using so called backfillers. This process effectively locks the strip in the tube wall, ensuring complete contact with the base tube, even at elevated temperatures. The result is a robust and efficient heat transfer mechanism provided by the G-FIN technology.

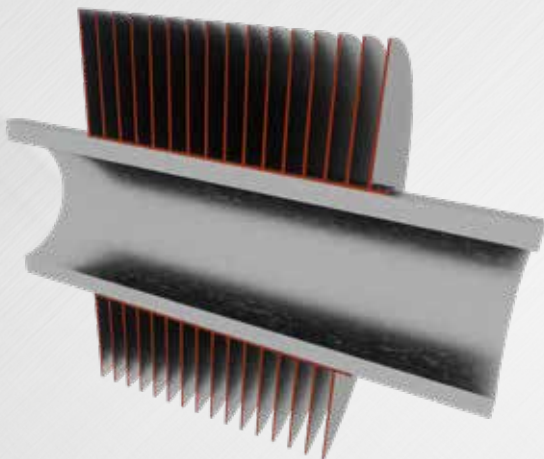


Max. tube wall temperature:	400°C
Base tube material:	Carbon steel – stainless steel – duplex – nickel alloys – copper/ copper alloys
Finning material:	Aluminium – copper
Range of finning:	Tube length: 200 – 22000 mm
Base tube diameter:	15,88 – 50,8 mm
Finning heights:	6,35 – 25,4 mm (depending on the tube OD)
Fin pitch:	5 – 12 fpi
Capacity:	6500 meter per day

L-FIN (Wrap-On) Technology

Description: The L-shaped fin is tension-wound around the base tube, ensuring complete contact between the foot and the base tube.

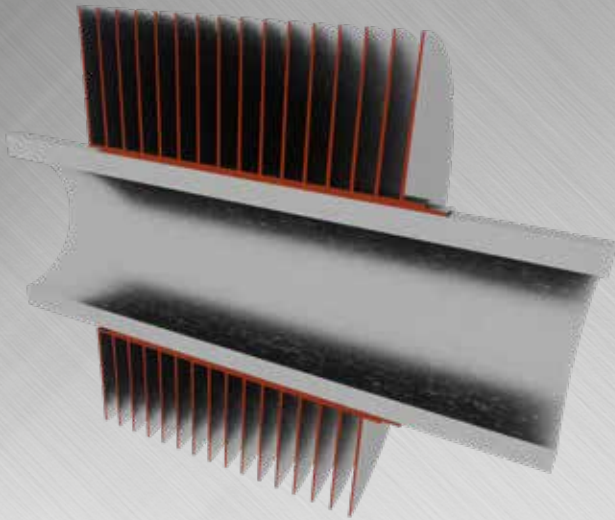
Production: In the manufacturing process, the strip undergoes pre-forming into an L-shape using a set of performer rollers. Subsequently, the strip is rolled and tension-wound around the base tube. The consecutive fins are positioned against the foot of the previous fin, providing additional protection to the base tubes.



Max. tube wall temperature:	130°C
Base tube material:	Carbon steel – stainless steel – duplex – nickel alloys – copper/copper alloys – Titanium
Finning material:	Aluminium or copper
Range of finning:	Tube length: 200 – 22000 mm
Base tube diameter:	15,88 – 50,8 mm
Finning heights:	6,35 – 25,4 mm (depending on the tube OD)
Fin pitch:	5 – 12 fpi
Capacity:	6500 meter per day



LL-FIN (Overlapped Footed) Technology



Description: The overlapped footed or double L-fin is similar to the L-fin but offers double strip thickness coverage of the base tube. This finning type serves often as an alternative to extruded finning.

Production: The strip is pre-formed using a two-stage preform roller set. Following this, the strip is rolled and tension-wound around the base tube. The preformed foot allows the fins to interlock on the tube surface, ensuring continuous contact with the base tube and forming a seal for protection against external corrosion.

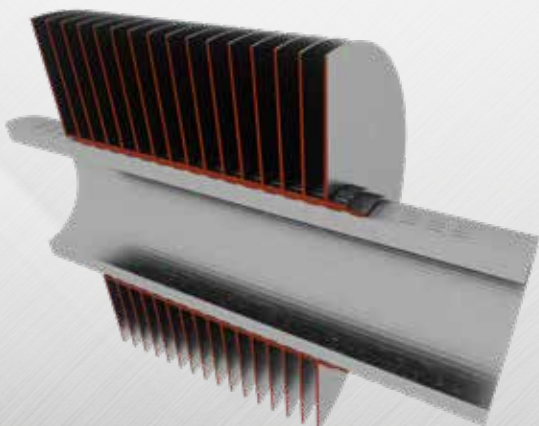
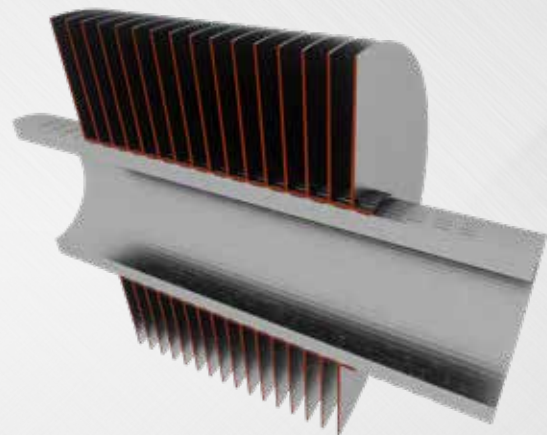
Max. tube wall temperature:	165°C
Base tube material:	Carbon steel – stainless steel – duplex – nickel alloys – copper/ copper alloys - Titanium
Finning material:	Aluminium - copper
Range of finning:	Tube length: 200 – 22000 mm
Base tube diameter:	15,88 – 50,8 mm
Finning heights:	6,35 – 15,88 mm (depending on the tube OD)
Fin pitch:	5 – 12 fpi
Capacity:	6500 meter per day



KL-FIN (Knurled Footed) and KLM-FIN (Knurled Overlapped Footed) Technology

Description: The knurled fin is characterized by the knurled surface on the foot of the L-type or LL-type finning. The knurling on both the base tube and the foot increases the surface area and bonding of the fin to the base tube.

Production: The strip is preformed into an L or LL shape. The base tube is knurled using a knurling disc. After rolling the strip and tension wrapping it around the tube, the foot of the L or LL fin undergoes knurling as well.

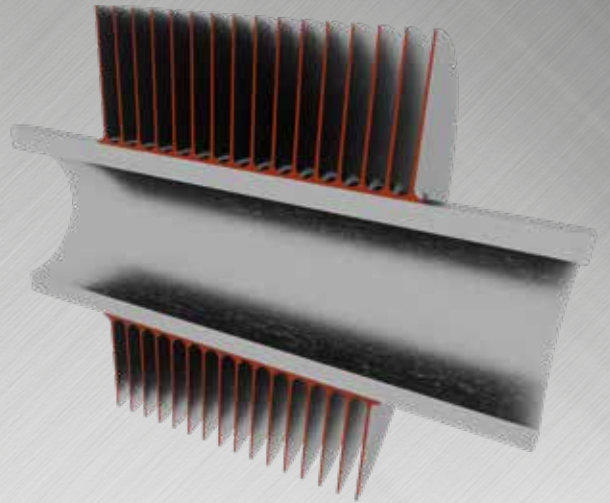


Max. tube wall temperature:	250°C
Base tube material:	Carbon steel – stainless steel – duplex – nickel alloys – copper/ copper alloys - Titanium
Finning material:	Aluminium - copper
Range of finning:	Tube length: 200 – 22000 mm
Base tube diameter:	15,88 – 50,8 mm
Finning heights:	6,35 – 15,88 mm (depending on the tube OD)
Fin pitch:	5 – 12 fpi
Capacity:	6500 meter per day

EXTRUDED FIN (Bi-metallic)

Description: Aluminium or copper fin formed out of a tube that is pushed over the base tubes. The complete tube is covered and if necessary a part of the unfinned end can be machined into a sleeve. This way the unfinned part behind the tube sheet is also covered with aluminium.

Production: The base tube is degreased and pushed into the barrel. The aluminium tube is pushed in the same barrel, over the base tube. In the next step the tube will be pushed into the machine where the outer tube is formed into a fin and the aluminium is pressed on the base tube. This creates the bonding for the heat transfer from the tube into the aluminium fin.



Max. tube wall temperature:	310°C
Base tube material:	Carbon steel – stainless steel – duplex – nickel alloys – copper/ copper alloys – Titanium
Finning material:	Aluminium – copper (copper depending on the required fin height).
Range of finning:	Tube length: 200 – 20000 mm
Base tube diameter:	15,88 – 50,8 mm
Finning heights:	6,35 – 15,88 mm (depending on the tube OD)
Fin pitch:	5 – 12 fpi
Capacity:	4500 meter per day

Stock

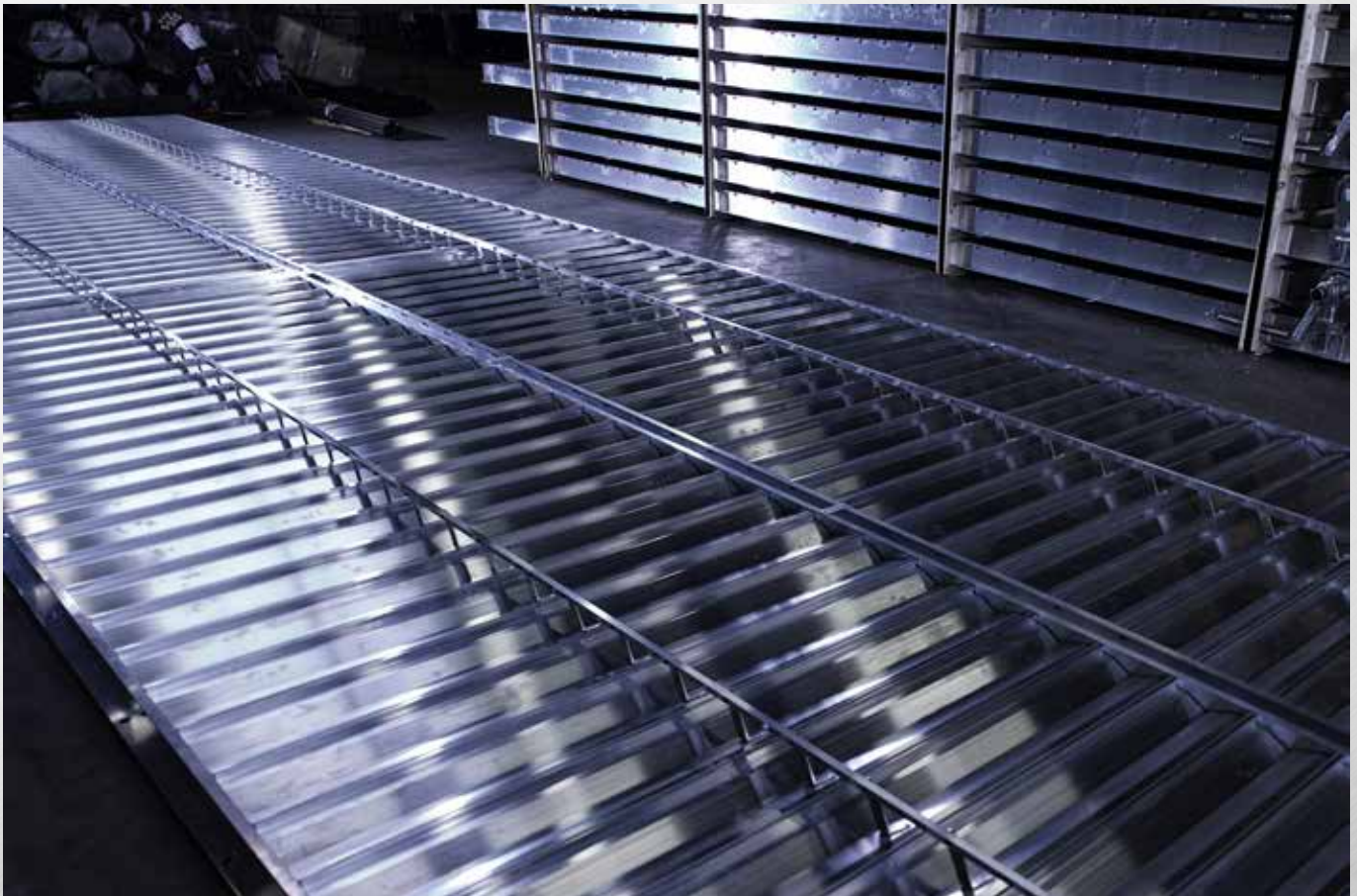
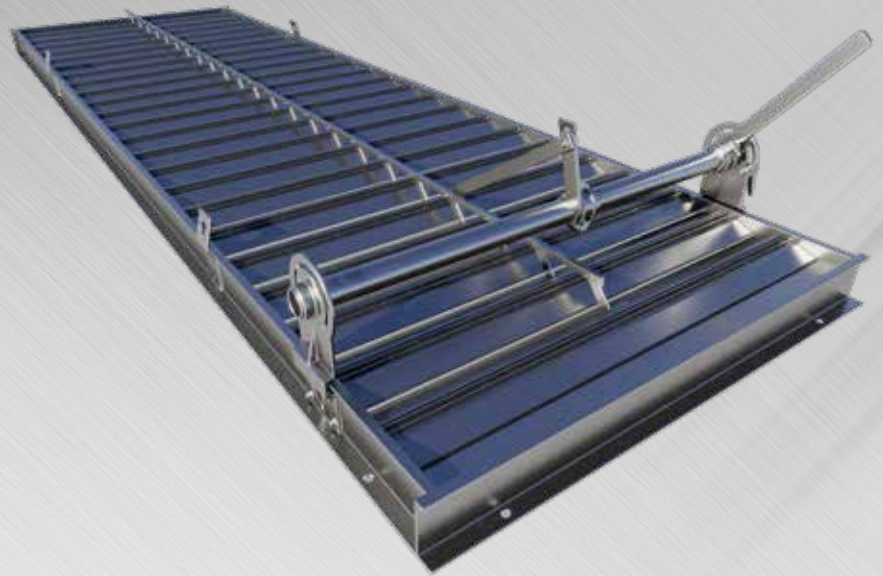
Airco-Fin keeps a large stock of finned tubes and aluminium. With this stock we are able to meet the shortest deliveries, using all base tubes and aluminium from our stock. But we also use this stock to produce smaller quantity of finned tubes at the lowest possible costs.



Louvers

Airco-Fin stands as a leading producer of aluminium louvers crafted from extruded aluminium alloy 6061, known for its high corrosion resistance. The lightweight nature of the aluminium ensures that the louvers require no maintenance. Additionally, all remote parts are equipped with PTFE bearings, eliminating the need for lubrication.

Our louvers adhere to the standards of API 661 / ISO 13706 and find application in Air-Cooled Heat Exchangers worldwide. Offering flexibility, our louvers can be configured for manual or automatic operation. To ensure optimal performance, pre-assembly and testing of the louvers are meticulously conducted in our workshop before shipment. Airco-Fin takes pride in delivering high-quality louvers that meet global standards and contribute to the efficiency of Air-cooled Heat Exchangers across the globe.





Airco-Fin Group: Uniting Excellence in Finned Tubes and Aluminium Louvers

Airco-Fin BV is part of the Airco-Fin Group, a family-owned company committed to delivering exceptional quality in the field.

Airco-Fin BV

In 1979, we started our production of the finned tubes (G / L / LL / KL / KLM / Extruded type) and aluminium louvers. Our factory in The Netherlands serves customers all over the world.

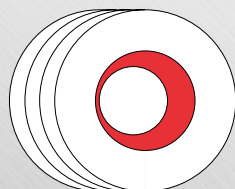
Airco-Fin Tubes India

In 2005, we expanded our presence with the establishment of Airco-Fin Tubes India in Hyderabad. Specializing in the production of finned tubes (G / L / LL / KL / Extruded type), Airco-Fin Tubes India primarily serves the Indian market.

Cemal z.o.o.

In 2009, Cemal, founded in 1989, became a valuable addition to the Airco-Fin Group. Cemal specializes in manufacturing extruded finned tubes, monometallic finned tubes and low finned tubes, catering to the local market in Poland and its surrounding areas.

Regardless of location, all our facilities adhere to the same stringent quality procedures and proudly hold the ISO 9001:2015 certification. This ensures that each site consistently delivers high-quality finned tubes, maintaining the exceptional standards synonymous with the Airco-Fin brand.



AIRCO·FIN



Airco-Fin BV

Pekelwerk 21, 9663 AW NIEUWE PEKELA, The Netherlands

Tel: +31597646384, Email: info@aircofin.nl, Website: www.aircofin.com