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INTEGRATED SOLUTIONS FOR EFFICIENT HEAT EXCHANGES

MRAZ ALETADOS is a leader in the manufacture and supply of high-quality finned tubes for efficient heat exchange in the oil, chemical, petrochemical, and refrigeration industries.

Our finned tubes are designed to optimize heat transfer and enhance the efficiency of thermal exchange systems. We use top-quality materials and advanced technologies to ensure the durability, corrosion resistance, and thermal conductivity of our products.

With over 46 years of experience in the metallurgical industry, Mraz Aletados specializes in providing a wide range of finned tubes that meet the most demanding requirements. Our commitment to customer service, continuous improvement, and excellence in product quality are the fundamental pillars that set us apart in the market.

INTEGRATED SOLUTIONS FOR EFFICIENT HEAT EXCHANGES

WHAT IS A FINNED TUBE AND WHAT IS IT USED FOR?

A finned tube is a component used in heat transfer systems that features a tube with fins or extensions along its outer surface. These fins significantly increase the heat exchange surface area of the tube, enhancing the efficiency of heat transfer between the fluid inside the tube and the surrounding medium.

QUESTIONS? WE ARE HERE TO HELP YOU.

Don't hesitate to contact us for any technical or commercial inquiries about our products. Integrated Solutions for Efficient Heat Exchanges



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INTEGRAL
FINNED



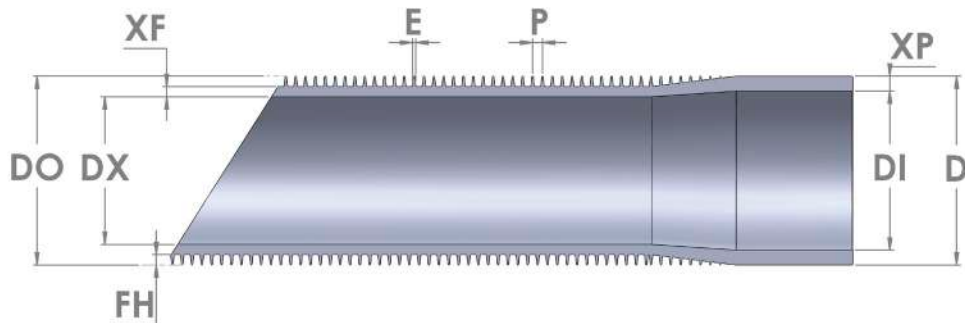
INTEGRAL FINNED

LOW-FIN

The **LOW-FIN** finning is a type of integral finning where the fin is formed from the same tube material without adding any extra material. The key feature of this finning method is that the outer diameter of the finned section remains the same as the outer diameter of the smooth tube. This makes it particularly suitable for manufacturing shell and tube heat exchangers. During the fin formation process, part of the tube wall thickness is utilized, leading to a reduction in wall thickness in the finned section.

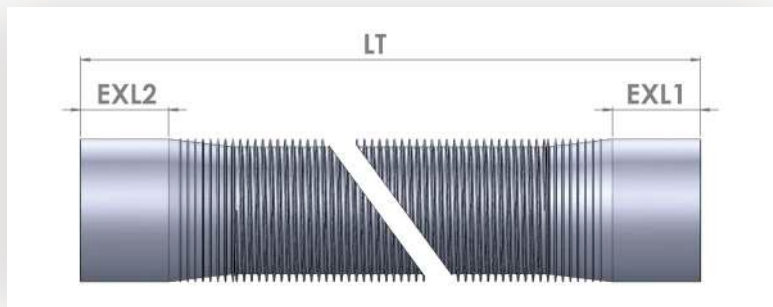
LOW-FIN finned tubes are used in various types of heat exchangers, including shell and tube, gas-to-gas, and liquid-to-gas applications.





D: Outer diameter of the smooth section
 DO: Outer diameter of the finned section
 FX: Fin height
 XP: Smooth tube thickness
 XF: Tube thickness in the finned section
 EXL: Smooth end

DI: Inner diameter of the smooth section
 DX: Inner diameter of the finned section
 E: Fin thickness
 P: Fin pitch
 LT: Total length



TUBE DIAMETER (D)

12.7mm - 38mm

MAXIMUM LENGTH (LT)

Hasta 18 mts

FIN HEIGHT (FH)

1mm - 3mm

FIN THICKNESS (E)

0.35mm en adelante

FINS PER INCH (FPI): 9 - 11 - 19 - 26

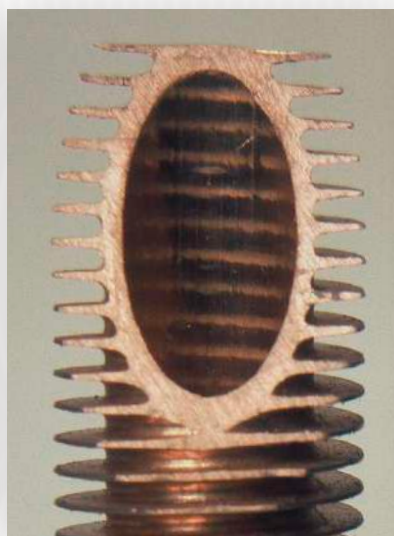
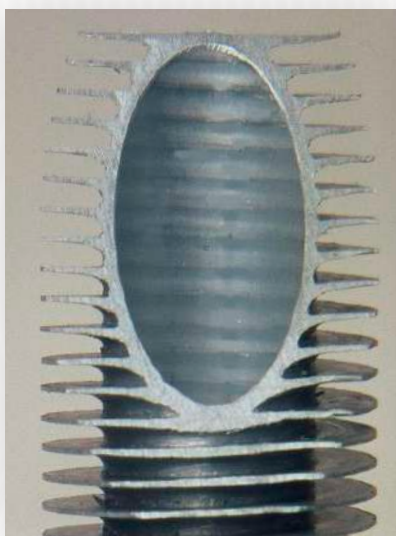
AVAILABLE MATERIALS: Aluminum, Copper, Stainless Steels, Bronze, Titanium, Carbon Steels

INTEGRAL FINNED

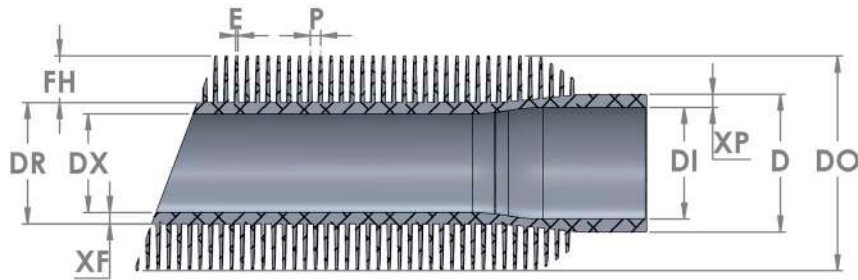
MEDIUM-FIN

MEDIUM-FIN finning is also an integral type, with fins formed from the same tube material. It is classified as Medium-Fin when the fin heights range from 2.5 mm to 5 mm. The diameter of the finned section depends on the tube material and the desired fin height, offering flexibility in the design of heat exchangers.

MEDIUM-FIN finned tubes are used in various applications, including condensers, coaxial condensers, heating coils, and coils for cooling compressed air, oil, and solvents. Their ability to enhance heat transfer makes them ideal for efficient cooling and heating systems.



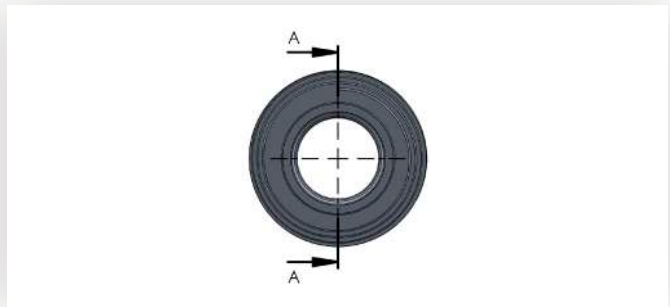
MEDIUM-FIN



SECCIÓN A-A

DO: Outer diameter of the finned section
DX: Inner diameter of the finned section
DR: Diameter of the tube under the fin
DI: Inner diameter of the smooth section
D: Outer diameter of the smooth section
XP: Smooth tube thickness

XF: Thickness of the finned section tube
FH: Fin height
E: Fin thickness
P: Fin pitch
LT: Total length
EXL: Smooth end



TUBE DIAMETER (D)

12.7mm - 38mm

MAXIMUM LENGTH (LT)

Hasta 18 mts.

FIN HEIGHT (FH)

2.5mm - 5mm

FIN THICKNESS (E)

0.35mm en adelante

FINS PER INCH (FPI): 11 - 19

AVAILABLE MATERIALS: Aluminum, Copper, Carbon Steels

INTEGRAL FINNED

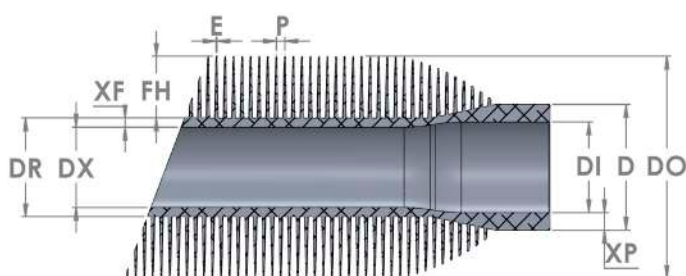
HIGH-FIN

HIGH-FIN finning is a continuous helical integral finning where the fins are formed from the same tube material. It is classified as High-Fin when the fin heights range from 7 mm to 15 mm. Similar to Medium-Fin, the diameter of the finned section depends on the tube material and the fin height, allowing for the optimization of thermal efficiency in specific applications.

HIGH-FIN finned tubes are used in a wide range of applications, including water heaters, oil radiators, water systems, solvents, compressed air, and air coolers. Their design maximizes heat transfer, making them a preferred choice for systems requiring high thermal efficiency and durability under demanding conditions.



HIGH-FIN

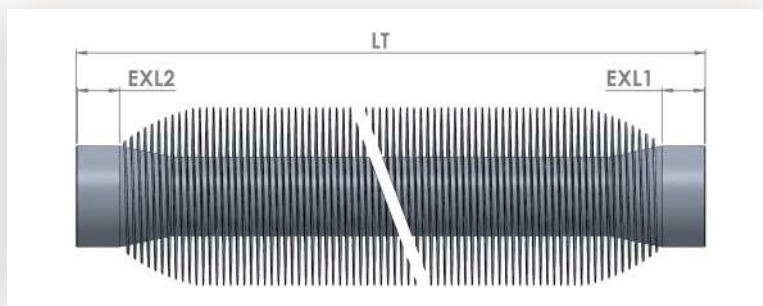


SECCIÓN B-B



DO: Outer diameter of the finned section
DI: Inner diameter of the smooth section
DX: Inner diameter of the finned section
DR: Diameter of the tube under the fin
D: Outer diameter of the smooth section
XP: Smooth tube thickness

XF: Thickness of the finned section tube
FH: Fin height
E: Fin thickness
P: Fin pitch
LT: Total length
EXL: Smooth end



TUBE DIAMETER (D)

12.7mm - 38mm

MAXIMUM LENGTH (LT)

Hasta 18 mts

FIN HEIGHT (FH)

7mm - 16mm

FIN THICKNESS (E)

0.35mm en adelante

FINS PER INCH (FPI): 5 - 11

AVAILABLE MATERIALS: Aluminum, Copper

LONGITUDINAL

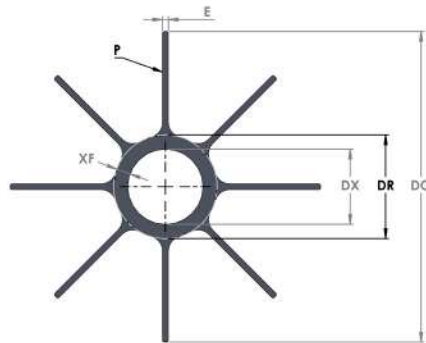
INTEGRAL FINNED

LONGITUDINAL INTEGRAL FINNING is a type of longitudinal finning produced from an extruded aluminum profile, resulting in a single-piece structure of the tube and fins. This integral design ensures efficient heat transfer and superior durability compared to fins applied by other methods.

Depending on the operating pressure, this finned profile can be used to line a steel tube, combining the high thermal conductivity of aluminum with the mechanical strength of steel. This hybrid design allows for applications that require both high thermal efficiency and structural robustness.

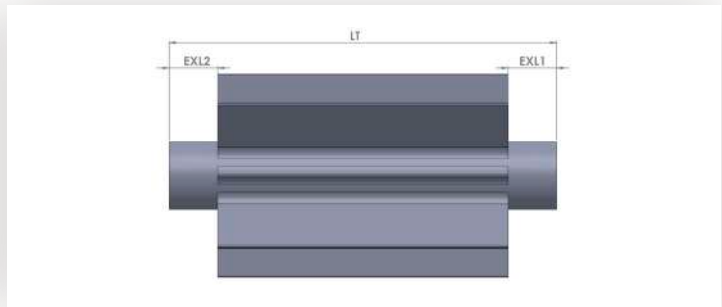
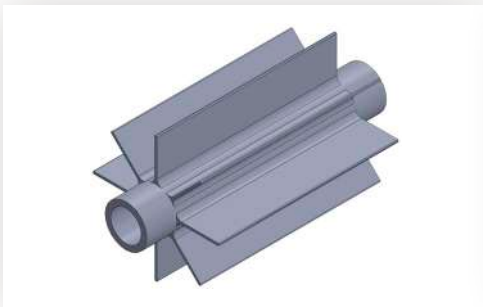
EXTRUDED LONGITUDINAL FINNED tubes are ideal for a variety of applications, including evaporators and regasifiers. Their efficient and durable design makes them suitable for systems that demand excellent heat transfer under challenging operating conditions.

LONGITUDINAL



DO: Outer diameter of the finned section
 DR: Diameter of the tube under the fin
 DX: Inner diameter of the finned section
 XF: Thickness of the finned section tube
 E: Fin thickness
 P: Number of fins

LT: Total length
 EXL: Smooth end



TUBE DIAMETER (D)

10mm en adelante

MAXIMUM LENGTH (LT)

Hasta 18 mts

FIN HEIGHT (FH)

4mm - 50mm

FIN THICKNESS (E)

0.35mm en adelante

FINS PER INCH (FPI): Defined by the tube diameter

AVAILABLE MATERIALS: Carbon steels, Stainless steels, Aluminum

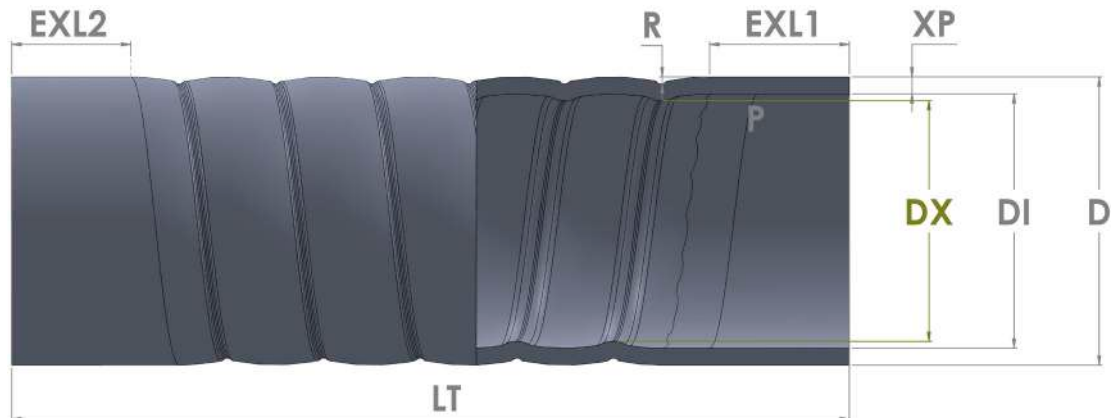
INTEGRAL FINNED **CORRUGATED SURFACE**

FINNED INTEGRAL CORRUGATED SURFACE tubes are manufactured using a helical embossing process applied to the tube wall through cold rolling. This technique ensures uniform thickness along the entire length of the tube, which is essential for maintaining both structural integrity and thermal efficiency. The defining feature of these tubes is their wavy surface, which creates increased turbulence in the fluid flowing through them.

The primary advantage of **CORRUGATED SURFACE TUBES** is their enhanced thermal transfer capability. The corrugations on the tube surface induce turbulent flow, significantly increasing the heat transfer coefficient compared to traditional smooth tubes. Additionally, this improved thermal efficiency is achieved with a lower pressure drop, optimizing overall system performance.

CORRUGATED SURFACE TUBES are well-suited for applications such as chillers, coaxial heat exchangers, coils, and shell-and-tube heat exchangers. Their efficiency in various environments makes them a preferred choice for industries aiming to maximize heat transfer and improve energy efficiency.

CORRUGATED SURFACE



D: Outer diameter of the smooth section
 DX: Inner diameter of the finned section
 DI: Inner diameter of the smooth section
 XF: Thickness of the finned section tube
 P: Fin pitch
 EXL: Smooth end
 R: Groove depth
 LT: Total length

TUBE DIAMETER (D)

10mm to 63mm

MAXIMUM LENGTH (LT)

Hasta 18 mts

FIN HEIGHT (FH)

Altura maxima: Sin limite

FIN THICKNESS (E)

No aplica

FINS PER INCH (FPI): Corrugation Pitch 3 mm to 20 mm

AVAILABLE MATERIALS: Aluminum, Copper, Stainless Steels, Bronze, Titanium, Carbon Steels

DEPOSITION

FINNED



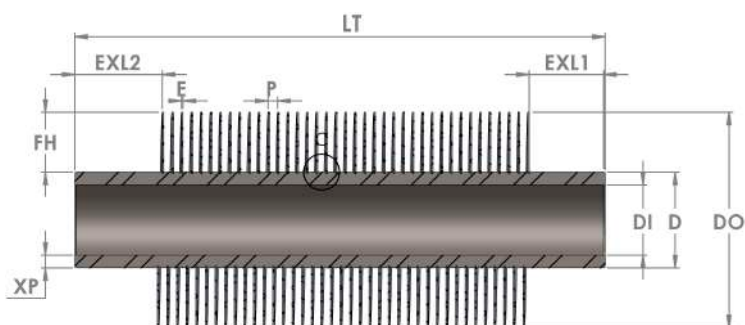
G-FIN

DEPOSITION - FINNED

G-FIN finning type is achieved by rolling an aluminum or copper strip onto the outer surface of a tube to form a flat helical fin. Its main feature is the mechanical bond to the tube, created by forming a groove in the tube wall without removing chips. During the rolling process, the base of the fin is inserted into the groove and then closed, ensuring secure attachment.

This mechanical bond provides excellent thermal exchange and secure fin attachment, allowing the tube to withstand higher operating temperatures. Due to its robustness and efficiency, the G-FIN finning type is ideal for applications requiring effective heat transfer and high resistance to demanding thermal conditions. It is used in a wide range of industrial applications, including heat exchangers, cooling and heating systems, and any other application where high thermal performance and superior resistance to high temperatures are required.

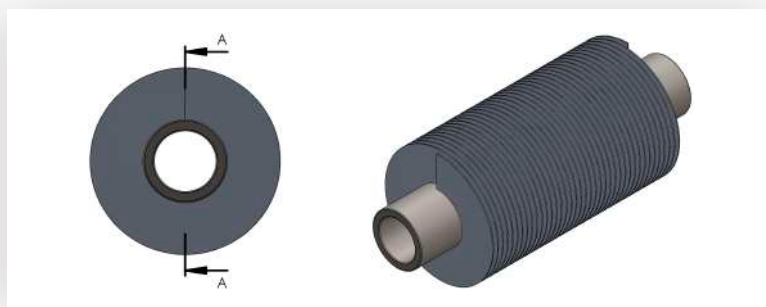
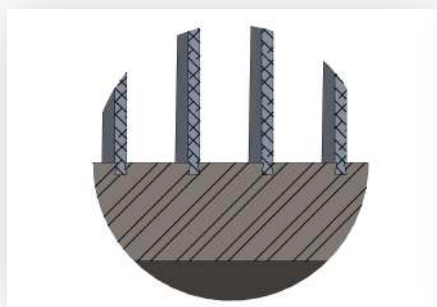




DO: Outer diameter of the finned section
DI: Inner diameter of the smooth section
D: Outer diameter of the smooth section

FH: Fin height
XP: Smooth tube thickness
E: Fin thickness

P: Fin pitch
EXL: Smooth end
LT: Total length



TUBE DIAMETER (D)

12.7mm - 50.8mm

FIN CONTACT

Mechanical bond

FIN HEIGHT (FH)

6,4mm - 25,4mm

FIN THICKNESS (E)

0,3mm - 1,5mm

FINS PER INCH (FPI): 5 to 13

SERVICE TYPE: High temperature

TUBE MATERIAL: Ferrous, non-ferrous, and some alloys

FIN MATERIAL: Aluminum, Copper, Carbon steel, Stainless steel

MAXIMUM WORKING TEMPERATURE (TUBE WALL): Aluminum: 343°C (650°F), Carbon steel: 450°C (850°F), Stainless steel: 540°C (1000°F)

MAXIMUM ADMISSIBLE TUBE HARDNESS: RCB 74/90

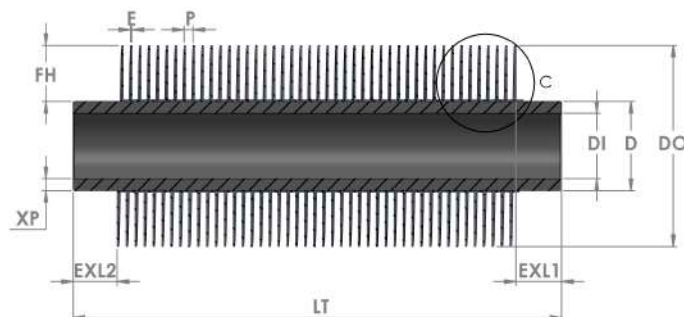
L-FIN

DEPOSITION - FINNED

L-FIN finning is achieved by folding an aluminum or copper strip to create its characteristic "L" profile. This strip is then rolled onto the outer surface of the tube, forming a flat helical fin. The fin is attached to the tube by clamping, where the base of the fin completely covers the tube's surface, ensuring efficient thermal exchange and secure attachment.

L-FIN finned tubes are suitable for applications with temperatures up to 176°C. At higher temperatures, the expansion of the strip may lead to a loss of attachment to the tube, reducing thermal efficiency. These tubes are ideal for heat exchangers, condensers, evaporators, and cooling and heating systems across various industries, ensuring optimal performance under controlled working conditions.

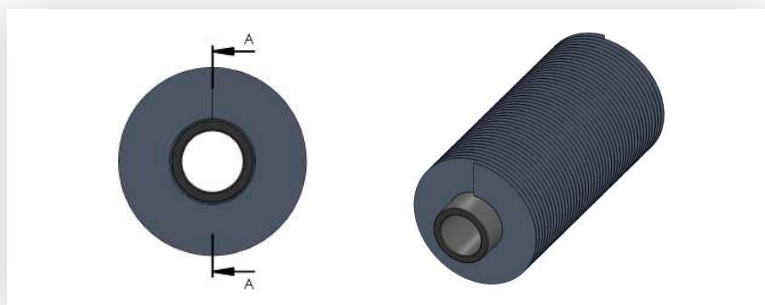
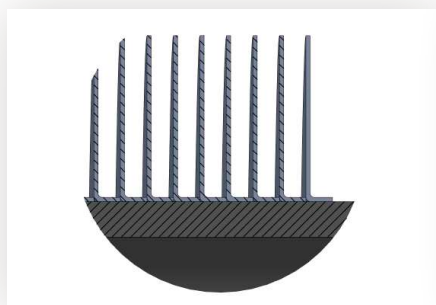




DO: Outer diameter of the finned section
DI: Inner diameter of the smooth section
D: Outer diameter of the smooth section

FH: Fin height
XP: Smooth tube thickness
E: Fin thickness

P: Fin pitch
EXL: Smooth end
LT: Total length



TUBE DIAMETER (D)

12.7mm - 50.8mm

FIN CONTACT

Interference fit

FIN HEIGHT (FH)

6,4mm - 25,4mm

FIN THICKNESS (E)

0,3mm - 1,5mm

FINS PER INCH (FPI): 4 to 12

SERVICE TYPE: Light duty

TUBE MATERIAL: Ferrous, non-ferrous, and some alloys

FIN MATERIAL: Aluminum, Copper

MAXIMUM WORKING TEMPERATURE (TUBE WALL): Up to 176°C (350°F)

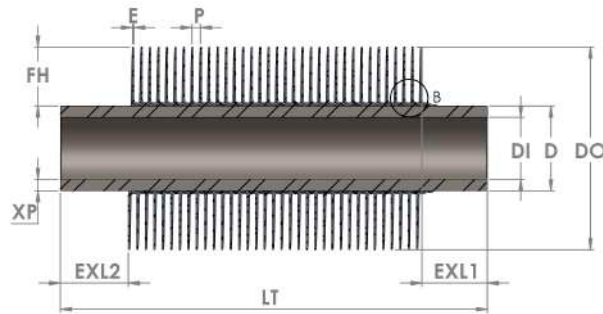
LL-FIN

DEPOSITION - FINNED

LL-FIN finning is achieved by folding an aluminum or copper strip twice to form its distinctive "LL" profile. This strip is then rolled onto the outer surface of the tube, creating a flat helical fin. The attachment of the fin to the tube is done by clamping, where the base of the fin completely covers the tube's surface. This method ensures both efficient thermal exchange and a secure attachment, while also offering protection against corrosion.

LL-FIN finned tubes are suitable for applications with temperatures up to 176°C. At higher temperatures, the expansion of the strip may lead to a loss of attachment to the tube, reducing thermal efficiency. Compared to the L-FIN design, the LL-FIN provides enhanced fin attachment stability and improved corrosion protection. These tubes are particularly well-suited for use in heat exchangers, condensers, evaporators, and various cooling and heating systems, offering optimal and durable performance in demanding conditions.

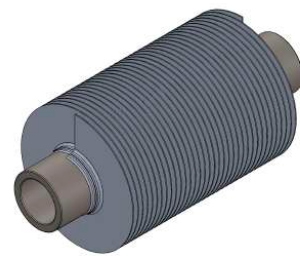
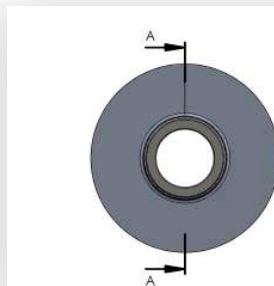
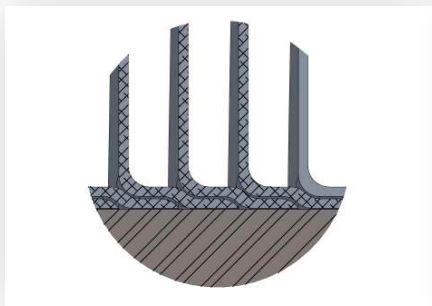




DO: Diámetro exterior sección aletada
DI: Diámetro interior sección lisa
D: Diámetro exterior sección lisa

FH: Altura de aleta
XP: Espesor tubo liso
E: Espesor aleta

P: Paso aletado
EXL: Extremo liso
LT: Longitud total



TUBE DIAMETER (D)

12.7mm - 50.8mm

FIN CONTACT

Interference fit

FIN HEIGHT (FH)

6,4mm - 25,4mm

FIN THICKNESS (E)

0,3mm - 1,5mm

FINS PER INCH (FPI): 4 to 12

SERVICE TYPE: Corrosive applications

TUBE MATERIAL: Ferrous, non-ferrous, and some alloys

FIN MATERIAL: Aluminum, Copper

MAXIMUM WORKING TEMPERATURE (TUBE WALL): Up to 176°C (350°F)

KL-FIN

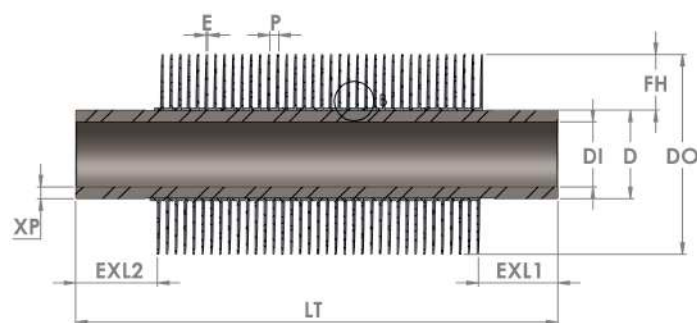
DEPOSITION - FINNED

KL-FIN finning is an enhancement applied to L-Fin and LL-Fin finned tubes. In this process, knurling is performed on both the tube surface and the base of the fin. This knurling significantly improves the attachment between the fin and the tube, resulting in a stronger and more stable connection.

These finned tubes, which feature a clamping fit, are known for their superior heat transfer performance due to the mechanical improvement in the bond between the fin material and the tube surface. **KL-FIN** fins are typically produced from aluminum or copper strips. The depth of the knurling on the tube wall varies depending on the hardness of the tube material, ensuring an optimal and durable connection.

This enhancement is ideal for applications that require higher thermal efficiency and mechanical strength, providing advanced solutions across various industries.

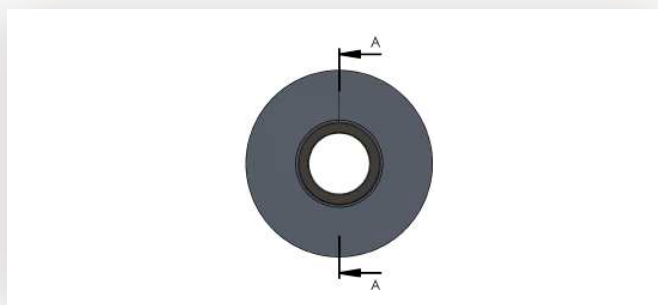
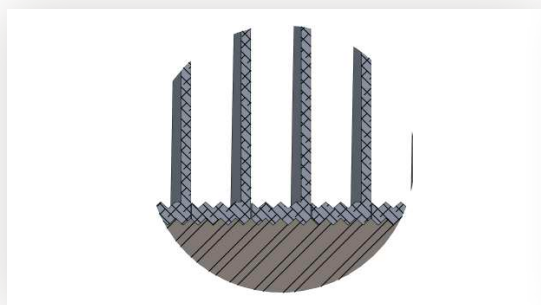
KL-FIN finned tubes are preferred for use in heat exchangers, condensers, evaporators, and cooling and heating systems, offering exceptional performance and reliability under demanding conditions.



DO: Outer diameter of the finned section
DI: Inner diameter of the smooth section
D: Outer diameter of the smooth section

FH: Fin height
XP: Smooth tube thickness
E: Fin thickness

P: Fin pitch
EXL: Smooth end



TUBE DIAMETER (D)

12.7mm - 50.8mm

FIN CONTACT

Interference fit

FIN HEIGHT (FH)

6,4mm - 25,4mm

FIN THICKNESS (E)

0,3mm - 1,5mm

FINS PER INCH (FPI): 4 to 12

SERVICE TYPE: Severe service

TUBE MATERIAL: Ferrous, non-ferrous, and some alloys

FIN MATERIAL: Aluminum, Copper

MAXIMUM WORKING TEMPERATURE (TUBE WALL): Up to 260°C (500°F)

PERFORATED FIN

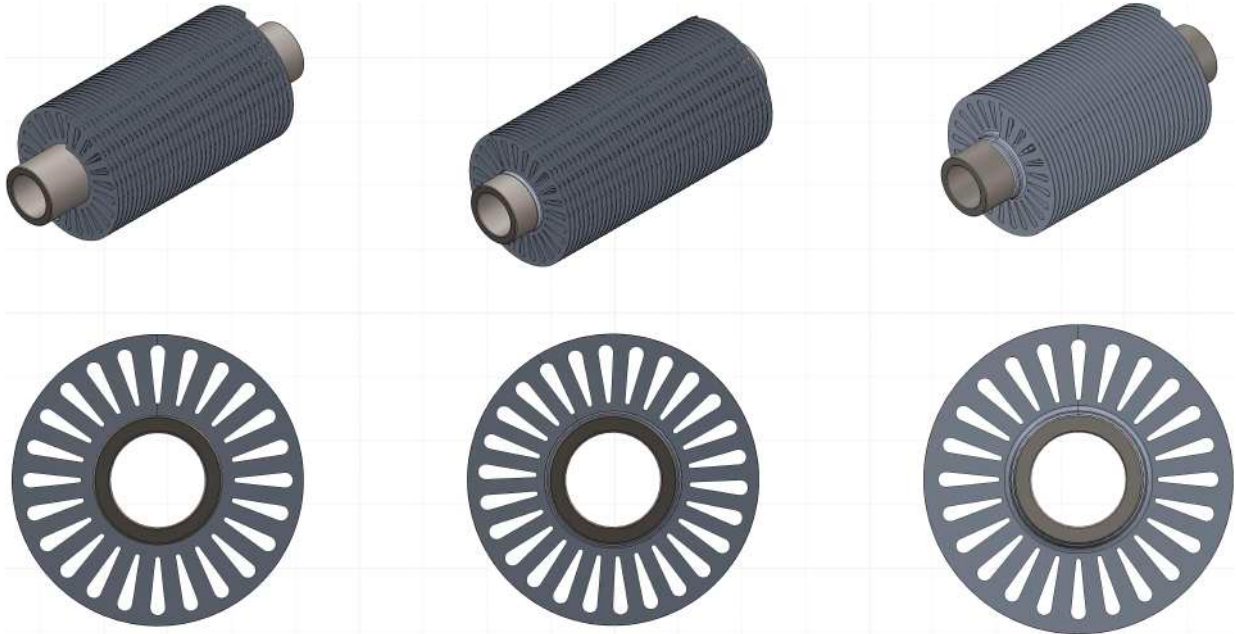
DEPOSITION - FINNED

PERFORATED FINS are an enhancement applied to L-Fin, LL-Fin, and G-Fin finned tubes, designed to improve air passage through the fins and significantly increase thermal exchange. This process involves making small cuts in the fin material, which expand during the subsequent rolling of the fins, creating visible perforations without any material loss.

This technique notably enhances thermal efficiency by facilitating better airflow and increasing the effective heat transfer surface area. Perforated fins are ideal for applications requiring high thermal performance and optimized airflow.

In engineering and thermodynamics, perforated fins are recognized as an effective solution for improving heat transfer in heat exchangers, radiators, evaporators, and other cooling or heating systems.

PERFORATED FIN



TUBE DIAMETER (D)

12.7mm - 50.8mm

FIN CONTACT

Mechanical joint or interference fit.

FIN HEIGHT (FH)

6,4mm - 25,4mm

FIN THICKNESS (E)

0,3mm - 1,5mm

FINS PER INCH (FPI): 4 to 12

SERVICE TYPE: Light duty, high temperature, severe service, and corrosive applications depending on the primary fin

TUBE MATERIAL: Ferrous, non-ferrous, and some alloys

FIN MATERIAL: Available for any G-Fin, L-Fin, LL-Fin aluminum or copper fin

MAXIMUM OPERATING TEMPERATURE (TUBE WALL): The selection of the primary fin determines the temperature. 176°C - 540°C (350°F - 1000°F)

AERO-FIN

DEPOSITION - FINNED

AERO-FIN finning is a type of applied finning where a continuous helical fin is created with a corrugated support base. This design increases the contact surface area between the fin and the tube, significantly enhancing heat transfer efficiency. The fin is attached to the tube through tension, securing it firmly at the tube ends to ensure a durable and reliable connection.

One of the main advantages of **AERO-FIN** finning is its versatility, as it can accommodate virtually any material for both the tube and the fin. This includes materials such as carbon steel, stainless steel, aluminum, and copper, making it suitable for a broad range of industrial applications.

AERO-FIN finned tubes are used in various industrial settings where high thermal efficiency and resistance to demanding conditions are required. Applications include industrial dryers, economizers, air coolers, evaporators, cooling coils, and furnaces. Their adaptability and effectiveness across different environments and materials make them an optimal choice for enhancing heat transfer in multiple industries.



TUBE DIAMETER (D)

10mm and above

FIN CONTACT

Tension

FIN HEIGHT (FH)

6.4mm to 100mm depending
on the tube diameter

FIN THICKNESS (E)

0.3mm - 4mm

FINS PER INCH (FPI): 2 to 10

SERVICE TYPE: Severe service

TUBE MATERIAL: Carbon steels, Stainless steels, Aluminum, Copper, Brass

FIN MATERIAL: Carbon steels, Stainless steel, Aluminum, Copper

MAXIMUM OPERATING TEMPERATURE (TUBE WALL): Up to 176°C (350°F)

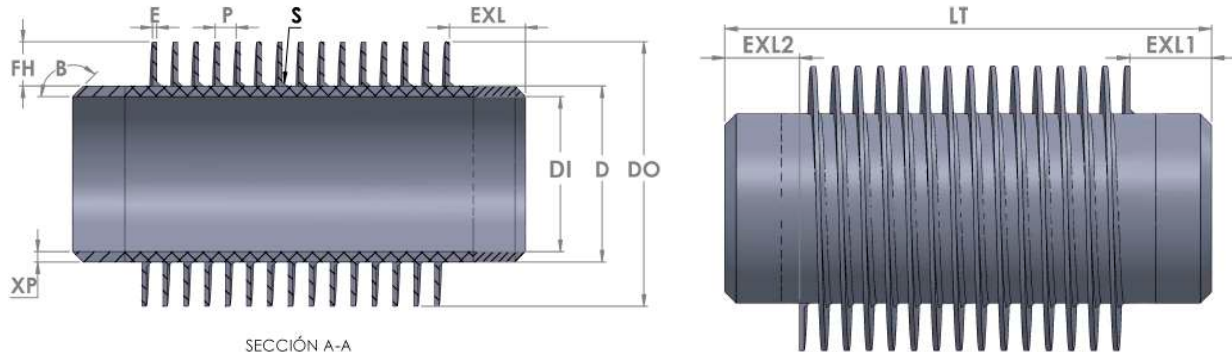
SOLDAFIN

DEPOSITION - FINNED

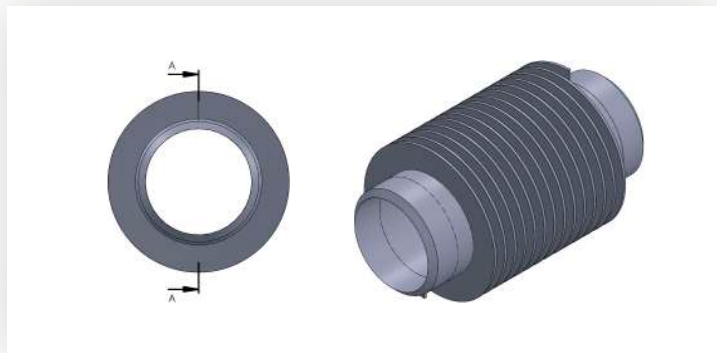
The **SOLDAFIN** finned tube features a continuous helical fin with a flat support base, applied directly onto the base tube using laser welding. This welding process can be performed with or without filler material, depending on customer specifications.

SOLDAFIN tubes are utilized in a range of industrial applications, including dryers, boilers, furnaces, and economizers. Their robust design and precise welding ensure efficient heat transfer while providing high resistance to pressure and corrosion.





D: Outer diameter of smooth section
DO: Outer diameter of finned section
DI: Inner diameter of smooth section
S: Type and section of welding
P: Fin pitch
E: Fin thickness
FH: Fin height
B: Bevel angle
XP: Smooth tube thickness
LT: Total length
EXL: Smooth end



TUBE DIAMETER (D)

10mm and above

FIN CONTACT

Welded

FIN HEIGHT (FH)

6.4mm to 100mm depending on the tube diameter and the number of fins per inch (FPI)

FIN THICKNESS (E)

0,3mm - 4mm

FINS PER INCH (FPI): 2 to 10

SERVICE TYPE: Severe service

TUBE MATERIAL: Carbon steels, Stainless steels

FIN MATERIAL: Carbon steels, Stainless steel

MAXIMUM OPERATING TEMPERATURE (TUBE WALL): +260°C (500°F)

SOLDAFIN SERRATED

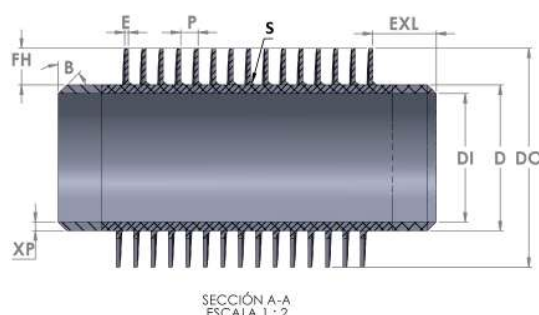
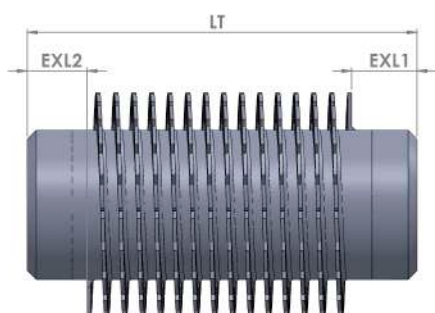
DEPOSITION - FINNED

The **SERRATED SOLDAFIN** finned tube is an enhanced version of the standard Soldafin, featuring a serrated helical fin instead of a flat one. This design is achieved by making cuts in the strip before forming the fin, allowing these cuts to open and create the characteristic serration during the finning process. As with the standard Soldafin, the fin is welded to the tube surface using laser welding, ensuring a strong and durable bond.

The serrated fin design significantly reduces dirt buildup, which improves thermal efficiency and decreases maintenance requirements. This makes **SERRATED SOLDAFIN** tubes ideal for applications in dryers, boilers, furnaces, and economizers, providing a durable and efficient solution in environments where residue accumulation is a frequent issue.



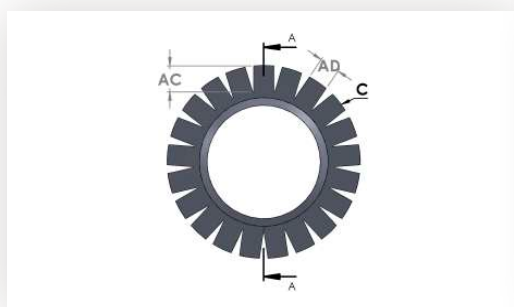
SOLDAFIN DENTED



DO: Outer diameter of finned section
DI: Inner diameter of plain section
D: Outer diameter of plain section
XP: Thickness of plain tube
FH: Fin height

EXL: Plain end
LT: Total length
E: Fin thickness
P: Fin pitch
B: Bevel angle

S: Type and section of weld
AC: Cut height
AD: Serration width
C: Number of fins per turn



TUBE DIAMETER (D)

10mm and up

FIN CONTACT

Welded

FIN HEIGHT (FH)

6.4mm to 100mm depending on tube diameter and the number of fins per inch

FIN THICKNESS (E)

0,3 mm - 4 mm

FINS PER INCH: 2 to 10

SERVICE TYPE: Severe service

TUBE MATERIAL: Carbon steels, Stainless steels

FIN MATERIAL: Carbon steels, Stainless steels

MAXIMUM OPERATING TEMPERATURE (TUBE WALL): +260°C (500°F)

LONGITUDINAL

DEPOSITION - FINNED

TUBES WITH LONGITUDINAL FINS BY DEPOSITION feature fins that are arranged longitudinally along the length of the tube, significantly expanding the heat exchange surface. These fins are securely attached to the tube surface through projection welding, ensuring a robust and efficient bond that enhances heat transfer.

The longitudinal fin design maximizes the contact surface between the hot fluid and the tube, greatly improving heat exchange efficiency. This design is particularly beneficial for applications that require uniform heat distribution along the entire length of the tube. The projection welding technique ensures that the fins remain firmly attached, even under demanding operating conditions.

This type of finned tube is commonly used in evaporators and regasification units, where it must perform efficiently at high temperatures. Its design supports high levels of heat without compromising the tube's integrity or the effectiveness of the heat transfer process. These attributes make longitudinal finned tubes by deposition an excellent choice for industrial applications that require high thermal efficiency and long-term durability.

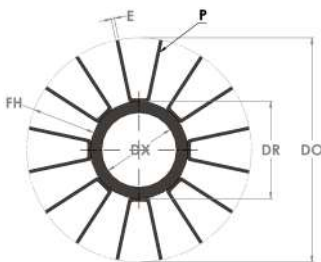
LONGITUDINAL



DR: Diameter of tube under the fin
DX: Inner diameter of finned section
DO: Outer diameter of finned section

E: Fin thickness
P: Number of fins
FH: Fin height

LT: Total length
EXL: Plain end



TUBE DIAMETER (D)

10mm and up

FIN CONTACT

Projection welded

FIN HEIGHT (FH)

4mm and up

FIN THICKNESS (E)

0,5mm - 4mm

FINS PER INCH (FPI): Not applicable

SERVICE TYPE: Severe service

TUBE MATERIAL: Carbon steels, Stainless steels

FIN MATERIAL: Carbon steels, Stainless steels

MAXIMUM OPERATING TEMPERATURE (TUBE WALL): +260°C (500°F)

STUDDED TUBE

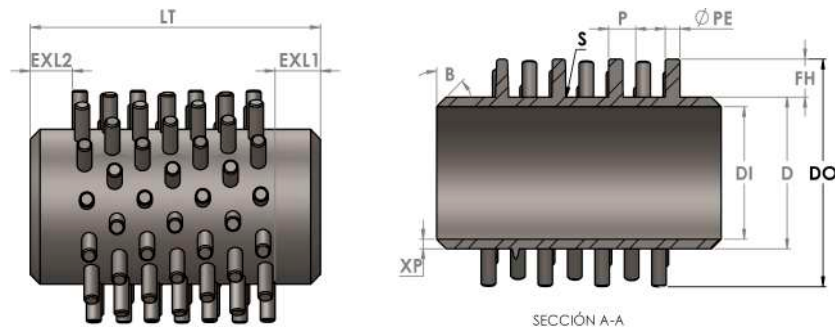
WITH DEPOSITION FINS

STUDDED TUBE is designed to enhance the heat exchange surface by welding studs onto its exterior. This process, conducted via spot welding, ensures that the studs are firmly attached, providing a robust connection that supports efficient heat transfer and superior durability under demanding conditions.

The addition of studs increases the contact surface for heat transfer, which is particularly advantageous in applications where the external fluid tends to foul or corrode the exchange surface. The strong and durable structure of studded tubes makes them well-suited for harsh environments and applications requiring high mechanical strength.

STUDDED TUBES are commonly used in furnaces and boilers, where the fuels can lead to significant levels of dirt or corrosion. Their ability to maintain effective heat transfer even under adverse conditions makes them a reliable choice for optimizing thermal performance and durability in critical industrial applications.

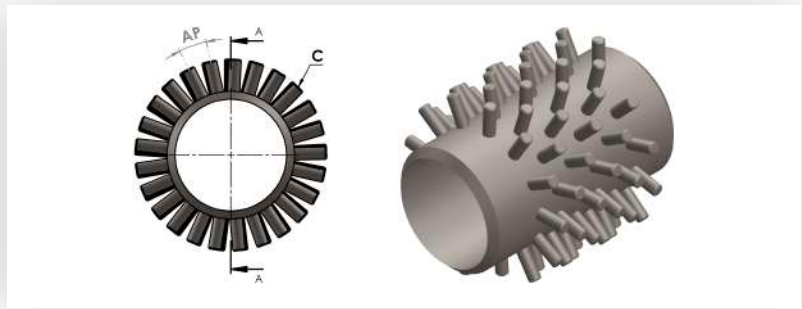
TUBE STUDDED



DO: Outer diameter of finned section
DI: Inner diameter of plain section
D: Outer diameter of plain section
FH: Fin height
PE: Stud diameter

P: Pitch
S: Type and section of weld
B: Bevel angle
XP: Thickness of plain tube
LT: Total length

EXL1: Free end 1
EXL2: Free end 2
AP: Angle between studs
C: Number of studs per turn



TUBE DIAMETER (D)

Up to 10 inches

FIN CONTACT

Spot welded

FIN HEIGHT (FH)

Stud length: up to 150mm

FIN THICKNESS (E)

Stud diameter: up to 19mm

FINS PER INCH (FPI): Not applicable

SERVICE TYPE: Severe service

TUBE MATERIAL: Carbon steels, Stainless steels

FIN MATERIAL: Carbon steels, Stainless steels

MAXIMUM OPERATING TEMPERATURE (TUBE WALL): +260°C (500°F)

MANUFACTURE OF TUBULAR COMPONENTS

COILS



MANUFACTURE OF TUBULAR COMPONENTS

COILS

MANUFACTURE OF TUBULAR COMPONENTS

In addition to offering a wide range of straight finned tubes for heat transfer, Mraz Finned Tubes provides components made from finned tubes in various configurations.

COIL MODELS:

- ✓ TAT / AGRAL / SERVIVAC Coils
- ✓ DEUTZ F3L / DEUTZ F4L / F5L / F6L Coils (for 3, 4, 5, and 6-cylinder DEUTZ engines)

QUALITY CONTROL:

Mraz Finned Tubes ensures quality with hydraulic testing at pressures up to 700 BAR and pneumatic testing underwater up to 20 BAR.

COILS



SEALING COMPONENTS

AERO PLUG

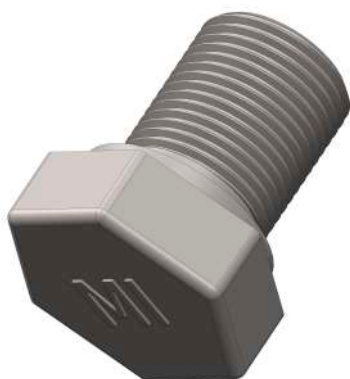
At Mraz Aletados SRL, we manufacture forged plugs and header gaskets for air coolers, designed to seal the openings in the headers, allowing for inspection, cleaning, and maintenance. We comply with the material specifications of ASME Section VIII and the threading standards of ASME B16.11, ensuring the durability and reliability of our products, which are essential for maintaining efficiency across various industries, including automotive, petrochemical, and manufacturing. We offer custom manufacturing, and each unit includes quality and traceability certificates.

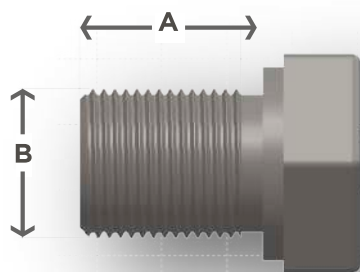
The threaded plugs are designed to seal the openings in the end headers of air coolers, allowing for access to inspection, cleaning, and maintenance. These plugs are essential for maintaining the efficiency and integrity of the cooling system in various industries, including automotive, petrochemical, and manufacturing.

AVAILABLE MATERIALS:

- ✓ Carbon Steel
- ✓ Stainless Steel

AERO PLUG





MEASUREMENT TABLE

SIZE HEXAGON	TUBE OD	"A" PLUG OD	THREAD UNF	"B" LENGTH UNDER HEAD (mm)	PLUGS		JOINTS	
					CARBON STEEL (SA 105)	STAINLESS STEEL (SA 182-316L)	CARBON STEEL	STAINLESS STEEL
1" (25.4 mm)	5/8" (15.9 mm)	3/4" (19.05 mm)	16 H	22 28	MI-M-RA-200-10-U1 MI-M-RA-201-10-U1	MI-M-RA-200-20-U1 MI-M-RA-201-20-U1	MI-J-RA-10-U1	MI-J-RA-20-U1
1 1/8" (28.6 mm)	3/4" (19.05 mm)	7/8" (22.2 mm)	14 H	28	MI-M-BS-201-10-U2	MI-M-BS-201-20-U2	MI-J-BS-10-U2	MI-J-BS-20-U2
1 3/8" (34.9 mm)	3/4" (19.05 mm)	7/8" (22.2 mm)	14 H	28 48	MI-M-NI-201-10-U2 MI-M-NI-401-10-U2	MI-M-NI-201-20-U2 MI-M-NI-401-20-U2	MI-J-NI-10-U2	MI-J-NI-20-U2
1 3/8" (34.9 mm)	7/8" (22.2 mm)	1" (25.4 mm)	12 H	28 48	MI-M-NI-201-10-U3 MI-M-NI-401-10-U3	MI-M-NI-201-20-U3 MI-M-NI-401-20-U3	MI-J-NI-10-U3	MI-J-NI-20-U3
1 3/8" (34.9 mm)	1" (25.4 mm)	1 1/8" (28.6 mm)	12 H	28 32 35 41 48 54	MI-M-NI-201-10-U4 MI-M-NI-300-10-U4 MI-M-NI-301-10-U4 MI-M-NI-400-10-U4 MI-M-NI-401-10-U4 MI-M-NI-500-10-U4	MI-M-NI-201-20-U4 MI-M-NI-300-20-U4 MI-M-NI-301-20-U4 MI-M-NI-400-20-U4 MI-M-NI-401-20-U4 MI-M-NI-500-20-U4	MI-J-NI-10-U4	MI-J-NI-20-U4
1 5/8" (41.3 mm)	1" (25.4 mm)	1 1/8" (28.6 mm)	12 H	28 32 35 41 48 54	MI-M-PI-201-10-U4 MI-M-PI-300-10-U4 MI-M-PI-301-10-U4 MI-M-PI-400-10-U4 MI-M-PI-401-10-U4 MI-M-PI-500-10-U4	MI-M-PI-201-20-U4 MI-M-PI-300-20-U4 MI-M-PI-301-20-U4 MI-M-PI-400-20-U4 MI-M-PI-401-20-U4 MI-M-PI-500-20-U4	MI-J-PI-10-U4	MI-J-PI-20-U4
1 1/2" (38.1 mm)	1 1/8" (28.6 mm)	1 1/4" (31.8 mm)	12 H	28 32 35 41 48 54	MI-M-AL-201-10-U5 MI-M-AL-300-10-U5 MI-M-AL-301-10-U5 MI-M-AL-400-10-U5 MI-M-AL-401-10-U5 MI-M-AL-500-10-U5	MI-M-AL-201-20-U5 MI-M-AL-300-20-U5 MI-M-AL-301-20-U5 MI-M-AL-400-20-U5 MI-M-AL-401-20-U5 MI-M-AL-500-20-U5	MI-J-AL-10-U5	MI-J-AL-20-U5
1 5/8" (41.3 mm)	1 1/4" (31.8 mm)	1 3/8" (34.9 mm)	12 H	35 41 48 54	MI-M-PI-301-10-U6 MI-M-PI-400-10-U6 MI-M-PI-401-10-U6 MI-M-PI-500-10-U6	MI-M-PI-301-20-U6 MI-M-PI-400-20-U6 MI-M-PI-401-20-U6 MI-M-PI-500-20-U6	MI-J-PI-10-U6	MI-J-PI-20-U6
1 7/8" (47.6 mm)	1 1/4" (31.8 mm)	1 3/8" (34.9 mm)	12 H	35 41 48 54	MI-M-VA-301-10-U6 MI-M-VA-400-10-U6 MI-M-VA-401-10-U6 MI-M-VA-500-10-U6	MI-M-VA-301-20-U6 MI-M-VA-400-20-U6 MI-M-VA-401-20-U6 MI-M-VA-500-20-U6	MI-J-VA-10-U6	MI-J-VA-20-U6
1 7/8" (47.6 mm)	1 1/2" (38.1 mm)	1 5/8" (41.3 mm)	12 H	35 41 48 54	MI-M-VA-301-10-U7 MI-M-VA-400-10-U7 MI-M-VA-401-10-U7 MI-M-VA-500-10-U7	MI-M-VA-301-20-U7 MI-M-VA-400-20-U7 MI-M-VA-401-20-U7 MI-M-VA-500-20-U7	MI-J-VA-10-U7	MI-J-VA-20-U7
2 1/8" (54 mm)	1 1/2" (38.1 mm)	1 5/8" (41.3 mm)	12 H	41 48 54	MI-M-AR-400-10-U7 MI-M-AR-401-10-U7 MI-M-AR-500-10-U7	MI-M-AR-400-20-U7 MI-M-AR-401-20-U7 MI-M-AR-500-20-U7	MI-J-AR-10-U7	MI-J-AR-20-U7
2 1/8" (54 mm)	1 3/4" (44.45 mm)	1 7/8" (47.6 mm)	12 H	48 54	MI-M-AR-401-10-U8 MI-M-AR-500-10-U8	MI-M-AR-401-20-U8 MI-M-AR-500-20-U8	MI-J-AR-10-U8	MI-J-AR-20-U8
2 3/8" (60.3 mm)	1 3/4" (44.45 mm)	1 7/8" (47.6 mm)	12 H	48 54	MI-M-SO-401-10-U8 MI-M-SO-500-10-U8	MI-M-SO-401-20-U8 MI-M-SO-500-20-U8	MI-J-SO-10-U8	MI-J-SO-20-U8
2 3/8" (60.3 mm)	2" (50.8 mm)	2 1/8" (54 mm)	12 H	48 54	MI-M-SO-401-10-U9 MI-M-SO-500-10-U9	MI-M-SO-401-20-U9 MI-M-SO-500-20-U9	MI-J-SO-10-U9	MI-J-SO-20-U9
2 5/8" (67 mm)	2" (50.8 mm)	2 1/8" (54 mm)	12 H	48 54	MI-M-IG-401-10-U9 MI-M-IG-500-10-U9	MI-M-IG-401-20-U9 MI-M-IG-500-20-U9	MI-J-IG-10-U9	MI-J-IG-20-U9

ACCESSORIES

SEPARATOR RINGS

Our separator rings are specifically designed to maintain consistent and precise spacing between finned tubes in heat exchangers.

Made from galvanized steel, these rings offer exceptional corrosion resistance, ensuring durability and optimal performance in demanding environments.

Each ring consists of two halves that easily snap together, allowing for quick and secure installation. This design facilitates both maintenance and assembly of thermal exchange systems, ensuring maximum operational efficiency.

To place an order, please send us the following information:

- ✓ Tube diameter
- ✓ Outer diameter of the ring (pitch)

SEPARATOR RINGS



BEFORE QUOTATION

WE ARE HERE TO HELP YOU.

Contact our team of experts for personalized advice, to request quotes, or to resolve any questions about our products and services.



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09:00 AM to 06:00 PM



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