



NUOVA **ZECCHINI**
excellence in insulation since 1980

PRODUCT OVERVIEW

Copper made to perfection

Leader in the production of
coated copper tubes.

COPPERWEAR SINCE 1980

Leader in the production and develop of high quality coated copper tubes for the ACR (Air Conditioning & Refrigeration), ITS (Hydrothermal/ Residential), Automotive and Industrial sectors.

The Headquarters in Onara di Tombolo (PD) produces and distributes pre-insulated or coated copper tubes for air conditioning, heating, sanitary and domestic gas; it also deals with coatings for tubes in rolls and bars in aluminum and steel, multilayer and other plastic materials.

All Nuova Zecchini manufacturing processes comply with ISO 9001:2015.

MISSION

Nuova Zecchini believes in maximizing processes, continuous improvement and generating high value for the customer. From the circular and waste-free economy to the improvement of the supply chain, it is able to generate very high added value for stakeholders and customers.

VISION

To offer a unique and valuable product designed locally, but conceived for global trade.



ACR RANGE - GELIX



Air Conditioning Refrigeration

gelix

PRE-INSULATED COPPER PIPE WITH ANTI-CONDENSATION SHEATH IN CLOSED CELLS CROSS-LINKED PE FOAM. EUROCLASS B_L S2 D0.



Insulation Features

Insulating material made of gamma rays cross-linked PE with closed cells and a very high resistance factor to the diffusion of water vapour.

Extremely compact, it is ideal for installations where space is critical while maintaining the same performance as the regular one.

- Thermal conductivity at 40°C: $\lambda \leq 0.040 \text{ W/m}^2\text{K}$
- Water vapour diffusion resistance factor (anti-condensation) $\geq 15000 \mu$
- Fire reaction: Euroclass_{BL} s2 d0 (EN13501:2019)
- Operating temperature: $-80^\circ \div +105^\circ\text{C}$
- Does not contain CFCs

Smooth external film in white LDPE with high mechanical resistance.

Copper pipe features

ACR Copper Cu-DHP 99.90 min. annealed (R220) seamless for refrigerant gases.


- Mechanical properties, dimensions, tolerances, and eccentricity in compliance with the EN 12735-1 standard.
- Specific for all air conditioning, refrigeration and heat pump systems that use refrigerant gases such as A1, A2L and A3.
- Internal cleanliness is ensured by sealing the ends of each tube.
- Carbon residue $< 0,34 \text{ mg/dm}^2$.
- Sealed ends as per ASTM B280.

Fields of use

Specific for all air conditioning, refrigeration and heat pump systems that use refrigerant gases such as A1, A2L and A3.



ACR RANGE - GELIX DUO

 Air Conditioning Refrigeration

gelix duo

PRE-INSULATED COPPER PIPES, COUPLED WITH OVERCOATING FILM. INSULATING SHEATHS IN CLOSED CELLS CROSS-LINKED PE FOAM WITH PROTECTIVE FILM THAT GUARANTEE A QUICK AND EASY INSTALLATION AND MAXIMUM RESISTANCE OF THE COATING.
EUROCLASS B_L s2 d0.



Insulation Features

Insulating material made of gamma rays cross-linked PE with closed cells and a very high resistance factor to the diffusion of water vapour. Coupling performed by extruding an additional overcoating film which facilitates separation without compromising the integrity of the coating.

- Thermal conductivity at 40°C: $\lambda \leq 0.040 \text{ W/m}^2\text{K}$
- Water vapour diffusion resistance factor (anti-condensation) $\geq 15000 \mu$
- Fire reaction: Euroclass_{BL} s2 d0 (EN13501:2019)
- Operating temperature: $-80^\circ \div +105^\circ\text{C}$
- Does not contain CFCs

Smooth external film in white LDPE with high mechanical resistance.

Copper pipe features

ACR Copper Cu-DHP 99.90 min. annealed (R220) seamless for refrigerant gases.

- Mechanical properties, dimensions, tolerances, and eccentricity in compliance with the EN 12735-1 standard.
- Specific for all air conditioning, refrigeration and heat pump systems that use refrigerant gases such as A1, A2L and A3.
- Internal cleanliness is ensured by sealing the ends of each tube.
- Carbon residue $< 0,34 \text{ mg/dm}^2$.
- Sealed ends as per ASTM B280.

Fields of use

Specific for all air conditioning, refrigeration and heat pump systems that use refrigerant gases such as A1, A2L and A3.



ACR RANGE - CONDIX



Air Conditioning Refrigeration

condix

PRE-INSULATED COPPER PIPE WITH SEAMLESS ANTI-CONDENSATION SHEATH IN PE FOAM. EUROCLASS B_L S1 D0.



Insulation Features

Insulating material in seamless extruded PE foam, with closed cells and a very high resistance factor to the diffusion of water vapour. The Condix series has the best fire resistance thanks to the exclusive processing of the insulating sheath and outer film (Euroclass B_L s1 d0)

- Thermal conductivity at 40°C $\lambda \leq 0,040$ W/m²K
- Water vapour diffusion resistance factor (anti-condensation) ≥ 15000 μ
- Fire reaction Euroclass B_L s1 d0 (EN13501:2019)
- Operating temperature -40° ÷ +100°C
- Does not contain CFCs

The insulating sheath is not cut or welded to ensure maximum integrity of the product. Smooth external film in pearl grey LDPE with high mechanical resistance.

Copper pipe features

ACR Copper Cu-DHP 99.90 min. annealed (R220) seamless for refrigerant gases.

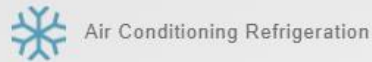
- Mechanical properties, dimensions, tolerances, and eccentricity in compliance with the EN 12735-1 standard.
- Specific for all air conditioning, refrigeration and heat pump systems that use refrigerant gases such as A1, A2L and A3.
- Internal cleanliness is ensured by sealing the ends of each tube.
- Carbon residue <0,34 mg/dm².
- Sealed ends as per ASTM B280.

Fields of use

Specific for all air conditioning, refrigeration and heat pump systems that use refrigerant gases such as A1, A2L and A3.



ACR RANGE - CONDIX DUO



condix duo

PRE-INSULATED COPPER PIPES COUPLED BY WELDING. INSULATING SHEATH IN SEAMLESS CLOSED CELLS EXTRUDED PE WITH EMBOSSED PROTECTIVE FILM. EUROCLASS B_L s1 d0.



Insulation Features

Insulating material in extruded PE foam, seamless, with closed cells and a very high resistance factor to the diffusion of water vapour. Coupling performed by welding the two embossed films which facilitates separation and reduces installation times.

- Thermal conductivity at 40°C $\lambda \leq 0,040$ W/m²K
- Water vapour diffusion resistance factor (anti-condensation) ≥ 15000 μ
- Fire reaction Euroclass B_L s1 d0 (EN13501:2019)
- Operating temperature -40° ÷ +100°C
- Does not contain CFCs

Smooth external film in white LDPE with high mechanical resistance.

Copper pipe features

ACR Copper Cu-DHP 99.90 min. annealed (R220) seamless for refrigerant gases.

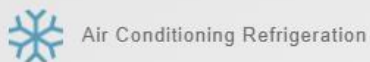
- Mechanical properties, dimensions, tolerances, and eccentricity in compliance with the EN 12735-1 standard.
- Specific for all air conditioning, refrigeration and heat pump systems that use refrigerant gases such as A1, A2L and A3.
- Internal cleanliness is ensured by sealing the ends of each tube.
- Carbon residue <0,34 mg/dm².
- Sealed ends as per ASTM B280.

Fields of use

Specific for all air conditioning, refrigeration and heat pump systems that use refrigerant gases such as A1, A2L and A3.



ACR RANGE - CONDIX UV-PRO



condix UV-Pro

PRE-INSULATED COPPER PIPE WITH SEAMLESS PE FOAM SHEATH AND ANTI-UV PROTECTIVE FILM.
EUROCLASS B_L S1 D0.



Insulation Features

Insulating material in seamless extruded PE foam, with closed cells and a very high resistance factor to the diffusion of water vapour. The pearl grey UV-Pro protective film is resistant to UV rays and sunlight up to 3 times more than the common white PE film. The UV-Pro compound is environmentally friendly, halogen-free, and maintains the Euroclass B_L s1 d0 fire reaction characteristics unchanged.

- Thermal conductivity at 40°C $\lambda \leq 0,040$ W/m²K
- Water vapour diffusion resistance factor (anti-condensation) ≥ 15000 μ
- Fire reaction Euroclass B_L s1 d0 (EN13501:2019)
- Operating temperature -40° ÷ +100°C
- Does not contain CFCs

Smooth external film in pearl grey LDPE with high mechanical resistance.

Copper pipe features

ACR Copper Cu-DHP 99.90 min. annealed (R220) seamless for refrigerant gases.

- Mechanical properties, dimensions, tolerances, and eccentricity in compliance with the EN 12735-1 standard.
- Specific for all air conditioning, refrigeration and heat pump systems that use refrigerant gases such as A1, A2L and A3.
- Internal cleanliness is ensured by sealing the ends of each tube.
- Carbon residue <0,34 mg/dm².
- Sealed ends as per ASTM B280.

Fields of use

Designed specifically for critical geographic areas or areas with high solar radiation, it adapts to all air conditioning, refrigeration, and heat pump systems that use class A1, A2L and A3 gases.



ACR RANGE - KELLY



Air Conditioning Refrigeration

kelly

PRE-INSULATED COPPER PIPE WITH SEAMLESS ELASTOMER SHEATH, WITH HIGH RESISTANCE PROTECTIVE FILM FOR HARSH ENVIRONMENTS. UL94 V0 – EUROCLASS B_L S2 D0.



Insulation Features

Flexible insulating material in extruded elastomeric foam (FEF) based on synthetic rubber according to EN 14304:2016 without welding, closed cells. The special elastomer insulation guarantees superior antimicrobial protection for greater safety against the formation of mold and fungi.

- Thermal conductivity at 40°C $\lambda \leq 0,037$ W/m²K
- Water vapour diffusion resistance factor (anti-condensation) ≥ 10000 μ (EN ISO 13469:2016)
- Fire reaction: **UL94 V0 – Euroclass B_L s2 d0 (EN13501-1:2019)**
- Operating temperature: -50° ÷ +110°C (-58° ÷ +230°F)
- Does not contain CFCs

KELLY's black protective film offers the highest mechanical resistance among all the Products in the range.

Copper pipe features

ACR copper Cu-DHP (Cu = 99.90% min., P = 0.0015 ÷ 0.040%), annealed in rolls (R220). Dimensions, tolerances, and finishes according to ASTM B280. Internal cleanliness is ensured by sealing the ends of each tube.

Fields of use

Designed for critical applications or particularly harsh environments (industrial, rental, military, field structures) it has a highly resistant cover, specific for all split systems for air conditioning, refrigeration and heat pump systems that use refrigerant gases such as A1, A2L and A3. **A1, A2L and A3.**

RESIDENTIAL - ISOFLEX



Residential

isoflex

PRE-INSULATED COPPER PIPE IN SEAMLESS PE FOAM.
EUROCLASS B_L s2 d0.



Insulation Features

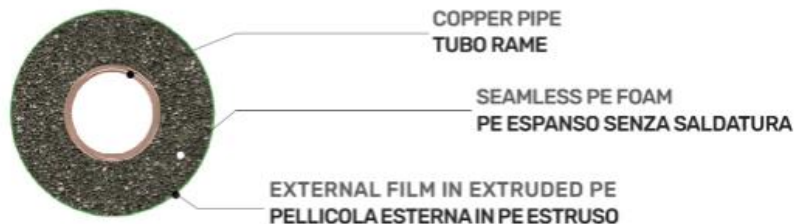
Insulating sheath in seamless PE foam with closed cells, insulation thickness compliant with L.10/91.

- Thermal conductivity at 40°C $\lambda \leq 0.040$ W/m°C
- Fire reaction: Euroclass B_L s2 d0 (EN13501:2019)
- Operating temperature -45° ÷ +100°C
- Not containing CFC
- Insulating sheath density 30 kg/m³

External film in extruded green LDPE, with high mechanical resistance, scratch-proof.

Fields of use

Ideal for all water piping and for underfloor heating (L.10/91 coeff. 0.3). Also suitable for distribution of compressed air and fluids in general.





RESIDENTIAL - STELLAR



Residential

stellar

WHITE STAR-SHAPED PVC COATED COPPER PIPE.



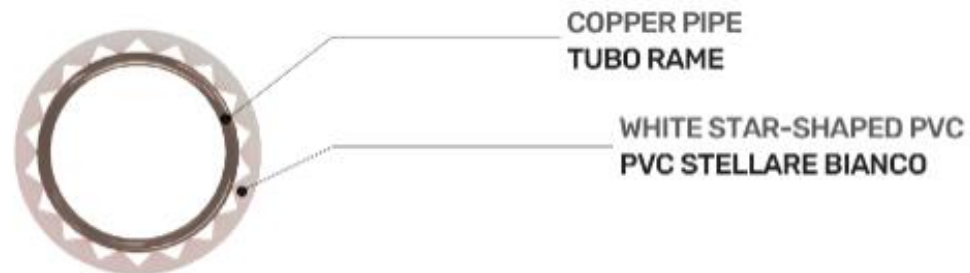
Insulation Features

Coated with a star-shaped PVC sheath, white in color, perfectly adhering to the copper pipe, odorless.

- Sheath density: 1.7 kg/dm³
- Fire reaction: **DIN 4102-B2**
- Not containing CFC

Fields of use

Ideal for plumbing systems for distribution of sanitary water and in particular for residential and industrial building sector. It is also used in chemical and petrochemical industries and in systems for distribution of compressed air and fluids in general.



RESIDENTIAL - GASMET



Residential

gasmet

YELLOW PVC COATED COPPER PIPE FOR EXTERNAL DOMESTIC GAS SYSTEMS.



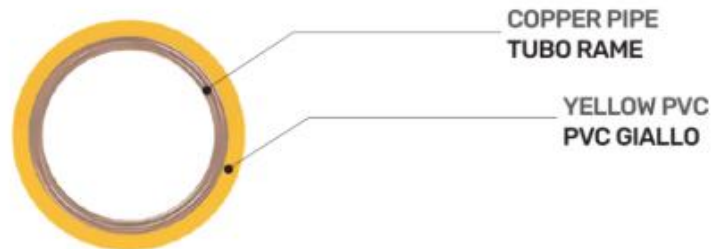
Insulation Features

Coated with a smooth yellow PVC sheath, perfectly adhering to the copper pipe, odourless.

- Sheath density: 1.7 kg/dm³
- Fire reaction: **DIN 4102-B2**
- Not containing CFC

Fields of use

Ideal for external installations for conduction of combustible gas for domestic use (**UNI CIG 7129**). It is also used in the chemical and petrochemical industry and in systems for distribution of compressed air and fluids in general.



RESIDENTIAL - STARMET



Residential

starmet

YELLOW STAR PE COATED COPPER PIPE FOR UNDER-TRACK DOMESTIC GAS SYSTEMS.

EUROCLASS B_L s2 d0.



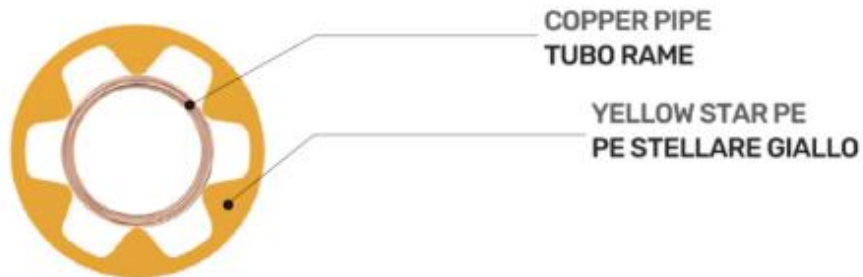
Copper pipe features

Coated with a yellow star-shaped PE sheath, odorless.

- Sheath density: 0.9 kg/dm³
- Fire reaction: Euroclass B_L s2 d0 (EN13501:2019)
- Not containing CFC

Fields of use

Ideal for the construction of underfloor distribution systems of domestic gas according to UNI CIG 7129. It is also used in the chemical and petrochemical industry and in systems for distribution of compressed air and fluids in general.



RESIDENTIAL - GELID



Residential

gelid – gelid HP

COPYING PIPE WITH SMOOTH PVC FOR AUTOMOTIVE AND INDUSTRIAL SYSTEMS IN 50 m ROLLS OR IN ROLLS TO BE INSTALLED IN AFTERMARKET KITS



Insulation Features

Medium plasticized PVC sheath, black colour, non-toxic, odourless, free from chlorofluorocarbons (CFC).

- Density: 1,7 kg/dm³
- Fire reaction: DIN 4102-B2

Fields of use

Specific for automotive gas systems (LPG – CNG) it complies with the regulation ECE ONU R67-01 and is also used for:

- Chemical and petrochemical systems
- Gas distribution networks
- Liquid fuel distribution networks
- Hydraulic systems
- Compressed air distribution systems



COPPER PIPE
TUBO RAME

BLACK SMOOTH PVC
PVC LISCIO NERO



COPPER PIPE



Air Conditioning Refrigeration

copper pipe

ANNEALED COPPER PIPE IN COILS AND RAW COPPER IN RODS FOR AIR CONDITIONING AND REFRIGERATION.



Copper pipe features

ACR copper Cu-DHP CW024A (Cu = 99.90% min., P = 0.0015 ÷ 0.040%) – physical state according to EN 12735-1:2020, annealed in rolls (R220) and raw in rods (R290) – carbon residue <0.34 mg/dm². Tolerances and eccentricities comply with EN 12735-1:2020, and the ends are sealed according to ASTM B280. The inner surface of the tube is particularly shiny, clean, and dry. Internal cleanliness is ensured by sealing the ends of each tube.

Fields of use

- Split-system systems
- Large capacity air conditioning systems such as: VRV, VRF, Multisplit and Chiller
- Food refrigeration systems (refrigerated counters, cooling coils, drinking water dispensers, ice cream machines...)
- Other industrial systems