MAKRO TEKNİK

Your solution partner globally…

"Thanks to our 26 years of experience and expertise, we continue to produce the best solutions pertinent to your projects both locally and globally."

Being one of the most rooted companies and pioneers in the ventilation industry for coming to the forefront as the first "Flange Manufacturer" in Turkey, Makro Teknik has accomplished a sustainable production capacity at the international standards with its knowledge accumulation of over quarter-century from its date of foundation in 1994 up until today and become a global organization that exports to almost 50 countries at present.

Having started its activities with the production of domestic duct flanges and components, Makro Teknik continues to enrich its manufacturing range with products of its own production such as support profiles, clamps and various assembly materials thanks to its current technological infrastructure and self-developed R&D applications as well as rubber insulation materials and flexible ducts that are procured under its own brand. Having certified its quality in March 2003 with ISO 9001, our company aims to perpetuate customer satisfaction by combining its wide sales organization at home and abroad with perfect quality and affordable pricing balance.

Makro Teknik team enhances cooperation in the scope of our corporate mission, in the way to be mutually beneficial for all of our stakeholders from suppliers to the customers and uses the state or art technology and resources efficiently while attaching importance to universal human rights as well as natural and environmental awareness. Carrying on its main production activities both in its factory in Dudullu Organized Industrial Zone and the manufacturing workshop in Belgrade, Serbia, Makro Teknik develops its products and services with a sales network of about 50 "Makro Teknik Express" located at home and abroad. Having a large customer portfolio consisting of companies located in Europe, Asia and Africa, our company has completed brand registration in all the countries within the scope of Madrid Protocol and achieved its goal by increasing the share of export to 75% within its total turnover.



FIRST QUALITY CERTIFICATION

FQC
FIRST QUALITY CERTIFICATION

CERTIFICATE

This certificate is granted to the organization,

MAKRO TEKNİK ENDÜSTRİ ÜRÜNLERİ VE MAKİNA İMALAT SANAYİ TİCARET ANONİM ŞİRKETİ

Yukarı Dudullu Organize Sanayi Bölgesi 3. Cadde No:12
Ümraniye / İstanbul / Türkiye

DESIGN, MANUFACTURE AND SALES OF BLOWER AND FLANGE ACCESSORIES

EA 17

according to the scope,

ISO 9001:2015

to certify that Quality Management System in accordance with standard's clauses is established and being implemented.

First Date of Issue	: 05.06.2009
Date of Issue	: 04.06.2021
Certificate period	: 3 Years
Expiry Date	: 04.06.2022
Certificate No	: 01.09.0397.8836.D

Firyal Quality Certification
System Certificate Approved
Maltepe,İstanbul,Türkiye

IAF DAkkS



FIRST QUALITY CERTIFICATION

FQC
FIRST QUALITY CERTIFICATION

CERTIFICATE

This certificate is granted to the organization,

MAKRO TEKNİK ENDÜSTRİ ÜRÜNLERİ VE MAKİNA İMALAT SANAYİ TİCARET ANONİM ŞİRKETİ

Yukarı Dudullu Organize Sanayi Bölgesi 3. Cadde No:12
Ümraniye / İstanbul / Türkiye

DESIGN, MANUFACTURE AND SALES OF BLOWER AND FLANGE ACCESSORIES

EA 17

according to the scope,

ISO 14001:2015

to certify that Environmental Management System in accordance with standard's clauses is established and being implemented.

First Date of Issue	: 14.07.2009
Date of Issue	: 13.07.2021
Certificate period	: 3 Years
Expiry Date	: 13.07.2022
Certificate No	: 02.09.0397.4249.D

Firyal Quality Certification
System Certificate Approved
Maltepe,İstanbul,Türkiye

IAF DAkkS



FIRST QUALITY CERTIFICATION

FQC
FIRST QUALITY CERTIFICATION

CERTIFICATE

This certificate is granted to the organization,

MAKRO TEKNİK ENDÜSTRİ ÜRÜNLERİ VE MAKİNA İMALAT SANAYİ TİCARET ANONİM ŞİRKETİ

Yukarı Dudullu Organize Sanayi Bölgesi 3. Cadde No:12
Ümraniye / İstanbul / Türkiye

DESIGN, MANUFACTURE AND SALES OF BLOWER AND FLANGE ACCESSORIES

according to the scope,

ISO 45001:2018

to certify that Occupational Health and Safety Management System in accordance with standard's clauses is established and being implemented.

First Date of Issue	: 05.06.2009
Date of Issue	: 04.06.2021
Certificate period	: 3 Years
Expiry Date	: 04.06.2022
Certificate No	: 03.09.0397.3083

Firyal Quality Certification
System Certificate Approved
İstanbul, 2021.06.04

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Makro Blue Insulated 4

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Makro Red Insulated 5

Makro Orange 6

Makro Orange Insulated 6

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Makro Blue



- Material : Aluminum + Metalized Polyester
- Diameter Range : Ø76 - Ø610 mm
- Heat Resistance : 30 m/s (max.)
- Air Flow Speed : -30 °C / +80 °C
- Working Pressure : Max. 5000 Pa
- Box Packing Type : 10 m

Makro Blue Insulated



- Material : Aluminum + Metalized Polyester
- Diameter Range : Ø76 - Ø610 mm
- Heat Resistance : 30 m/s (max.)
- Air Flow Speed : -30 °C / +80 °C
- Working Pressure : Max. 5000 Pa
- Insulation : Glass Wool 25mm - 14 kg/m3
- Box Packing Type : 10 m

Makro Red



- Material : 2 Floor Aluminum
- Diameter Range : Ø76 - Ø610 mm
- Heat Resistance : -30 °C / +150 °C
- Air Flow Speed : 30 m/sn
- Reaction to Fire : Flameproof (m1)
- Working Pressure : Max. 5000 Pa
- Box Packing Type : 10 m

Makro Red Insulated



- Material : 2 Floor Aluminum
- Diameter Range : Ø 76 - Ø 610 mm
- Heat Resistance : -30 °C / +150 °C
- Air Flow Speed : 30 m/sn
- Reaction to Fire : Flameproof
- Working Pressure : Max. 5000 Pa
- Insulation : Glass Wool 25mm - 14 kg/m3
- Box Packing Type : 10 m
- Jacket : Aluminum

Makro Orange



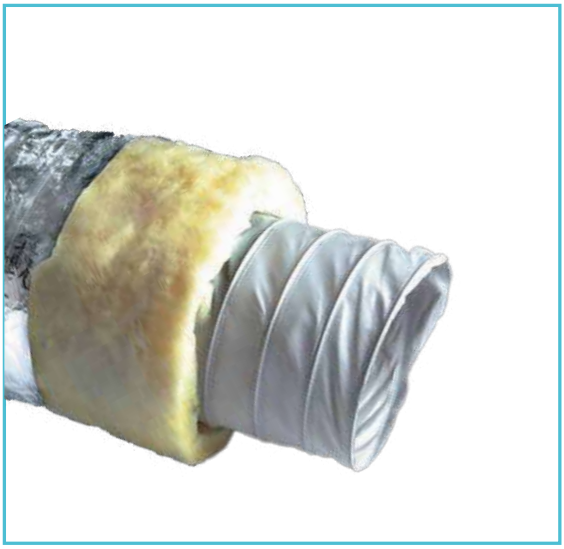
- Material : 2 Floor Aluminum
- Diameter Range : Ø 76 - Ø 610 mm
- Heat Resistance : -30 °C / +250 °C
- Air Flow Speed : 30 m/s (max.)
- Reaction to Fire : Flameproof (m0)
- Working Pressure : Max. 5000 Pa
- Box Packing Type : 10 m

Makro Orange Insulated



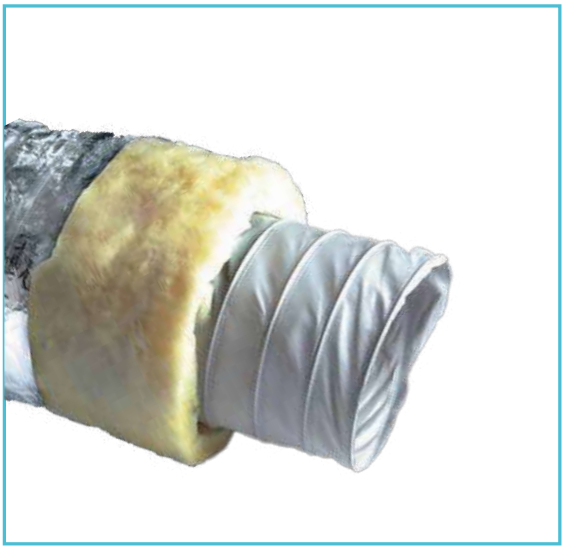
- Material : 2 Floor Aluminum
- Diameter Range : Ø 76 - Ø 610 mm
- Heat Resistance : -30 °C / +250 °C
- Air Flow Speed : 30 m/sn
- Reaction to Fire : Flameproof (m0)
- Working Pressure : Max. 5000 Pa
- Insulation : Glass Wool 25mm - 14 kg/m3
- Box Packing Type : 10 m
- Jacket : Aluminum

Makro PVC Blue Insulated



- Material : 300 denier fabric reinforced PVC
- Heat Resistance : -30 °C / +80 °C
- Air Flow Speed : Max. 30 m/sn
- Working Pressure : Max. 10.000 Pa
- Box Packing Type : 10 m

Makro PVC Red Insulated



- Material : 750 300 denier fabric reinforced PVC
- Heat Resistance : -30 °C / +80 °C
- Air Flow Speed : Max. 30 m/sn
- Working Pressure : Max. 15.000 Pa
- Box Packing Type : 10 m

Makro Combi



- Material : Aluminum + PVC
- Diameter Range : Ø 76 - Ø 610 mm
- Heat Resistance : -30 °C / +120 °C
- Air Flow Speed : 30 m/s (max.)
- Working Pressure : Max. 5000 Pa
- Box Packing Type : 10 m

Properties

- Resistant against tear and impact
- %100 airtight
- Smooth inner wall
- Low workmanship cost
- Easy to carry
- Easy to store
- Energy efficiency
- No particle retention
- Easy assembly



Makro Blue Hygiene

- Material : Aluminum + Metalized Polyester
- Heat Resistance : -30 °C / +80 °C
- Air Flow Speed : Max. 30 m/sn
- Working Pressure : Max. 5.000 Pa
- Box Packing Type : 10 m

Makro Red Hygiene

- Material : 2 Floor Aluminum
- Heat Resistance : -30 °C / +150 °C
- Reaction to Fire : Flameproof (m1)
- Air Flow Speed : Max. 30 m/sn
- Working Pressure : Max. 5.000 Pa
- Box Packing Type : 10 m

Makro Orange Hygiene

- Material : 2 Floor Aluminum
- Heat Resistance : -30 °C / +250 °C
- Reaction to Fire : Flameproof (m0)
- Air Flow Speed : Max. 30 m/sn
- Working Pressure : Max. 5.000 Pa
- Box Packing Type : 10 m



Makro Sono Blue Hygiene

- Material : Aluminum + Metalized Polyester
- Heat Resistance : -30 °C / +80 °C
- Air Flow Speed : Max. 30 m/sn
- Working Pressure : Max. 5.000 Pa
- Box Packing Type : 10 m

Makro Sono Red Hygiene

- Material : 2 Floor Aluminum
- Heat Resistance : -30 °C / +150 °C
- Reaction to Fire : Flameproof (m1)
- Air Flow Speed : Max. 30 m/sn
- Working Pressure : Max. 5.000 Pa
- Box Packing Type : 10 m

Makro Sono Orange Hygiene

- Material : 2 Floor Aluminum
- Heat Resistance : -30 °C / +250 °C
- Reaction to Fire : Flameproof (m0)
- Air Flow Speed : Max. 30 m/sn
- Working Pressure : Max. 5.000 Pa
- Box Packing Type : 10 m



Makro Sono Blue Silent

- Material : Aluminum + Metalized Polyester
- Heat Resistance : -30 °C / +80 °C
- Air Flow Speed : Max. 30 m/sn
- Working Pressure : Max. 5.000 Pa
- Box Packing Type : 10 m

Makro Sono Red Silent

- Material : 2 Floor Aluminum
- Heat Resistance : -30 °C / +150 °C
- Reaction to Fire : Flameproof (m1)
- Air Flow Speed : Max. 30 m/sn
- Working Pressure : Max. 5.000 Pa
- Box Packing Type : 10 m

Makro Sono Orange Silent

- Material : 2 Floor Aluminum
- Heat Resistance : -30 °C / +250 °C
- Reaction to Fire : Flameproof (m0)
- Air Flow Speed : Max. 30 m/sn
- Working Pressure : Max. 5.000 Pa
- Box Packing Type : 10 m

Metal Roll Clamp

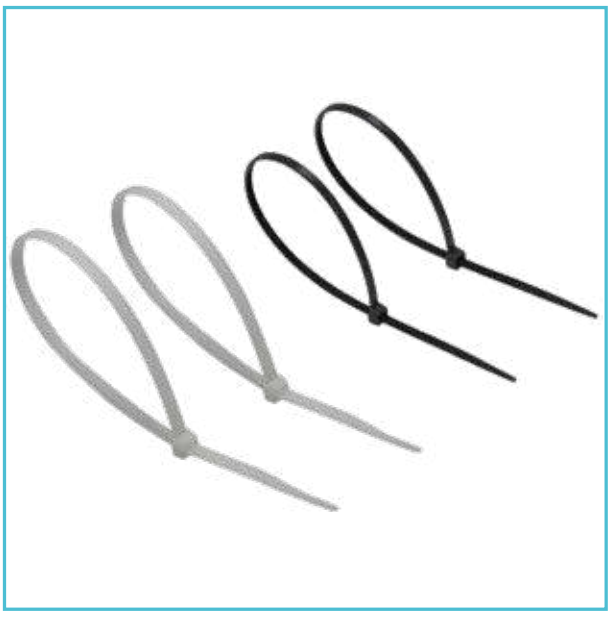


Properties

- Tape Material W1 : DX51D+Z Galvanised Material
- Band Malzemesi W2 : Stainless Steel AISI 430 - X6Cr17 (430BA)
- Material of Locking Device : DIN EN 10130:1999 -
- Cold-dip galvanized steel suitable for drawing operation
- Zinc Coating Zn Cr+3 Yellow Passivation
- Material of Locking Screw : Cq15 Zinc Coating Cr+3 yellow passivation

Notes	Width of Tape	Thickness of Tape	Length of Tape	Values	Quantity in box
Metal Roll Clamp	9 mm	0.65 mm	30 m	2.5 Nm	10

Plastic Clamp



- Material : Polyamide 6.6
- Humidity Absorption : %2.7 (%50 relative humidity)
- Working Temperature : -40°C +85°C
- Application Temperature : -10°C +60°C
- Flash Point : UL 94 class V2
- Halogen-free : Yes

Aluminum Foil Tape



Adhesive aluminum foil tapes are used in particular to ensure permeability at the joint edges of the aluminum foil coated insulation materials. They are available with or without reinforcement. Provided in 3 different widths as 5 - 7,5 - 10 cm, with a length of 40m. The tape should be used on a clean and dry surface. It may not provide the required performance on dirty, dusty and humid surfaces.

Technical Properties of Reinforced Aluminum Foil Tapes

Adhesive	Solvent – Acrylic
Load-Bearing	Reinforced Aluminum Foil (Reinforced towards 3 dimensions)
Protective	Silicon Paper
Thickness	230-250 micron
Adhesion / Peeling	20 N/25 mm
Stretching / Rupture	120 N/25 mm
Elongation	%1.0
Working temperature	-30°C ile +80°C
Width*	50 mm - 75 mm - 100 mm
Length*	25 m

Technical Properties of Aluminum Foil Tapes without Reinforcement

Adhesive	Solvent – Acrylic
Load-Bearing	Standard Aluminum Foil 18 mic.
Protective	Silicon Paper
Thickness	18 micron
Adhesion / Peeling	18 N/25 mm
Stretching / Rupture	35 N/25 mm
Elongation	%3.0
Working temperature	-30°C ile +120°C
Width*	50 mm - 75 mm - 100 mm
Length*	25 m

** Dimensions are standard Alteration may be possible upon special order.*

Makro PVC Connector



- Material : 0,40 mm galvanized / stainless steel, PVC reinforced with 750 denier polyester fabric
- Heat Resistance : -30 °C / +80 °C
- Reaction to Fire : Flameproof
- Properties : High stretching and tear resistance
  Airproof
  Resistant against UV lights
- Box Packing Type : 25 m

Makro Non-Flammable Connector



- Material : 0,40 mm galvanized / stainless Steel, 650 gr/m² both sides silicon coated, non-flammable and dam proof, fiber woven fabric
- Heat Resistance : -30 °C / +280 °C
- Reaction to Fire : Flameproof
- Properties : Water proof
  Air proof
  Resistant against UV lights
- Box Packing Type : 25 m

Makro Canvas Connector



- Material : 0,40 mm galvanized / stainless steel, 500 gr/m² dam proof canvas woven heat resistance
- Heat Resistance : -30 °C / +80 °C
- Properties : High stretching and tear resistance
  Water and air proof
  High resistance against humidity
  Resistant against UV lights
- Box Packing Type : 25 m