

Heating, Ventilation, Air-Conditioning & Refrigeration Supplies







Introduction

Kavalani & Sons is proud to present our new catalogue for Heating, Ventilation, Air-Conditioning & Refrigeration (HVAC-R) Supplies.

Our goal is to provide you with the best in the HVAC-R products making your job more professional, effective and easier.

Our new catalogue which brings together all our HVAC-R product range into one document giving you all the technical details regarding the product's application and use. Nearly all products displayed in the catalogue are from reputed manufacturers which meet & exceed industry standards.

Kavalani & Sons stock and distribute more than **50,000** products for industrial, construction and marine supplies and have more than **60** years of experience to prove it.

We hope you will find this as a useful reference for all your needs for HVAC-R.

ONE SOURCE, MANY SOLUTIONS



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Industrial Fans & Ventilation Systems







THE ASIAN SCHOOL

NOVO CINEMA

TUBLI

ARAD





SOLUTIONSIN VENTILATION

province of Barcelona. Its business in the design, manufacture and sale of

For many years SODECA has been associated with providing ventilation solutions and fire related smoke extraction systems for numerous emblamatic buildings worldwide. Some of our most significant international projects include the ventilation system for the Tatweer Petroleum refinery in Bahrain and the Deluxia Suites and Palace luxury residential complex in Istanbul. Recent projects include the large warehouse of over 300,000 sqm for Amazon in Prague.

TATWEER PETROLEUM BUILDING

SAAR MALL SAAR

NATIONAL STADIUM ISA TOWN

SULTAN MALL ZAYED TOWN

THE WALK RIFFA

OASIS MALL

SWISS BEL HOTEL

SFFF

RIFFA

TWIN TOWER SEEF

OUR PRODUCTS

SODECA has a catalogue of more than 4,200 fans and extractors, all equipped with the latest technology and all of which can be adapted to the technical requirements of our clients.



WORK FANS

EFFICIENT



AXIAL



CENTRIFUGAL



FANS



F-400 SMOKE **EXHAUST FANS**



LOW PRESSURE FANS



ATEX CERTIFIED FANS



HEAT RECOVERY UNITS



FILTRATION



CURTAINS



VENTILATION FOR HOUSES



IN-LINE











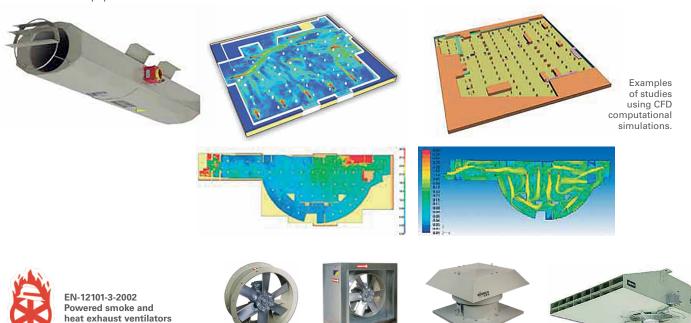


SODECA has extensive experience in manufacturing and installing jet fans throughout the world.

Our Project Development, which has technique specialised in the design of ventilation and smoke control systems, can advise on the design of your projects, providing you with a complete technical study, including sizing calculations and drawings showing the location of the equipment.

SPECIALISTS IN JET FAN VENTILATION

We can carry out the system checks necessary for the Competent Authorities' approval by calculation methods which use Sodeca's own design tools with **CFD computational simulations**. This can also be done by using softwate which has been extensively proven at an international level, and display the ventilation system's operating parameters, such as the behaviour of the smoke and the values of temperature, visibility, air speed and CO concentrations.





for use in Construction Works

ATEX EXPLOSIVE **ATMOSPHERES**

All the SODECA extractors and fans for explosive atmospheres fulfil the demands of the European Directives ATEX 94/9/EC and have been designed in accordance with standard EN-14986 "Design of fans to work in potentially explosive atmospheres". In this manner, the quality of the products is guaranteed and the safety of people and facilities is ensured to the greatest possible extent.



Design of fans:

In accordance with the EN-14986 standards and in order to avoid ignition in case of friction or impact between the moveable and the static parts, they are built with combination materials to prevent possible sparks.

Centrifugal fans:

In order to prevent sparks generated by the turbine:

- Inlet in copper
- Protective tips to protect the
- screwed/riveted joints
- Verification of the distances
- between components





PREPARE TECHNICAL

NEW **MODELS IN** CAD_{3D}

REPORTS IN MINUTES





Our new tool makes it easy to choose the best suited product for your ventilation installation.

PROJECT MODULE: a new function for preparing technical reports in minutes.

- Select hundreds of models in a single step.
- Bulk load your data into Excel.
- Edit and manage data sheets.
- Print the report with contents and cover pages, edit it or send it to another QuickFan.





Our new tool for technical departments and engineering companies makes it easy to choose the best suited product for your ventilation installation.

MODELS IN CAD 3D:

- Download our fans in CAD 3D.
- Choose between over 40 CAD formats available.
- Including Revit.
- Over 2,000 models and configurations available.









Ducting Systems Technology & Accessories

www.imf.com.sa

DUCTING SYSTEM TECHNOLOGY & ACCESSORIES



ISO 9001:2008 Certified



IM-PIR panel is a polyisocyanurate resin foam coated by aluminum foil on both sides which is produced under a continuous process. Suitable for the construction of ductworks in HVAC systems.

IM-PIR duct is made this way to be fire resistant and to have a very low air friction resistance and excellent heat insulation. In order to save transportation power and reduce cold loss, the temperature and humidity of the transferred air can be kept as original using IM-PIR duct. The imposed aluminum foil on both sides is treated by special process and coating method, which forms a compact protecting layer, increasing its life by 4-6 times of that of the traditional air ducts, GI.

IM-PIR polyisocyanurate foam panel is CFC / HCFC-free, and complies with American Standards (ASTM) and British Standard (BS). Tested with European Standards EN465-2.



PRE INSULATED DUCT ACCESSORIES

Invisible Profile in Aluminum PVC/20mm/30mm





GI DUCT & ACCESSORIES



























Pre-Insulated
Duct Foam

HUYA Pre-Insulated Duct Factory is a pioneer in pre-insulated foam ducting. HUYA is the first company in the Kingdom of Saudi Arabia to introduce the innovative and revolutionary foam based pre-insulated duckwork as the new generation material that replaces traditional sheet metal in ductwork.









Support Technology & Sound Insulating Systems









MUPRO — A concept for progress and quality

With more than 50 years of market presence and experience in the sector, MUPRO is one of the leading providers of support, vibration control and fire protection systems. The MUPRO group of companies is represented worldwide, with seven subsidiaries in Germany, 13 companies in other countries and more than twenty international sales partners. MUPRO products are used in more than 50 different countries.

Support Technology and Sound Insulating Systems

Pipe Clamps

MUPRO Single **Bossed Clamps**



Advantages

- Tried and trusted two-piece clamp with increased material thickness.
- Strengthened lock bolts for high load capacity.
- Increased breaking resistance.
- DÄMMGULAST® Vibration Control Lining with yellow identification stripe: vibration control value on average up to 22,7 dB (A).

MSS Products Swivel Hangers



Advantages

- Size range from ¾" to 8".
- Made of carbon steel.
- Galvanised, other finish available upon request.
- Knurled Swivel nut provides a gripping surface when adjusting the pipe elevation.
- Complies with Manufacturers

Standardization Society MSS-SP-58 and MSS-SP-69 (Type 10).

Approved by FM and UL.

Field of application

Attachment of sprinkler lines.

Pipe Clamps

MUPRO U-Bolts

galvanised



Advantages

- Supplied with 4 hexagonal nuts.
- Galvanized.
- Other surface finish available upon request.

Field of application

For installation of insulated and uninsulated pipes.

Vibration Control

MUPRO Vibration Control Hangers







Advantages

- Vibration control incorporated in the hanger.
- Very good vibration control values up to 17 dB due to the highly elastic DÄMMGULAST® Spring Element.
- The design allows for M8 or M10 threaded rod fixings, or alternatively allows the use of assembly strips or Hanger sockets.
- The design for use with assembly strips is also suitable for swinging suspension in combination with hanger sockets.
- Height adjustment of the threaded rods is possible after installation.

Pipe Clamps

Rubber Support Inserts



Advantages

- Excellent resistance to deterioration/distortion.
- Very high load bearing capacity.
- Unique tongue and groove design reduces labour charges while installation and also eliminates possibility of air gaps or shift of insert
- Resistance against vapour diffusion.

Field of application

- A cost effective support for pipes to prevent the insulated pipes from being crushed due to load and pressure.
- Specially suitable for chilled water, condenser water and domestic hot/cold water installations.

MUPRO > Support Technology & Sound Insulating Systems









MSS Products Pipe Straps



MSS Products

Adjustable Clevis Hangers



Advantages

Advantages

Size range from 2" to 24".

Made of carbon steel.

Galvanised, other finish available upon request. Complies with Manufacturers Standardization Society MSS-SP-58 and MSS-SP-69 (Type 26).

- Size range from 1/2" to 24".
- Galvanised, other finish available upon request.
- Complies with Manufacturers Standardization Society MSS-SP-58 and MSS-SP-69 (Type 1).

Field of application and vertical pipes.

For supporting horizontal

Approved by FM and Made of carbon steel. UL from 1/2" to 8".

Field of application

To support suspended pipes.

Support Channels

MUPRO Girder Clamps



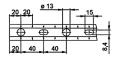
Advantages

- For fixing pipework, air ducts and sprinkler systems to steel girders.
- Fixes to the girder without welding or drilling.
- Subsequent alignment on the girder is possible.
- For suspending threaded rods for installing pipe clamps or cross-members made up of MPC Support Channels.
- High load capacity.
- Quick, subsequent height adjustment of the Threaded Rod.
- Approved by the VdS.
- Sizes for M10 and M12 with FM approval.
- Also available with M8 or M10 internal thread

Support Channels







Advantages

- Fast and efficient fixing of multiple and single pipes.
- Ideally suited for use as air duct cross member supports.
- Unlimited applications for wall mounted installations and Canti-lever Bracket when used with a comprehensive range of system components.
- The scale on the top and the side of the channel simplify the alignment of fastening elements during installation. These facilitate the measuring and cutting of length in site.
- Safe fixing with both lateral and vertical adjustment.
- High flexural strength due to profile design.
- Large number of connection components allow high strength support to be constructed
- Matching vibration controlling inserts are available for all MPC Support Channels.
- Protection caps allow a neat visual appearance.

Anchor/Expansion Assemblies

MUPRO Wooden **Blocks**





Anchor point solution at chilled water pipes with STATO® Clamps and STATO® Brackets.

Advantages

- Anchor point insulation for chilled water pipes.
- Frictional connection takes up the axial pipe forces.
- Excellent thermal insulation characteristics
- No danger of condensation on the fixings.
- Matches thickness of the pipe insulation.
- Suitable for all pipe materials.
- Fixing possible at any point on straight lengths of pipe.
- Boiled linseed-oil impregnated, therefore unaffected by moisture.
- For indoor use.

Anchor/Expansion Assemblies **PHONOLYT® Anchor Points** for Pipes



Advantages

- The ideal component for vibration controlled anchor points for pipes where vibration control according to DIN 4109 and VDI 4100 is required.
- Sound barrier between pipe and structure.
- Ideal anchor point for vertical pipes with perfect sound absorbing features.
- Double kit for high loading.
- Special feature: also approved for change of direction loads of e.g. plastic pipes.
- Least possible distance to the structure.

- Easily adjustable wall distance due to threaded rods.
- Practical construction for twopoints fastening of the pipe.
- Anchor point for all kind of vertical pipes independent of the pipe flange and bushings.
- Insulation of structure-borne noise up to 40 dB.
- Silicone-free.



Insulation Solution















We didn't choose brown, it just came naturally!

Knauf Insulation Glasswool with ECOSE®Technology doesn't look or feel like any insulation you have ever experienced, it is free phenol formaldehyde, any chemical or artificial colors and is the most environmental friendly insulation.

Insulation for HVAC Applications





Friendly Feel® **Duct Wrap**

Knauf Insulation Friendly Feel® Duct Wrap with ECOSE® Technology is a treatment and acoustical insulation blanket.

Rigid Plenum Liner

Knauf Insulation Rigid Plenum Liner is a heavy-density mat-faced Glasswool board insulation bonded with ECOSE® Technology. Its base board is brown with WGF facing to give the airstream a smooth, tough surface that resists damage during installation and operation.

Insulation for Building Applications





Sonic XP® **Duct Liner**

Knauf Insulation Sonic XP® Duct Liner with ECOSE® Technology is a flexible, WGF mat-faced insulation. It is faced with a tightly bonded mat to give the airstream a smooth, tough surface, resisting damage during installation and operation.

Facing Op	tions
Unfaced	
FSK	
WGF	х
ASj	
Aluglass	х

Facing Options

Х

Х

х

Unfaced

FSK

WGF

ASj Aluglass



Knauf Insulation Metal Building Insulation

Metal Building Insulation is engineered specifically for metal building construction. It is manufactured in lengths and widths to specifically fit between the steel girt and purlins found in metal construction. Metal Building Insulation controls heat flow, absorbs noise, and prevents condensation.

Facing Op	tions
Unfaced	х
FSK	х
WGF	
ASj	Х
Aluglass	Х



Insulation Board

Knauf Insulation Board with ECOSE® Technology is a versatile product for thermal and acoustical applications such as heating and air conditioning ducts, power and process equipment, boiler and stack installations, metal and masonry walls, wall and roof panel systems, curtain wall assemblies and cavity walls.

Facing Op	tions
Unfaced	х
FSK	х
WGF	х
ASj	х
Aluglass	х



KB Blanket Insulation

Knauf KB Blanket Insulation is a lightweight blanket of Glasswool bonded with ECOSE® Technology. KB Blanket is used as thermal and acoustical insulation for appliance, equipment, acoustical, industrial, commercial and marine applications.

Facing Op	tions
Unfaced	Х
FSK	х
WGF	
ASj	Х
Aluglass	Х



Pipe Insulation

Knauf Insulation Pipe Insulation is a molded, heavy-density, one-piece insulation made from inorganic Glasswool bonded with ECOSE® Technology. It is produced in 1.2 meter lengths, and available in easy to fit diameter sizes of 1/2" to 18" to match international pipe dimensions.

Facing Op	tions
Unfaced	х
FSK	х
WGF	
ASj	х
Aluglass	х



Insulation Board

Knauf Insulation Board with ECOSE® Technology is a versatile product for thermal and acoustical applications such as heating and air conditioning ducts, power and process equipment, boiler and stack installations, metal and masonry walls, wall and roof panel systems, curtain wall assemblies and cavity walls.

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х
х



HVAC Products

www.pidilite.com









FEVICOL HVAC PRODUCTS

Pidilite is Asia's largest manufacturer of adhesives with a turnover of over US \$550 million per annum. Pidilite's mainstay of business is consumer & industrial adhesives and sealants. Its largest brand, FEVICOL, is synonymous with the adhesive category itself. The company has a total of 40 brands spanning 400 industrial and consumer products.

FIBER GLASS INSULATION SYSTEM

FEVICOL AC DUCT KING DUCT SEALANT 3278

- Water based sealant for heating, ventilating & air conditioning metal duct.
- Long lasting durable seal against air leakage.
- Moderate mildew resistant.
- Low water vapour permeance. Conforms surface burning
- (ASTM E-84).
- Flame resistant ASTM 4804.
- Wet Flammability ASTM D3278.Meets requirement for LEED IEQ 4.1 low emitting material, adhesives and sealants, VOC: 75 g/l, less ater and exempted solvents.

Packing: 310 ml, 3.8 Lt. (1 USG)





FEVICOL AC DUCT KING CONTACT GLUE C-916

- Synthetic rubber-based adhesive.
- Used for bonding fiber glass insulation, duct wraps and acoustic linings to metal ducts.
- Excellent bonding to glass wool and acoustic lining.
- UL classified for surface burning characteristics (UL-723).
 Flammability resistant ASTM 4804.
- ASTM C-916 type IV requirements.
- Good aging resistance.
- · Lead, asbestos and mercury free.
- High bond strength.

Packing: 19 Lt (5 USG), 3.8 Lt. (1 USG)



FEVICOL AC DUCT KING ECO FRESH

- Non Hazardous and Environment Friendly.
- Strong Bond.
- Surface burning characteristics ASTM E-84.
- Low VOC content.

Packing: 19 Lt (5 USG)



FEVICOL AC DUCT KING LAG COATING E-84

- Indoor coating over thermal insulations gives white, fire resistive finish which will not yellow or discolor with age.

 High bond strength, low water vapour permeability.
- Contains no solvents.
- materials paint and coatings.
- **Packing:** 19 Lt (5 USG), 3.8 Lt. (1 USG)

Flammability resistance (ASTM 4804).
Conforms surface burning (ASTM E-84). Meets VOC compliance of LEED 4.2 – low emitting

- VOC 20 g/l less water and exempted solvents.
 Compatible with Polystyrene and PU foam insulation.



FEVICOL AC DUCT KING LAG COATING AF 5590

- Indoor coating over thermal insulations
- for high humidity area.

 UL classified for surface burning characteristics (UL-723).
- Fungal resistance (ASTM D5590)
- Flammability resistance ASTM 4804.Conforms surface burning (ASTM E-84).
- Meets VOC compliance of LEED 4.2 low emitting materials paint and coatings.
- VOC 10 g/l less water and exempted solvents.
 High bond strength, low water vapour permeability.

Packing: 19 Lt (5 USG), 3.8 Lt. (1 USG)



AC DUCT WEATHER PROOF COATING E-96

- Protection of outdoor insulation of AC and thermal ducts.
- Protects from spillage, wash water, rain, snow & solvents. Tough, elastomeric fire-resistant finish.
- Protects thermal expansion & contraction.
- Excellent chemical resistance.
 Conforms surface burning (ASTM E-84).
- Flammability resistance as per ASTM 4804.
- Vapor permeability as per ASTM E-96. Wet flammability ASTM D-3278.
- Tough elastomeric protection film.
- **Packing:** 19 Lt (5 USG), 3.8 Lt (1 USG)

PIR DUCT SYSTEM



FEVICOL PIR Glue

- FEVICOL PIR Glue is a synthetic rubber based contact
- adhesive for bonding PIR panels in duct work.
 Immediate bond strength and good aging resistance.
- Free from Benzene and Non-hazardous to health.
- Mild smell. Packing: 15 Lt



AC DUCT WEATHER PROOF COATING E-96

- Protection of outdoor insulation of AC and thermal ducts.
- Protects from spillage, wash water, rain, snow & solvents. Tough, elastomeric fire-resistant finish.
- Protects thermal expansion & contraction.
- Excellent chemical resistance. Conforms surface burning (ASTM E-84).
- Flammability resistance as per ASTM 4804.
- Vapor permeability as per ASTM E-96. Wet flammability ASTM D-3278.
- Tough elastomeric protection film.

Packing: 19 Lt (5 USG), 3.8 Lt (1 USG)

ASTM D 1667 ASTM C 177 DIN 52613 ASTM C 534 **ASTM E96 JIS A 1412**

UL 94

ASTM D 635 DIN 1988







CLOSED CELL INSULATIONS

AEROFLEX Closed Cell Tube and Sheet Insulation is flexible, closed cell and lightweight elastomeric material designed for insulating liquid cooling and heating lines. Closed Cell Structure of Aeroflex provides many advantages over the most rigid insulations used for heating and cooling such as:

- Moisture & vapour resistance without using additional vapor barriers.
- Stable thermal conductivity (K value) due to its dense surface and closed cell characteristics.
- Flexibility which makes installation easy and neat.
- Outstanding ultraviolet and weather resistance.

AEROFLEX is an ideal insulation for frost control on cold water plumbing. It prevents heat gain and condensation problems on chilled water and refrigerant pipelines, and it also prevents heat loss from hot water plumbing, liquid and dual temperature piping.



AEROFLEX is processed without CFC chemical that is harmful to the earth ozone layer

TECHNICAL SPECIFICATION CHART

ROFLEX Closed Cell Elastomeric Thermal Insulation

PHYSICAL PROPER	RTIES *	AEROFLEX			TEST METHOD * *								
Cell Structure		Closed Cell			-								
Density lbs/ft³(kg/m³)			3-6 (48-96) * * *			ASTM D 1667							
Thermal conductivity BTU. in/ft²hr.°F (W/mk)	Mean temp.	-4°F (-20°C)	32°F (0°C) 0.23	75°F (24°C) 0.25	90°F (32°C) 0.26	104°F (40°C)	ASTM C 518, C 177 JIS A 1412 DIN 52613						
Service Temperature ****	K-value	0.032	0.34	0.037 -70°F to 25	0.038	0.039	AEROFLEX becomes hard at -57°C,						
Service remperature				-57°C-+125	5°C		but can be used even at -200°C						
Water Vapor permeability (g/P	a. s. m.)		0.10 p	perm-in (1.4	4 x 10 ⁻¹⁰)		ASTM E96						
Moisture Resistance (μ value)			<i>μ</i> ≥ 7,000				DIN 52615						
Water Absorption (% by weight	:)			≤ 5			ASTM D 1056						
Ozone Resistance			No crack			ASTM D 1171, D 1149							
Heat Stability (% shrinkage) 200°F (93°C) 7 days			6				ASTM C 534						
		Class V O)		UL-94						
		25/50					ASTM E 84						
51 1 1 1 1 1 C 1 D 11		Self-extinguishing					ASTM D 635						
Flammability & Smoke, Densit	.y	Class 5.3					EMPA (Switzerland)						
			Non-Flammable				JIS K 6911						
			Pass				IMO****						
U.V. Weather Resistance			Excellent			Excellent		Excellent			-		
Corrosion of copper, stainless	rosion of copper, stainless		Non corrosive			Non corrosive		Non corrosive		Non corrosive			DIN 1988
Nitrosamine Contents * * * * *	Nitrosamine Contents * * * * *		Not detected		Not detected		Not detected		U.S. FDA				
Sound reduction (ΔL _{ΔF})		27 dB (20 mm)				DIN 52218							
Flexibility		Excellent				-							



Specifications comply with ASTM C 534-88

- * Figures show the average values obtained by the world well-known testing
- ** Tested according to DIN, JIS ASTM and
- *** Average density of insulation thickness \geq 20mm is 2.5–5 lbs/ft³ (40–80 hk/m³).
- **** At temp. under -57°C AEROFLEX becomes hard, but it doesn't affect thermal conductivity nor water vapor permeability. In the heating applications AEROFLEX can stand +125°C continuously, and the adhesive up to +100°C
- ***** IMO: International Maritime Organization. IMO fire test procedures code part 5 and part 2 (IMO res. A. 653[16]).
- Lioyd's type Approval Certificate.
- DNY's type Approval Certificate.
- ***** It is reported that Nitrosamine is harmful to human health even during storage. No Nitrosamine compound was detected in AEROFLEX





Adhesive for Aeroflex Insulation

- Modified neoprene contact adhesive for bonding insulations
- Usable with metal, cork, PUF, PVC sheet formica, melamine board & rubber sheet
- Forms strong firm & permanent bonding.

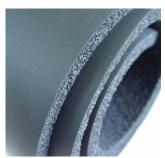






Plate Heat Exchangers

www.alfalaval.com



UNI EN ISO 9001:2000



Alfa Laval is a 125 years old Swedish company. It is a leading global provider of specialized products and engineered solutions. It's equipment, systems and services are dedicated to helping customers to optimize the performance of their processes. Time and time again, Alfa Laval helps customers to heat, cool, separate

and transport products such as oil, water, chemicals, beverages, foodstuff, starch and pharmaceuticals. Alfa Laval's worldwide organization works closely with customers in almost 100 countries to help them stay ahead.

PLATE HEAT EXCHANGERS

Alfa Laval is the largest manufacturer of Plate Heat Exchangers in the world











Gasketed Plate Heat Exchange



Heating insulation



Cooling insulation with drip tray



Thermal Insulation Systems

www.eepdubai.com

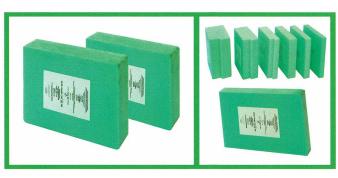
Extruded Polystyrene Foam is also known as XPS board which is very useful for the Middle East since its ambient temperature is more than +40 degree centigrade. XPS board has a high resistance to water absorption with specialized mechanical properties. The manufacturing process combined with intrinsic qualities of the static component thermo plastic material give extruded polystyrene predictable long term performance and high insulating value.



Product Range and Technical Data

ASTM D 1622 ASTM C 203 ASTM C 158 ASTM 2863 **ASTM D 1621 ASTM E 96** ASTM C 272 DIN 4102

Product	Description	Major Application	Board Dimensions
E-Foam Roof Fix	Extruded polystyrene rigid foam with skin. It is available with and without shiplap edge treatment. Other thicknesses available upon request.	Thermal Insulation Board for roof, Density of roof Fix is 32-35 kg.m3. For upside down roof below the gravel protecting/Roof concrete.	Roof-fix with shiplap edges Thickness: 30, 40, 50, 60, 70, 80, 100 mm Width: 600 mm (covering dimension) Length: 1250 mm (covering dimension) Other Thickness will be available upon request
E-Foam Wall Fix	Extruded polystyrene rigid foam with skin. It is available with and without tongue and groove edge treatment.	Thermal insulation board for: - Walls, Tile backing - Core material for sandwich panels - Low temperature space - Density of Wall Fix is 30-32 kg/m3 use between internal standard wall/ external brick wall	Wall-fix with tongue and or butt edges Thickness: 30, 40, 50, 60, 70, 80, 100 mm Width: 600 mm Length: 2500 mm/ 1250 mm Other thickness will be available upon request
E-Foam Floor Fix	Extruded polystyrene rigid foam with skin with high density and high compressive strength. It is available with or without shiplag edge treatment.	Floors, Cold store, Parking decks Density of Floor Fix is 40-45 kg/m3 Below the floor concrete slab/damp proof membrane	Floor-fix Thickness: 30, 40, 50, 60, 70,80, 100 mm Width: 60 mm Length: 1250 mm Width: shiplap edges







Closed Cells Insulations

www.rockwoolfujairah.ae

ASTM C 612 ASTM C 553

ASTM C 665 ASTM C 592 **ASTM C 547 ASTM BS 3958**







CLOSED CELL INSULATIONS



Fujairah Rockwool slabs conforming to ASTM C-612 and equivalent BS 3958 Part 5 are designed for the thermal and acoustic insulation of flat or slightly curve surfaces operating in both high and low temperatures. These slabs are produced from long, non combustible resin bonded fibers. They are easy to cut, fit and handle. The robust fibers in the slabs combine high levels of thermal efficiency and acoustic absorption.

Applications

- Designed for a wide range of applications, at both high and low service temperatures, and can be used on flat or slightly curved surfaces for thermal and acoustic insulation.
- They are suitable for thermal and acoustic insulation of gypsum portions, gypsum ceiling, roofs, ducts and sandwich panels.
- It is also ideal for fire protection of steel stuctures and insulation of bulk heads and ship decks.



Fujairah Rockwool Blanket conforming to ASTM C-553 and ASTM C-665 is a lightly bonded insulating material available with or without facing. These products can be faced on one side or both sides to form a firm but flexible multi-purpose insulating materials.

Applications

 Designed for thermal and acoustic insulation of various applications such as gypsum portions, gypsum portions ducts and cladding or other equipment in heating, ventilating and air conditioning applications.



Fujairah Rockwool Blanket conforming to ASTM C-592 and equivalent BS 3958 Part 3 is a lightly bonded insulating material faced with hexagonal G.I. or S.S. wire mesh on one or both sides to form a firm but flexible multi-purpose insulating materials.

Applications

- Highly recommended for use in the thermal insulating of large vessels, boilers, small machinery, equipment, ducts, flange, valves and plants operating at high temperatures.
- The Blanket is exceptionally suited for wrapping large curved surfaces or for cutting to fit over irregular shapes.



Fujairah Rockwool Preformed Pipe section conforming to ASTM C-547 and equivalent BS 3958-4 is intended for the thermo-acoustic insulation and fire protection of pipe works operating at high temperatures.

Applications

- Designed for tough thermal and acoustic insulation pipe works, its combination of density, strength and excellent thermal conductivity at high operating temperatures offer efficient insulation.
- It is highly applicable for industrial steam and process pipe lines in oil refineries, chemical plants and power stations. It has also the versatility to be used in heating and ventilating and other non-industrial applications.

Air Conditioning Compressors

www.kulthorn.com







18K 240 V 50 Hz 3 legs / 4 legs 24K 240 V 50 Hz 3 legs / 4 legs 30K 240 V 50 Hz 3 legs / 4 legs 36K 240 V 50 Hz 3 legs / 4 legs



Components for Refrigeration & Air Conditioning

www.white-rodgers.com

COMPONENTS FOR REFRIGERATION & AIR CONDITIONING









Touchscreen Thermostats w/ Blue Display 70 / 80 / 90 Series

Applications

- Gas / Oil / Electric 3 Wire Zone Value
- Millivolt Compatible
- Humidity Control
- **Selectable Performance Features** Auto Changeover
- Programmable Fan
- Energy Management Recovery
 - Energy Star
- Dual Fuel Heat Pump Control
- Keypad Lockout
- Set-Point Temperature Limits
- Indoor Remote Sensors Outdoor Remote Sensor



AC Motors, Fans & Blowers www.elco-motors.co.uk















ELCO manufactures a wide range of AC motors, fans and blowers. These are supplied to customers worldwide for use in heating, ventilation, air conditioning and refrigeration equipment, as well as many other diverse fan and mechanical duty applications.

N Series

Shaded Pole motors of N series are widely used in the industrial, commercial refrigeration and condensing evaporating units and small ventilating units.

These motors are 4 shaded poles, single phase running at nominal tension of 230 V–240 V, 50–60 Hz with output power 5–34 watts, insulating class B and protection class IP 42.



Cubigel Compressors is a world leading company in manufacturing, sales and distribution of compressors and condensing units for Commercial Refrigeration market.







P Range

D Range

Features: Very compact design, Low weight, extra silent

L Range

Features: The most efficient high efficiency range with propane (R290) & isobutane (R600a)

Features: High Efficiency





Features: High reliability & efficiency, New design to work under heavy duty operational conditions



S Range

Features: Top capacity range, Optimized design to reduce vibration



Copper Tube, Pipes & Copper Coils



















COMMITMENT TO QUALITY

Cambridge-Lee implement strict testing methods and controls to ensure that the highest quality tubes reaches our customers. Tubes manufactured are continuously tested for defects by Eddy-Current test units.

ACR Copper Coils & Pipes are dehydrated, degreased, purged with nitrogen and capped to maintain the internal cleanliness of the product.

From the selection of raw materials to final packaging, our table is continually tested and inspected at all stages in the manufacturing process to ensure problems and defects are detected and solved at their source. Each Coil is individually packed in dye cut carton boxes. This ensures the Originality & Exclusivity of the product

while also giving additional protection during Transportation. Environmentally harmful material such as plastic shrink wrap are eliminated in the packaging process.

Another step in our ongoing commitment to provide the highest level of product quality, exceptional customer and technical service is that both our production facilities have achieved ISO 9001:2000

Certification - the international standard for assured product quality. This achievement along with our dedication to you is the driving force that paved the way for and has earned us the reputation as a worldclass industry leader.



COPPER TUBING & PIPES

Rigid Copper "M" Tube (ASTM B-88)

General Description

"M" type copper tubing in nominal sizes from 1/4" to 8".

General Specifications

The "M" type copper tubing is used to conduct cold and hot water in homes, buildings, and industrial facilities. The identification of this tubing is made through a red ink bass-relief engraving along the tube.



COPPER COILS

Pancake Dehydrated Coils (ASTM B-280)

Seamless Copper Tube for Air-Condition & Refrigeration According to ASTM B280 UNS C12200

Size: 1/8" - 1 1/8" Length: 50' coil

Suitable for R-410a gas application.



Rigid Copper "L" Tube (ASTM B-88)

General Description

"L"type copper tubing in nominal measures from 1/4" to 8".

General Specifications

It is used in system for the conduction of LP and natural gas, cold water, hot water, and flame retardant systems. This tube is identified by a blue ink bass-relief engraving along the tube. Suitable for R-410a gas application.



Fittings (NIBCO)

According to ASMF/ANSI B16:22





Rigid Copper "K" Tube (ASTM B-88)

General Description

"K"type copper tubing in nominal measures from 1/4" to 8".

General Specifications

It is used in system for the conduction of LP and natural gas, compressed air and hydraulic lines. This tube is identified by a green ink bass-relief engraving along the







90° Flhow





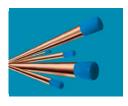
Rigid Copper "Acr" Tube (ASTM B-280)

General Description

"ACR"type rigid copper tubing in diameters of 1/8" to 4 1/8"

General Specifications

Used in refrigeration and air conditioning installations. The copper ACR tube is purged with nitrogen to prevent internal oxidation and comes with plastic caps on the end to protect the inside. Suitable for R-410a gas application.





Copper Tubes & Fittings

www.hailiang.com

HAILIANG is one of the world's largest producers for copper.



ASTM B75 ASTM B743

EN 1057

ASTM B68 EN 12735 **DIN 1761**



























COPPER TUBES SERIES







LWC FOR ACR SERIES



PANCAKE COILS SERIES

Sizes available from

1/8" to 7/8"

COPPERTUBES

Main Purposes:

Water, Gas, Sanitation, Air Conditioning, Refrigeration Fire Protection and General Purposes.

FITTING SERIES







COPPER FITTINGS

Main Purposes:

Air Conditioning, Water, Gas, etc.

Galvanized, MI, Ductile Iron & Brass Pipe Fittings







Pipe Fittings Galvanized Iron





Ductile Iron Grooved Couplings and Fittings

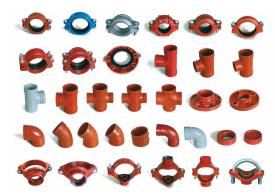
Ductile iron casting conforming to ASTM A536 65-45-12 equal to QT450-12.

Coating:

- 1. painting
- 2. epoxy
- 3. dacromet
- 4. galvanized

Color:

- 1. Red
- 2. Blue
- 3. White
- 4. Orange





FITTINGS

Brass Fittings

CORONET deals in Assortments, Brass fittings valves, Airline products, Lubricant & brake system products. Brass fittings particularly to refrigeration & Air conditioning requirement.

All sizes 1/8"-1"

■ 90°

Tee

■ 45° SAE Flare

Nipple

Standard Compression

Connectors

Union

■ Tee Pipe

■ Elbow

Lock Nut, Adaptors, etc.





Flexible Air Ducts & Accessories

www.afs.com.tr



UL 181, UL 723 BS 476, Part 6 & 7





0 P E

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AFS FLEXIBLE DUCT Co. has been the leading manufacturer for HVAC Flexible Ducts in Turkey for over 20 years and has become a reliable name in the HVAC market. AFS produces and markets many products in the heating, ventilation and air conditioning sectors with state-of-the-art technology. Starting with SEMIAFS flexible duct in 1991, many products have been improved and introduced to the HVAC market. AFS has committed itself to providing the highest quality ventilation products, as well as constantly excellent services, and the most effective solutions for the HVAC market.

FLEXIBLE
AIR DUCTS

AIR DUCTS	ISO AFS-ALU.70	ISO AFS-POLY
Inner Duct Construction	3 ply aluminium, 2 ply polyester	2 ply polyester
Nominal Thickness of Inner Duct	74 micron	30 micron
Jacket Construction	1 ply aluminium, 2 ply polyester	2 ply metallized polyester (reinforced by polyester fiber)
Nominal Thickness of Jacket	45 micron	30 micron
Insulation	25 mm glass wool 16 kg $/$ m 3	25 mm glass wool 16 kg $/$ m 3
Available Diameters	Ø 52 mm–Ø 800 mm	Ø 82 mm–Ø 800 mm
Temperature Range	-30 °C / +150 °C	-30 °C / +120 °C
Air Velocity	30 m/s (max)	30 m/s (max)
Operating Pressure	3000 Pa (max)	3000 Pa (max)
Standard Length	10 m	7, 6 m
Packing	Single cardholder box	Single cardholder box
Fire Resistance	Fire retardant	
Fire Certificates	M1 (France), Class 1 (Italy), Class 0 (UK), [BS 476, Part 6 & 7] BS 476 Part 20 Integrity: 26 min, Flame Spread Index < 25 Smoke Developed Index < 50, Class B [EN 13501-1]	EN 13501-1 (Class E), Flame Spread Index $<$ 25 Smoke Developed Index $<$ 50, (USA) [UL181]
Certificates	GOST-R (Russia), Puncture test per UL 181	GOST-R (Russia)
Available Options upon Request	Customized lengths, * 40 mm insulation, ** 24 kg / m^3	Customized lengths, * 40 mm & 50 mm insulation, ** 24 kg / m³

PIN

SELF ADHESIVE STUCK UP PIN	BASE	PIN	FASTENING CLIPS
Construction	Reinforced Galvanized Steel	Plated Steel or Aluminium	Galvanized Steel
Dimension	50 x 50 mm (2" x 2") 30 x 30 mm (1.18" x 1.18")	\emptyset 3 mm \pm 0.3 mm \emptyset 2.2 mm \pm 0.2 mm	Outside 30 mm (1.18")
Length		30 mm–200 mm (1.18"–7.87")	
Temperature Range	-10 °C to $+80$ °C ($+14$ °F to $+1$ Application Temperature has to be		

CONNECTORS	PVC	SILICONE	
Base Fabric	Polyester	Fiberglass	
Coating	PVC (Both Sides)	Silicone (Both Sides)	
Color	Grey & Black	Grey	
Temperature Range	-30 °C / +80 °C	-50 °C / +260 °C	
Fire Resistance	Fire Retardant	Fabric: non-combustible, Coating: flame proof	
Specifications	Suitable for general applications Economical choice	Suitable for high temperature applications (400 $^{\circ}\text{C}$ / 2 h) High resistance to weathering and chemicals	
Standard Length *	25 m	25 m	
Fire Certificates	UL 723 (USA)		
Certificates	GOST-R (Russia)	GOST-R (Russia)	
Construction	Galvanized steel plate + Coated fabric + Galvanized steel plate **		
Packing	Single Cardboard Box		

^{* 50} m or other lengths are available upon request.

^{**} Stainless steel or auminium is available upon request.



Ventilation Systems

www.flexiva.com.tr



















Flexiva aluminum sky

Its inner and outer surfaces are produced of laminated aluminum foil and high-tensile steel wires, with intent to be used in heating, cooling, ventilation and waste gas transmission lines.

- Specially suitable for chilled water, condenser water and domestic hot/cold water installations.
- It has the features of being able to be stretched, twisted and compressed.
- Airtight. Resistant to tear and impact.
- It is flame retardant and has CSTB M1fire retardant certificate.
- Does not cause poisonous gas release during fire.
- Produced in accordance with ISO 9001 2008 Quality Management System.
- Complies with TS EN 13180 standards.

TECHNICAL SPECIFICATIONS			
Material	Aluminum		
Diameter Range	ø 52 mm – ø 610 mm		
Heat Resistance	-30°C + 150°C		
Velocity of Air Flow	Max. 30 m/sec		
Operating Pressure	Max. 5000 Pa.		
Class	Flame Retardant (M1)		
Standard Form of Supply	Box/10 m		
INSULATED SKY			
Insulation	25 mm – 100 mm thick glasswool with a density of 12–16 kg/m³		
Jacket	Aluminum		





Flexiva connector

It is a flexible connector that prevents the transmission of the vibration and noise in heating, cooling and ventilation system to the metal sheet channel which carries the air.

- The material used between two galvanized sheets has been combined with the multi-lock system and it is inseparable.
- Can easily be applied to corners, square, oval, round joints, etc.

STANDARD DIMENSIONS				
35 mm	Х	60 mm	Х	35 mm
45 mm	Х	60 mm	Х	45 mm
45 mm	Х	75 mm	Х	45 mm
70 mm	Х	100 mm	Х	70 mm
70 mm	Х	150 mm	Х	70 mm



Self Adhesive Stuck Up Pins

Complete with washer.

Size: 4, 6 & 8 cm



www.ramratna.com



CEILING FANS

FLOMAX CEILING FANS

FEATURES

- Designed to suit your interiors.
- Aluminum pressure die cast motor body.
- Precisely balanced aerodynamically designed strong MS blades.
- Double ball bearing facilities silent and long term performance.
- Shaft protection with additional safety wire.

EXHAUST FANS

ROUND EXHAUST FANS



SQUARE EXHAUST FANS



- 6" Square Exhaust fan
- 220–240 V 50/60 Hz.
- Plastic body.

SQUARE EXHAUST FANS FULL METAL



- 8" & 10" Square Exhaust fan
- 220-240 V
- Full metal

CEILINGEXHAUST FANS



• 8" & 10" Ceiling Mounted Exhaust fan

INDUSTRIAL AIR CIRCULATOR

PEDESTAL FANS

Sizes: 16", 24", 26", 30"



INDUSTRIAL EXHAUST FANS

LIGHT DUTYEXHAUST FANS



HEAVY DUTY EXHAUST FANS



Sizes: 10" to 18"

RR~KĀBEL

Electrical Cables

www.ramratna.com

Certified by top international electrical standards organizations world over, used in over 75 countries across the globe, RR KABEL are WIRES WITHOUT WORRIES.

























Single Core Flexible Cable BS 6231



Flexible Cable BS 6500



Components of Refrigeration & Air Conditioning

www.emersonclimate.com



ISO 9001:2008 Authenticated



COMPONENTS FOR REFRIGERATION & AIR CONDITIONING

Thermal Expansion Valves TRAE Series

The **TRAE** series is balanced ported valve.

Typical applications include: refrigerated cases, coolers, freezers, ice machines and air conditioning systems. TRAE valves operate over wide operating conditions.



Solenoid Valves **240RA**

The **204RA** is a 2-way, normally closed diaphragm valve. 240RA valves are used for liquid, suction, and hot gas service.

NOTE: Mounting enclosing tube more than 90° off vertical up position is not recommended.

Pressure Controls Pressure Control Series PS1/PS2





Single PS1

Dual PS2

Pressure Controls & Thermostats **Differential Pressure**

Control Series FD113



System Protectors & Drier Cores

EK Liquid Line Filter Drier

The EK Liquid Line Filter Drier is a premium compacted bead Filter Drier with a fine 20 micron fine outlet pad for maximum filtration. The EK is a premium universal replacement liquid line Filter Drier for CFC, HCFC and HFC refrigerants including R-12, R-134a, R-22, R-404A, R-407C, R-410A, R-500, R-502, and R-507.

R-410A

System Protectors **HMI-Hermetic Moisture Indicators**

The **HMI** is designed to provide an accurate method of determining the moisture content of a system's refrigerant. The HMI has a unique high accuracy indicator for C HCFC, and HF refrigerants.

R-410A

Filter Bags

FILTER BAGS

EXCEL POLY-PAC

SELF SUPPORTING POCKET FILTER-VERY HIGH DUST HOLDING CAPACITY



EXCEL POLY-PAC, self-supporting bag filters are made up of superior grade synthetic filter media, multi-layered having progressive density fiber arrangement. The three stage fiber arrangement has a first layer which acts as a pre-filter to the microfiber while the second layer and the third layer supports the media fibers. This results in high dust holding capacity, low pressure drop and longer life time. The rigid pockets are formed by welded construction and aerodynamic design.

EXCEL ULTRA PAC

TENDED SURFACE POCKET FILTER-SUPERFINE SYNTHETIC MEDIA



EXCEL ULTRAPAC utilizes a 100% synthetic filter media having high tensile strength developed through meltblown process. This media has an advantage of being heat sealed, thus avoiding any pin holes that are found in most conventional bag filters. The three stage arrangement which consists of coarse fiber upstream, micro-fine fibers downstream and a scrim backing to prevent fiber migration, offers high dust holding capacity and filtration efficiency.

Brazing & Soldering Products

BRAZING & SOLDERING PRODUCTS



20



High Pressure Cleaners

www.annovireverberi.it

Annovi Reverberi portable pressure cleaners for professional and home use are the result of many year's experience on the industrial market. The exceptional performance of the Annovi Reverberi piston pumps is perfectly combined with the practical handling, ergonomic design and attractive styling of the products in which they are installed.



SIMPLY 110

Max pressure: Bar/Psi: 110/1600 Flow rate: It/h/Gph: 370/98

Power: Kw: 1.4

Max water temp. °C/°F: 50/122

Weight: **Kg:** 7.5



X-TRA CLEAN 140

Max pressure: Bar/Psi: 140/2050 Flow rate: It/h/Gph: 420/111

Power: Kw: 2.1

Max water temp. °C/°F: 50/122

Weight: Ka: 18.5



MIRAGE 131

Max pressure: Bar/Psi: 130/1900 Flow rate: It/h/Gph: 370/98

Power: Kw: 1.8

Max water temp. °C/°F: 50/122

Weight: **Kg:** 9.5



X-TRA CLEAN 150

Max pressure: Bar/Psi: 150/2200 Flow rate: It/h/Gph: 500/132

Power: Kw: 2.5

Max water temp. °C/°F: 50/122 Weight:

Kg: 23.4



X-PRO SK 15.20

Max pressure: Bar/Psi: 200/2900 Flow rate:

It/h/Gph: 900/238 **Power: Kw:** 9.0

Max water temp. °C/°F: 60/140

Weight: **Kg:** 63



Welding Equipments

www.decaweld.com

Deca is one of the leading Companies manufacturing welding equipments. It has been on the market for 40 years obtaining ever increasing success. The company's mission is to manufacture welding equipments able to satisfy the requirements of all kinds of welders: do-it-yourself, maintenance, workshop technicians, professional welders.

MOS 210 GEN

Input voltage: 1 Ph x 230 Welding current range: (AMP) 5 - 165 Power — Kw: 4.5 Weight — Kg: 4.0

Electrodes: 1.6 – 4.0 mm

Direct current stick ARC welder & TIG Suitable for E 6013 Electrodes Rutile.





MMA

WELDING EQUIPMENTS

STAR 270 E

Input voltage: 1 Ph x 230 Welding current range: (AMP) 30 - 200 **Power — Kw:** 2 – 6 **Weight — Kg:** 21.0



T-ARC 525

Input voltage: 1 Ph x 230 Welding current range: (AMP) 40 - 250 **Power** — **Kw:** 4.0 **Weight** — **Kg:** 26.0

Electrodes: 1.6 – 5.0 mm

Suitable for E 6013 Electrodes Rutile.





T-ARC 530

Input voltage: 1 Ph x 220 Welding current range:

(AMP)(50V) 15 - 300, (70V) 15 - 270 **Power — Kw:** 10 **Weight — Kg:** 62.5

CE

Electrodes: 1.6 – 5.0 mm Suitable for E 6013 Electrodes Rutile & E 7018 Electrodes Basic.

T-ARC 845

Input voltage: 1 Ph x 220 Welding current range: (AMP) 110 - 550 **Power** — **Kw:** 17 **Weight** — **Kg:** 74.0 Electrodes: 2.5 – 8.0 mm Suitable for E 6013 Electrodes Rutile &

P-ARC 526

E 7018 Electrodes Basic.

Input voltage: 3 Ph x 230 Welding current range: (AMP) 40 – 260 **Power — Kw:** 12 **Weight — Kg:** 66.5

Electrodes: 1.6 - 5.0 mm

Suitable for E 6013 Electrodes Rutile & E 7018 Electrodes Basic.

P-ARC 840

Input voltage: 3 Ph x 230

Welding current range: (AMP) 65 - 400 **Power — Kw:** 21 **Weight — Kg:** 119.0

Electrodes: 2 - 8.0 mm

Suitable for E 6013 Electrodes Rutile & E 7018 Electrodes Basic.









Italy





Freon Gas & Chemicals

REFRIGERANT GASES



R22

- 99.9% High Purity
- 13.6 kg cylinder
- Mainly used industrial and commercial gas as refrigerant.



R 134 A

- 99.9% High Purity 13.6 kg cylinder
- Used in automobile air conditioning and refrigeration systems extensively.



R 407 C

- 99.9% High Purity 11.3 kg cylinder
- Used for various air conditioning & non-centrifugal refrigeration system.



R 404 A

- 99.9% High Purity
- 10.9 kg cylinder
- Highly pure used for low temperature refrigerant systems such as refrigerator cabins, freezer and refrigerator car etc.



R 410 A



- 99.9% High Purity
- 11.3 kg cylinder
- Operates at higher pressures

PREMIUM COIL CLEANERS



Virginia KMP – USA

www.parker.com





Foam-Max™

Virginia Foam-Max is a super high-foaming, alkaline based, outdoor condenser coil cleaner designed for extra tough cleaning jobs. This cleaner creates a super thick foam when used on aluminum condenser coils that cuts through grease, grime and oil and pushes out feathers dirt, dust, leaves and grass. This highly concentrated formula can be used in lighter dilution ratios to make an economical cleaner for standard cleaning jobs.

1 Gallon	
FM1	



Acti-Brite™

This is our-based, high-foaming outdoor condenser coil cleaner. It is designed to push contamination from heat transfer surfaces and increase airflow for increased efficiency. Effectively foams away stubborn deposits from air cooled condensers, leaving them clean and bright. The liquid penetrates deep into the recesses of the coils and expanding foam pushes contamination such as lint, grass, leaves, insects, feathers and smoke film out to be rinsed away easily with water.

1 Gallon	5 Gallon	55 Gallon	
AB1	AB5	AB55	



Capacitors

www.tzfuye.com





















DUCT CLOTH

- 4 oz
- 6 oz
- 8 oz x 20 yards







Clamping & Fixing Components

www.normfixing.com







EN ISO 9001:2000

NORM Fixing steadily has invested its man power and production facilities since starting its manufacturing of high quality pipes clamps, fixing and hanging elements in 2005. Not only having extended our range of products, we also increased product quality and performance on highest levels.

Obeying the rules and directives of ISO 9001:2008, TSEK, TUV and GOST, our whole manufacturing process, is focused on total quality management, ensuring the use of high quality raw materials, the production of premium quality products and customer service.

NORM Fixing's standard product program primarily includes pipe clamps, anchors, threaded rods, hanging accessories (U-, L-, C-type channels) and other fixing elements like U-bolts and beam clamps, additionally developing and producing customer tailored fixing solutions. NORM's highly motivated and well trained man power is focused on preserving high quality standards and "on time" delivery.



Turkey

CLAMPING & FIXING COMPONENTS

Pipe Clamp with Nut

Used in the assembly of the pipes to the wall (vertically and horizontally), to the ceiling and to the ground.

General Features

- Standard nut is used for the hanger connection.
- Much more better nut welding is gained by the welding parts.



Sprinkler Pipe Clamp

Will be used for connection of tubes in fire fighting and sprinkler systems, water sprinkler systems, CO2, foam, powder spraying.

General Feature

Hanging height can be set as desired with rods.



Polyurethane Isolation Block

It is as excellent heat isolation material used in all kinds of pipe systems. Eliminates the loss of heat inside of the pipe in the hot or cold pipe installations.



General Features

- Generally is produced in 80 kg/m3 density. Upon request, may also be produced in higher densities.
- Shall be used in between -150° C and +130° C.
- Even in lower densities, high isolation is to be gained.
- When compared with the other isolation materials, it is the lowest heat conductive material.
- Has a long life.

G Clips / Ventilation Clamp

They are the connection units used for fixing the flange profiles which are used for the assembly of the air conditioning canals to each other.

General Features

- Has the specialty of being able of easily fixing the profiles by the help of the nuts.
- Has easy assembly possibility.
- Has high loading capacity by means of its hard structure.
- The clamp bolt has always to be suitable and in the same sizes with the flange bolts in order the assembly being able to cushing value.



General Features

■ Used for fixing the pipes, air canals and sprinkler systems to the building construction.



U Bolt

Used in the assembly of the pipes into the canals. It is recommended to use the material as not like a fixation unit but as well in the sliding points.



Tapes & Adhesives





Carton Wrapping Tapes UNI PACK

■ 1″-2″



Clear Cello Tapes UNI PACK

■ ½"- 2½"



Grey Duct Tapes UNI PACK



Black PVC Tapes

2"





Aluminum Foil Tapes UNI PACK



Cork Insulation Tapes

- Designed for all types of climates
- Insulates cold pipes
- Used in cars, homes, freezers and refrigerators



Foam Insulation Tapes

Available in ½", ¾", 1" self adhesive & flexible tape made up of elastomeric materials

Adheres firmly to hot & cold pipes



Masking Tapes UNI PACK



UNIWELD USA is the biggest manufacturer of quality tools for the HVAC industry which was formed in 1949.

HVAC/R OUTFITS, TOOLS & ACCESSORIES

Welding & Brazing Outfits

An economical, contractor grade outfit with the basic components for brazing & welding. Lightweight, portable and effective for light to medium duty job applications.

- Front valve welding handle with stainless steel ball point valves for accurate gas control
- Includes two different types of welding tips capable of blazing up to 1" copper tubing and welding up to 1/8" steel. Portable welding set ModelK23C.

Pipe/Tube Preparation Tools

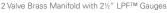
- Deburring Tools
- Pinch-Off Tool
- Spring Tube Benders
- Lever Type Tube Benders for soft copper, aluminum, brass, steel for sizes 1/2"-7/8" diameter.
- Mini Tubing Cutters
- Heavy duty deluxe 45° Flare/Burnish & Swaging Kit for 3/16"-3/4" tubes.

Manifolds

The patented Uniweld forged brass body is manufactured with reseated Teflon valve stem packing for durability and leakproof reliability. This user-friendly, accurate, manifold features:

- Limited Pointer Flutter™, easy-to-read 2.5" gauges with the color coded refrigerant scales and color coded gauge boots.
- Metal (not plastic) hand wheels.
- Extended valve stems for ample knuckle clearance.
- Quick action valve assembly for 1/2 turn fully open or fully closed.
- Convenient 45° front hose holders.
- Soft Magic[®] high pressure hoses (available with optional anti-blowback fittings)







Soft Magic® hose set

HVP 8CFM

Vacuum Pumps

The all-new Uniweld exclusive HUMM•VAC pumps: HVP 6CFM (yellow) and its two bigger brothers, HVP 8CFM (red) and HVP 12CFM (black) remove moisture and dehydrate a system quickly and efficiently. The rugged tough chassis, powerful, quiet running 110/220V, 50/60 Hz motors, lighter weight and ergonomically designed features:

- Cool new styling
- Wide surefooted chassis
- Lightweight
- Slant back balanced handle
- Top mount 1/4 turn on/off isolation valve
- Low profile beveled oil drain
- Large oil level sight glass
- Gas ballast
- Dual voltage 110/220V 50/60 Hz
- High performance deep vacuum
- Factory rated to 15 microns



U.S. PATENT # D0518068

HVP 6CFM



Temperature & Pressure Gauge

www.brannan.co.uk







S. Brannan & Sons has manufactured and supplied thermometers, gauges and instrumentation since 1913. A century of tradition, combined with modern manufacturing methods at their facilities in the UK and Sweden ensure an unequalled service.

The company has operated a quality management system since 1991 and currently operates within the scope of ISO 9001:2000.

NEW PRODUCTS

Heavy Duty Push Button Maximum Minimum Thermometer



These products use a patented blue coloured liquid to replace the mercury but retain the ease of operation of the mercury instrument.

Sound Level Meter



Easy to use electronic sound meter for monitoring sound levels such as traffic and workplace machinery.

CFM/CMM Anemometer & Thermometer



This CFM/CMM thermometer measures air velocity, air flow (volume) and temperature.

Gilt Dial Thermometer & Hygrometer



100 mm gilt dial with temperature and humidity scales printed in black.

High Range Infrared Thermometer



Provides easy and safe temperature measurement where non-contact access is required.

Mini Infrared Thermometer



Provides easy and safe temperature measurement where non-contact access is required.

TEMPERATURE & PRESSURE GAUGE

BRANNAN are leading European manufacturers of Thermometers, Pressure Gauges and associated products. Their thermometer and pressure gauge manufacturing plants in England and Sweden are highly mechanised offering high quality thermometers and gauges at internationally competitive prices. They can provide certification for thermometers, pressure gauges and hydrometers.

DIAL PRESSURE GAUGES

63mm / 100mm / 150mm Glycerine Filled Pressure Gauges: BS EN 837



DIAL THERMOMETERS

100mm Stainless Steel Thermometer: BS EN 13190 | Remote Mounting Liquid **Expansion Mechanism**



STANDARD SPECIFICATIONS		
Case:	Stainless Steel	
Class:	1.6 (*2.5 for 0 to 1 bar/psi)	
Window:	Plastic	
Connection:	1/4" BSP Brass	
Internals:	Copper Alloy	
Filling:	Glycerine	
Optional:	Other sizes/materials inc. NPT	

Case:	Stainless Steel	
Class:	2	
Nindow:	Plastic	
Connection:	1/2" BSP Female Stainless Nut	
Sensor Mechanism:	Liquid Expansion	
Filling:	Dry	
Capillary:	2m, 5m or 10m	
	Stainless Interlocking	
Optional:	Glycerine (with Stainless Steel case)	

Suitable for surface mounting. Complete with back flange.





HVAC TOOLS & MACHINES



Pipe Cutters up to 300mm with different types of cutting wheels.



A full range of heavy-duty adjustable Pipe Stands with capacity from 1/8"-36".



Tube Cutters for cutting both plastics and metal cutting up to 42mm.



Battery Operated press tool $\frac{1}{2}$ – 4" for Copper fittings with hydraulic output 32KN.



Portable Power threader with threading capacity %"-2" pipes.

NaviTrack® II Locator



- The NaviTrack II Locator navigates you to the location of underground pipes quickly and easily. It tracks energized lines with ease.
- Approach the transmitter from any direction for faster, more accurate locates.
- Maximize the signal and the locate is complete.
- Verify the locate using the large mapping display.
- Depth measurement is continuous.
- Depths of greater than 15' can be read.
- Weight: 5 lbs.
- Power Source: 4 C-Cell batteries.
- Battery Life: Approximately 16 hours
- Sonde: 16Hz, 512Hz, 640Hz, 850Hz, 8kHz, 16kHz, 33kHz
- Active Line Trace: 128Hz, 1kHz, 8kHz, 33kHz, 65kHz, 200kHz, 262kHz
- Passive AC LineTrace: 60Hz, 50Hz



- Designed for commercial purpose, having light weight with proven heavy duty performance.
- Pipe cutting ½"-2".
- Fast Transport and easy set up.
- Versatility for threading and grooving.
- Self Contained Oil system with adjustable control
- Universal Motor Capacity 1.7 KW at 230V. 25 - 60Hz.
- Control Motor: Reverse / off / Forward Switch.
- Spindle Speed: 38 RPM
- Chuck: Hammer Type
- Self opening Die Head %"- 2" BSPT or NPT with dies $\frac{1}{2}$ " – $\frac{3}{4}$ " and 1" - 2" NPT or BSPT
- Portable design, Quick setup fast transport as it weighs only 52 kg.
- UL, CSA approved.





- Designed for most heavy duty threading jobs of various pipes such as stainless steel, galvanized, plastic coated pipes, IMC, heavy wall conduit and pipes up to 30 Rockwell C hardness
- Pipe cutting ½"-4"
- 1.1 KW low noise induction motor
- ¼"-2" Universal Die head; Optional 21/2" receding die head allows cutting of tapered or straight NPT/BSPT
- Dies $\frac{1}{2}$ " $\frac{3}{4}$ " ,1" 2" universal alloy dies and $\frac{2}{2}$ " 4 high speed dies.
- Spindle speed: 36 / 12 RPM with two speed gear ratio 3:1.
- Reamer capacity: ¼"-4" blade type.
- Chuck: Hammer type with replaceable jaw inserts.
- Weight: 220 kg
- Stand available.
- UL, CSA approved.

Model 918 **Hydraulic Roll Grooving Machine**



- Mainly used for Sprinkler installation pipes.
- Groove pipes of steel (1"- 12"), copper (2"-6", SS (11/4"-6")
- Useable with 300 Compact, 535 and 1224 machines as an accessory.

Model HC300 **Hole Cutting Tools**



- Quick Connecting Two-piece Design. This unique design allows for easy mounting, transport and set up, the unit can be broken down into two lighter weight units for maximum transport and operation comfort.
- Single-hand Chain Latching. The Model HC300 features a patented spring-loaded chain that saves time and significantly aids set up and operation.
- Ergonomic Design.
- Horizontal and vertical flats to ensure perpendicular cutting.

- Motor: Universal, 115V or 230V 25-60Hz 11amp, 1.2 HP.
- RPM: 360 (no load)
- Hole Cutting Capacity: up to 3"
- Chuck Size: 1/16"- 1/2
- Pipe Diameter Mounting Range:
- Weight: 30 lbs.
- Height: 12.8"
- Length: 11.9"
- Width: 13.2"
- 115V approved by CSA to CSA and UL standards.



Belts & MS Fittings

www.mitsuboshi.co.jp

All MITSUBOSHI V BELTS are of high super load capacity, best dimensional stability with a longer belt life leading to increased productivity with less maintenance.



V BELTS

Available Sizes

A Series	A16-A160
■ B Series	B25-B380
= CPA Sorios	550_5000

■ SPZ Series

487-5000

Other Available Models

C	\blacksquare AX	Link Belts
D	■ BX	■ SPA X
Z	CX	■ SPZ X
■ 3V	\blacksquare ZX	■ Timing Belts
		_

JV ■ SPB ■ 8X SPC





Power & Flexible Cables

BASEC, BSI, WARRINGTON FIRE RESEARCH, KEKMA, UL, CTL, VDE, 3P, SASO, ESMA, JQM



Middle East Specialized Cables Co. (MESC) was established in 1993 as a private owned company and in 2007, it was converted into a joint stock company after reinforcing its presence as a market leader in KSA. Presently, MESC has three ultra modern manufacturing facilities located respectively in Saudi Arabia, Jordan and UAE. Their products are manufactured to international standards, tested and certified by prestigious institutions such as BASEC, BSI, WARRINGTON FIRE RESEARCH (UK), KEKMA (Netherlands), UL, CTL (USA), VDE (Germany), 3P (Denmark), SASO (KSA), ESMA (UAE) & JQM (Jordan).



Armored Cables

Anti-Vibration Pads

Anchor Anti-Vibration Pads

Offers an ideal solution. Made from a combination of high quality rubber polymers and cork, this ideal combination ends up to make up a product that has excellent resistance to ageing, compression set, water & oil.

Anti-Vibration Pads are widely used in

- Refrigeration Plants
- Compressors
- Conveyors
- Air Cinditioning Plants
- **Diesel Generators**
- **Business Machines** Fans Motors



Cork Sheet

Is made from selected granulated cork, bonded together using different synthetic or natural binding agents. Binding agents & chemical additives are carefully selected to adept to suit user requirements & the end use for which the material is to be utilized.



Rubberized **Cork Sheet**

Combines the compressibility of cork with the properties of resilience as well as resistance to mechanical action of rubber. Rubber cork can be easily bent round sharp corner without cracking. They are strong, flexible and easy to cut and can be used for gaskets even with very narrow borders. The unique cellular structure compresses under pressure and creates a reverse pressure on the restraining forces. This "fight back" is a primary requirement in any good gasket material.



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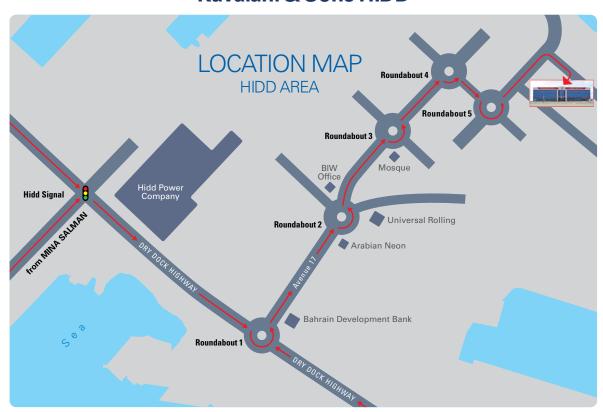








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