



# RATA™

Since 1949

The Refrigeration & Air Conditioning Trades Association Ltd.  
110, Unique Industrial Estate, 1st Floor Bombay Dyeing Compound.  
Off Veer Savarkar Marg, Prabhadevi, Mumbai 400 025  
Tel : 022 24381140 Email : info@rataindia.com  
Website : www.rataindia.com

## Rata - Newsletter

15th September 2016 | Issue 33

(For Private Circulation Only)

**“I shall participate, I shall contribute,  
and in so doing, I will be the gainer”**

- Walter Annenberg



# PARTICIPATIONS

Membership Application enclosed, complete the same and send to RATA office.

**FOR EVERYTHING IN AIRCONDITIONING, REFRIGERATION & INDUSTRIAL CONTROLS**

## ISHWAR TRADING

### MAHARASHTRA

107, Great Western Building, 23, Bake House Lane, Fort, Mumbai 400 023.  
Call : 22 6636 0881, 22 2204 2187, 22 2284 6509. Fax : 22 2283 2424.  
E-mail : sales@ishwartrading.com

### GUJARAT

G-10, Chitrangana Complex, Anand-Vallabh Vidyanagar Road, Anand 388001.  
Call : 91 2692 645789, 92271 77712. E-mail : ishwargujarat@gmail.com

**AUTHORISED WHOLESALER FOR**

*Danfoss*

denaline

FLORON

GOMAX

**DISTRIBUTOR FOR**



Contents

Overview Of RATA

The Refrigeration & Air-Conditioning Trades Association Ltd. (RATA) is one of the oldest association working for the development of Air-Conditioning & Refrigeration industry in India. Established in the year 1949, the association brings together people from the entire industry and gives them a central forum to help them accomplish their common goal of making progress and achieving success. To bring this vision to reality, RATA with its base of ethics and a strong code of conduct, actively and responsibly helps its members to grow and has also encouraged new entries for the expansion and betterment of the industry. RATA believes in providing a platform to its members to showcase their offerings which in turn will promote internal as well as external trade. In this constantly evolving industry and changing market trends, the association contributes towards the promotion and an overall development of its members and the industry by encompassing companies and traders to organize promotional, educative and informative events.

Details of Committee Members of Year 2014-2017

Name Of Member	Name Of Company	Post
Mr. Parasmal Sirohia	Delite Refrigeration Company	President
Mr. Deepak Dalmia	COOLVIN HVAC SYSTEM Pvt Ltd	Vice President
Mr. Jasprit Singh	H. J. International	Treasurer
Mr. Ajit Panicker	NOVA HVAC SYSTEMS (INDIA) PVT LTD.	Secretary
Mr. Mihir Sanghavi	Auro Engineering Company	Jt. Secretary
Mr. R. T. Gurnaney	Nova ACR Services (India) Pvt. Ltd	Committee Member
Mr. Pankaj Choraria	Boulton Trading Corporation	Committee Member
Mr. Akash Varma	Ishwar Trading	Committee Member
Mr. Hitendra Morakia	Industrial Metals	Committee Member
Mr. Anoop Sabnani	A. S. Controls Pvt Ltd	Committee Member
Mr. Anand Joshi	Manik Engineers	Committee Member
Mr. Rahul Rane	Emerson Climate Technologies (I) Pvt Ltd	Committee Member
Mr. Pritesh Shah	Filko Engineering Co	Action Committee
Mr. Harshal Padia	T J Controls	Action Committee
Mr. Sumod Nair	Kwality Engineering Co	Action Committee
Mr. Sanjay Ray	Russair Technologies	Action Committee
Mr. Nasir Khan	Airofrost HVAC Systems Pvt Ltd	Action Committee
Mr. Kunal Gosavi	Yogeshwar Service & Repairing Pvt Ltd	Action Committee
Mr. Rajen Bhimra	Bhimra Products	Action Committee
Mr Bhavesh Mehta	Mr Bhavesh Mehta	Action Committee

Content

04

RATA AGM

06 / 10

Microgroove Copper Tubings

12 / 14

Finance Minister Letter Preview

Edited & Complied: Ajit Panicker, Secretary RATA, ap@novainitiative.com

Administrative Support : Ms Rinal Vira, info@rataindia.com

Circulation: Monthly to every member randomly every quarter to non members reaching over 5000+ small and medium enterprises in the field of airconditioning and refrigeration.

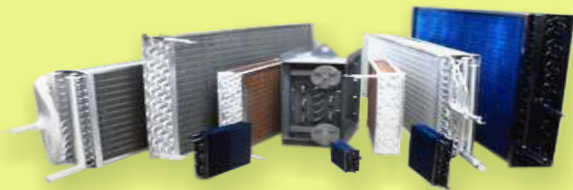
Visit us at [www.rataindia.com](http://www.rataindia.com)

For advertising call +91 77387 45000

Follow us:  /RataIndia



We never compromise on quality



# INSTALL FLEXIBILITY

EASY TO INSTALL INSULATION SYSTEM



**Accoflex® W** tough and easy to sleeve insulation

**Key Features:**

- Cost effective
- Easy to sleeve on tubes
- Sweat control
- Tough and flexible insulation with smooth powdered inner surface

**Applications:**

Insulation for split ACs, plumbing and light commercial applications, to prevent condensation and save energy - **install it. trust it.**



## Accoflex® W



**armacell**

Tel: +91 20 6678 2000  
info.isa@armacell.com

**Armaflex**

**Arma-Chek**

**ArmaSound**

[www.armacell.in](http://www.armacell.in)



## RATA 67th AGM

The 67th RATA AGM was held at Hotel Le Grande Andheri East . The Balance sheet and auditor reports for year ending 31 st March 2016 were recieved and passed by the members . A detailed presentation was made by Mr Akash Varma on the revenues of RATA and how our revenues have been steadily increasing which is helping RATA sustain and grow its membership .

RATA President Mr Parasmal Sirohia highlighted the key achievements that the RATA committee had achieved over the last year by way of advertising revenue in the newsletter , Acrex participation and VRF Mela . Mr Ajit Panicker RATA Secretary detailed the areas that RATA will focus on by way of organising events on safety and GST .

This year was probably the first year where the AGM was held as a high Tea , the focus being on saving our cash reserves and deploying it in activities that can help the trade members . All members had a common concern on the low active participation of RATA members in engaging with RATA activities . We are hereby requesting all members to please come forward and be part of the AGM or monthly committee meetings which helps in engaging with the current needs of the trade and help bridge these gaps .



*Dealers of*



**H.J. International**

B/8, Shakti Sadan Co-Op. Hsg. Society,  
161/163, Dr. D.B.Marg, Grant Road (E),  
Mumbai - 400007.

E-mail Id: jasbir@mtnl.net.in  
hjipvtltd@hotmail.com

Contact No.: +91 93222 52722  
+91 93222 51843  
+91 93222 52754



# ONE STOP SOURCE FOR REFRIGERATION & AIR CONDITIONING

**Bitzer**  
THE HEART OF FRESHNESS  
Semi Hermetic Recip Compressors & Condensing Units  
Open Drive Recip Compressors, Transport Compressors  
Semi Hermetic / Open Type Screw Compressor

**EMERSON**  
Climate Technologies  
Compressors & Condensing Units

**ROTHENBERGER**  
pipetool technologies at work  
Instruments & Tools

**KYOWA**  
Jet Cleaner

**KOLDIN** *NAKATOMI*  
Movin SPOT COOLER

**GÜNTNER**  
Evaporators & Condensers

**EMKARATE**  
Synthetic Lubricants for HFC Refrigerants Ammonia

**FUCHS**  
Refrigeration Lubricants

**Bitzer**  
THE HEART OF FRESHNESS  
Lubricants

**Danfoss**  
ENGINEERING TOMORROW  
Compressors, Condensing Units & Controls

COOLING THE NATION SINCE 1947  
**HINDUSTAN GROUP**

Insulation Pipes  
Refrigeration Accessories  
Soft & Hard Drawn Copper Pipes  
Thermal Plastic Hose  
Receiver  
Accumulator  
Vibration Eliminators  
Axial Fans  
Vacuum pump

**DUPONT**  
The miracles of science  
**Freon**  
Chemours  
SUVA RANGE OF HFC REFRIGERANTS  
ISCION RANGE OF DROP IN REFRIGERANTS

**SANMAR**  
Chemplast Mettron Refrigerants

**HIGRO**  
Industrial Chemicals  
Industrial Gases, Anhydrous Ammonia & Sulphur Dioxide

**VERIKOLD**  
Upright Display Visi Coolers, Juice Dispenser  
Back Bar Coolers, Refrigerated Display Counters

**KOLDIN**  
*Keep Fresh*  
Cold Rooms, Process Chillers  
Condensing Units, Evaporators & Condensers

**MAHINDRA**  
Ice Cream Machinery  
ICE CREAM MANUFACTURING EQUIPMENT  
&  
SOFT ICE CREAM MACHINE

ISO 9001 : 2008 Certified

COOLING THE NATION SINCE 1947  
**HINDUSTAN**  
REFRIGERATION STORES  
DELHI NOIDA GURGAON BHIWANDI CHENNAI SECUNDERABAD

Head Office : 2, 4 & 5, Netaji Subhash Marg, Darya Ganj, New Delhi-110002  
Telephone : 011-23271898, 23277725, 23277735, 23288884, 49677777 (100Lines) Fax : 011-23271152  
Email : higrup@gmail.com, sales@hrsgroupindia.com, www.higroupworld.com  
Branch : Bldg. A6/1, Prithvi Complex, Kalher Village, Taluka - Bhiwandi Distt. Thane (Maharashtra)  
Mobile : 09322980202  
Email : hrsbhiwandi@gmail.com

# Microgroove Copper Tubings

## Microgroove copper tube heat exchangers for air conditioner

### A Climate of Innovation

Many factors are contributing to a climate of innovation in the ACR industry today, including

- Phase out of high-ODP and high-GWP refrigerants and use of eco-friendly refrigerants
- Energy efficiency standards and Sustainable development
- Computer simulation of components and system performance
- Responsiveness to needs and wants in the marketplace

The phasing out of popular CFC and HCFC refrigerants has been a major factor in spurring innovations in cooling technology in the past 20 years. Likewise, energy efficiency and sustainability have necessitated invention. End-users have their eyes on energy efficiency ratings and OEMs are highly motivated to use less material in their products.

### Natural Refrigerants

Natural refrigerants such as carbon dioxide and propane are fast becoming more attractive to OEMs and end-users for ACR and heating applications as technology advances. Also known as R744, carbon dioxide is used as a refrigerant in a growing number of applications ranging from vending machines and refrigerated supermarket display cases to ice-skating rinks.

Another natural refrigerant under consideration for use in air conditioning systems is propane. Known as R290, propane is an eco-friendly hydrocarbon (chemical formula  $C_3H_8$ ) with outstanding thermodynamic properties that make it well suited as a refrigerant for residential air conditioners. The advantages of copper tubes in these applications include high thermal conductivity, corrosion resistance and strength. Smaller diameter copper tubes have even higher burst strengths and they allow for lower overall refrigerant volumes.

Copper is a proven technology with a well-established supply chain, including a network of trained installers with the know-how to ensure safety and reliability.

### The Most Important Factor

Perhaps the most important factor driving the development of new products is a better understanding of attitudes toward comfort and refrigeration in different climates and cultures. ACR product developers are responding better to the real needs and wants of end users in the built environment. They are right-sizing air conditioning and refrigeration products to allow for precise temperature and humidity control in specific zones without waste. The result is that end-users will enjoy healthy, eco-friendly products that deliver cooling capacity with high energy efficiency when as well as where it is most desirable.

Computer modelling is now commonly used to simulate total system design. Decisions about refrigerants, coils and components are now made with the assistance of increasingly accurate performance simulations.

### Advances in coil design

Redesign of the coil has seen the use of smaller diameter copper tubes with inner-grooves increasing the internal heat transfer coefficient and raising COPs. Such improvements in coil performance may also be favourable for the use of new refrigerants, less materials, higher operating pressures (due to the smaller diameter tubes) and variable refrigerant flow (due to the increased number of branches). System design is dramatically changed for the better by using smaller diameter, inner grooved copper tubes in the coil designs.

Smaller diameter, inner grooved copper tubes have been proven to be well suited for the high-volume production of residential air conditioners. Now it is time to show that the same benefits that make MicroGroove so attractive for room air conditioners also apply to commercial and industrial systems.



Contributed by:  
Shankar Sapaliga,  
Senior Consultant HVAC -  
International Copper Association India  
shankar.sapaliga@copperalliance.asia

Continued on Pg. 10



**Russ Air**  
ENVIRONMENT YOU TRUST!

GLOBAL LEADERS IN TECHNOLOGY



INDUSTRIAL AIR CURTAINS & AIR DOORS  
PVC STRIP CURTAINS & ROLLS  
INSECT KILLERS & ARRESTORS

Projects In Pharma | Food & Beverage | Cold Storages | Automotive | Chemical | Real Estate | Retail | Hospitality | Healthcare

Tel: +91 84259 67000 | +91 22 42 200 359 | Email: sales@russairtec.com | Web: www.russairtec.com



# Arimpoor Enterprises



✓ Company Policy All Gasket Are Readymade.

✓ We Don't Sell Loose Gasket.

E-192, Lalji Devraj Chawl, Shop No-10, Gokuldas Pasta Road, Near Chitra Cinema, Dadar East Mumbai-400014

Tel.: 022 2417 3944 / 2417 2886

E: arimpoorenterprises@arimpoorenterprises.com | W: www.arimpoorenterprises.com

## AUTHORISED DISTRIBUTOR



## JEET AIRCONDITIONINGS

Shop No. 23, Andheri Shiv Shakti CHS, Indira Nagar, Behind Indian Oil Nagar,  
4 Bungalows, Andheri (W), Mumbai – 400 053.

Tel No. : +91 9821068899 / 022 65559997 / 32928291 / 26371742 / 26373078.

Email : jeetaircon@gmail.com Website : www.jeetairconditionings.com





**Single Outdoor Unit Solution:** Supports up to nine indoor units, and is an optimized cooling system for residences



**Optimized Balcony Space:** With the largest capacity in its class of 14HP, provides more coverage and a smaller footprint



**Easy Installation:** 4-way installation with front, side, bottom and back piping



**Energy Efficient:** Save on energy consumption with high-performance compressor technology

# SAMSUNG

## Samsung DVM 14HP VRF

### A compact cooling solution for luxury apartments

The new side-discharge Samsung DVM 14HP VRF air conditioner combines world-class energy efficiency and economy to deliver outstanding performance in a space-saving design.



For sales enquiry, write to us at  
[sales.enquiry@samsung.com](mailto:sales.enquiry@samsung.com)



Call us at **1800 3010 8282**





## Microgroove Copper Tubings

We would like manufacturers and mechanical systems engineers to come to realize the same benefits in commercial applications that OEMs of residential products already enjoy. The MicroGroove concept is applicable across the boards: residential, commercial and industrial refrigeration and air conditioning; and for evaporators and condensers. There are benefits in every case.

Traditional copper tube/ aluminum fin coil manufacturing technology when modified for smaller diameter copper tubes of 7mm to 5 mm, can achieve significant improvements in heat transfer. When coupled with internal enhancements to the copper tubes such as higher strength, thinner walls and internal micro-grooves, newer optimized heat exchanger designs can be smaller, more efficient, and lower cost compared.

A major innovation of small diameter copper tube technology enhances heat transfer by rifling or grooving the inside surface of the tube. This increases the surface-to-volume ratio, mixes the refrigerant, moves the refrigerant into contact with the interior surface of the tube, and homogenizes refrigerant temperature across the tube, resulting in more efficient conductive and convective heat transfer. The high efficiency of the inner grooved tube stimulates and promotes the development of energy-saving, high efficiency and miniaturization for air conditioning systems. Typically, such surface enhancement can significantly increase overall heat transfer performance, with different inner groove geometries available for optimization under various refrigerants and conditions.

### Making coil with Microgroove Tubes

Manufacturers are using familiar equipment to make coils with smaller-diameter round copper tubes. Performance simulations and prototype designs of heat exchangers with smaller diameter copper tubes are indeed impressive. The savings in materials and reduction of refrigerant volume cannot be denied. Fortunately, Microgroove copper tube technology is compatible with production methods and equipment already familiar to the HVAC industry. Equipment makers have made the necessary adjustments for producing smaller-diameter tubes and assembling them into coils. Such manufacturing equipment has proven production-worthy at major companies in China such as Haier, Midea, Kelon, Chigo and Goodman who have mastered the manufacturing and now are marketing products globally.

### Typical Processes

The principles of tube insertion and tube expansion have been utilized in the industry for decades. The equipment used today expands the tubes circumferentially, i.e the circumference of the tube is increased without changing the length. This "non-shrinkage" expansion allows for better control of tube lengths in preparation for subsequent assembly operations. Tubes are inserted, or laced, into the holes in a stack of precisely spaced fins. Specially designed expanders are inserted into the tubes and the tube diameters are increased slightly until mechanical contact is achieved between the tubes and fins. The high ductility of copper allows for this process to be performed accurately and precisely. Heat exchanger coils made in this manner have excellent durability and heat transfer properties.

### Modern Manufacturing

Modern designs of the tube expansion equipment allow for tight tolerances and exact specifications using smaller diameter copper tubes. Otherwise the equipment and production lines closely resemble the existing equipment lines that have a long and successful history.

Manufacturing in general has become more precise and accurate and the equipment for working with smaller diameter tubes is no exception and manufacturers can quickly recoup the costs of equipment upgrades because the use of smaller diameter coils allows them to make higher value products with less material.

### Antimicrobial Materials

Another factor influencing the design of air conditioning and refrigeration systems is new published research on copper's efficacy against the spread of fungi in air conditioning systems. OEM companies such as the Chinese air-conditioning giant Chigo and Hydronic in France have already developed all-copper products expressly for their antimicrobial properties. The use of all copper coils is not new but their use expressly to inhibit the growth of fungi and bacteria is a recent development that is expected to be an important factor in the development of innovative air conditioning and refrigeration products. Bio build up on the coil may be reduced by using all copper coils, helping to maintain high levels of energy efficiency for longer times and avoiding energy efficiency drop off over time.

ENGINEERING  
TOMORROW

*Danfoss*

Authorised Wholesaler

www.volgaagency.com

**VOLGA**<sup>TM</sup> **Agency**

Mumbai

Ahmedabad

Indore

e-mail : sales@volgaagency.com  
Mob :+91 9327001868/ 022-65671976

marathon®

SF

Tecumseh

Supco

Fieldpiece





## COMPLETE AIR - CONDITIONING SOLUTIONS



Deals in All Leading Brands

AC AMC and Repairs

Split Ductable Cassette

VRF/VRV, HVAC Projects

9987899636 / 7498383318

ganiaircon@gmail.com • www.ganiaircon.net

GANI AIRCON

MAKE YOUR  
FUTURE BRIGHT

With



# टेक्निकल ट्रेनिंग इन्सटिट्यूट

LEARN AND EARN



## DIPLOMA COURSES



AC & REFRIGERATION



WATER PURIFIER  
MAINTENANCE



MOBILE REPAIRING



ELECTRICAL



SECURITY SYSTEMS



AUTOMOBILE

JUST MISS - CALL 022 6140 3667

ganiairconinstitute7@gmail.com | www.gati.institute



RISHAB  
Enterprises

**AUTH. DEALER & DISTRIBUTOR IN  
MULTI BRAND AIR-CONDITIONER &  
REFRIGERATION PRODUCTS**

AIR-CONDITIONERS, WATER DISPENSER, WATER COOLER  
DEEP FREEZER, VISI COOLER, BOTTLE COOLER  
COOLER CUM FREEZER, ICE CUBE MACHINES



Unit no 20, Saraf Udyog Bhavan, Chincholi phatak gate, Chincholi, Malad (W), Mumbai: 400 064, Email: halwai.rishab@gmail.com

www.rishabenterprises.co.in | Mob.: 98201 99820 / 022 2881 3527

## RATA committee meets Maharashtra Finance Minister

### FAM / RATA engage with the Maharashtra Government on trade issues

FAM and RATA actively joined in taking trade issues to the Government of Maharashtra with a hope to engage with the government to ensure the difficulties of the enterprises within Maharashtra are addressed . Below are a few excerpts from the letter that was addressed to the Hon. Finance Minister Mr. Sudhir Mungantiwar.



#### 1. VAT

The sudden and abrupt increase of the VAT tax from 12.5% to 13.5% and from 5.5% to 6% was unwarranted for especially when GST was to be implemented in the next financial year . It was requested to withdraw the same.

#### 2. Sales Tax Amnesty Scheme

It was requested to extend the sales tax amnesty scheme which was expiring on 30th September to 31st March 2016 and the payment to be made in 4 to 6 installments

#### 3. LBT / Octroi

Maharashtra is the only state that still has the octroi and LBT , there have been number of representations to abolish the same . The importance to abolish the same was reemphasized by the representatives.

#### 4. GST

While GST was being welcomed by the business community , apprehensions were raised on the final rate of duty from the current proposed 18% limit

Continued on Pg. 14



PROUD TO BE INDIAN

## MAMCO ENTERPRISES

Manufacturer & Importer of:

Deodorizer, G.I.Ductable Filters, Filter Cloth, Protection (Rear) Net

E-mail : mamco@vsnl.com Web Site : www.mamcogroup.in

SURESH MANOT : +919820084466





## GLOBAL LEADERS IN AIR CONDITIONING WITH JAPANESE TECHNOLOGY



Cassette Air Conditioner



Hand Dryer - Jet Towel



City Multi VRF System



Ductable Air Conditioner



Split Air Conditioner



Tower Air Conditioner

### THE ME ADVANTAGE

More power savings | High durability | Unmatched service | Eco-friendly green refrigerant (R-410A)

Website: [www.mitsubishielectric.in](http://www.mitsubishielectric.in)

for a greener tomorrow



## AUTHORISED DISTRIBUTOR



## AC&R APPLIANCES PVT LTD

**The Complete HVAC Solution Provider**

HO: Unit no 6, Cama Estate, Sunmill Compound, Lower Parel (west), Mumbai 400013.

Email: [salesmum@acra.in](mailto:salesmum@acra.in) / [salesnm@acra.in](mailto:salesnm@acra.in) Tel: 022-24975005 / 9820200163

Branch: M-3, B-1, Housing Board, Plot No. 4/10, Porvorim, Bardez, Goa 403521.

Email: [salesgoa@acra.in](mailto:salesgoa@acra.in) Tel: 9594930051 • Website : [www.acra.in](http://www.acra.in)



## RATA committee meets Maharashtra Finance Minister

### 5. Law and Order

It was brought to the notice of the Finance minister on the harassment meted to business owners by government officials and police . It was emphasized a safe and comfortable environment was required to ensure growth of business in Maharashtra.

### 6. Representation in decision making

The visiting representative requested that our trade representation be taken in various public bodies like Sales TAX , Municipal Corporation , Transport , Railways , Tourism , Finance , Export Promotion , Police and various other state level bodies.







ISO 9001 | 14001 | 18001



# MANDEV TUBES, ARTERIES & VEINS OF A.Cs IN BUILDINGS!

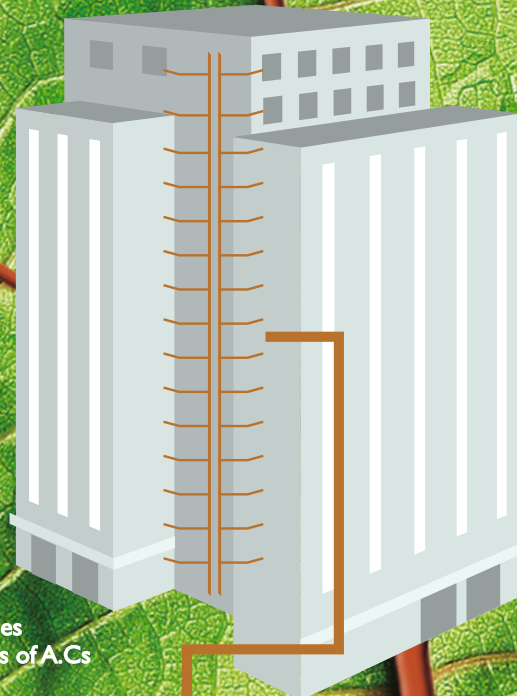
For Air-Conditioners that last longer.

# MANDEV TUBES, TRACHEA (WIND PIPE) OF MGPS IN HOSPITAL BUILDINGS!

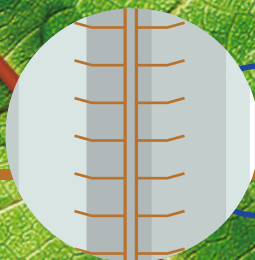
For MGPS Circuits that last longer.

COPPER TUBES for Air-Conditioning and Medical Gas Pipe Line Systems you can:

- Save joints, eliminate 1 joint in every 3 meters for application of Air-condition & Medical gas pipe-line circuits.
- Reduce potential chances of leakage up to 50% due to human errors while doing brazing.
- Save upon AC & Medical pipe installation costs.
- Eliminate coupling, elbow (copper fittings) & bottom joint (brazing) expenses.
- Suitable for vertical tubing installation



Mandev's ONLY Design  
Regd. "MT-ECO-SELF"/"MT-MEDI-SELF  
CONNECT PLUS" + (One End Expanded Copper Tube)



Arteries  
& Veins of A.Cs

Trachea  
(Wind Pipe) of MGPS

**Saves 3 Brazing Joints Out Of Every 4 Joints**

**MANDEV TUBES PVT. LTD. (MUMBAI)**

www.mandevtubes.com | Call 022 66131 818 ( Jalpa/Ria/Surendra) | mantubes@vsnl.net  
Dealership Enquires solicited for Ahmedabad, Bangalore, Chennai, Hyderabad,  
Kolkata, Mumbai, New Delhi, Pune.

To know more about the Mandev Make Copper Tubes visit our Website, Facebook & YouTube page.

[www.facebook.com/mandevtubespvtltd](https://www.facebook.com/mandevtubespvtltd) | [www.youtube.com/MandevTubesPvtLtd](https://www.youtube.com/MandevTubesPvtLtd)

\*BEWARE OF "COUNTERFEIT", DUPLICATE TUBES THAT RESEMBLE MANDEV MAKE ALL OVER INDIA FOR VRF SOFT COPPER COIL & ONE END EXPANDED - VRF HALF HARD STRAIGHT TUBES



## End your AC's water drainage woes!



Ductable & Condensate Removal Pump (CXP-51 HA)

**Cruise Condensate Removal Pumps** (Water Removal Pump for AC) brings permanent resolution to your water leakage problems and other AC equipment installation challenges.

Our pumps are small in size and can easily be used in all kinds of air conditioners or refrigeration capacity of 15 KW or less. These pumps can be effectively used in automotive and domestic appliance industries also.

With our pumps, your water drainage worry will be a thing of the past!

For more information on commercial / industrial condensate pumps, log on to our website.

### Key Features

Suitable for split AC, exposed & concealed ceiling and fan coil unit

Highly efficient and low in noise vibration

Top or side AC inlet pipe connection options

Easy to installation or maintain

Made of fire retardant grade plastic



Condensate Removal Pump - CX MN14LH



Drain-Pump-CXPW-30HA



Contactors



Digital Thermostat



Temperature Controller (CXP-7569K)



Wall Mounted Fan Coil Units



Cassette & Ceiling Mounted FCU's



Refrigeration Condensing Units



5-10 Ton Commercial Refrigeration ODU's

Cruise products symbolize reliability in extreme conditions and offer a pan-India service network

Featuring one of the widest range of light commercial AC products and parts, we can cater to your unique needs of customized ODU's and Fan Coil Units

**Cruise represents a mark of reliability since 1992!**

**SEAGULL COOLING PVT. LTD.** G2 Industry House, 23B Mahal Indl Estate, Mahakali Caves Rd, Andheri (East), Mumbai 400093, India  
For more information, simply search for '**Cruise ac**' | You can call us on **+91-22-26874040** or email us at **info@cruiseac.com**



www.facebook.com/cruiseac



www.twitter.com/cruise\_ac



www.instagram.com/cruise\_ac



www.linkedin.com/company/cruise-appliances