



ECO-FRIENDLY INDUSTRIAL & MARINE CHILLERS







## **Industrial Chillers:**

*Fischer Kälte-Klima*, *Germany* has many years of experience in building Water and Brine Chillers to cater to specific Industrial Applications.

The machines are built robust, with high quality materials and with the consideration of harsh Asian environments. Due consideration is given to developing controls and process conditions, based on customers' needs.

The machines come with Special Power Saving Features, which are unique to the product.

### **VARIABLE SPEED DRIVE**

The Fischer machines are installed with Frequency Convertors which will reduce the machine speed at low load conditions which eventually results in HUGE SAVINGS in Power Consumption.

### REFRIGERANT ECONOMISERS

The Economisers installed in the Refrigerant Circuit , Subcools the liquid Refrigerant , and eliminates all flash gas . This ensures a more effective use of the latent heat of evaporation present in the liquid refrigerant.

## INTERNET CONNECTIVITY

The Chillers come pre-installed with a modem , allowing the machine to be operated / observed and even maintained over an internet connection . In case there are any problems on the machine the same can be reviewed over the internet , by the manufacturer in Germany , and can even be readjusted or repaired over the internet .

## AIR OR WATER COOLED

The Refrigerant Condenser can be either Air-cooled, Evaporative or Stainless Steel Water-cooled Plate Type depending on customer preference and site conditions. Also available Sea Water Resistant Condensors and/or Tube in Shell Type

### MOST RELIABLE COMPRESSORS

The machines are fitted with top brands of European Compressors

Typically, our larger systems are installed with Semi Hermetic Screw Compressors and smaller with Reciprocating compressors.

# ENVIRONMENT

A lot of thought goes into the design of these machines to make them Environment friendly. Some of the environment friendly features are Reduction of power when the load is lower, Environment friendly components ... and more.

# Other Features:

- Full Stainless Steel Piping
- CFC Free Insulating Material (Environmentally Friendly)
- Built to German Standards , can be built to confirm to most other International standards

## **Marine Chillers:**

Chillers and Refrigeration Systems for installation on Sea Going Vessels, Luxury Yachts, Naval Applications, Cruise Ships, Platforms etc.

**Fischer Kälte-Klima**, **Germany** has been manufacturing Marine Chillers for many years now and have perfected the technology to provide reliable failsafe operation, even in the choppiest of seas.

### **VARIOUS SOLUTIONS**

For Refrigeration and storage of Food, for comfort cooling, or any other on board cooling requirements.

### **FLEXIBLE DESIGN**

The machines are built to order, and hence can be designed to be accommodated in the tightest of corners and smallest of spaces. They can also be built to be installed in 2 parts to suit location.

### **POWER SUPPLY**

Can be made available with various different Power supply conditions, such as 690V, 380V, etc and also 50/60 hz ... There is no limitation, it will be possible to build the machine to operate at any voltage and frequency (to be specified in advance)

### **RELIABILITY**

The machines are built to highest quality standards and can be provided with approval from agencies such as LLOYDS REGISTER OF SHIPPING, AMERICAN BUREAU OF SHIPPING, BUREAU VERITAS or any other agency of customer choice.

# HARSH ENVIRONMENT

Marine Chilling systems are subjected to harsh conditions at sea, such as salty air and water . The machines are pre-treated with special coatings to prevent corrosion / damage at sea . The Condensers are also Sea Water resistant





Model No.	Nominal Capacity TR	Annual Avg Power KWH	Power Supply	No. of Compressors	Dimensions mm LxWxH	Weight Kgs
NF 100 VSD	100	58.5	415V/3ph/50hz	1	3500x1600x2100	4200
NF 150 VSD	150	89.0	415V/3ph/50hz	1	3500x1600x2100	5300
NF 225 VSD	225	130.2	415V/3ph/50hz	1	3500x1600x2100	6100
NF 300 VSD	300	176.7	415V/3ph/50hz	1	4500x1800x2100	8500
NF 400 VSD	400	229.5	415V/3ph/50hz	2	4500x1800x2100	9400
NF 500 VSD	500	307.80	415V/3ph/50hz	2	5000x2000x2100	11000
NF 750 VSD	750	449.4	415V/3ph/50hz	3	5000x2000x2100	14000

## NOTES:

- 1. The data above is subject to change,
- 2. Power figures are based on certain assumptions, and will be different for every application and operating conditions.
  Guaranteed figures will be provided on quotation.
- 3. Other Capacity ratings available.

4. Capacity and Power is based on following : Chilled Water Tempr(in/out) : 12 / 7degC Cooling Water Tempr : 36 degC

- 5.Contact NOVUS for capacity of machines at other operating parameters
- 6. Data in tabulation is for machines suited for on shore installation ( not for marine )





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LARGE ECO-FRIENDLY REFRIGERATION
SYSTEMS AND COMPLETE COLD STORAGE





# **Refrigeration Components:**

Fischer in Germany provides customised solutions for most

Refrigeration Applications .

The machines can built for all of the following applications:

- Cold Storage for Fish, Meats or Grains
- Process Air Chilling Applications / Gas Separation
- Marine Refrigeration
- Oil / Brine Chillers
- Building Air-Conditioning
- Portable Air-Conditioning Direct Expansion System

The machines are constructed with high quality European Refirgeration Components, put together on Rugged Heavy Duty Structural Skids, keeping the machines Vibration free.

The various Refrigeration
Components are connected together by High Quality,
Seamless Stainless Steel tubes and pipes.

Instruments and Safety Devices as prescribed by European Engineering Standards are provided to enable the machines to be granted the CE certification.

Machines are built to be environment friendly, and every detail is looked upon carefully. It is ensured that there is minimal use of resources, and care is taken to chose components which are environment friendly.

Variable Speed Drives can be added in various cases where power can be conserved, providing dual benefit of Lower Operating Costs and making the machine more environment friendly.





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REFRIGERATION PARTS
AND ECO FRIENDLY
SYSTEMS







**Veit Scholl** - Managing Director Fischer Kälte-Klima , Germany Welcome to Fischer!



Since many years Fischer Kälte-Klima, with 12 fully stocked branch offices throughout Germany and Switzerland, belongs to the leading AC/R wholesale companies in the trade.

High product availability, powerful logistics and a complete service and consulting package create a solid base for long term customer relationships and an active cooperation with End Users , Consultants , Refrigeration contractors, small OEM and industrial customers.

Our experienced Refrigeartion and Electric Engineers not only support our customers in all questions oft the daily business, but as well in the realization and planning of larger projects including individually designed refrigeration packs, chillers and special systems, focused on energy saving and alternative and environment friendly refrigerants, such as CO2 and natural gases.

Those systems are not only designed but as well manufactured and assembled in our own 3.000sqm workshop. This allows great flexibility, short delivery times and exceptionally high quality and safety level, generated by industrial manufacturing conditions and elaborate quality assurance processes.

Through long term relationships with the leading manufacturing companies of the industry and extensive stock, Fischer grants immediate and direct access to more than 18.000 quality products to their customers.

Try us and profit from the advantages of a State of the Art Manufacturing facility, and modern & specialized distribution company for your success – Success, that comes in from the cold!

## NOVUS and Fischer Kälte-Klima,

partnered in ASIA to provide customers with the worlds top brand of Refrigeration Components and Spares. Also bringing to Asia State of the art technology in Refrigeration Chillers, Marine Chillers, Cold Stores, etc



Fischer has been in the business of Chiller Manufacture and Trade of Refrigeration Components for many years. The business has been in existence for nearly a 100 Years and successfully served the European market by providing top class Refrigeration Components of every brand and also their very popular Built to order Refrigeration Systems.

# **Refrigeration Components:**

Fischer in Germany has ready on stock over 15000 different items in their 12 warehouses all over Germany and Switzerland , the parts include:

Refrigeration Components and Spare Parts
Air Conditioning Components and Spare Parts
Refrigerant Gasses
SpecialityTools and Refrigeration Hardware
Refrigeration Instrumentation
Condensing Unit Packages
Compact Chillers
Pumps
Leak Detectors
Electronic Controls for Refrigeration Systems
Air Conditioning Systems

The materials can be shipped to any location in the world at a very short notice .





# **Refrigeration Systems**

Fischer has long years of experience in building different kinds of Refrigeration Systems to customer specifications .

Fischer has great expertise in following kinds of Refrigeration Systems :

- Marine Refrigeration especially Luxury Yachts
- Cold Storages for Meat , fish or food grain
- Water Chilling for Buildings or Industrial application
- Low Temperature Refrigeration
- Automobile, Pharmaceutical and many others

Our philosophy is to build Systems to suit the application rather than the customer accomodating the standard machine.

# Service Support \*

NOVUS provides on site service for all systems sold .

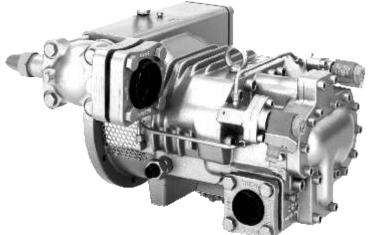
This includes onsite commissioning , one time training and attending to breakdown calls as needed during the warranty period .

NOVUS engineers are trained in Germany and capable of handling all onsite service as needed .

The Fischer systems are built in with Modems and can be serviced or operated over the internet . Many of the service related issues can be handled remotely by our engineering team in Germany .

\* Subject to country of sale and terms of agreement







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