

**ASSOCIATED<sup>TM</sup>  
FIRST RUBBER**

**COOLTEC<sup>®</sup>**

Group Of Companies

**"QUALITY PRODUCTS with PROMPT and TIMELY DELIVERIES"**

**ASSOCIATED FIRST RUBBER (M) SDN BHD (524138-X)**

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## INTRODUCTION

The company was found in 1989. COOLTEC INDUSTRIES SDN BHD started off from humble beginnings, servicing and installation of car air conditioning system. From the knowledge obtained over the years, COOLTEC had in 1993 ventured into manufacturing, wholesale and distributions of car air conditioning components, parts and accessories.

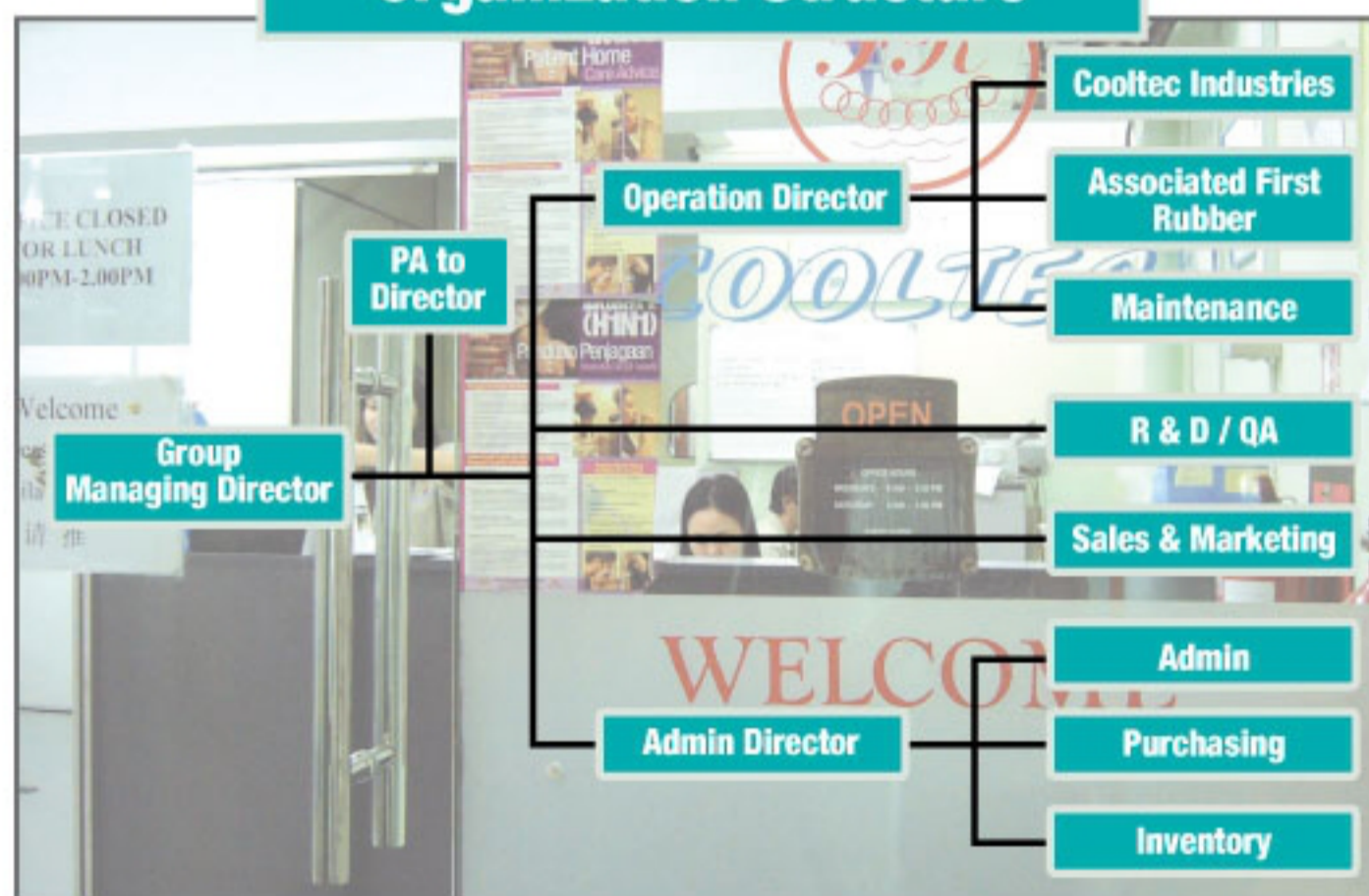
ASSOCIATED FRIST RUBER (M) SDN BHD was officially established in 1999. It is a joint venture between FIRST RUBBER CO. LTD of Thailand and COOLTEC INDUSTRIES SND BHD. FIRST RUBBER CO. LTD. was first established in Taipei, Taiwan in 1972 and in 1992 transferred its entire operation to Bangkok, Thailand. ASSOCIATED FIRST RUBBER (M) SDN BHD specializes in the manufacturing of Rubber O-Rings, Rubber Packing, Rubber-Metal Bonded Parts and Custom-Molded Rubber Parts. The Company obtained the prestigious ISO 9001:2000 Quality Management System in the year 2003 and now looking forward for the **ISO/ TS 16949 : 2009**, to achieve latest by 2010.

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## Organization Structure



## COMPANY PROFILE

<b>Company Address</b>	No. 43, 45, 47, 49, Jalan Sesama, Taman Perusahaan Ringan, 68100 Batu Caves Selangor Darul Ehsan, Malaysia. Tel: (603) 6186-9969, (603) 6186-3396, (603) 6186-3378 Fax: (603) 6186-6086 Skype name: cooltec1 Website: www.cooltecindustries.com Email: group@cooltecindustries.com
<b>Contact Person</b>	- <b>Mr. KK Yeaw</b> (Managing Director) kkyeaw@cooltecindustries.com - <b>Mr. Hing Joo Cheong</b> (Sales & Marketing Manager) jching@cooltecindustries.com
<b>Engineering Design</b>	AUTOCAD 2010 AUTODESK INVENTOR 2010
<b>Factory Build-Up Area</b>	6840 sqm or 22440 sqf
<b>Paid-Up Capital</b>	RM 500,000
<b>Technical Associate &amp; Support</b>	Rubber Research Institute of Malaysia (RRI) & First Rubber Co. Ltd. (Thailand)
<b>Management System</b>	- ISO 9001:2000 (Certified in 2003) - ISO/TS 16949:2009 (Estimated to be certified in 2010)
<b>Total Employees</b>	85
<b>Average Age Group</b>	35



## GROUP VISION

It is the Group Vision to be a major and leading player both locally and internationally in the automotive air conditioning parts, accessories and components industries in the years to come.

## GROUP MISSION & SERVICE

It is the Group Mission to provide service SECOND to NONE to all its valuable customers. If you are looking for automotive air conditioning components, parts, accessories, rubber o rings and custom-molded rubber parts, WE stand at all times to serve you with its forever motto: ( QUALITY PRODUCTS with PROMPT and TIMELY DELIVERIES ).

## QUALITY POLICY

We as a company of manufacturing/assembly of automotive air-conditioning part, components and accessories, O-ring, custom made rubber part for all industries are committed to serve our customer with excellent quality products and timely delivery through uncompromising commitment towards total customer satisfaction and continuous improvement.

We shall also:

- i) Improve quality, productivity and reliability
- ii) Meet customer general requirements and ISO 9001:2000 requirement
- iii) Minimize cost
- iv) Continually improve effectiveness of the quality management system
- v) Establish quality objectives at relevant functions
- vi) Periodically review the Quality Policy and Quality Objective

## CUSTOMER SERVICE

The Group approach to customer is simple; to serve as a reliable business partner. Your business goals, expectations and achievements are our priority. We believe that efficient customer support and technical quality are essential in our organization. Our resources are totally dedicated to high quality - from conception to consumption.

## BUSINESS PROCEDURE

- 1** AFR **visits** customers to explore what will be the future need of the customers.
- 2** Customer **requests** AFR to develop new application.
- 3** AFR considers what is the best application and determine quality and feasibility plan for the idea. AFR presents the **idea** to the customer. Design concept differences are resolved.
- 4** Upon customer's acceptance on the idea, AFR develops **prototype** for design confirmation.
- 5** Designer evaluates the prototype. Prototype is submitted to customer for evaluation and AFR improves the sample if necessary.
- 6** Upon confirmation on the design, AFR fabricates mass production **tooling**.
- 7** AFR evaluates the **sample** and submits the samples to customer for acceptance. **Quality plan** is reviewed.
- 8** **Mass-production** is started upon obtaining the customer's acceptance. In-process quality control is performed to ensure its conformance.
- 9** New products are **delivered** to customer.

## PRODUCT RANGE

### O-RING :

**Description:** O-Ring is the simplest circular shape sealing system.

**Feature of O-Rings :** AFR provides almost all commercial o-ring, aerospace o-ring, military specification o-ring, automotive o-ring, A/C o-ring and customer sized o-ring.

**Material :** NR, NBR, HNBR, EPDM, Silicone, and VITON.

**Application :** O-Rings are used for both static and rotational sealing applications. Good for hydraulic actuator seals, transmission seals, oil and water pump seals.

**Quality Grade :** Normal and Special grade for higher level of quality with respect to automotive, hydraulic & pneumatics, valve body, rotary vane vacuum pumps electronic, medical and watch case applications.

**Standard :** JIS, AS-568, ASTM, DIN, SAE and Specifics for Automotive, high Precision for medical and watch case and heavy duty machine specifications.



### O-RING KIT :

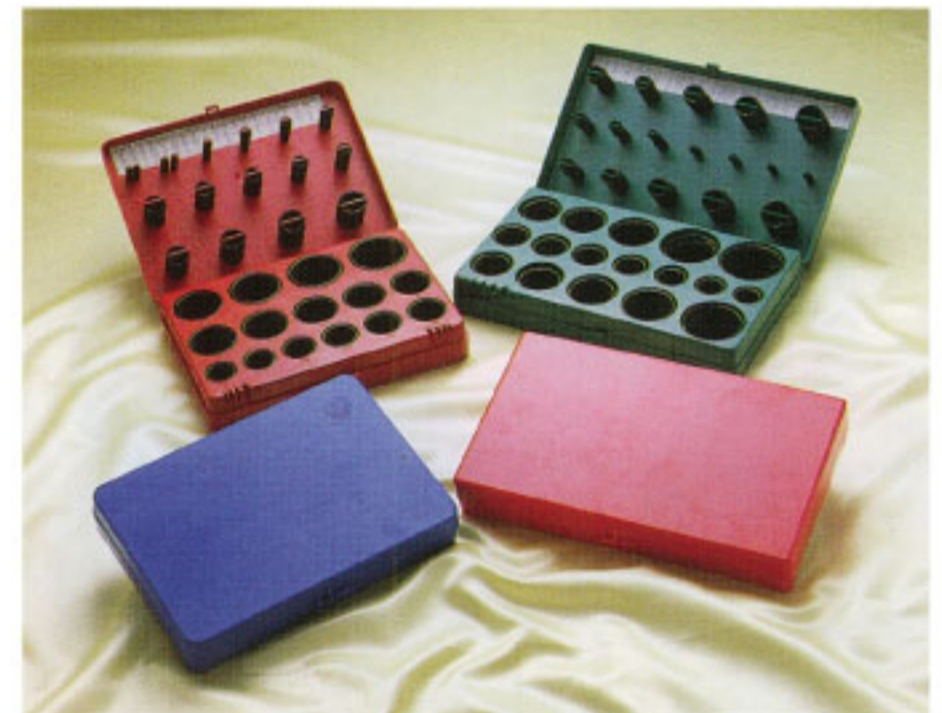
**Description:** O-Ring Kit is the most popular contains set model of size o-rings.

**Feature :** O-Ring Sealing compact set for general renew upgrade or repairing purposes.

**Material :** NBR, VITON, HNBR of 70-90 Durometer Shore A.

**Application :** General Purpose for machine shop, plumbing, Engineering Maintenance.

**Quality Grade :** Advantage Standard O-Ring Kits NBR 70 and NBR 90 are the Imperial (AS Standard) and Metric Sizes. Automotive Air Condition Kit. This O-Ring Kit HNBR 70 are used in R12 or R134a refrigerant for car's air conditioning system which also compatible to DENSO, CARSONIC, SANDEN and ZEXEL A/C Compressor types. Heavy Duty Machine O-Ring Kit VT 70 (Black or Brown) for hydraulic and heavy equipments.



### PACKING :

**Description:** Likely hood O-Ring but not be circular shaped seals.

**Feature of Packing :** Mostly applies as connected seals (Flat surface) that called square ring also.

**Application :** Water sealing pipe, sanitary ware, hydraulic seals and others.



## **GROMMET:**

**Description:** Grommet is the rubber supporting joints.

**Feature :** Weathering and temperature resistance, high tension strength, corrosion resistance, anti-vibration, support and dust protector.

**Application :** General support with bolt and nut for automotive condensing unit, air condition, mounting base support for anti-vibration.



## **FABRIC DIAPHRAGM:**

**Description :** Diaphragm is the rubber valve type with or without consolidated with high strength fabric.

**Feature :** Precious dimensional for on-off pressure gas or fluid controlling, reinforcement heavy duty, and high corrosion resistance.

**Material :** EPDM, NBR

**Application :** Apply as the valve for Open-Close, regulator pressure control for gas or pressured switch instruments and vacuum equipments.

**Standard :** Refer to Functional Product Standard.



## **RUBBER MOUNT :**

**Description :** Rubber Mounts bolt or rivet rubber with rubber cement coating all with hub or connecting sizes of plate or flange.

**Feature :** High Tension Strength and sealant for static or dynamic rotating, reinforcement for compress-depress forces and anti-vibration control.

**Application :** Hydraulic piping seals, vacuum seals, anti-vibration hub seals, engine mount, transmission seals. inter-joint flange plate in motor.



## **AUTOMOTIVE OEM :**

**Description :** Specified Rubber Product for Automotive Parts.

**Feature :** Customized Molding and specified application; such as sealing system, anti-vibration function, and other purpose.

**Application :** Functional and performances testing refer to OEM's specifications.



## RESEARCH & DEVELOPMENT

The Group is keeping abreast and acquiring the latest equipment and technology for its R&D department. The Group is constantly developing new products to meet to the ever-changing market demand.

APQP is applied during the development.

Available Software : Autodesk Inventor 2009  
Autocad 2009



## QUALITY CONTROL & QUALITY ASSURANCE

Quality Control is the operational techniques and activities that are used to fulfill requirements for quality. The techniques applied in our organization are Histograms, Cause & Effect Diagram, Check Sheets, Pareto Diagrams, Graphs, and Control Charts. The Quality Control covers the products, reactive, focus on the line function and finding defects.

Quality Assurance covers all those planned and systematic activities implemented to provide adequate confidence that an entity will fulfill requirements for quality. The Quality Assurance covers the process, proactive, focus on the staff function and prevention of defects.



## LIST OF MACHINERY

- |  |        |
|--|--------|
| ▪ Milling Roller   | 1 Unit |
| ▪ Automatic Cutting Machine  | 1 Unit |
| ▪ Manual Cutting Machine   | 1 Unit |
| ▪ Automatic Hydraulic Vacuum Compressing Molding Machine (250 Ton) | 4 Unit |
| ▪ Automatic Hydraulic Vacuum Compressing Molding Machine (200 Ton) | 4 Unit |
| ▪ Automatic Hydraulic Vacuum Compressing Molding Machine (150 Ton) | 3 Unit |
| ▪ Manual Press For Test Cube                                       | 1 Unit |
| ▪ Vulcanize Oven   | 2 Unit |
| ▪ Durometer Hardness Tester (Shore A)                              | 2 Unit |





## SELECTING RUBBER MATERIAL

When selecting elastomeric seals for specific applications, there are a number of important selection criteria including the anticipated service conditions, the design and inspection requirements for the particular application and material specification and traceability.

### The Service conditions to be considered include:

1. Fluid to be sealed, including any contaminants or additives.
2. Temperature range including minimum and maximum operating conditions, as thermal cycling and potential excursions.
3. Pressure range - including minimum and maximum operating range with an error range and compression/decompression rate if the pressure is high.
4. Vacuum application - including where the vacuum is applied and whether it is cyclic.
5. Motion - either static or dynamic. If it is dynamic, describe the motion.

### Material specification and traceability are also critical for proper seal selection:

1. Define material specifications by the American Society for Testing and Materials (ASTM), Society of Automotive Engineers (SAE), military specification or other recognized standards.
2. Discuss with your seal supplier the procedure for specifying and certifying sealing materials.
3. Ask your supplier if compound changes may without a customer's knowledge and how to protect yourself from it. Are hardness buttons, tensile bars or other test specimens required for incoming material verification?

### It is important to consider the inspection requirements including :

1. Defining inspection criteria
2. Determining the need for lot sampling
3. Indicating the critical sealing surface.

### The design requirements of the particular sealing application are also critical including:

1. Component geometry/ description, like O-ring, gasket, diaphragm, etc.
2. Chemical medias affect on the seal.
3. Desired service life. If it is a replacement for a failed seal, which material was used before and why did it fail.
4. Assembly considerations including lubricants, installed stretch, etc.
5. Critical dimensions and tolerances, including groove dimensions and machining tolerances.

### Cost versus Value:

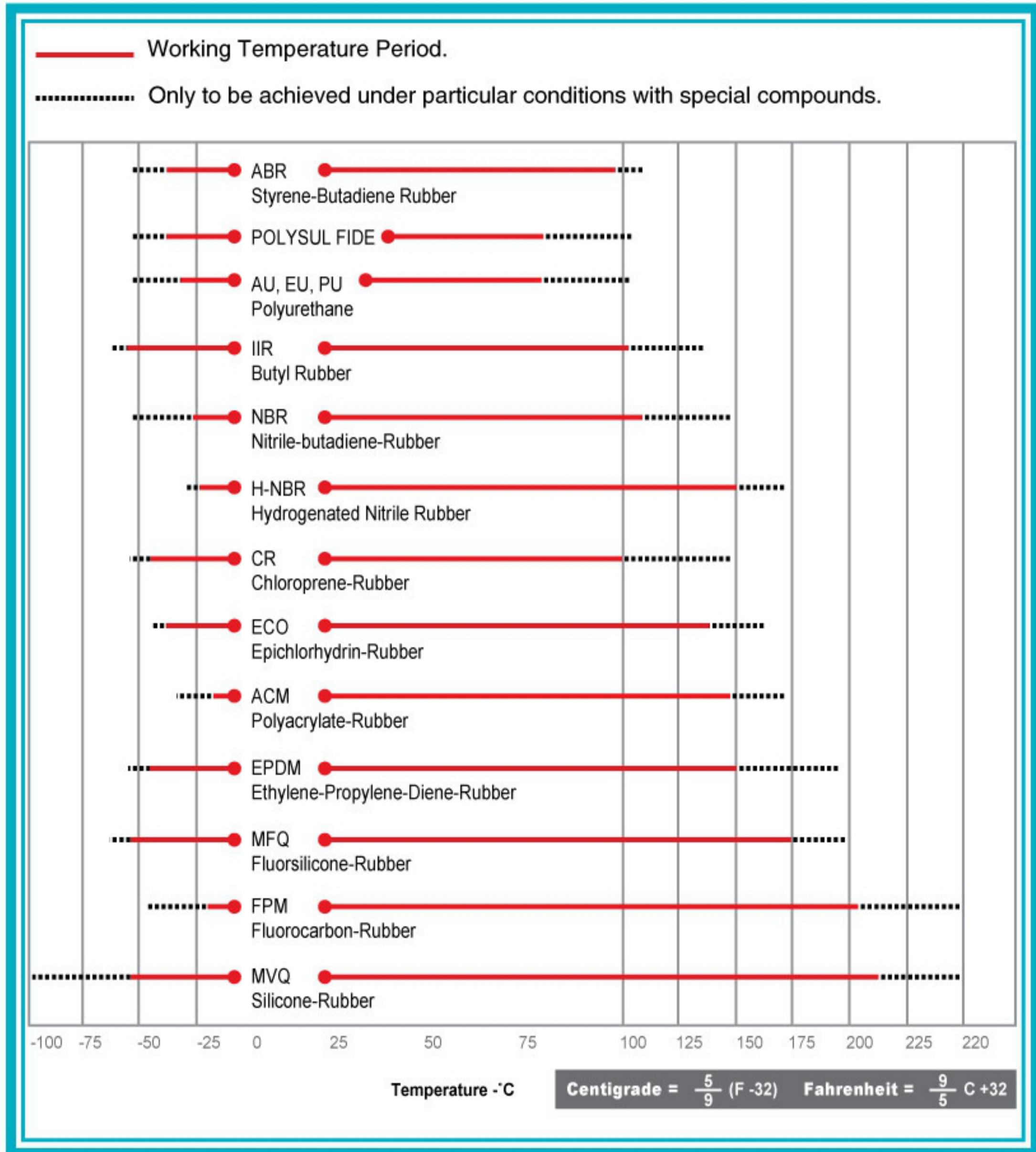
When selecting materials for your particular sealing application, the guiding principle should be value-in-use. When evaluating seal performance, seal life and maintenance costs must be included. A performance, seal made from EPM may be appropriate for many general applications where heat and steam are encountered, but inappropriate at higher temperatures when contaminated steam and frequent maintenance are required. The relatively high price of a fluoroelastomer or perfluoroelastomer will be recouped many times over by a seal's long service life. Specifying the proper high performance seal can also prevent costly unscheduled downtime and dangerous leakage.

## MAJOR CUSTOMER WORLDWIDE

### ● The Countries We Export



## RUBBER MATERIAL TEMPERATURE RESISTANCE



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