

---

POWER GENERATION INDUSTRY

---

*Seal in your profits™*



**Garlock**

SEALING TECHNOLOGIES®

# Garlock Fluid Sealing Products



## Sheet Gaskets

706

### Style ST-706

An inorganic asbestos-free gasketing material available in either sheet or cut gasket form. Intended for use in high temperature steam in turbine cross-overs, condensate systems, boiler feed systems and circulating water applications.



## Metallic Gasketing

304

### Spiral Wound

Metal and flexible graphite gasket designed for ANSI flange ratings over 300 lbs. and/or high temperature.\* Particularly suited for boiler feed, condensate systems, turbine systems and diesel backup.

\*For oxidizing conditions or temperatures over 950°F (510°C), please consult Garlock Metallic Gaskets at 1-281-459-7200.



## KLOZURE® Oil Seals

EQ

### EQUALIZER™

A non-metallic bearing isolator seal with a patented and unitized design. Ideal for condensate pumps, circulating water pumps, service water pumps, utility water and makeup water.

MT

### MICRO-TEC™

A unique seal designed to hold lubricants in and to keep contaminants out. Excellent for rotary shaft sealing and bearing protection on ash handling conveyors, pulverizers and boiler feed pumps.

ISO

### ISO-GARD®

Unitized PTFE construction of this non-contacting bearing isolator provides excellent chemical and temperature resistance. Ideal for pump bearing frames and electric motor applications.



## Hydraulic Seals

432

### Style 432

A nitrile elastomer reinforced with cotton fabric, produced in many sizes for sealing reciprocating equipment. For higher temperatures, use Style #7532.

CPP

### Charging Pump Packing

Specifically designed to meet the sealing requirements for each charging pump.



## Mechanical Seals

GMP

### GMP-I and II

A single or double balanced cartridge seal designed to fit standard ANSI pumps in virtually all areas of the plant.

GPA

### GPA Seal

Mechanical seal with a coated metallic membrane as spring element. Specially designed for ash slurry pumps and lime slurry service in the scrubber area.



## Compression Packing

1303 FEP

### Style 1303-FEP

A spool stock packing that combines flexible graphite with a non-scoring Inconel® filament. Superior valve stem packing material.

Inconel is a registered trademark of Inco Alloys International, Inc.

1333 G

### Style 1333-G

Spool stock packing that combines flexible graphite foil with extrusion-resistant graphite filament. For pumps and low pressure valve applications.

7501

### Style 7501

A soot blower packing set produced especially for this application. A special material on the braid supports the lance, but prevents scoring at the same time.

9000

### Style 9000 EVSP

A patented\* expandable valve stem packing design. Engineered for high temperature, high pressure valves, convenient enough for circulating water and condensate. For nuclear services use 9000-S-NUC.

8093

### Style 8093 DSA

A patented\* design for pump service. This packing set can run with no flush water and can dramatically reduce fluid leakage. Used in condensate pumps, circulating water pumps, waste water pumps and Clinker Grinders.

\* Patent #4328974



## Expansion Joints

204

### Style 204

Designed to absorb movement and misalignment in circulating water piping systems and service water applications.

207  
208

### Styles 207 and 208

Rubber and fabric U-type expansion joints in round or rectangular configurations. Recommended as flexible connector between turbine and condenser or to reduce vibration and noise on lightweight piping.

8400

### Style 8400

An expansion joint available in either rectangular or round configuration for flue duct applications under 400°F (205°C).



## GRT/BFG Conveyor Belts

DUL

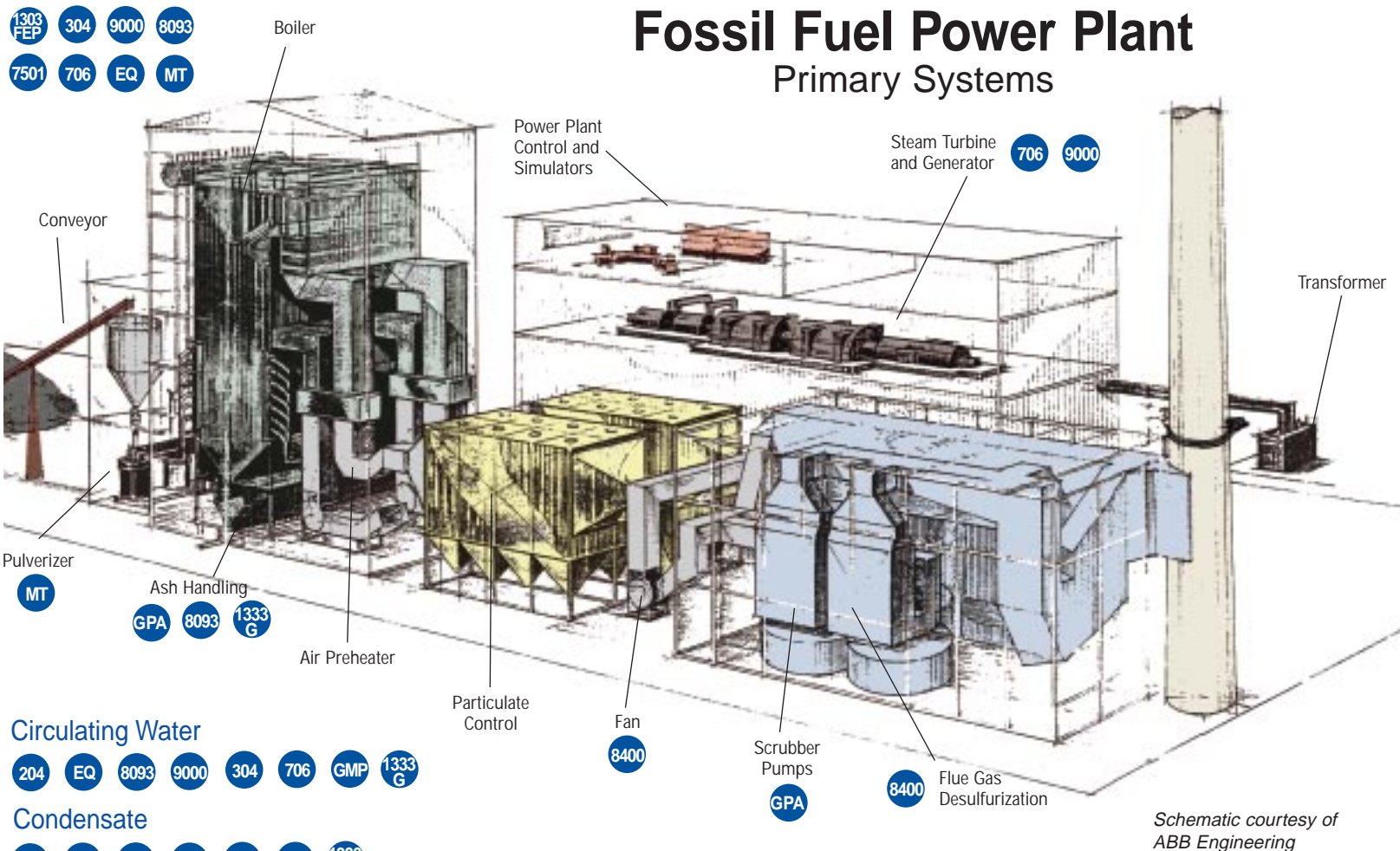
### DULON®

Premium quality belting with excellent impact and abrasion resistance, suitable for conveying coal, coke, fly ash and limestone. With standard RMA Grade II covers, or special cover compounds meeting MSHA 2G requirements and branded MSHA designation 28-9.

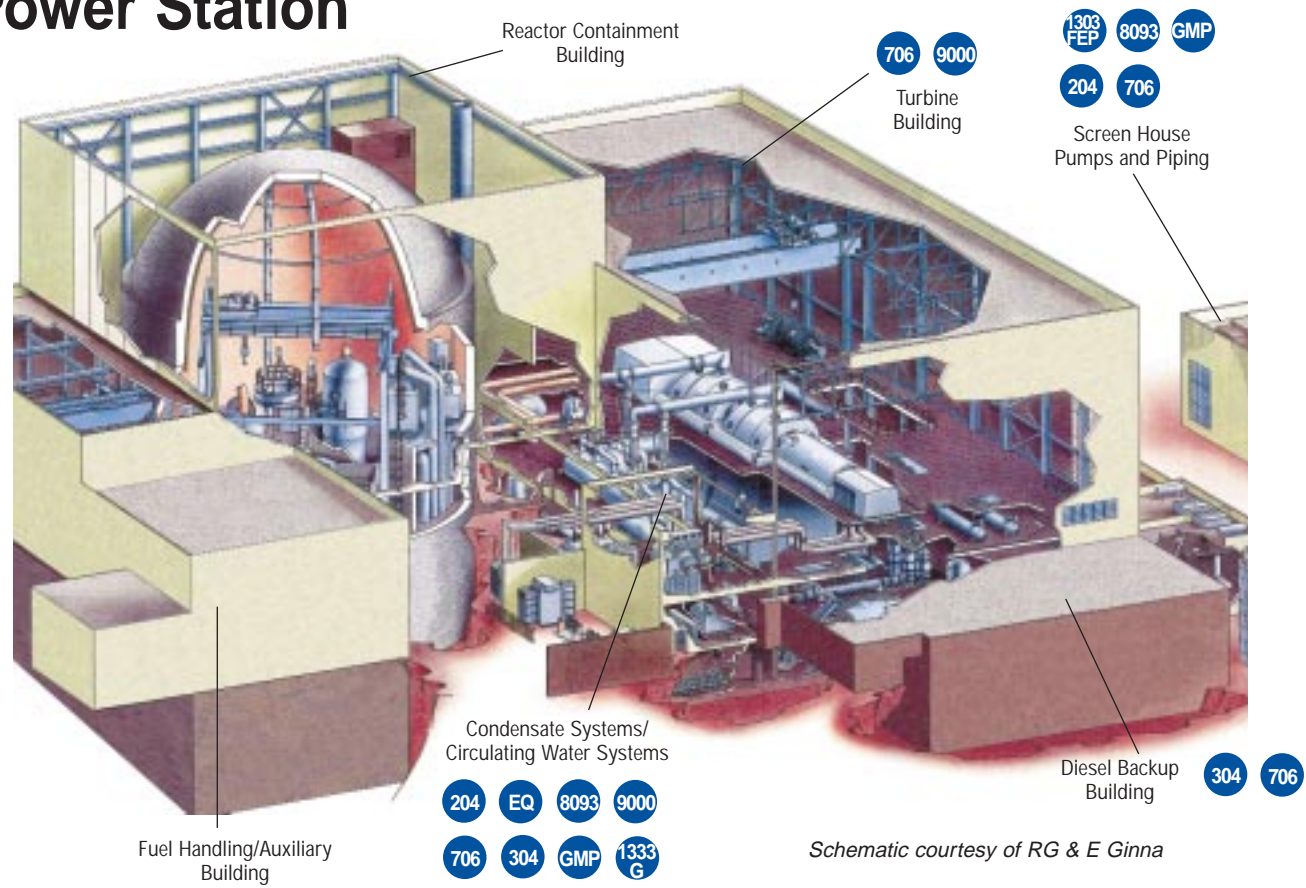
KLOZURE, ISO-GARD, GRAPH-LOCK, and DULON are registered trademarks of Garlock Inc.

# Fossil Fuel Power Plant

## Primary Systems



# Nuclear Power Station





**ISO-GARD®** - Unitized PTFE construction of this non-contacting, two-piece seal provides excellent chemical and temperature resistance. The ideal non-scoring, low load alternative to lip seals in non-flood oil or grease applications.

**Construction:** Blue glass-filled PTFE  
**Temperature:** -40°F (-40°C) to 400°F (204°C)  
**Surface speed:** To 4,500 fpm (22.9 m/s)  
**Axial motion:** ±0.015" (0.38 mm)  
**Misalignment and runout:** ±0.020" (0.50 mm)  
**Pressure:** Ambient - will accept grease pressure of 5 psi (0.3 bar) during purge operation.



**1303-FEP** - Braided packings combine flexible graphite with a non-scoring filament jacket for high temperature and pressure applications in the chemical, petrochemical and power generation industries. Fire-safe and compliant with stringent VOC and VHAP emissions regulations.

**Construction:** 100% GRAPH-LOCK® flexible graphite and 0.004" INCONEL® filament.  
**Temperature:** -328°F (-200°C) to 850°F (455°C) atmosphere; to 1200°F (650°C) steam.  
**ph range:** 0-14 (except strong oxidizers)  
**Pressure:** To 4,500 psi (310 bar)

INCONEL is a registered trademark of Inco Alloys International, Inc.



**GPA** - Mechanical seal with a coated metallic membrane as spring element. Specifically designed for pumps and mixers carrying abrasive, corrosive, crystallizing or clogging fluids.

**Temperature:** 32°F (0°C) to 310°F (160°C)  
**Pressure:** To 300 psi (20 bar)  
**Shaft size:** 0.788" to 8" (20 to 200 mm)  
**Solid content:** To 70 oz/gal (500 gr/L)  
**Shaft speed:** To 3,000 fpm (15 m/s)

## AUTHORIZED DISTRIBUTOR



ISO 9002-94  
 Cert. #001762

### WARNING:

Properties/applications shown throughout this brochure are typical. Your specific application should not be undertaken without independent study and evaluation for suitability. For specific application recommendations consult Garlock. Failure to select the proper sealing products could result in property damage and/or serious personal injury.

Performance data published in this brochure has been developed from field testing, customer field reports and/or in-house testing.

While the utmost care has been used in compiling this brochure, we assume no responsibility for errors. Specifications subject to change without notice. This edition cancels all previous issues. Subject to change without notice.

GARLOCK is a registered trademark for packings, seals, gaskets, and other products of Garlock.

© Garlock Inc 2000. All rights reserved worldwide.

# BF Goodrich

**Garlock Sealing Technologies**  
 1666 Division Street  
 Palmyra, New York 14522 USA  
 1-315-597-4811  
 1-800-448-6688  
 Fax: 1-315-597-3216

Visit the Garlock network  
[www.garlock.net](http://www.garlock.net)

Other Garlock facilities are located in:

<b>Paragould, AR, USA</b>	1-870-239-4051	Fax: 1-870-239-4054
<b>Columbia, SC, USA</b>	1-803-783-1880	Fax: 1-803-783-4279
<b>Houston, TX, USA</b>	1-281-459-7200	Fax: 1-281-458-0502
<b>Sydney, Australia</b>	61-2-9793-2511	Fax: 61-2-9793-2544
<b>São Paulo, Brazil</b>	55-11-884-9680	Fax: 55-11-884-9680
<b>Oakville, Canada</b>	1-905-829-3200	Fax: 1-905-829-3333
<b>Berkshire, England</b>	44-1635-38509	Fax: 44-1635-569573
<b>Saint-Étienne, France</b>	33-4-7743-5100	Fax: 33-4-7743-5151
<b>Neuss, Germany</b>	49-2131-3490	Fax: 49-2131-349-222
<b>Seoul, Korea</b>	822-554-6341	Fax: 822-554-6343
<b>Mexico City, Mexico</b>	52-5-567-7011	Fax: 52-5-368-0418
<b>Singapore</b>	65-254-7372	Fax: 65-254-6708

# Garlock

Sealing Technologies®