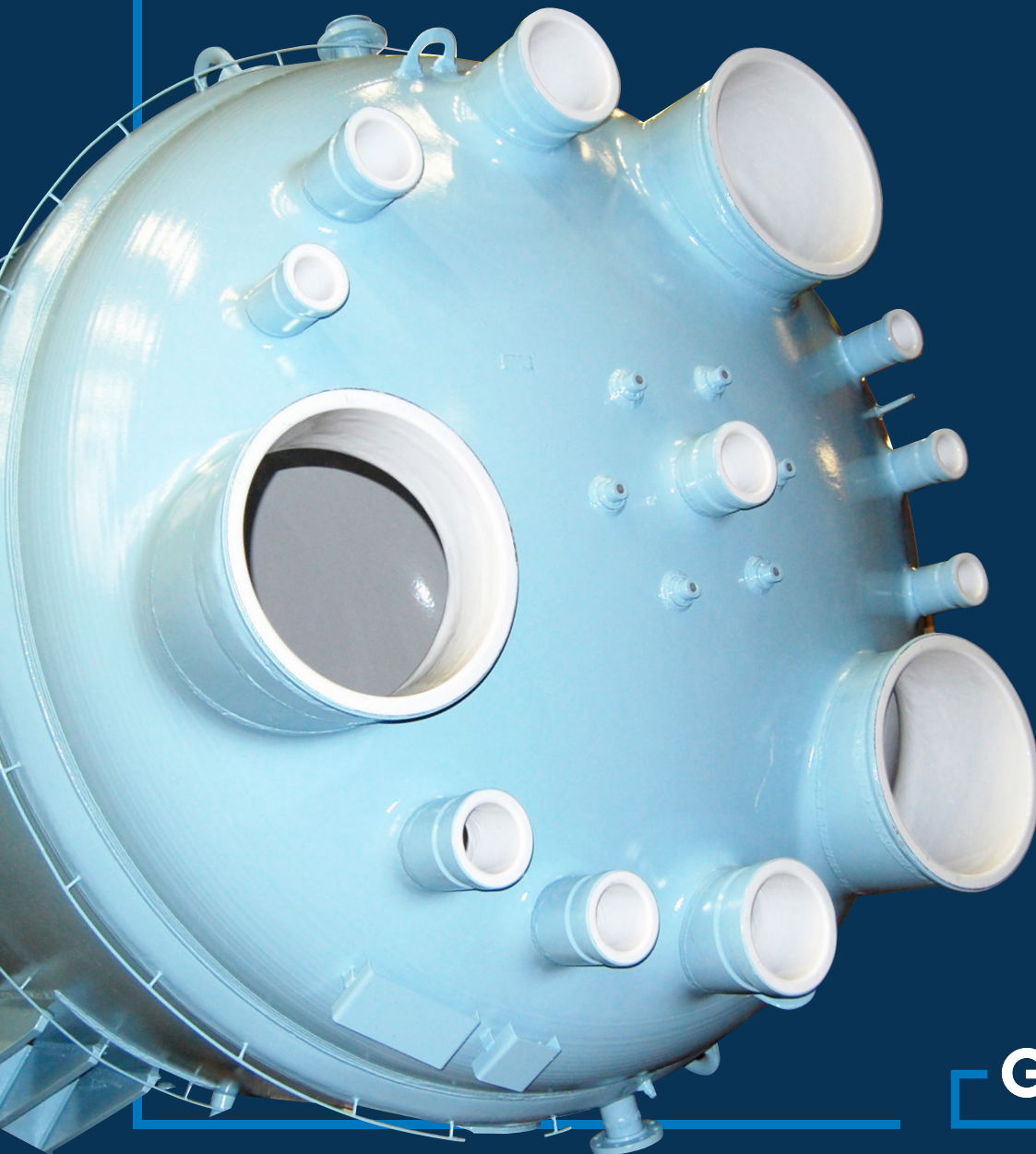


**PFAUDLER**

— Glass-Lined Technology

# RS Series Reactors



**GMM**  
**Pfaudler**

# PFAUDLER

— Glass-Lined Technology

For over 130 years, Pfaudler is the leader in developing new technologies to meet the highly specific chemical processing needs of its clients. One reason why our glass-lined equipment is trusted by over 90% of the world's top chemical companies is the sheer reliability of our reaction technologies and comprehensiveness of our glass-lined accessories. These technologies are critical to the safe containment of corrosive contents, maintaining the vessel pressure and ensuring the final batch quality.

In short, our glass-lined technologies are absolutely integral to an effective process.

## PRODUCTS & EQUIPMENT

**Glass Lined Reactors**

**Glass Lined Mixing Systems**

**Baffling Technoliges**

**Storage Tanks & Receivers**

**Glass Lined Columns**

**Accessories**

**Glass Lined Instrumentation**

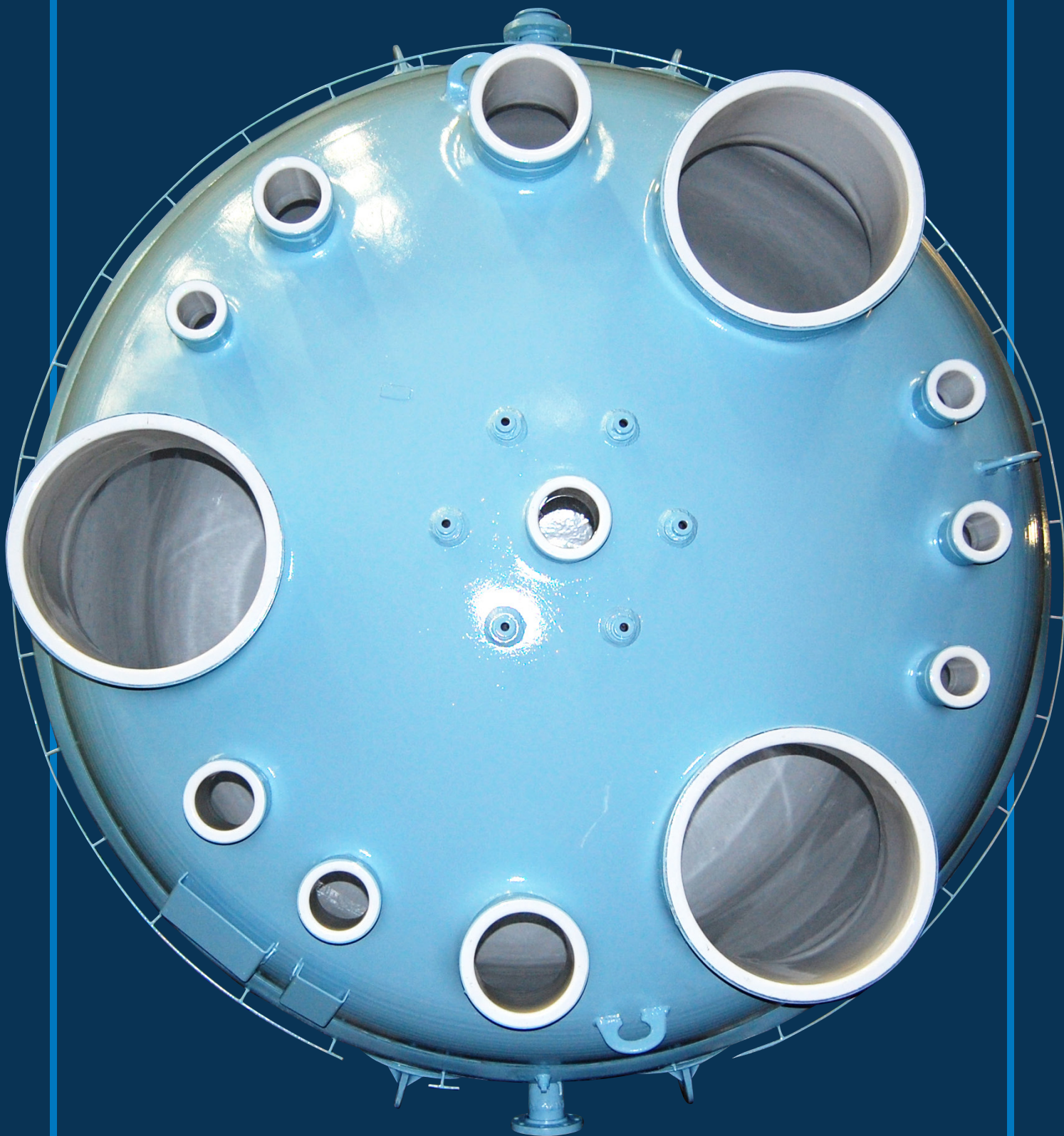
**Glass Lined Heat & Mass Transfer**



50/5/50t







# RS-Reactor Series

## Why Use a Glasteel Reactor

The specially formulated glass lining, fused to a steel substrate, is highly corrosion resistant and chemically inert to nearly all substances. It is the ideal environment for processing ultra-pure products.

Its smooth surface resists adherence by viscous or sticky materials and cleans easily. Glasteel is strong. Fusing glass to steel produces a composite material with the advantages of glass and the strength of steel. It has a high resistance to impact and thermally induced stresses.

Proven SRW mixer drive.

Flange mounted baffle provides easy assembly; no stuffing box required.

Fine grain carbon steel for improved low temperature characteristics.

Interchangeable with RA Series reactors.

High internal and jacket pressure rating.

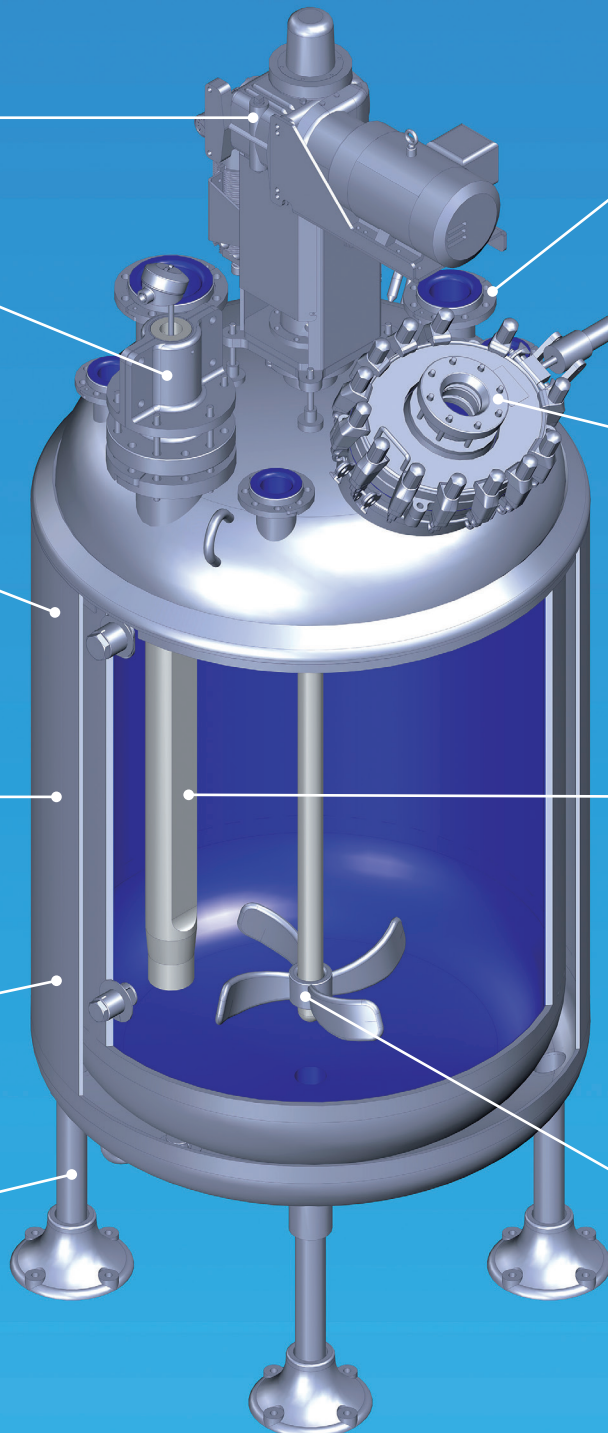
Supports designed for wind and seismic conditions.

More top head nozzles, custom layouts are available.

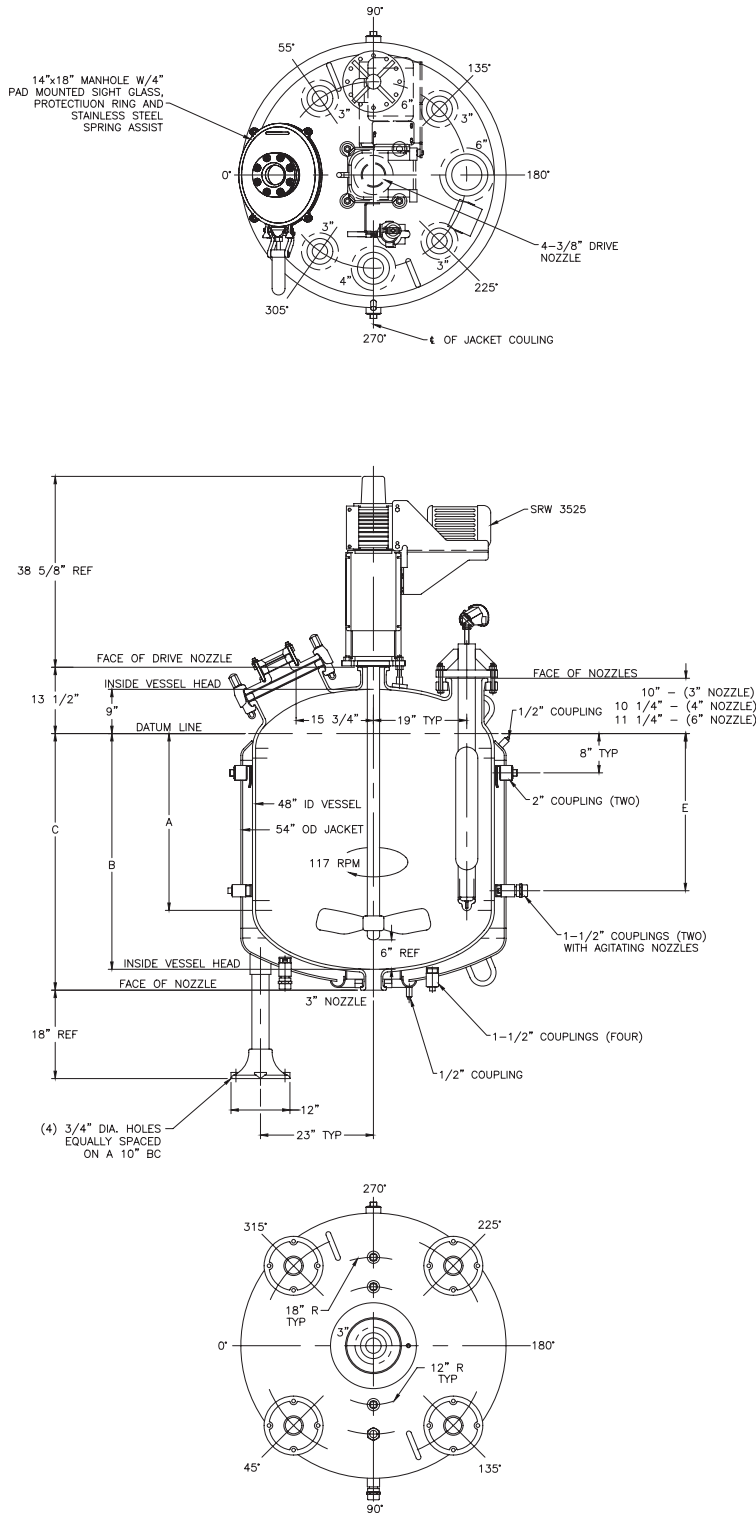
Larger manway, including a fused sight glass, protection ring, and stainless steel assist.

Quick response, completely glass-lined TMI Type Temperature Sensor.

Patented interference-fit, glass-to-glass joint locks the Cryo-Lock impeller to the shaft.



# RS-48 Series



300 gal.	500 gal.
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## Design pressure (psig)

Internal @ 450°F

125/FV	125/FV
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Jacket @ 450°F

100/FV	100/FV
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## Dimensions (inches)

A	33	58
B	48	73
C	52-1/4	77-1/4
D	122-5/8	147-5/8
E	32	51

## Capacity (gallons)

Working	300	500
Top Head	62.7	62.7
Bottom Head	62.7	62.7
Per Inch of Straight Side	7.8	7.8
To Bottom of Impeller Blade	25	25
To Top of Impeller Blade	62.5	62.5
To Bottom of Baffle	47	47
Jacket	75	110

## Heating area (square feet)

Jacket (total)	53	80
Bottom Head	17.4	17.4
Per Inch of Straight Side	1.1	1.1

## Weight (pounds)

Without Accessories	3,580	4,750
Total - Including Drive, Agitator, Baffle	4,830	6,200
Add for Shipment	150	150



# RS-60 Series

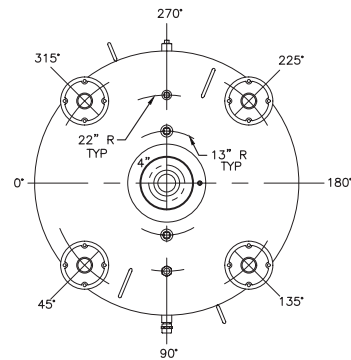
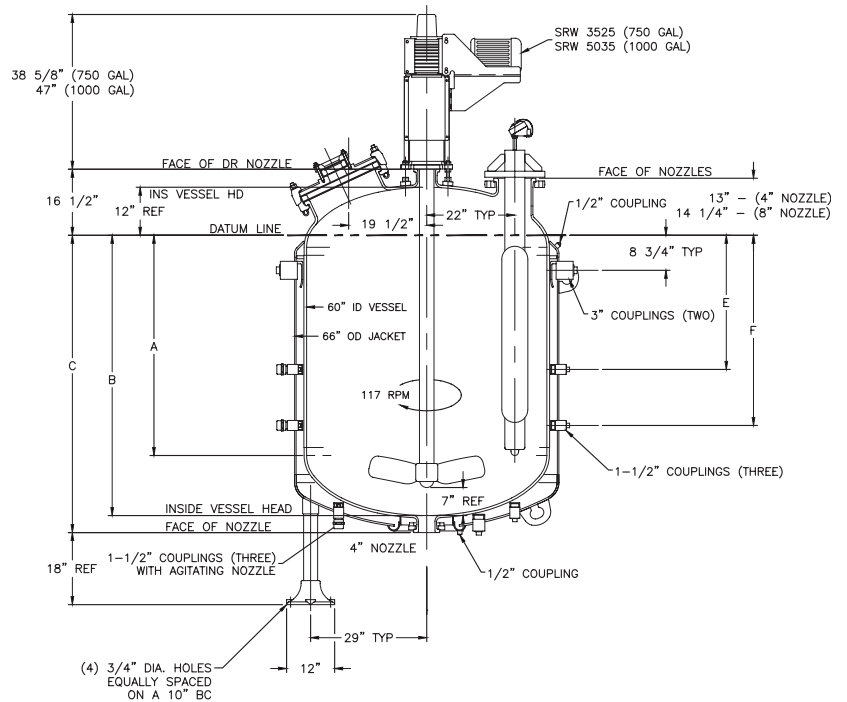
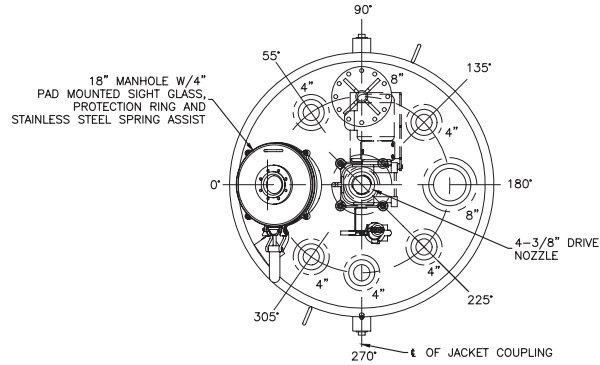
	750 gal.	1000 gal.
<b>Design pressure</b> (psig)		
Internal @ 450°F	125/FV	125/FV
Jacket @ 450°F	100/FV	100/FV

<b>Dimensions</b> (inches)		
A	52	72
B	70	90
C	74-1/4	94-1/4
D	147-3/8	175-5/8
E	33-1/2	47-1/2
F	47-1/2	67-1/2

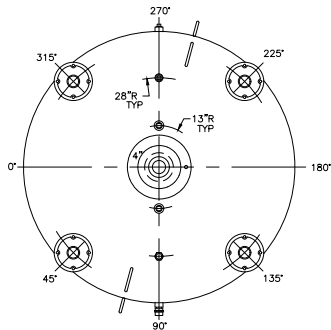
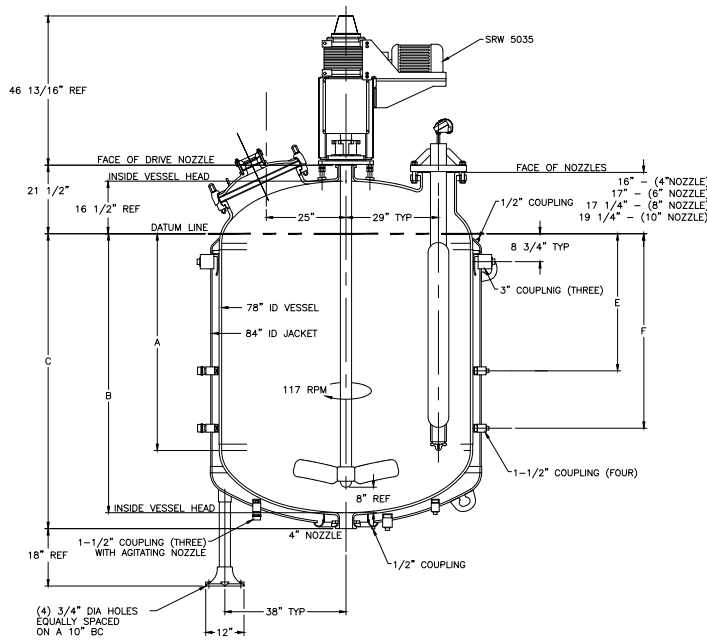
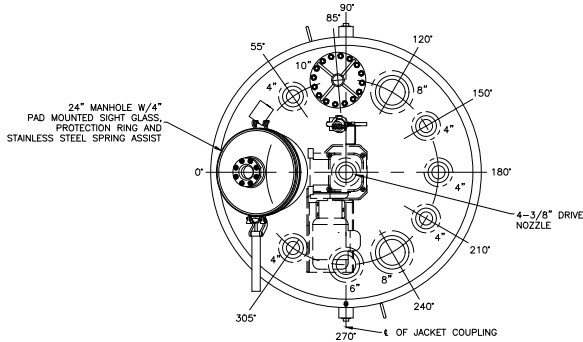
<b>Capacity</b> (gallons)		
Working	750	1000
Top Head	122.4	122.4
Bottom Head	122.4	122.4
Per Inch of Straight Side	12.2	12.2
To Bottom of Impeller Blade	42	42
To Top of Impeller Blade	122	122
To Bottom of Baffle	75	75
Jacket	141	171

<b>Heating area</b> (square feet)		
Jacket (total)	96	122
Bottom Head	27.1	27.1
Per Inch of Straight Side	1.3	1.3

<b>Weight</b> (pounds)		
Without Accessories	6,050	7,250
Total – Including Drive, Agitator, Baffle	7,900	9,450
Add for Shipment	200	200



# RS-78 Series



1500 gal.	2000 gal.
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## Design pressure (psig)

Internal @ 450°F

Jacket @ 450°F

125/FV

125/FV

100/FV

100/FV

## Dimensions (inches)

A	65	84
B	87-1/2	106-1/2
C	92-1/2	111-1/2
D	179	198
E	43	60
F	61	81

## Capacity (gallons)

Working	1500	2000
Top Head	268.9	268.9
Bottom Head	268.9	268.9
Per Inch of Straight Side	20.7	20.7
To Bottom of Impeller Blade	72	72
To Top of Impeller Blade	205	205
To Bottom of Baffle	139	139
Jacket	255	301

## Heating area (square feet)

Jacket (total)	158	191
Bottom Head	45.8	45.8
Per Inch of Straight Side	1.7	1.7

## Weight (pounds)

Without Accessories	11,630	13,380
Total – Including Drive, Agitator, Baffle	14,000	15,900
Add for Shipment	450	450



# RS-96 Series

	3000 gal.	4000 gal.
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## Design pressure (psig)

Internal @ 450°F	125/FV	125/FV
Jacket @ 450°F	100/FV	100/FV

## Dimensions (inches)

A	77	109
B	105-1/2	137-1/2
C	110-1/2	142-1/2
D	213-3/4	251-1/2
E	52-1/2	72-1/2
F	74-1/2	102-1/2

## Capacity (gallons)

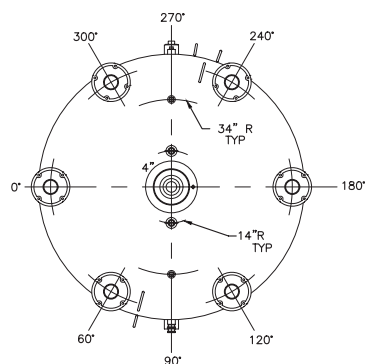
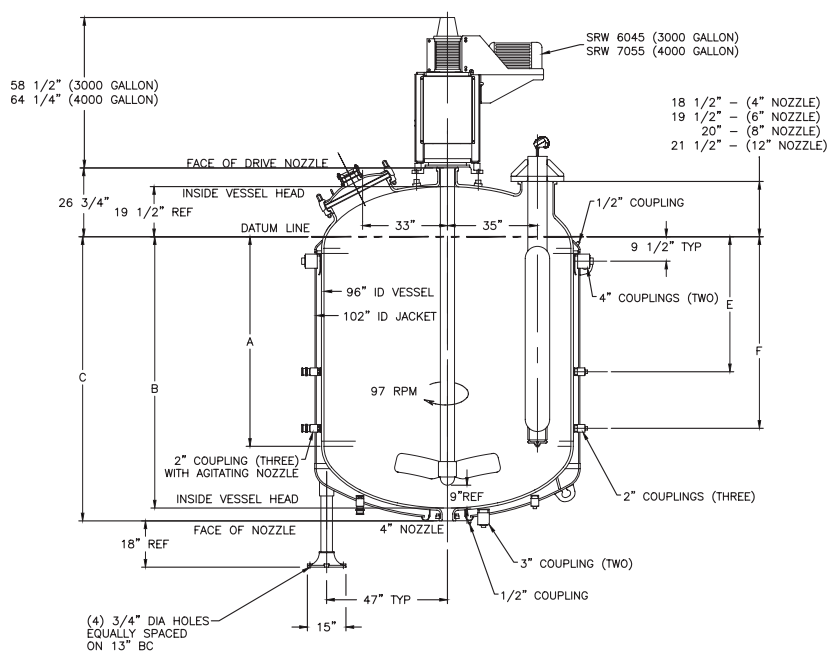
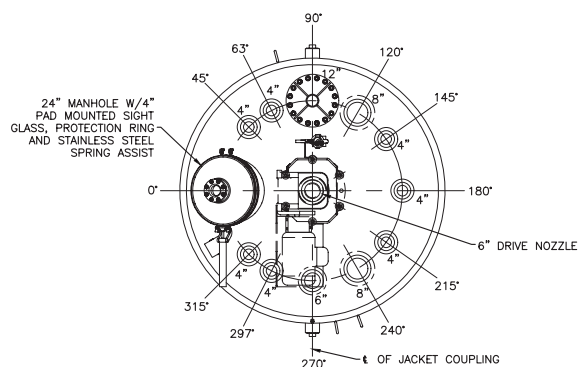
Working	3000	4000
Top Head	501.4	501.4
Bottom Head	501.4	501.4
Per Inch of Straight Side	31.3	31.3
To Bottom of Impeller Blade	133.5	133.5
To Top of Impeller Blade	408	408
To Bottom of Baffle	232-1/2	232-1/2
Jacket	366	453

## Heating area (square feet)

Jacket (total)	236	300
Bottom Head	69.4	69.4
Per Inch of Straight Side	2.1	2.1

## Weight (pounds)

Without Accessories	20,950	26,300
Total – Including Drive, Agitator, Baffle	24,300	30,400
Add for Shipment	900	900



# Design Features

The RS-Series reactor can be interchanged with standard RA-Series vessel with minimal piping or support modifications.

## Standard and Custom Designs

Choose from a full line of Pfaudler RS Series Glasteel reactors, with models ranging from 300 to 15,000 gallons. These configurations can be customized to meet specific design requirements. The large drive access cover has been eliminated, removing the need to shim large gaskets or tighten numerous clamps.

## Mixing

Robust mixers are provided on all RS Series reactors. Various drive styles are available, from drives with an easy seal change-out feature to established drives for low headroom requirements.

Cryo-Lock® impellers are available with various baffle options to maximize mixing in the reactor.

## Higher Pressure Ratings

Many chemical processes today require higher pressures. RS Series reactors are rated for 125 psig internal pressure. Jackets are rated for 100 psig.

## Run at lower temperatures

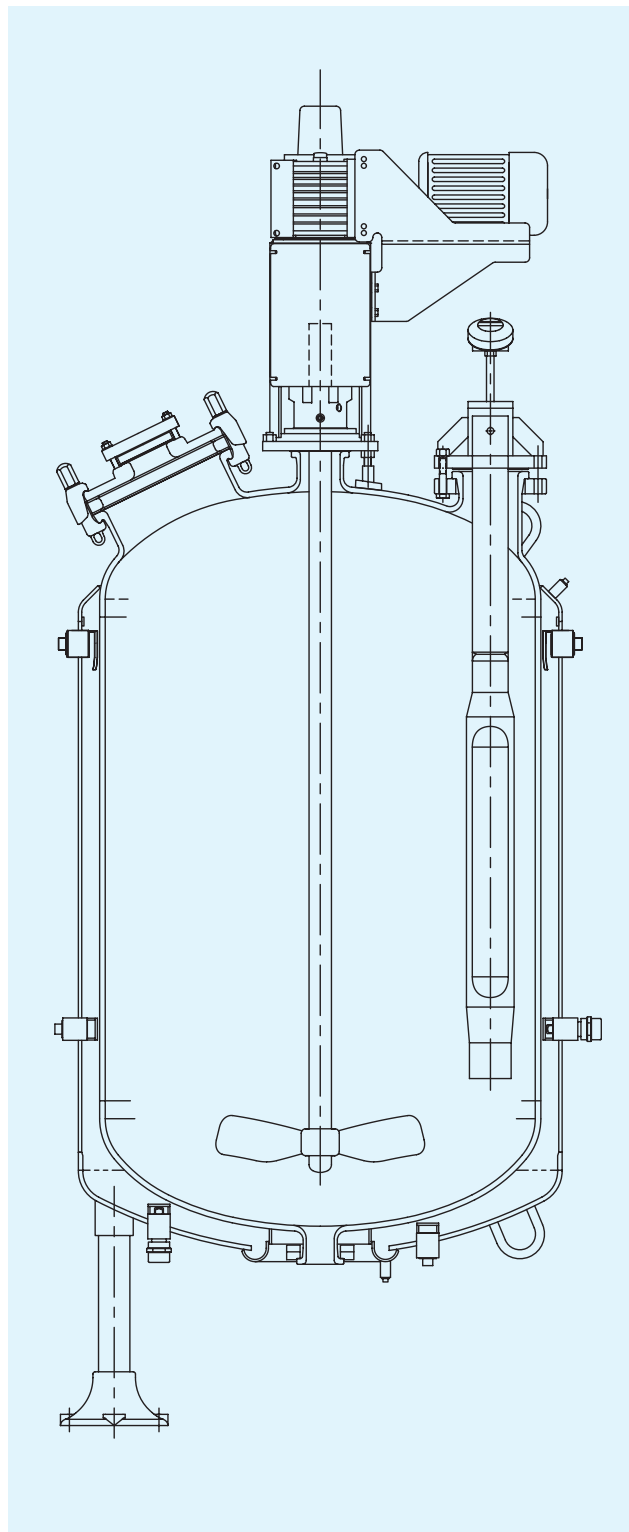
Shells and heads of the RS Series utilize fine grain carbon steel, which has significantly improved low temperature characteristics.

## Temperature Measurement

Pfaudler's integral TMI type temperature sensing system is specifically designed for Glasteel equipment. This innovation allows for quick response time in an all glass-lined construction, eliminating a gasketed joint and exposed metal in the baffle or valve.

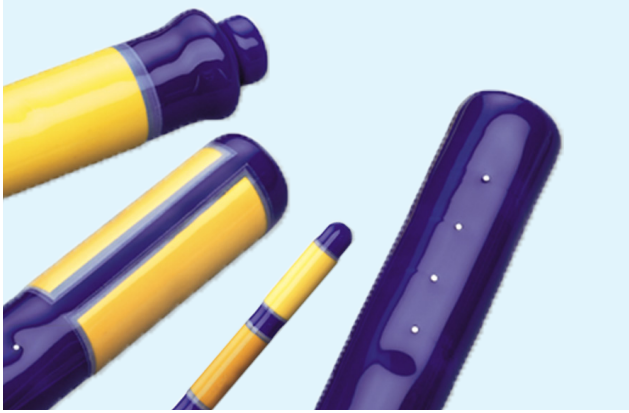
## Handhole / Sight Glass

Our reactors are provided with fused steel sight glasses that can either be nozzle mounted or pad mounted on the manway cover. The sight glass / handhole can also be replaced with our EZ-port for easy access to the vessel.



# Features

For variable functionality



## Instrumentation

- PH probes
- Temperature sensors
- GlasSentinel
- Quatro-pipe baffle available with temperature measurement and sampling capabilities



## Valves

- Outlet valves with manual hand wheel or air-actuator
- Optional low profile air actuator available for limited space requirements
- Optional EZ-valve adapter available for quick installation and removal
- Valve bodies are available with side flush port providing access for sampling, cleaning, and purging without dismantling the entire valve.

## Options

- A variety of baffles available
- Dip tubes with fluoropolymer-lined and glass-lined options
- EZ-port handhole
- Insulation and stainless steel sheathing
- Pfiber lights or Hi-lights
- Glass-lined pipe and fittings
- A variety of exterior coatings



## Service

Pfautler offers complete installation and start-up services to assure trouble free start-up and efficient equipment performance. Pfautler provides 24/7 assistance to ensure long-term reliable operation of your Pfautler equipment. Technicians are direct employees with OSHA training and certifications.

- Installation - preinstallation service
- Start-up assistance
- Training of personnel
- Field erection service
- Inspection
- Field repairs
- ASME welding



# Worldwide Presence



GMM Pfaudler is a global leader in corrosion-resistant technologies, systems, and services for the chemical, pharmaceutical, food and energy industry.

Our Branded Product Lines that include PFAUDLER, NORMAG, MAVAG, MIXION, INTERSEAL, EQUILLOY, EDLON and HYDROAIR showcase our strength as a group, our capabilities, and our pursuit for constant innovation. With an end-to-end solutions-oriented approach, a global footprint, and a perfectly integrated offering system we are able to meet complex industry demands worldwide.

GMM Pfaudler is driven by 1800+ individuals across 4 continents and 16 global manufacturing facilities around the world. The Group's targeted investments in strategic markets, innovation and competitiveness paves the way forward for GMM Pfaudler's continued legacy.

**80+**  
Countries

**1800+**  
Employees

**04**  
Continents

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