

# **CPP**

## **DISTRIBUTION**



# **ALS CATALOGUE**

Connecting People With Product









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**Disclaimer**

CPP Distribution strives to ensure the accuracy of the information in the ALS Catalogue. However, occasional errors, omissions, or updates may occur. For the most current and up-to-date product details, pricing, and availability, please refer to our digital catalogue or contact our sales team directly for confirmation. CPP Distribution is not responsible for discrepancies between the printed catalogue and actual product specifications or availability.

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Reference Material



Chemical Compatibility Charts



25 years ago, CPP Distribution began furnishing the artificial lift market with niche consumables. Our goal was to reduce production losses from consumable failure. Over the years, CPP has successfully completed hundreds of field trials servicing customers in every producing nation.

Artificial lift is one of our core technical focuses, and our team of industry experts comes with more than 100 years of experience. Our expertise covers many areas of production in both surface and subsurface equipment. CPP Distribution focuses our product design efforts on:

- Conventional sucker rod production
- Progressive cavity / Heavy oil production
- High-pressure liquids-rich gas production
- High-pressure sucker rod production

- Thermal / Steam sucker rod production
- High sour / Co2 production
- Plunger lift
- Gas lift

Our customers have come to rely on our solution mindset, an approach with a field-level understanding. The level of experience harnessed brings solutions not only in the laboratory but also in meeting producers' strict regulatory requirements.

As the market explores new production techniques and works harder to produce existing formations, CPP will be there working alongside the energy market. Our commitment to set our industry's curve with the best sealing and wear products worldwide will remain our core focus.



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**The industry's most trusted artificial lift consumables.**

# Seating Cups



At CPP Distribution, we are proud to present our premium line of seating cups, engineered to deliver superior quality and performance across a wide range of demanding applications. Our development team has invested significant effort into formulating advanced materials capable of withstanding extreme chemical environments, various temperatures, and other challenging field conditions. Each seating cup undergoes rigorous quality control, including comprehensive 100% dimensional inspections both on and off

the mandrel prior to shipment, ensuring consistent reliability and performance. Field testing has demonstrated exceptional durability, with many customers reporting successful reuse of cups after multiple seating and unseating cycles.

We are confident that our seating cups offer a robust and dependable solution, exceeding industry expectations and delivering measurable value in the field.



CHEMICAL CHART FOR SEATING CUPS IS AVAILABLE ON PAGE 10

## General Services

**Nylon**, one of the most popular seating cup materials, is ideal for conventional oil production. The Nylon material is best suited when used with a fabric cup, making the combination well-rounded for general service applications without compromising hold down strength. Nylon has a strong resistance to chemicals, while its resistance to abrasives is moderate.



### NYLON

**TEMPERATURE RATING**  
250°F (120°C)

**ABRASION RESISTANCE**  
MODERATE-HIGH

**ELONGATION (BREAK STRENGTH)**  
200% (MODERATE)

**CHEMICAL COMPATIBILITY**



**High Temp Nylon** are ideal for conventional oil production with increased bottom hole temperatures. This material is best suited when used with a High Temp fabric cup, making the combination well-rounded for High Temp service applications without compromising hold down strength. High Temp Nylon has a strong resistance to chemicals, while the resistance to abrasives is higher than standard nylon.



### HIGH TEMP NYLON

**TEMPERATURE RATING**  
302°F (150°C)

**ABRASION RESISTANCE**  
HIGH

**ELONGATION (BREAK STRENGTH)**  
50% (LOW)

**CHEMICAL COMPATIBILITY**





## Composite

**Composite** are manufactured with an impregnated fabric core for the ultimate in holding strength. The composite construction is for long-term exposure in all general service pumping applications. The impregnated construction brings a higher chemical resistance than standard rubber, while reducing any risk of breaking during seating or unseating. Composite cups, also known as fabric seating cups, are the most commonly-used material in the SRP market today. A very common selection for plunger lift equipment.



**SEAT-RITE**

### COMPOSITE

**TEMPERATURE RATING**  
220°F (105°C)

**ABRASION RESISTANCE**  
MEDIUM

**ELONGATION (BREAK STRENGTH)**  
400% (GREAT)

**CHEMICAL COMPATIBILITY**



**High Temp Composite** should be used when higher temperatures or increased chemical resistance is needed in a fabric reinforced cup. The increased elongation of any fabric cup, versus a plastic cup, is beneficial when seating and unseating can be expected. Operators can trust to see all Seat-Rite cups return after numerous years in service. The increased temperature rating, and increased chemical resistance make the Seat-Rite High Temp fabric cup a well-rounded, inexpensive cup for all well conditions.



**SEAT-RITE**

### HIGH TEMP COMPOSITE

**TEMPERATURE RATING**  
330°F (165°C)

**ABRASION RESISTANCE**  
HIGH

**ELONGATION (BREAK STRENGTH)**  
400% (GREAT)

**CHEMICAL COMPATIBILITY**



## Specialty Plastics

**Peek** are built to take almost any application. Peek material allows operators to cover most application without risk. It also has an extreme temperature rating, coupled with unstoppable resistance to extreme pressure and abuse. Choose Peek when nothing else works.

**EXT** are best when the fit and function of a Nylon cup is preferred with an increased elongation. The EXT material provides an increased resistance (inert) to all chemicals, while staying semi-flexible to prevent breaking or cracking down hole in any optimization effort. Look to run an EXT set with a High Temp fabric cup when a backup is required.

**PEEK**

**TEMPERATURE RATING**  
536°F (300°C)

**ABRASION RESISTANCE**  
HIGH

**ELONGATION (BREAK STRENGTH)**  
50% (LOW)

**CHEMICAL COMPATIBILITY**

**SEAT-RITE**

**EXT**

**TEMPERATURE RATING**  
392°F (200°C)

**ABRASION RESISTANCE**  
HIGH-EXTREME

**ELONGATION (BREAK STRENGTH)**  
250%

**CHEMICAL COMPATIBILITY**

**SEAT-RITE**

**Poly Keytone** offer a longer-lasting alternative to standard Nylon, delivering reliable performance in high-speed, long-stroke applications with moderate abrasives. They resist a broad range of chemicals found in oil and gas environments, including weak acids, bases, lubricants, oils, hydrogen sulfide (H<sub>2</sub>S), and carbon dioxide (CO<sub>2</sub>). Available in all standard sizes, with custom options upon request, Poly Keytone is ideal for demanding, chemically aggressive conditions.



## POLY KEYTONES

**TEMPERATURE RATING**  
320°F (160°C)

**ABRASION RESISTANCE**  
MODERATE

**ELONGATION (BREAK STRENGTH)**  
100% (LOW)

**CHEMICAL COMPATIBILITY**



**Super Orange** brings to the market a seating cup built to last through all applications, while preventing breaking and seating problems down hole. The goal for Super Orange seating cups is to replace high temperature plastics like PEEK & EXT and many other high temperature fabric materials. The Super Orange seating cup will allow a firm, secure seat each and every time in all applications, including high H<sub>2</sub>S and high temp applications. Works well in areas where Paraffin is an issue.



## SUPER ORANGE

**TEMPERATURE RATING**  
-238°F (-250°C) Cryogenic -  
500°F (260°C)

**ABRASION RESISTANCE**  
MODERATE-HIGH

**ELONGATION (BREAK STRENGTH)**  
230%

**CHEMICAL COMPATIBILITY**



**THT** are an alternative to metal sealing assemblies. Our design allows producers the ability to seat in worn out and scored pump seating nipples. These seating cups will seat multiple times, while providing positive pressure tests each time. Our THT material is proven to last the life of bottom hole pumps in all types of thermal production from SAGD's extreme bottom hole temperatures. THT seating cups are a great alternative to EXT, XT, and PEEK seating materials. THT has a wide temperature range coupled with a chemical compatibility, providing an unstoppable cup.



## THT

**TEMPERATURE RATING**  
-446°F (-230°C) / 662°F (350°C)

**ABRASION RESISTANCE**  
MODERATE - HIGH

**ELONGATION (BREAK STRENGTH)**  
230%

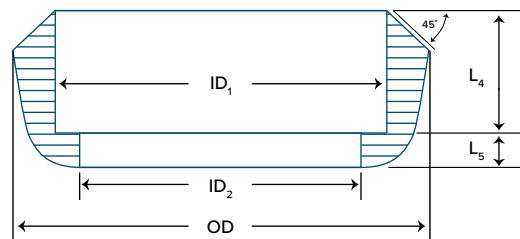
**CHEMICAL COMPATIBILITY**



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# SEAT-RITE



Seating Cup size	Seating Nipple Bore	1000s	OD	ID1	ID2	L4	L5
1-1/16"	1.062	+30	1.082	0.860	0.687	0.095	0.375
1-1/4"	1.250	+30	1.270	0.984	0.750	0.125	0.375
		+15	1.255		0.875		
		+30	1.270				
1-3/8"	1.375	+30	1.405	1.015	0.750	0.125	0.531
		+30	1.405		0.875		
		+45	1.420				
1-1/2"	1.460	-40+30	1.486	1.160	0.875	0.154	0.593
	1.500	Base	1.500				
		+15	1.515				
		+30	1.530				
		+45	1.545				
1-3/4"	1.710	-40+30	1.730	1.411	1.187	0.165	0.656
	1.750	Base	1.740				
		+15	1.755				
		+30	1.770				
		+45	1.785				
1-25/32"	1.780	+60	1.800	1.411	1.187	0.165	0.656
		+45	1.815				
		+30	1.800				
		+15	1.783				
		Base	1.770				
1-7/8"		Base	1.865	1.411	1.187	0.165	0.656
		+30	1.895				
2-1/4"	2.210	-40+30	2.230	1.850	1.562	0.185	0.688
	2.250	Base	2.240				
		+15	2.255				
		+30	2.270				
		+45	2.285				
	2.280	+60	2.300				
		+70	2.310				
2-3/4"	2.710	-40+30	2.730	2.350	2.000	0.185	0.688
	2.750	Base	2.740				
		+15	2.755				
		+30	2.770				
		+45	2.785				
	2.780	+60	2.800				
		+70	2.810				
3-3/4"	3.750	Base	3.375	3.271	2.812	0.186	0.978
		+15	3.750				
		+30	3.765				
		+45	3.780				
		+60	3.795				



## Composite Fabric



### COMPOSITE

**TEMPERATURE RATING**  
220°F (105°C)

**ABRASION RESISTANCE**  
MEDIUM

**ELONGATION (BREAK STRENGTH)**  
400% (GREAT)

**CHEMICAL COMPATIBILITY**



## Nylon/Plastic



### NYLON

**TEMPERATURE RATING**  
250°F (120°C)

**ABRASION RESISTANCE**  
MODERATE-HIGH

**ELONGATION (BREAK STRENGTH)**  
200% (MODERATE)

**CHEMICAL COMPATIBILITY**



## Super Orange



### SUPER ORANGE

**TEMPERATURE RATING**  
-238°F (-250°C) Cryogenic - 500°F (260°C)

**ABRASION RESISTANCE**  
MODERATE-HIGH

**ELONGATION (BREAK STRENGTH)**  
230%

**CHEMICAL COMPATIBILITY**



## Type-O Seating Cup Dimensions

SEATING CUPS TYPE 'O'	OUTSIDE DIAMETER		INSIDE DIAMETER		HEIGHT	HEIGHT
DESCRIPTION	API	CPP	API	CPP	API	CPP
SIZE	TOLERANCE +/- .005	TOLERANCE CPP = API +.005/- .003	TOLERANCE +.010/-0	TOLERANCE +.010/-0	TOLERANCE +.010/-0	TOLERANCE SAME AS API
1-1/2 -10-TYPE 'O'	1.490"	1.487 - 1.495	1.188 - 1.198	1.188 - 1.198	0.625 - 0.635	0.625 - 0.635
1-1/2 +70-TYPE 'O'	1.570"	1.567 - 1.575	1.188 - 1.198	1.188 - 1.198	0.625 - 0.635	0.625 - 0.635
1-3/4 +70-TYPE 'O'	1.810"	1.807 - 1.815	1.440 - 1.450	1.440 - 1.450	0.687 - 0.697	0.687 - 0.697
1-25/32 +30-TYPE 'O' (1.431" ID)	1.800"	1.797 - 1.805	1.431 - 1.441	1.431 - 1.441	0.821 - 0.831	0.821 - 0.831
1-25/32 +30-TYPE 'O' (1.471" ID)	1.800"	1.797 - 1.805	1.471 - 1.481	1.471 - 1.481	0.821 - 0.831	0.821 - 0.831
2-1/4 +70-TYPE 'O' (1.750" ID)	2.310"	2.307 - 2.315	1.750 - 1.760	1.750 - 1.760	0.750 - 0.760	0.750 - 0.760
2-1/4 +70-TYPE 'O' (1.805" ID)	2.310"	2.307 - 2.315	1.805 - 1.815	1.805 - 1.815	0.750 - 0.760	0.750 - 0.760
2-1/4 +70-TYPE 'O'-(1.805" ID 0.844" HGT)	2.310"	2.307 - 2.315	1.805 - 1.815	1.805 - 1.815	0.844 - 0.854	0.844 - 0.854
2-1/4 +70-TYPE 'O' (1.871" ID)	2.310"	2.307 - 2.315	1.871 - 1.881	1.871 - 1.881	0.750 - 0.760	0.750 - 0.760
2-1/4 +70 TYPE 'O' (1.973" ID)	2.310"	2.307 - 2.315	1.973 - 1.983	1.973 - 1.983	0.750 - 0.760	0.750 - 0.760
2-1/4 +70 TYPE 'O' (1.976" ID)	2.310"	2.307 - 2.315	1.976 - 1.986	1.976 - 1.986	0.750 - 0.760	0.750 - 0.760
2-1/4 +70 TYPE 'O' (1.981" ID)	2.310"	2.307 - 2.315	1.981 - 1.991	1.981 - 1.991	0.750 - 0.760	0.750 - 0.760

New sizes arriving daily in our warehouse. Contact sales if you have a specific size not listed above.

# Chemical Compatibility

## RATINGS CHEMICAL EFFECT

A - NO EFFECT - EXCELLENT

B - MINOR EFFECT - GOOD

C - MODERATE EFFECT - FAIR

D - SEVERE EFFECT - NOT RECOMMENDED

	Nylon	High Temp Nylon	Composite	High Temp Composite	PEEK	EXT	Super Orange	THT	Poly Ketone
Acetaldehyde <sup>5</sup>	C	B	D	D	A	A	A	A	A
Acetic Acid 20%	D	A	D	D	A	A	A	A	A
Acetone <sup>6</sup>	D	A	D	D	A	A	A	A	A
Benzyl	A	A	C	C	A	A	A	A	A
Ethyl	A	A	C	C	A	A	A	A	A
Isopropyl	C	A	D	D	A	A	A	A	A
Amines	A	A	D	D	A	A	A	A	A
Ammonia, Anhydrous	A	A	D	D	A	A	A	A	A
Ammonium Bifluoride	A	A	D	D	A	A	A	A	A
Amyl Alcohol	A	A	B	B	A	A	A	A	A
Asphalt	A	A	D	D	A	A	A	A	A
Barium Chloride	A	A	A	A	A	A	A	A	A
Benzene <sup>2</sup>	A	A	D	D	A	A	A	A	A
Boric Acid	A	A	A	A	A	A	A	A	A
Butadiene	D	A	D	D	A	A	A	A	A
Calcium Bisulfate	A	A	A	A	A	A	A	A	A
Calcium Chloride	D	A	C	C	A	A	A	A	A
Carbon Disulfide <sup>2</sup>	A	A	D	D	A	A	A	A	A
Diesel Fuel	A	A	A	A	A	A	A	A	A
Ethane	A	B	C	C	A	A	A	A	A
Ethyl Acetate <sup>2</sup>	A	B	D	D	A	A	A	A	A
Ethylene Chloride <sup>2</sup>	A	A	D	D	B	A	A	A	A
Fluorine	D	A	D	D	A	A	A	A	A
Hydraulic Oils (Petroleum) <sup>1</sup>	A	A	A	A	A	A	A	A	A
Hydraulic Oils (Synthetic) <sup>1</sup>	A	A	A	A	A	A	A	A	A
Hydrobromic Acid 20%	D	B	D	D	A	A	A	A	A
Hydrofluosilicic Acid	D	A	B	B	A	A	A	A	A
Hydrogen Peroxide	D	A	D	D	A	A	A	A	A
Ketones	B	A	D	D	A	A	A	A	A
Lubricants	A	A	A	A	A	A	A	A	A
Methanol	A	A	D	D	A	A	A	A	A
Methyl Alcohol 10%	B	A	B	B	A	A	A	A	A
Methyl Chloride	C	B	D	D	B	A	A	A	A
Methylene Chloride	A	A	D	D	A	A	A	A	A
Nitric Acid (10% Solution)	B	A	D	D	A	A	B	B	A
Paraffin	A	A	A	A	A	A	A	A	A
Phosphoric Acid (Crude)	A	A	C	C	A	A	A	A	A
Potash	A	A	A	A	A	A	A	A	A
Potassium Carbonate	A	A	C	C	A	A	A	A	A
Potassium Hydroxide (50%)	B	A	C	C	A	A	A	A	A
Propylene Glycol	B	A	C	C	A	A	A	A	A
Sodium Acetate	A	A	B	B	A	A	A	A	A
Sodium Carbonate	A	A	C	C	A	A	A	A	A
Sodium Hydroxide/Caustic Soda (20%)	C	A	C	C	A	A	A	A	A
Sodium Nitrate	A	A	C	C	A	A	A	A	A
Sodium Peroxide	A	A	C	C	A	A	A	A	A
Sodium Thiosulphate ("Hypo")	A	A	D	D	A	A	A	A	A
Sulfuric Acid (to 10%)	D	B	B	B	A	A	A	A	A
Sulfurous Acid	C	B	B	B	A	A	A	A	A
Toluene	C	B	C	C	A	A	A	A	A
Xylene <sup>2</sup>	C	B	C	C	A	A	A	A	A
Zinc Chloride	C	B	D	D	A	A	A	A	A

### FOOTNOTES

1. P.V.C. - Satisfactory to 72°F | 2. Polypropylene - Satisfactory to 72°F | 3. Polypropylene - Satisfactory to 120°F

4. BUNA-N - Satisfactory for "O" Rings | 5. Polyacetal - Satisfactory to 72°F | 6. Ceramag - Satisfactory to 72°F



## IMMERSION TEST

Simulated sour gas environment

### API 6A ANNEX F IMMERSION TEST

	80% CO <sub>2</sub>	10% H <sub>2</sub> S	10% CH <sub>4</sub>
CPP COMPOSITE	PASSED	PASSED	PASSED
CPP EXT	PASSED	PASSED	PASSED
NYLON	FAILED	FAILED	FAILED
PEEK	PASSED	PASSED	PASSED

FOR MORE IMMERSION TESTING RESULTS AND SERVICE  
PLEASE CONTACT CPP TODAY!

This information reflects the current state of our knowledge and is intended only to assist and advise. It is given without obligation or liability. It does not assure or guarantee chemical resistance, quality of products, or their suitability in any legally binding way. Values are not minimum or maximum values, but guidelines that can be used for comparative purposes in material selection. They are within the normal range of product properties and do not represent guaranteed property values. Testing under individual application circumstances is always recommended.

# PA Rings



CHEMICAL CHART FOR PA RINGS IS AVAILABLE ON PAGE 13.

## Extended Life PA Rings (EXT)

**SEAT-RITE**



### MATERIAL PROPERTIES

TEMPERATURE RATING  
392°F (200°C)

ABRASION RESISTANCE  
HIGH-EXTREME

ELONGATION (BREAK STRENGTH)  
250%

CHEMICAL COMPATIBILITY



## Super Mag Kevlar PA Rings

**SEAT-RITE**



### MATERIAL PROPERTIES

TEMPERATURE RATING  
330°F (165°C)

ABRASION RESISTANCE  
EXTREME

ELONGATION (BREAK STRENGTH)  
400% (GREAT)

CHEMICAL COMPATIBILITY



## Nylon PA Rings

**SEAT-RITE**



### MATERIAL PROPERTIES

TEMPERATURE RATING  
250°F (120°C)

ABRASION RESISTANCE  
MODERATE-HIGH

ELONGATION (BREAK STRENGTH)  
315%

CHEMICAL COMPATIBILITY



## Poly Ketone PA Rings

**SEAT-RITE**



### MATERIAL PROPERTIES

TEMPERATURE RATING  
320°F (160°C)

ABRASION RESISTANCE  
MODERATE

ELONGATION (BREAK STRENGTH)  
100% (LOW)

CHEMICAL COMPATIBILITY



## Composite PA Rings

**SEAT-RITE**



### MATERIAL PROPERTIES

TEMPERATURE RATING  
220°F (105°C)

ABRASION RESISTANCE  
MEDIUM

ELONGATION (BREAK STRENGTH)  
400% (GREAT)

CHEMICAL COMPATIBILITY



## Super Orange PA Rings

**SEAT-RITE**



### MATERIAL PROPERTIES

TEMPERATURE RATING  
-238°F (-250°C) Cryogenic -  
500°F (260°C)

ABRASION RESISTANCE  
MODERATE-HIGH

ELONGATION (BREAK STRENGTH)  
230%

CHEMICAL COMPATIBILITY



## High Temp Nylon PA Rings

**SEAT-RITE**



### MATERIAL PROPERTIES

**TEMPERATURE RATING**  
302°F (150°C)

**ABRASION RESISTANCE**  
HIGH

**ELONGATION (BREAK STRENGTH)**  
50% (LOW)

**CHEMICAL COMPATIBILITY**



## THT PA Rings

**SEAT-RITE**



### MATERIAL PROPERTIES

**TEMPERATURE RATING**  
446°F (230°C) - 662°F (350°C)

**ABRASION RESISTANCE**  
MODERATE-HIGH

**ELONGATION (BREAK STRENGTH)**  
230%

**CHEMICAL COMPATIBILITY**



## PEEK PA Rings

**SEAT-RITE**



### MATERIAL PROPERTIES

**TEMPERATURE RATING**  
536°F (300°C)

**ABRASION RESISTANCE**  
HIGH

**ELONGATION (BREAK STRENGTH)**  
50% (LOW)

**CHEMICAL COMPATIBILITY**



## PA RING DIMENSIONS

PA RINGS DESCRIPTION	O.D.	I.D.	HEIGHT
	CPP	CPP	CPP
SIZE	+/.005"	+.005/- .000	+/.005"
1-1/4"	1.215"	0.850"	0.230"
1-1/2"	1.500"	1.140"	0.230"
1-3/4"	1.710"	1.240"	0.230"
2.000"	1.965"	1.485"	0.230"
2-1/4"	2.200"	1.590"	0.230"
2-1/2"	2.435"	1.835"	0.230"
2-3/4"	2.740"	2.090"	0.230"
3-1/4"	3.200"	2.550"	0.230"

New sizes arriving daily in our warehouse. Contact sales if you have a specific size not listed above.



# Chemical Compatibility

## RATINGS CHEMICAL EFFECT

A - NO EFFECT - EXCELLENT

B - MINOR EFFECT - GOOD

C - MODERATE EFFECT - FAIR

D - SEVERE EFFECT - NOT RECOMMENDED

	EXT	Super Mag Kevlar	Nylon	Poly Ketone	Composite	Super Orange	High Temp Nylon	THT	Peek
Acetaldehyde <sup>5</sup>	A	A	C	A	D	A	B	A	A
Acetic Acid 20%	A	A	D	A	D	A	A	A	A
Acetone <sup>5</sup>	A	A	D	A	D	A	A	A	A
Benzyl	A	A	A	A	C	A	A	A	A
Ethyl	A	A	A	A	C	A	A	A	A
Isopropyl	A	A	C	A	D	A	A	A	A
Amines	A	A	A	A	D	A	A	A	A
Ammonia, Anhydrous	A	A	A	A	D	A	A	A	A
Ammonium Bifluoride	A	A	A	A	D	A	A	A	A
Amyl Alcohol	A	A	A	A	B	A	A	A	A
Asphalt	A	A	A	A	D	A	A	A	A
Barium Chloride	A	A	A	A	A	A	A	A	A
Benzene <sup>2</sup>	A	A	A	A	D	A	A	A	A
Boric Acid	A	A	A	A	A	A	A	A	A
Butadiene	A	A	D	A	D	A	A	A	A
Calcium Bisulfate	A	A	A	A	A	A	A	A	A
Calcium Chloride	A	A	D	A	C	A	A	A	A
Carbon Disulfide <sup>2</sup>	A	A	A	A	D	A	A	A	A
Diesel Fuel	A	A	A	A	A	A	A	A	A
Ethane	A	A	A	A	C	A	B	A	A
Ethyl Acetate <sup>2</sup>	A	A	A	A	D	A	B	A	A
Ethylene Chloride <sup>2</sup>	A	A	A	A	D	A	A	A	B
Fluorine	A	A	D	A	D	A	A	A	A
Hydraulic Oils (Petroleum) <sup>1</sup>	A	A	A	A	A	A	A	A	A
Hydraulic Oils (Synthetic) <sup>1</sup>	A	A	A	A	A	A	A	A	A
Hydrobromic Acid 20%	A	A	D	A	D	A	B	A	A
Hydrofluosilicic Acid	A	A	D	A	B	A	A	A	A
Hydrogen Peroxide	A	A	D	A	D	A	A	A	A
Ketones	A	A	B	A	D	A	A	A	A
Lubricants	A	A	A	A	A	A	A	A	A
Methanol	A	A	A	A	D	A	A	A	A
Methyl Alcohol 10%	A	A	B	A	B	A	A	A	A
Methyl Chloride	A	A	C	A	D	A	B	A	B
Methylene Chloride	A	A	A	A	D	A	A	A	A
Nitric Acid (10% Solution)	A	B	B	A	D	B	A	B	A
Paraffin	A	A	A	A	A	A	A	A	A
Phosphoric Acid (Crude)	A	A	A	A	C	A	A	A	A
Potash	A	A	A	A	A	A	A	A	A
Potassium Carbonate	A	A	A	A	C	A	A	A	A
Potassium Hydroxide (50%)	A	A	B	A	C	A	A	A	A
Propylene Glycol	A	A	B	A	C	A	A	A	A
Sodium Acetate	A	A	A	A	B	A	A	A	A
Sodium Carbonate	A	A	A	A	C	A	A	A	A
Sodium Hydroxide/Caustic Soda (20%)	A	A	C	A	C	A	A	A	A
Sodium Nitrate	A	A	A	A	C	A	A	A	A
Sodium Peroxide	A	A	A	A	C	A	A	A	A
Sodium Thiosulphate ("Hypo")	A	A	A	A	D	A	A	A	A
Sulfuric Acid (to 10%)	A	A	D	A	B	A	B	A	A
Sulfurous Acid	A	A	C	A	B	A	B	A	A
Toluene	A	A	C	A	C	A	B	A	A
Xylene <sup>2</sup>	A	A	C	A	C	A	B	A	A
Zinc Chloride	A	A	C	A	D	A	B	A	A

## FOOTNOTES

1. P.V.C. - Satisfactory to 72°F | 2. Polypropylene - Satisfactory to 72°F | 3. Polypropylene - Satisfactory to 120°F

4. BUNA-N - Satisfactory for "O" Rings | 5. Polyacetal - Satisfactory to 72°F | 6. Ceramag - Satisfactory to 72°F



## IMMERSION TEST

Simulated sour gas environment

### API 6A ANNEX F IMMERSION TEST

	80% CO <sub>2</sub>	10% H <sub>2</sub> S	10% CH <sub>4</sub>
CPP COMPOSITE	PASSED	PASSED	PASSED
CPP EXT	PASSED	PASSED	PASSED
NYLON	FAILED	FAILED	FAILED
PEEK	PASSED	PASSED	PASSED

FOR MORE IMMERSION TESTING RESULTS AND SERVICE  
PLEASE CONTACT CPP TODAY!

This information reflects the current state of our knowledge and is intended only to assist and advise. It is given without obligation or liability. It does not assure or guarantee chemical resistance, quality of products, or their suitability in any legally binding way. Values are not minimum or maximum values, but guidelines that can be used for comparative purposes in material selection. They are within the normal range of product properties and do not represent guaranteed property values. Testing under individual application circumstances is always recommended.

# Wiper Rings



CHEMICAL CHART FOR WIPER RINGS IS AVAILABLE ON PAGE 13.



## HSN

### MATERIAL PROPERTIES

**TEMPERATURE RATING**  
-40°F (-40°C) - 305°F (150°C)

**ABRASION RESISTANCE**  
VERY GOOD

**CHEMICAL COMPATIBILITY**



## EPDM

### MATERIAL PROPERTIES

**TEMPERATURE RATING**  
-58°F (-50°C) - 300°F (148°C)

**ABRASION RESISTANCE**  
GOOD

**CHEMICAL COMPATIBILITY**



## FKM

### MATERIAL PROPERTIES

**TEMPERATURE RATING**  
-4°F (-20°C) - 401°F (205°C)

**ABRASION RESISTANCE**  
GOOD

**CHEMICAL COMPATIBILITY**



## FFKM

### MATERIAL PROPERTIES

**TEMPERATURE RATING**  
-15°F (-26°C) - 608°F (320°C)

**ABRASION RESISTANCE**  
MEDIUM

**CHEMICAL COMPATIBILITY**



## URETHANE

### MATERIAL PROPERTIES

**TEMPERATURE RATING**  
-31°F (-35°C) - 230°F (110°C)

**ABRASION RESISTANCE**  
GOOD

**CHEMICAL COMPATIBILITY**



# Valve Cups



CHEMICAL CHART FOR VALVE CUPS IS AVAILABLE ON PAGE 10

**Nylon** are ideal for conventional oil production. The Nylon material is best suited when used with a composite cup, making the combination well-rounded for general service application without compromising hold down strength.

**Composite** are manufactured with an impregnated fabric core for the ultimate in holding strength. The composite construction is for long-term exposure in all general service pumping applications.

**SEAT-RITE**



## NYLON

### MATERIAL PROPERTIES

**TEMPERATURE RATING**  
392°F (200°C)

**ABRASION RESISTANCE**  
HIGH-EXTREME

**ELONGATION (BREAK STRENGTH)**  
250%

**CHEMICAL COMPATIBILITY**



**SEAT-RITE**



## COMPOSITE

### MATERIAL PROPERTIES

**TEMPERATURE RATING**  
221°F (105°C)

**ABRASION RESISTANCE**  
HIGH-EXTREME

**ELONGATION (BREAK STRENGTH)**  
400%

**CHEMICAL COMPATIBILITY**



# Rod Guides

Oil States Sucker Rod Guides are designed for use in artificial lift (pumping) wells to eliminate the internal tubing wear caused by the sucker rods. The sucker rod guides minimize costly metal-to-metal contact between the sucker rods and tubing. The guides also function as bearings by centralizing the sucker rods in the tubing string. Even when the tubing buckles during upstrokes, the guides help prevent contact between the rods and tubing. Friction is also reduced, which raises the overall pumping efficiency. Oil States Sucker Rod Guides are available in both snap-on and twist-on versions.

## OSI Snap On Rod Guide

The standard of the industry for years, Oil States' Hi-Temp Snap-on Rod Guides are made of abrasion-resistant synthetic rubber. A spring steel clip insert is molded into the rubber guide, providing a positive grip on the sucker rod and preventing slippage in temperatures up to 300°F.

PART NUMBER	SIZE	ROD SIZE	TUBING SIZE
1025HT	1" X 2-1/2"	1"	2-7/8"
1027HT	1" X 3"	1"	3-1/2"
3420HT	3/4" X 2"	3/4"	2-3/8"
3425HT	3/4" X 2-1/2"	3/4"	2-3/8"
5820HT	5/8" X 2"	5/8"	2-7/8"
5825HT	5/8" X 2-1/2"	5/8"	2-7/8"
7820HT	3/4" X 2"	7/8"	2-3/8"
7825HT	7/8" X 2-1/2"	7/8"	2-7/8"
CPP-7825XL	7/8" X 2-1/2"		



## OSI Twist On Rod Guide

Oil States' Twist-on Rod Guides contain no metal clip insert. Tests, however, indicate an excellent holding strength due to design and materials. The twist-on style rod guide can easily be installed with a pipe wrench and withstand temperatures up to 200°F.

PART NUMBER	SIZE	TUBING SIZE
TO-3420	3/4" Rod X 2" Tubing	2-3/8"
TO-3425	3/4" Rod X 2-1/2" Tubing	2-7/8"
TO-7820	7/8" Rod X 2" Tubing	2-3/8"
TO-7825	7/8" Rod X 2-1/2" Tubing	2-7/8"



# Stuffing Box Packing

At CPP Distribution, we understand the importance of having the right stuffing box packing for your well conditions. That's why we offer a broad range of sizes, materials, and designs to best fit your configuration. Our innovative materials for high performance applications ensure that our products exceed traditional alternatives in both quality and durability. CPP

Distribution prioritizes quality control above all else, requiring all packing to undergo a 100 percent check before shipping. Our products are compatible with various models of stuffing boxes, making them the perfect choice for mild or extreme applications. Field-tested and proven, you can trust that our products will perform at the highest level.

## Cone Packing

### Gold Flake and Super Gold Cone

**Packing** is widely used in sweet to moderate sour crude production with high oil-to-water ratios.

It's best suited for wells producing medium to heavy oil (20-30 API), and it handles moderate produced heat along with higher than average friction heat. Ideal for moderate to heavy abrasives, when additional lubrication is not required.

Composite brass impregnated rubber helps dissipate friction heat, while maintaining rubber integrity. It also acts as a cleaner, scraping residual oil away from the turn around.



#### GOLD FLAKE & GOLD FLAKE +

##### TEMPERATURE RATING

Gold Flake | 202°F (94°C)

Gold Flake + | 302°F (150°C)

##### MAX PRESSURE

2,500 PSI

**H2S:** MAX 5% | **CO2:** LOW RESISTANCE

**ABRASIVE RESISTANCE:**  
MODERATE-HEAVY



#### SUPER GOLD FLAKE & SUPER GOLD FLAKE +

##### TEMPERATURE RATING

Super Gold Flake | 250°F (121°C)

Super Gold Flake + | 350°F (177°C)

##### MAX PRESSURE

2,500 PSI

**H2S:** MAX 5% | **CO2:** LOW RESISTANCE

**ABRASIVE RESISTANCE:**  
MODERATE-HEAVY





## Cone Packing

### Kevlar Brass Cone Packing

Kevlar Brass Cone Packing is engineered for high concentrations of H<sub>2</sub>S & CO<sub>2</sub> in all applications, including steam injection. Kevlar brass is manufactured with fabric-reinforced contact points for long-lasting performance in heavy abrasives and viscous fluids. Kevlar Brass packing is said to be one of the best extreme service packings on today's market.



#### KEVLAR BRASS

**TEMPERATURE RATING**  
653°F (345°C) Bursts over 550°C

**MAX PRESSURE**  
5,000 PSI

**H<sub>2</sub>S: 30% | CO<sub>2</sub>: 30%**

**ABRASIVE RESISTANCE:**  
HEAVY



**Fluid Lip Cone Packing**, allows producers an alternative to standard gland activated sealing. Pressure activated sealing allows for less stuffing box adjustments when the applications produce less fluid and fluid pressures changes at times. The Fluid Lip design is ideal when gas pressure continues to push fluid past conventional single stack stuffing boxes.



#### FLUID LIP

**TEMPERATURE RATING**  
302°F (150°C)

**MAX PRESSURE**  
5,000 PSI

**H<sub>2</sub>S: 15% | CO<sub>2</sub>: 20%**

**ABRASIVE RESISTANCE:**  
HIGH TO EXTREME



**Soft Rubber Cone Packing** is widely used in all general service applications and is ideal for sweet crude production. Soft rubber does well in high oil-to-water ratios. It's engineered to function well in light oils with minimal abrasion present and makes a great packing for OEM manufacturers.



#### SOFT RUBBER & SUPER + SOFT RUBBER

**TEMPERATURE RATING**  
Soft Rubber | 202°F (94°C)  
Super + Soft Rubber | 302°F (150°C)

**MAX PRESSURE**  
2,500 PSI

Soft Rubber | **H<sub>2</sub>S: 5% | CO<sub>2</sub>: 2%**  
Super + Soft Rubber | **H<sub>2</sub>S: 2% | CO<sub>2</sub>: 10%**

**ABRASIVE RESISTANCE:**  
LOW



## Cone Packing

**EPDM Cone Packing** is an excellent choice for those looking for an economical solution for sealing fluids at higher temperatures. It offers a cost-effective alternative to higher-priced packing options while providing adequate sealing in thermal flood production. In addition, EPDM cone packing is ideal for moderate to higher water cut applications, providing moderate abrasion resistance. Its versatility and reliability make it a popular choice for sealing applications across various industries.



### EPDM

**TEMPERATURE RATING**  
425°F (218°C)

**MAX PRESSURE**  
2,500 PSI

**H2S: 5% | CO2: N/A**

**ABRASIVE RESISTANCE:**  
MODERATE



**Hard Rubber Cone Packing** is widely used in all general service applications, and it's ideal for sweet crude production. Hard rubber does well in high oil-to-water ratios. It's engineered to function well in light oils with abrasives present and makes great packing for OEM manufacturers. Hard rubber compounds resist gland adjustment, while maintaining a positive seal in oil production.



### HARD RUBBER

**TEMPERATURE RATING**  
202°F (94°C)

**MAX PRESSURE**  
2,500 PSI

**H2S: 6% | CO2: 2%**

**ABRASIVE RESISTANCE:**  
HEAVY



**HSN Cone Packing** performs better than soft rubbers and Teflon filled materials. Normally, general service packing becomes blistered or easily fatigued by production bi-products. The HSN material has an increased chemical resistance. The abrasion resistance of HSN elastomers is proven to be better than most general service rubber blends. This allows for longer life when lubrication is absent and the hydrocarbon presence is higher than normal concentrations.



### HSN

**TEMPERATURE RATING**  
329°F (165°C)

**MAX PRESSURE**  
2,500 PSI

**H2S: 10% | CO2: 20%**

**ABRASIVE RESISTANCE:**  
MODERATE



**CPP**  
DISTRIBUTION

## Cone Packing

**Super Orange Cone Packing** is the latest breakthrough in packing technology, offering an unmatched compression set that allows for increased load and creates a seal without reducing the life of the packing set. This hybrid polymer is highly resistant to all hydrocarbons, making it inert to CO<sub>2</sub> and H<sub>2</sub>S. It also provides producers with the flexibility to pump longer, faster, and dryer without added packing failures. Super Orange Cone Packing is the “king of cones” that will meet all your needs.



### SUPER ORANGE

**TEMPERATURE RATING**  
257°F (125°C)

**MAX PRESSURE**  
5,000 PSI (5,000+ WHEN INERT)

**H<sub>2</sub>S:** NO EFFECT | **CO<sub>2</sub>:** NO EFFECT

**ABRASIVE RESISTANCE:**  
MODERATE-HEAVY



**Rainbow Cone Packing** are excellent in low gas-to-oil ratios and high water cut wells, performing well at 90+ percent water cut. Rainbow boasts a high tensile strength, making this a great packing for high-performance wells. Ideal for well-lubricated applications with continuous production. Look to try our Rainbow Ring packing in all light fluids.



### RAINBOW

**TEMPERATURE RATING**  
400°F (204°C)

**MAX PRESSURE**  
2,500 PSI

**H<sub>2</sub>S:** 12% | **CO<sub>2</sub>:** 15%

**ABRASIVE RESISTANCE:**  
MINIMAL



**Urethane Cone Packing**, a workhorse in heavy abrasive fluids, has the ability to strip all wax bi-products. It's ideal for work with heavy fluids in any application. Urethane is traditionally used in mid to heavy viscosities when pump off is common. Not ideal for high water cuts.



### URETHANE

**TEMPERATURE RATING**  
230°F (110°C)

**MAX PRESSURE**  
5,000 PSI

**H<sub>2</sub>S:** 10% | **CO<sub>2</sub>:** 8%

**ABRASIVE RESISTANCE:**  
HEAVY-EXTREME



**Special Lube (General Service)** Special Lube packing has been designed for sweet production, with high oil to water ratios. The external coating provides additional lubrication and seal ability in worn equipment. Recommended for gas locking or pump off situations. Special lube will also reduce rod noise.



### SPECIAL LUBE

**TEMPERATURE RATING**  
302°F (150°C)

**MAX PRESSURE**  
2,500 PSI

**H<sub>2</sub>S:** 5% | **CO<sub>2</sub>:** 10%

**ABRASIVE RESISTANCE:**  
MINIMAL



## Cone Packing

**Vanilla Cone Packing** uses patent polymer technology, providing suitable compression sets for all conditions. Conventional elastomeric properties bring complications during spring and fall weather changes. Our polymer engineers have designed not only a self-lubricated product like most Teflon impregnated materials, but also a product requiring less real-time adjustments when evening or seasonal temperatures change rapidly. These temperature changes cause seeping and emission leaks beyond producers' expectations.



### VANILLA CONE

**TEMPERATURE RATING**  
257°F (125°C)

**MAX PRESSURE**  
5,000 PSI (5,000+ WHEN INERT)

**H2S: NO EFFECT | CO2: NO EFFECT**

**ABRASIVE RESISTANCE:**  
LOW - MODERATE



**Teflon Filled Cone Packings** has a number of benefits to pumpers. CPP Teflon Filled (Soft) is one of our most popular packings. Teflon Soft can be recommended in sweet or light to moderate crude productions. It's ideal for long stroking, high-speed pumping, with limited or intermittent lubrication present. Look to our Teflon 85 & Teflon 95 for a higher performance in hydrocarbons as well as pressure resistance



### TEFLON

**TEMPERATURE RATING**  
202°F (94°C)

**MAX PRESSURE**  
2,500 PSI

**H2S: 5% | CO2: 5%**

**ABRASIVE RESISTANCE:**  
MINIMAL



**Teflon 85** is the original improvement to generic Teflon filled packings. This harder material was built with the operator in mind. Teflon 85 withstands gland pressures and well fluid pressures. It's a long lasting packing in abrasive environments and is ideal for heavier fluid with moderate to heavy particles like sand. Teflon 85 is self-lubricating in both gas locking and pump off situations. Helpful when larger areas are to be covered from location to location.



### TEFLON 85

**TEMPERATURE RATING**  
302°F (150°C)

**MAX PRESSURE**  
2,500 PSI

**H2S: 5% | CO2: 10%**

**ABRASIVE RESISTANCE:**  
MODERATE



**Cube Cone Packing**, has a unique design specifically for high paraffin or sand-producing wells. The incorporated materials allow for polish rod lubrication as well as aggressive stripping, allowing for sufficient sealing to take place. In addition to stripping, Cube Cone Packing resists over tightening, as well as packing failure during pump off.



### CUBE

**TEMPERATURE RATING**  
302°F (150°C)

**MAX PRESSURE**  
2,500 PSI

**H2S: 10% | CO2: 15%**

**ABRASIVE RESISTANCE:**  
HEAVY-EXTREME





## Cone Packing

**Lappin tech Cone Packing** is built with braided rope packing inserts for advanced sealing when polish rod conditions are marginal. Look to use LappinTech® when fluid lubrication is absent. Ideal for long, fast-stroking wells, with moderate to high water cuts. A high-performing product in salt water.



### LAPPIN TECH

**TEMPERATURE RATING**  
482°F (250°C)

**MAX PRESSURE**  
2,500 PSI

**H2S: 7% | CO2: 11%**

**ABRASIVE RESISTANCE:**  
LOW-MODERATE



**Steam Seal Cone Packing** is built to withstand extreme temperatures, pressure, and extended production cycles. It's designed to suit any polish rod material. Steam Seal is manufactured from high-quality abrasive materials, specifically to disperse high heat, while maintaining a positive seal on break-in. Steam Seal is the world leader in thermal protection.



### STEAM SEAL

**TEMPERATURE RATING**  
572°F (300°C) Bursts over 330°C

**MAX PRESSURE**  
5,000 PSI

**H2S: 15% | CO2: 20%**

**ABRASIVE RESISTANCE:**  
HIGH-EXTREME



**The Completion King Packing** has been designed with one application in mind: new completions. After a well has been drilled, fractured, and tested, producers have come to expect application changes overnight when bringing production online. In the infant days of some new completions, operators are faced with an off-the-shelf stuffing box typically furnished with import soft rubber, which is met with some of the most abrasive fluids a well may see in its life. The Completion King packing is a 6-cone set for the most popular cone stuffing boxes that brings a combination built for abuse. The set will handle extreme abrasion, high friction temps from gland loading or over tightening, and keep the polish rod clean from frac debris being pumped around on clean out.



### THE COMPLETION KING

**TEMPERATURE RATING**  
302°F (150°C)

**MAX PRESSURE**  
2,500 PSI

**H2S: 10% | CO2: 15%**

**ABRASIVE RESISTANCE:**  
EXTREME



The Completion King packing combination set was one of the pioneers in combination packing culture—something we have all come to understand and recognize as best practice.



**Did you know we sell singles as well as custom sets?**  
**Contact our sales team today!**

## Donut Cone Packing

**Donut Cone Packings** are best suited when a cone packing profile is preferred. Donut Cone excels when limited lubrication from gas locking or pump occurs frequently. This unique design of cone packing has a press-fit lubrication ring that helps cool and lubricate the polish rod at any stroke speed. Operators can expect a positive seal while sealing lighter fluids and have confidence with heavier produced products.



### DONUT CONE

**TEMPERATURE RATING**  
 202°F (94°C)

**MAX PRESSURE**  
 2,500 PSI

**H2S: 5% | CO2: 2%**

**ABRASIVE RESISTANCE:**  
 MODERATE



### DONUT CONE - SOUR SERVICE

**TEMPERATURE RATING**  
 329°F (165°C)

**MAX PRESSURE**  
 2,500 PSI

**H2S: 10% | CO2: 20%**

**ABRASIVE RESISTANCE:**  
 MODERATE

## Ratigan Stuffing Box Rubber



GOLD FLAKE	GRAPHITE	NBR	TEFLON	HNBR
TEMPERATURE RATING 302°F (150°C)	TEMPERATURE RATING 302°F (150°C)	TEMPERATURE RATING 302°F (150°C)	TEMPERATURE RATING 176°F (80°C)	TEMPERATURE RATING 329°F (165°C)
H2S: 5%   CO2: 5%	H2S: 5%   CO2: 5%	H2S: 2%   CO2: 5%	H2S: 2%   CO2: 5%	H2S: 10%   CO2: 20%
ABRASIVE RESISTANCE LOW-MODERATE	ABRASIVE RESISTANCE LOW-MODERATE	ABRASIVE RESISTANCE LOW-MODERATE	ABRASIVE RESISTANCE LOW-MODERATE	ABRASIVE RESISTANCE LOW-MODERATE

## Donut Packing

If you're struggling with traditional cone packing in applications with high-fluid pressure, consider CPP Donut Packing. Its unique self-activating profile creates a tighter seal as flow line pressure increases, providing superior performance compared to cone packing. CPP has also improved its inserts to offer added protection in high-speed or pump-off conditions. Made with advanced compounds, this packing solution is an excellent alternative to cone packing for both general service and sour service applications. Trust CPP Donut Packing to meet and exceed your operator's expectations.



NBR	HNBR	AFLAS	SUPER ORANGE
TEMPERATURE RATING 230°F (110°C)	TEMPERATURE RATING 329°F (165°C)	TEMPERATURE RATING 450°F (232°C)	TEMPERATURE RATING 257°F (125C)
MAX PRESSURE 5,000 PSI	MAX PRESSURE 5,000 PSI	MAX PRESSURE 5,000 PSI	MAX PRESSURE 5,000 PSI
H2S: 2%   CO2: 5%	H2S: 10%   CO2: 20%	H2S: 35%   CO2: 15%	H2S: NO EFFECT CO2: NO EFFECT
ABRASIVE RESISTANCE MODERATE	ABRASIVE RESISTANCE MODERATE	ABRASIVE RESISTANCE MODERATE	ABRASIVE RESISTANCE HEAVY TO EXTREME

## Slim Hole Packing

**Fluid Seal Packing** is tailored for sweet, low- pressure production. Designed with a long, reinforced sealing lip, it allows for adequate sealing in all low-pressure applications. A preferred product in light oil production.



### FLUID SEAL

**TEMPERATURE RATING**  
250°F (125°C)

**MAX PRESSURE**  
2,000 PSI

**H2S: 4% | CO2: 8%**

**ABRASIVE RESISTANCE:**  
MINIMAL-MODERATE



**Super Orange VEE Packing** elevates your pumping experience. The innovative hybrid polymer is designed to enhance flexibility, speed, and reliability for producers. The center rings effortlessly create a tight seal under pressure, maximizing performance even in low-emission environments or under high pressures. Experience unprecedented efficiency in your operations. Super Orange is a low pressure design built to last under extreme loads.



### SUPER ORANGE

**TEMPERATURE RATING**  
257°F (125°C)

**MAX PRESSURE**  
8,500 PSI

**H2S: NO EFFECT | CO2: NO EFFECT**

**ABRASIVE RESISTANCE:**  
EXTREME



**Sour Seal VEE Packing** - With the increasing demand for higher performance polish rod packing required for greater H2S content and higher pressures, CPP has engineered SOUR SEAL. Designed to suit all polish rods and manufactured from the highest-quality, fully reinforced sour resistant materials, SOUR SEAL is the answer for sour service high-pressure well applications.



### SOUR SEAL

**TEMPERATURE RATING**  
325°F (163°C)

**MAX PRESSURE**  
10,000 PSI

**H2S: 25% | CO2: 10%**

**ABRASIVE RESISTANCE:**  
MINIMAL



**Sour Seal VEE Packing FKM**, an economical compound designed for applications requiring sealing in thermal flood production with higher fluid temperatures. This innovative packing solution offers a cost-effective alternative to higher-priced options, providing adequate sealing performance. Additionally, the EPDM cone packing included in this product ensures reliable sealing in moderate to higher water cut applications, while offering moderate abrasion resistance.



### SOUR SEAL FKM

**TEMPERATURE RATING**  
464°F (240°C)

**MAX PRESSURE**  
10,000 PSI

**H2S: 20% | CO2: 5%**

**ABRASIVE RESISTANCE:**  
MINIMAL





**Rainbow Ring Packing** is excellent in low gas-to-oil ratios and high water cut wells, performing well at 90+ percent water cut. Look to try our Rainbow Cone packing in all light fluids. Rainbow boasts a high tensile strength, making this a great packing for high -performance wells. Ideal for well -lubricated applications with continuous production. Look to try our Rainbow Cone packing in all light fluids.



### RAINBOW RING

**TEMPERATURE RATING**  
400°F (204°C)

**MAX PRESSURE**  
2,500 PSI

**H2S: 12% | CO2: 15%**

**ABRASIVE RESISTANCE:**  
MINIMAL



**Special Vee Packing** comes in all sizes and fits all OEM high-pressure equipment. It's specifically designed for high-pressure pumping applications. Special Vee is ideal for sweet to moderate sour environments. The multi-lip functioning design allows for expansion and contraction of sealing lips while pumping. This results in a longer life before change out.



### SPECIAL VEE

**TEMPERATURE RATING**  
250°F (125°C)

**MAX PRESSURE**  
10,000 PSI

**H2S: 8% | CO2: 15%**

**ABRASIVE RESISTANCE:**  
MINIMAL



**Steam Seal Ring Packing** is a high-performance material built to withstand extreme temperatures, pressure, and extended production cycles. It's designed to suit any polish rod. Steam Seal is manufactured from high-quality abrasive materials, specifically to disperse high heat, while maintaining a positive seal on break-in.



### STEAM SEAL RING

**TEMPERATURE RATING**  
572°F (300°C) Bursts over 350°C

**MAX PRESSURE**  
5,000 PSI

**H2S: 15% | CO2: 20%**

**ABRASIVE RESISTANCE:**  
HIGH-EXTREME



**Lappin Tech Ring Packing** is built with braided rope packing inserts for advanced sealing when polish rod conditions are marginal. Look to use LappinTech® when fluid lubrication is absent. Ideal for long, fast stroking wells with moderate to high water cuts. A high-performing product in salt water.



### LAPPIN TECH

**TEMPERATURE RATING**  
482°F (250°C)

**MAX PRESSURE**  
2,500 PSI

**H2S: 8% | CO2: 12%**

**ABRASIVE RESISTANCE:**  
LOW-MODERATE



**Kevlar Brass Ring Packing** is engineered for high concentrations of H2S & CO2 in all applications, including steam injection. Kevlar Brass is manufactured with fabric-reinforced contact points for long-lasting performance in heavy abrasives and viscous fluids. Kevlar Brass packing is said to be one of the best extreme service packings on today's market.



### KEVLAR BRASS

**TEMPERATURE RATING**  
653°F (345°C) Bursts over 550°C

**MAX PRESSURE**  
2,500 PSI

**H2S: 30% | CO2: 30%**

**ABRASIVE RESISTANCE:**  
HEAVY



### CROWN RING W/ GRAPHITE

**TEMPERATURE RATING**  
302°F (150°C)

**H2S: 15% | CO2: 20%**

**ABRASIVE RESISTANCE**  
HIGH



### CROWN RING W/ SOFT RUBBER

**TEMPERATURE RATING**  
302°F (150°C)

**H2S: 2% | CO2: 5%**

**ABRASIVE RESISTANCE**  
LOW



### CROWN RING W/ TFE FILLED

**TEMPERATURE RATING**  
302°F (150°C)

**H2S: 2% | CO2: 5%**

**ABRASIVE RESISTANCE**  
MEDIUM



## Gland Inserts

If you are looking to replace gland bushing inserts for your OEM stuffing boxes, CPP is your go-to solution. Our gland sets come in two pieces and are made with Delrin or Brass for superior performance and lubrication. Our components surpass OEM dimensions specifications ensuring top quality. For the most effective results, replace gland bushing when replacing packing sets. Choose CPP for reliable and long-lasting gland bushing inserts.



# Stuffing Box Configuration List

## FMC



### THERMAL

**PACKING CONFIGURATION:****OPTION 1:**

Upper - 1 BTM Cone | 4 Top Cones

Lower - 1 Set - PR X 2-1/4" X 3" Ring Packing

**OPTION 2:**

Upper - PR X 2.25" X 3" Ring Packing

Lower - PR X 2.25" X 3" Ring Packing

**ALTERNATIVE: PACKING:**

Options Available

Contact CPP for technical support

## NEGLAR



### ROD KNUCKLE

**PACKING CONFIGURATION:**

Upper - 1 set - PR X 2-1/4" X 3" Ring Packing

Lower - 1 set - PR X 2-1/4" X 3" Ring Packing

**ALTERNATIVE: PACKING:**

Options Available

Contact CPP for technical support

## DOMINO



### NACE/SINGLE

**PACKING CONFIGURATION:**

1 set - PR X 2-1/4" X 3" Fluid Seal Packing

**ALTERNATIVE: PACKING:**

Options Available

Contact CPP for technical support

## WIDGET DESIGN



### SB-10

**PACKING CONFIGURATION:**

6 Ring set - PR X 2-1/4" x 4-1/2" Ring Packing

**ALTERNATIVE: PACKING:**

Options Available

Contact CPP for technical support

## PRODUCTION SAFETY SUPPLY

**PACKING CONFIGURATION:**

1 Set - PR X 2-1/4" X 4" Ring Packing

**ALTERNATIVE: PACKING:**

Options Available

Contact CPP for technical support

## DOUBLE E



### STANDARD

**PACKING CONFIGURATION:**

PR X 2-1/8" X 2-1/2" Rubber Vee Packing

**ALTERNATIVE: PACKING:**

Limited Options Available

Contact CPP for technical support

### H2S SERVICE

**PACKING CONFIGURATION:**

PR X 2-1/8" X 2-1/2" Sour Service Vee Packing

**ALTERNATIVE: PACKING:**

Limited Options Available

Contact CPP for technical support



## RED WING



### SUPER B7

**PACKING CONFIGURATION:**

Upper - 1 set -

PR X 2-1/4" X 3" High Pressure Vee Packing

Lower - 1 set -

PR X 2-1/4" X 4-1/2" High Pressure Vee Packing

**ALTERNATIVE: PACKING:**

Options Available

Contact CPP for technical support

## RED M

**PACKING CONFIGURATION:**

1 set -

PR X 2-1/4" X 4" High Pressure Vee Packing

**ALTERNATIVE: PACKING:**

Options Available

Contact CPP for technical support

## TECH WEST



### HALTER SINGLE

**PACKING CONFIGURATION:**

3 rings - PR X 2-1/4" Ring Packing

**ALTERNATIVE: PACKING:**

Options Available

Contact CPP for technical support

### THERMAL SINGLE

**PACKING CONFIGURATION:**

4 rings - PR X 2-1/4" Thermal Ring Packing

**ALTERNATIVE: PACKING:**

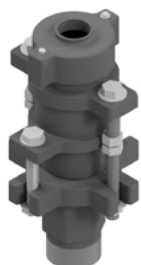
Options Available

Contact CPP for technical support



# Stuffing Box Configuration List

## WNS LOWERY



### SINGLE

#### PACKING CONFIGURATION:

1 BTM Cone | 3 Top Cones  
Night Cap - 1 Top Cone

#### ALTERNATIVE: PACKING:

Options Available  
Contact CPP for technical support



### DUAL

#### PACKING CONFIGURATION:

Lower 1 BTM Cone | 1 Top Cone  
Middle 1 BTM Cone | 3 Top Cones  
Night Cap - 1 Top or BTM Cone

#### ALTERNATIVE: PACKING:

Options Available  
Contact CPP for technical support



### TEE BASE

#### PACKING CONFIGURATION:

Night Cap - 1 Top Cone  
Lower - 1 BTM Cone | 3 Top Cones

#### ALTERNATIVE: PACKING:

Options Available  
Contact CPP for technical support



### BIG BOY SERIES

#### PACKING CONFIGURATION:

Upper - 3 Dome Packing Rings  
Lower - 2 Top Cones

#### ALTERNATIVE: PACKING:

Options Available  
Contact CPP for technical support



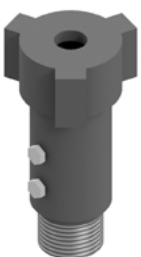
### PC - BIG BOY

#### PACKING CONFIGURATION:

Upper -  
PR X 2-1/2" X 3" High Pressure Vee Packing  
Middle - 3 Dome Packing Rings  
Lower - 2 Top Cones

#### ALTERNATIVE: PACKING:

Options Available  
Contact CPP for technical support



### HYBRID FLAPPER

#### PACKING CONFIGURATION:

Upper -  
PR X 2-1/2" X 3" High Pressure Vee Packing  
Lower - 3 Dome Packing Rings

#### ALTERNATIVE: PACKING:

Options Available  
Contact CPP for technical support

## SKINNER



### SINGLE

#### PACKING CONFIGURATION:

1 BTM Cone | 3 Top Cones  
Night Cap - 1 Top Cone

#### ALTERNATIVE: PACKING:

Options Available  
Contact CPP for technical support



### DUAL

#### PACKING CONFIGURATION:

Lower - 1 BTM Cone | 1 Top Cone  
Middle - 1 BTM Cone | 3 Top Cones  
Night Cap - 1 Top or BTM Cone

#### ALTERNATIVE: PACKING:

Options Available  
Contact CPP for technical support



### TEE BASE

#### PACKING CONFIGURATION:

Night Cap - 1 Top Cone  
Lower - 1 BTM Cone | 3 Top Cones

#### ALTERNATIVE: PACKING:

Options Available  
Contact CPP for technical support



### X SINGLE

#### PACKING CONFIGURATION:

PR x 2-1/2" x 1" Crown Rings

#### ALTERNATIVE: PACKING:

Options Available  
Contact CPP for technical support



### X CROSS TWIN

#### PACKING CONFIGURATION:

Type "B" Packing

#### ALTERNATIVE: PACKING:

Options Available  
Contact CPP for technical support



### JACK - REGULAR THREAD

#### PACKING CONFIGURATION:

PR x 2-1/2" Crown Rings

#### ALTERNATIVE: PACKING:

Options Available  
Contact CPP for technical support



# Stuffing Box Configuration List

## NOV



### SINGLE

**PACKING CONFIGURATION:**

1 BTM Cone | 3 Top Cone  
Night Cap - 1 Top Cone

**ALTERNATIVE: PACKING:**

Options Available  
Contact CPP for technical support



### DOUBLE PACK

**PACKING CONFIGURATION:**

Lower 1 BTM Cone | 1 Top Cone  
Middle 1 BTM Cone | 3 Top Cones  
Night Cap - 1 Top or BTM Cone

**ALTERNATIVE: PACKING:**

Options Available  
Contact CPP for technical support



### BIG STUFF

**PACKING CONFIGURATION:**

1 BTM Cone | 3 Top Cones (Inverted)

**ALTERNATIVE: PACKING:**

Options Available  
Contact CPP for technical support



### BIG STUFF (DPSB)

**PACKING CONFIGURATION:**

Upper - 1 BTM Cone | 3 Top Cones (Inverted)  
Lower - 2 Top Cones

**ALTERNATIVE: PACKING:**

Options Available  
Contact CPP for technical support



### NACE BIG STUFF

**PACKING CONFIGURATION:**

1 Bottom Cone | 3 Top Cones (Inverted)

**ALTERNATIVE: PACKING:**

Options Available  
Contact CPP for technical support



### NACE BIG STUFF (DPSB)

**PACKING CONFIGURATION:**

Upper - 1 BTM Cone | 3 Top Cones (Inverted)  
Lower - 2 Top Cones

**ALTERNATIVE: PACKING:**

Options Available  
Contact CPP for technical support



### CLASSIC POLLUTION CONTROL (PCSB)

**PACKING CONFIGURATION:**

Upper -  
1 Set Rubber Vee Packing PR X 2-1/2" X 3"  
Middle - 1 BTM Cone | 3 Top Cone  
Lower -  
2 Top Cones or 1 BTM Cone | 1 Top Cone

**ALTERNATIVE: PACKING:**

Options Available  
Contact CPP for technical support



### NACE BIG STUFF (PCSB)

**PACKING CONFIGURATION:**

Upper - 1 BTM Cone | 3 Top Cones  
Middle - 1 BTM Cone | 3 Top Cones  
Lower - 2 Top Cones or 1 BTM Cone | 1 Top Cone

**ALTERNATIVE: PACKING:**

Options Available  
Contact CPP for technical support



### Hercules HP Flapperball

**PACKING CONFIGURATION:**

Upper - PR X 2.25" X 3" Ring Packing  
Lower - 1 BTM Cone | 1 Top cone

**ALTERNATIVE: PACKING:**

Options Available  
Contact CPP for technical support

## RATIGAN



### NO. 176

**PACKING CONFIGURATION:**

2 Ratigan Packing Elements

**ALTERNATIVE: PACKING:**

Limited Options Available  
Contact CPP for technical support



### NO. 175

**PACKING CONFIGURATION:**

2 Ratigan Packing Elements

**ALTERNATIVE: PACKING:**

Limited Options Available  
Contact CPP for technical support





# Stuffing Box Configuration List

## HARBISON FISCHER



### HIGH TEMP/HIGH PRESSURE

#### PACKING CONFIGURATION:

Upper - PR X 2-1/4" X 2-1/2" High Temp Packing  
Lower - PR X 2-1/4" X 2-1/2" High Temp Packing

#### ALTERNATIVE: PACKING:

Options Available  
Contact CPP for technical support



### DL - SERIES

#### PACKING CONFIGURATION:

PR X 2-1/4" X 2-1/2" Fluid Seal Packing

#### ALTERNATIVE: PACKING:

Options Available  
Contact CPP for technical support



### L - SERIES

#### PACKING CONFIGURATION:

PR X 2-1/4" X 2-1/2" Fluid Seal Packing

#### ALTERNATIVE: PACKING:

Options Available  
Contact CPP for technical support



### POLLUTION CONTROL

#### PACKING CONFIGURATION:

Upper - PR X 2-1/4" X 2-1/2" Fluid Seal Packing  
Lower - PR X 2-1/4" X 2-1/2" Fluid Seal Packing

#### ALTERNATIVE: PACKING:

Options Available  
Contact CPP for technical support



### PRO ALIGN

#### PACKING CONFIGURATION:

Upper - PR X 2-1/4" X 2-1/2" Vee Packing  
Lower - 1 BTM Cone | 3 Tops Cones

#### ALTERNATIVE: PACKING:

Options Available  
Contact CPP for technical support



### QUICK SEAL

#### PACKING CONFIGURATION:

Upper - PR X 2-1/4" X 3" Vee Packing  
Lower - 1 BTM Cone | 3 Tops Cones

#### ALTERNATIVE: PACKING:

Options Available  
Contact CPP for technical support

## MOST



### CLASSIC

#### PACKING CONFIGURATION:

Upper - PR X 2-1/4" X 2-1/2" High Temp Packing  
Lower - PR X 2-1/4" X 2-1/2" High Temp Packing

#### ALTERNATIVE: PACKING:

Options Available  
Contact CPP for technical support



### CLASSIC DUAL

#### PACKING CONFIGURATION:

PR X 2-1/4" X 2-1/2" Fluid Seal Packing

#### ALTERNATIVE: PACKING:

Options Available  
Contact CPP for technical support



### POLLUTION CONTROL

#### PACKING CONFIGURATION:

PR X 2-1/4" X 2-1/2" Fluid Seal Packing

#### ALTERNATIVE: PACKING:

Options Available  
Contact CPP for technical support



### HIGH PRESSURE

#### PACKING CONFIGURATION:

Upper - PR X 2-1/4" X 2-1/2" Vee Packing  
Lower - 1 BTM Cone | 3 Tops Cones

#### ALTERNATIVE: PACKING:

Options Available  
Contact CPP for technical support

## GRIZZLY



### GESB

#### PACKING CONFIGURATION:

1 set - PR X 2-1/4" X 3" High Pressure Vee Packing

#### ALTERNATIVE: PACKING:

Options Available  
Contact CPP for technical support

# Stuffing Box Configuration List

## SPM WEIR



### W-IVSB

**PACKING CONFIGURATION:**  
1 BTM Cone | 3 Top Cones

**ALTERNATIVE: PACKING:**  
Options Available  
Contact CPP for technical support



### W-IVSBT

**PACKING CONFIGURATION:**  
1 BTM Cone | 3 Top Cones

**ALTERNATIVE: PACKING:**  
Options Available  
Contact CPP for technical support



### W-SB CLASSIC

**PACKING CONFIGURATION:**  
1 BTM Cone | 3 Top Cone  
Night Cap - 1 Top Cone

**ALTERNATIVE: PACKING:**  
Options Available  
Contact CPP for technical support



### W-SBT TEE

**PACKING CONFIGURATION:**  
Night Cap - 1 Top Cone  
Lower - 1 BTM Cone | 3 Top Cones

**ALTERNATIVE: PACKING:**  
Options Available  
Contact CPP for technical support



### W-DPSB DOUBLE PACK

**PACKING CONFIGURATION:**  
Lower - 1 BTM Cone | 1 Top Cone  
Middle - 1 BTM Cone | 3 Top Cones  
Night cap - 1 Top or BTM Cone

**ALTERNATIVE: PACKING:**  
Options Available  
Contact CPP for technical support



### W-IVDPSB INVERTED DOUBLE PACK

**PACKING CONFIGURATION:**  
Upper - 1 BTM Cone | 3 Top Cones  
Lower - 1 Top Cone

**ALTERNATIVE: PACKING:**  
Options Available  
Contact CPP for technical support

## W-BSDP BIG SHOT DOUBLE



**PACKING CONFIGURATION:**  
Upper - 1 BTM Cone | 3 Top Cones  
Lower - 1 Top Cone

**ALTERNATIVE: PACKING:**  
Options Available  
Contact CPP for technical support



### W-PCDP POLLUTION CONTROL DUAL PACK

**PACKING CONFIGURATION:**  
Upper -  
1 Set Rubber Vee Packing PR X 2-1/2" X 3"  
Middle - 1 BTM Cone | 3 Top Cones  
Lower - 2 Top Cones or 1 BTM Cone | 1 Top Cone

**ALTERNATIVE: PACKING:**  
Options Available  
Contact CPP for technical support



### HIGH TEMPERATURE

**PACKING CONFIGURATION:**  
Upper -  
PR X 2-1/4" X 3" High Temp Ring Packing  
Lower -  
PR X 2-1/4" X 3" High Temp Ring Packing

**ALTERNATIVE: PACKING:**  
Options Available  
Contact CPP for technical support

## WSI



### BSSP

**PACKING CONFIGURATION:**  
1 BTM Cone | 3 Top Cones  
**ALTERNATIVE: PACKING:**  
Options Available  
Contact CPP for technical support



### BSTB

**PACKING CONFIGURATION:**  
2 BTM Cone | 3 Top Cones  
**ALTERNATIVE: PACKING:**  
Options Available  
Contact CPP for technical support



### BSDP

**PACKING CONFIGURATION:**  
1 BTM Cone | 5 Top Cones  
**ALTERNATIVE: PACKING:**  
Options Available  
Contact CPP for technical support

# Stuffing Box Configuration List

## WSI (CON'T)



### PCDP

#### PACKING CONFIGURATION:

Upper -  
PR X 2-1/2" X 3" High Pressure Vee Packing  
Lower - 1 BTM Cone / 5 Top Cones

#### ALTERNATIVE: PACKING:

Options Available  
Contact CPP for technical support



### DPSB

#### PACKING CONFIGURATION:

Upper - Lower 1 BTM Cone / 1 Top Cone  
Middle - 1 BTM 3 Top Cones  
Night Cap - 1 Top or BTM Cone

#### ALTERNATIVE: PACKING:

Options Available  
Contact CPP for technical support



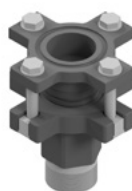
### PCDP - 5K

#### PACKING CONFIGURATION:

Upper -  
PR X 2-1/2" X 3" High Pressure Vee Packing  
Lower - 3 Dome Packing

#### ALTERNATIVE: PACKING:

Options Available  
Contact CPP for technical support



### IVSB

#### PACKING CONFIGURATION:

Inverted 1 BTM Cone / 3 Top Cones

#### ALTERNATIVE: PACKING:

Options Available  
Contact CPP for technical support



### BSPCDP

#### PACKING CONFIGURATION:

Upper -  
PR X 2-1/2" X 3" High Pressure Vee Packing  
Lower - 1 BTM Cone / 5 Top Cones

#### ALTERNATIVE: PACKING:

Options Available  
Contact CPP for technical support



### IVTBSB

#### PACKING CONFIGURATION:

Inverted 2 BTM Cone / 3 Top Cones

#### ALTERNATIVE: PACKING:

Options Available  
Contact CPP for technical support



### BSPCDP - 5K

#### PACKING CONFIGURATION:

Upper -  
PR X 2-1/2" X 3" High Pressure Vee Packing  
Lower - 3 Dome Packing

#### ALTERNATIVE: PACKING:

Options Available  
Contact CPP for technical support



### IVDPSB

#### PACKING CONFIGURATION:

Inverted 1 BTM Cone / 5 Top Cones

#### ALTERNATIVE: PACKING:

Options Available  
Contact CPP for technical support



### SPSB

#### PACKING CONFIGURATION:

1 BTM Cone / 4 Top Cones

#### ALTERNATIVE: PACKING:

Options Available  
Contact CPP for technical support



### JSB

#### PACKING CONFIGURATION:

PR x 2-1/2" x 5" Crown Rings

#### ALTERNATIVE: PACKING:

Options Available  
Contact CPP for technical support



### TBSB

#### PACKING CONFIGURATION:

2 BTM Cone / 4 Top Cones

#### ALTERNATIVE: PACKING:

Options Available  
Contact CPP for technical support



### WSB

#### PACKING CONFIGURATION:

PR X 2-1/2" X 3" Crown Rings

#### ALTERNATIVE: PACKING:

Options Available  
Contact CPP for technical support

# Cone Packing Material Data

Packing Material	Performance in Stream	Max Temp (°F/°C)		Max Pressure	Max H2S	Max CO2	Water Cut Sealability	Abrasion Resistance	Sealability	Coefficient of Friction
Gold Flake	POOR	202	94	2,500 PSI	5%	2%	GOOD	MODERATE TO HEAVY	GOOD	0.14 - 0.09
Gold Flake +	GOOD	302	150	2,500 PSI	5%	10%	GOOD	MODERATE TO HEAVY	GOOD	0.14 - 0.10
Super Gold	POOR	202	94	2,500 PSI	5%	2%	GOOD	MODERATE TO HEAVY	GOOD	0.14 - 0.09
Super Gold +	GOOD	302	150	2,500 PSI	5%	10%	GOOD	MODERATE TO HEAVY	GOOD	0.14 - 0.10
Kevlar Brass	EXCELLENT	653	345	5,000 PSI	30%	30%	POOR	HEAVY	GOOD	0.3 - 0.5
Fluid Lip	POOR	302	150	5,000 PSI	15%	20%	GOOD	HIGH TO EXTREME	EXCELLENT	0.12 - 0.13
Soft Rubber	N/A	202	94	2,500 PSI	5%	2%	EXCELLENT	LOW	EXCELLENT	0.7 - 0.8
Soft Rubber +	MODERATE	302	150	2,500 PSI	2%	10%	EXCELLENT	LOW	EXCELLENT	0.7 - 0.8
EPDM	GOOD	425	218	2,500 PSI	5%	NA	GOOD	MODERATE	GOOD	0.98
Hard Rubber	MODERATE	202	94	2,500 PSI	6%	2%	POOR	HEAVY	GOOD	0.67 - 0.7
HSN (HNBR)	VERY GOOD	329	165	2,500 PSI	10%	20%	GOOD	MODERATE	EXCELLENT	0.65 - 0.89
Super Orange	N/A	257	125	5,000 PSI	NO EFFECT	NO EFFECT	GOOD TO EXCELLENT	MODERATE TO HEAVY	EXCELLENT	0.4 - 0.5
Rainbow	POOR	400	204	2,500 PSI	12%	15%	EXCELLENT	MINIMAL	EXCELLENT	0.64 - 0.7
Urethane	N/A	230	110	5,000 PSI	10%	8%	POOR	HEAVY TO EXTREME	POOR	0.59 - 0.68
Special Lube	N/A	302	150	2,500 PSI	5%	10%	POOR	MINIMAL	GOOD	0.3
Creamsicle	N/A	257	125	5,000 PSI	NO EFFECT	NO EFFECT	EXCELLENT	LOW-MODERATE	EXCELLENT	0.4 - 0.5
Teflon	N/A	202	94	2,500 PSI	5%	5%	GOOD	MINIMAL	GOOD	0.4 - 0.6
Teflon 85	N/A	302	150	2,500 PSI	5%	10%	POOR	MODERATE	GOOD	0.4 - 0.6
Cube	N/A	302	150	2,500 PSI	10%	15%	GOOD	HEAVY-EXTREME	MODERATE	0.8
Lappin Tech	MODERATE	482	250	2,500 PSI	7%	11%	EXCELLENT	LOW TO MODERATE	MODERATE	0.9
Steam Seal	EXCELLENT	572	300	5,000 PSI	15%	20%	MODERATE	HIGH TO EXTREME	EXCELLENT	0.51 - 0.65
Completion King	N/A	302	150	2,500 PSI	10%	15%	EXCELLENT	EXTREME	GOOD	0.6
Donut Cone	N/A	202	94	2,500 PSI	5%	2%	GOOD	MODERATE	EXCELLENT	0.89
Donut Cone - Sour Service	VERY GOOD	329	165	2,500 PSI	10%	20%	GOOD	MODERATE	EXCELLENT	0.65 - 0.68



## Ratigan Stuffing Box Rubber Material Data

PACKING MATERIAL	PERFORMANCE IN STREAM	MAX TEMP (°F/°C)		MAX PRESSURE	MAX H2S	MAX CO2	WATER CUT SEALABILITY	ABRASION RESISTANCE	SEALABILITY	COEFFICIENT OF FRICTION
Gold Flake	GOOD	302	150	2,500 PSI	5%	5%	GOOD	LOW-MODERATE	GOOD	0.14
Graphite	GOOD	302	150	2,500 PSI	5%	5%	GOOD	LOW-MODERATE	MEDIUM	0.55
NBR	MODERATE	302	150	2,500 PSI	2%	5%	GOOD	LOW-MODERATE	EXCELLENT	0.7
Teflon	N/A	176	80	2,500 PSI	2%	5%	GOOD	LOW-MODERATE	GOOD	0.15
HNBR	VERY GOOD	329	165	2,500 PSI	10%	20%	GOOD	LOW-MODERATE	EXCELLENT	0.7

## Donut Packing Material Data

PACKING MATERIAL	PERFORMANCE IN STREAM	MAX TEMP (°F/°C)		MAX PRESSURE	MAX H2S	MAX CO2	WATER CUT SEALABILITY	ABRASION RESISTANCE	SEALABILITY	COEFFICIENT OF FRICTION
Donut Packing NBR	N/A	230	110	5,000 PSI	2%	5%	GOOD	MODERATE	EXCELLENT	0.64 TO 0.67
Donut Packing HNBR	VERY GOOD	329	165	5,000 PSI	10%	20%	GOOD	MODERATE	EXCELLENT	0.65 TO 0.68
Donut Packing AFLAS	EXCELLENT	450	232	5,000 PSI	35%	15%	EXCELLENT	MODERATE	EXCELLENT	0.7
Donut Packing Super Orange	N/A	257	125	5,000 PSI	NO EFFECT	NO EFFECT	EXCELLENT	HEAVY TO EXTREME	EXCELLENT	0.4 TO 0.5

## Slim Hole Packing Material Data

PACKING MATERIAL	PERFORMANCE IN STREAM	MAX TEMP (°F/°C)		MAX PRESSURE	MAX H2S	MAX CO2	WATER CUT SEALABILITY	ABRASION RESISTANCE	SEALABILITY	COEFFICIENT OF FRICTION
Fluid Seal - Vee Packing	N/A	250	125	2,000 PSI	4%	8%	LOW	MINIMAL-MODERATE	GOOD	0.7
Super Orange - Vee Packing	N/A	257	125	8,500 PSI	NO EFFECT	NO EFFECT	GOOD TO EXCELLENT	EXTREME	GOOD	0.4-0.5
Sour Seal - Vee Packing	EXCELLENT	325	163	10,000 PSI	25%	10%	EXCELLENT	MINIMAL	EXCELLENT	0.7
Sour Seal FKM - Vee Packing	MODERATE	464	240	10,000 PSI	20%	5%	EXCELLENT	MINIMAL	EXCELLENT	0.62
Rainbow Ring Packing	POOR	400	204	2,500 PSI	12%	15%	EXCELLENT	MINIMAL	EXCELLENT	0.64
Special Vee - Vee Packing	POOR	250	125	10,000 PSI	8%	15%	EXCELLENT	MINIMAL	EXCELLENT	0.8
Steam Seal Ring Packing	EXCELLENT	572	300	5,000 PSI	15%	20%	EXCELLENT	HIGH-EXTREME	EXCELLENT	0.6
Lappin Tech Ring Packing	EXCELLENT	482	250	2500 PSI	8%	12%	EXCELLENT	LOW-MODERATE	EXCELLENT	0.7
Kevlar Brass Ring Packing	EXCELLENT	653	345	2500 PSI	30%	30%	MODERATE	HEAVY	MEDIUM	0.51-0.65
Crown Ring Packing - w/Graphite	N/A	302	150	2500 PSI	15%	20%	GOOD	HIGH	MEDIUM	0.55
Crown Ring Packing - w/soft rubber	N/A	302	150	2500 PSI	2%	5%	EXCELLENT	LOW	EXCELLENT	0.7
Crown Ring Packing - w/tfe filled	N/A	302	150	2500 PSI	2%	2%	GOOD	MEDIUM	GOOD	0.2



# Ratigan Ram Rubber Material Data

PACKING MATERIAL	MAX TEMP (°F/°C)		MAX PRESSURE	MAX H2S	MAX CO2	ABRASIVE RESISTANCE
NBR	250	125	MODERATE	2%	5%	MODERATE
SILICON	425	218	LOW-MODERATE	NOT TESTED	NOT TESTED	MODERATE-HIGH
HSN	330	165	MODERATE	10%	20%	MODERATE
AFLAS	450	232	MODERATE-HIGH	35%	15%	MODERATE-HIGH

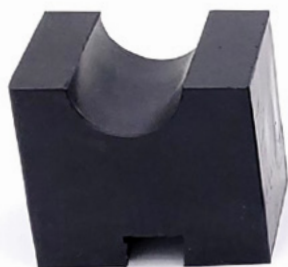
# Ram Seal Material Data

PACKING MATERIAL	MAX TEMP (°F/°C)		MAX PRESSURE	MAX H2S	MAX CO2	ABRASIVE RESISTANCE
NBR	250	125	MODERATE	2%	5%	MODERATE
SILICON	425	218	LOW-MODERATE	NOT TESTED	NOT TESTED	MODERATE-HIGH
HSN	330	165	MODERATE	10%	20%	MODERATE
AFLAS	450	232	MODERATE-HIGH	35%	15%	MODERATE-HIGH

# BOP / Ram Repair Kits

## Ratigan Ram Rubbers

CPP offers 150 Series Ratigan Style BOP Rams for all polish rod and sucker rod sizes and compounds for both low and high-pressure wells. This includes sour, sweet, and high temp production conditions. All replacement BOP ram rubbers are built to OEM specifications. In addition, CPP takes great care with 100 percent quality control, checking all pressure control consumables one by one.



NBR	SILICON	HSN	AFLAS
TEMPERATURE RATING 250°F (125°C)	TEMPERATURE RATING -20°F (-29°C) - 425°F (218°C)	TEMPERATURE RATING 330°F (165°C)	TEMPERATURE RATING 450°F (232°C)
MAX PRESSURE MODERATE	MAX PRESSURE LOW-MODERATE	MAX PRESSURE MODERATE	MAX PRESSURE MODERATE-HIGH
H2S: 2%   CO2: 5%	H2S   CO2: NOT TESTED	H2S: 10%   CO2: 20%	H2S: 35%   CO2: 15%

## OUR BRAND PROMISE

COMMUNICATING **WITH VALUE**  
DELIVERING **WITH SPEED**  
CREATING **TIME FOR YOU**

### Ram Seals

At CPP, we pride ourselves on our technical expertise in custom molding technologies. Our artificial lift sealing solutions are designed to bring long-term performance to producers worldwide, with quick turnaround times and field-level solutions for both new designs and existing tolling. Don't let high-pressure or extreme-temperature sealing failure hold you back. Contact CPP today to "seal" the deal on better production!



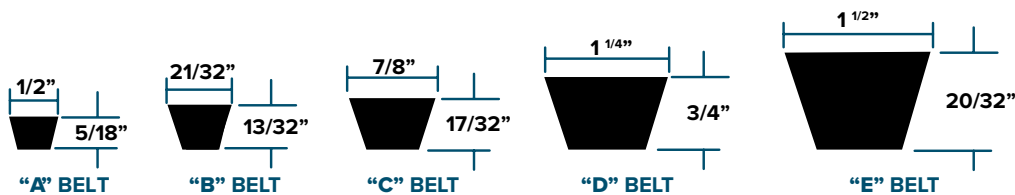
# Progressing Cavity Pumping System

## Belts

CPP Distribution is expanding into new product lines to better service our customers. Our goal is to provide strong distribution points for premium brands, all under one roof. The addition of Nirlon® belts will do just that—a trusted brand for all artificial lift needs. Whether it be Classic V belts, Wedge, Hexagonal, FHP/M, Wrapped, Raw Edge, Automotive and or variable speed, CPP Distribution has our customers covered. The Nirlon® belt meets and exceeds all industry standards including ISi and ARPM Engineering Standard. For specific belt information, contact CPP today. Our staff will be more than happy to provide specific information.



 **Nirlon**



### CONVERT V-BELT PART NUMBER TO OUTSIDE CIRCUMFERENCE

A Section = Add 2" to belt number  
(Example A88 = 90" Outside Circumference)

B Section = Add 3" to belt number; larger than 210 add 1"  
(Example B88 = 91" Outside Circumference, B212 = 213" Outside Circumference)

C Section = Add 4" to belt number; larger than 210 add 2"  
(Example C88 = 92" Outside Circumference; C212 = 214" Outside Circumference)

D Section = Add 5" to belt number; larger than 210 add 3"  
(Example D105=110" Outside Circumference, D212=215" Outside Circumference)

E Section = Add 6" to belt number; larger than 210 add 4"  
(Example E144=150" Outside Circumference, E220=224 Outside Circumference)



# Rotating Stuffing Box Packing



KEVLAR	GFO	KGF	PE1000	TFE
<b>TEMPERATURE RATING</b> -10°F (-23°C) - 500°F (260°C)	<b>TEMPERATURE RATING</b> -400°F (-240°C) - 550°F (288°C)	<b>TEMPERATURE RATING</b> -10°F (-23°C) - 500°F (260°C)	<b>TEMPERATURE RATING</b> -400°F (-240°C) - 550°F (280°C)	<b>TEMPERATURE RATING</b> -400°F (-240°C) - 500°F (260°C)
<b>PRESSURE LIMIT:</b> 500 PSI (3000 PSI in plunger pumps)	<b>PRESSURE LIMIT:</b> 300 PSI	<b>PRESSURE LIMIT:</b> 700 PSI (2500 PSI in plunger pumps)	<b>PRESSURE LIMIT:</b> 800 PSI (5000 PSI in plunger pumps)	<b>PRESSURE LIMIT:</b> 250 PSI - 2,00PSI (Dependant on style)
<b>PH:</b> 3-11	<b>PH:</b> 0-14	<b>PH:</b> 3-11	<b>PH:</b> 1-13	<b>PH:</b> 0-14



# Seals / Repair Kits



# Alternative ALS System

## Plunger Lift

**SEAT-RITE**



**THERMAL HIGH  
TEMP (THT)**



**HIGH TEMP  
COMPOSITE**



**NYLON**



**SUPER  
ORANGE**



**HIGH TEMP  
NYLON**

**COMPOSITE**

**PEEK**

**EXT**

## Gas Lift

The importance of design performance has grounded our mandrel packings. CPP offers a wide range of Vee packing profiles made from both generic compounds as well as our Super Orange materials. CPP maintains a focus on tight tolerance precision, providing our gas lift clients excellence both at the OEM and aftermarket levels. Our commitment has been and will always be repeatable tolerances, repeatable profiles, and customer service that sells. Call CPP today for more information on how we can improve your equipment.



# Tools



**SURGRIP Friction Vise**



**SURGRIP Friction Tongs**



**SURGRIP Friction Tongs  
w/Chains**



**Pump Support**



**Tool Stand**



**SURGRIP Friction Tongs  
(for Rod Box/Couplings)**



**Packing Pullers**



**Pump Wrap  
Bone Wrap**



**Lubricator Wicks**

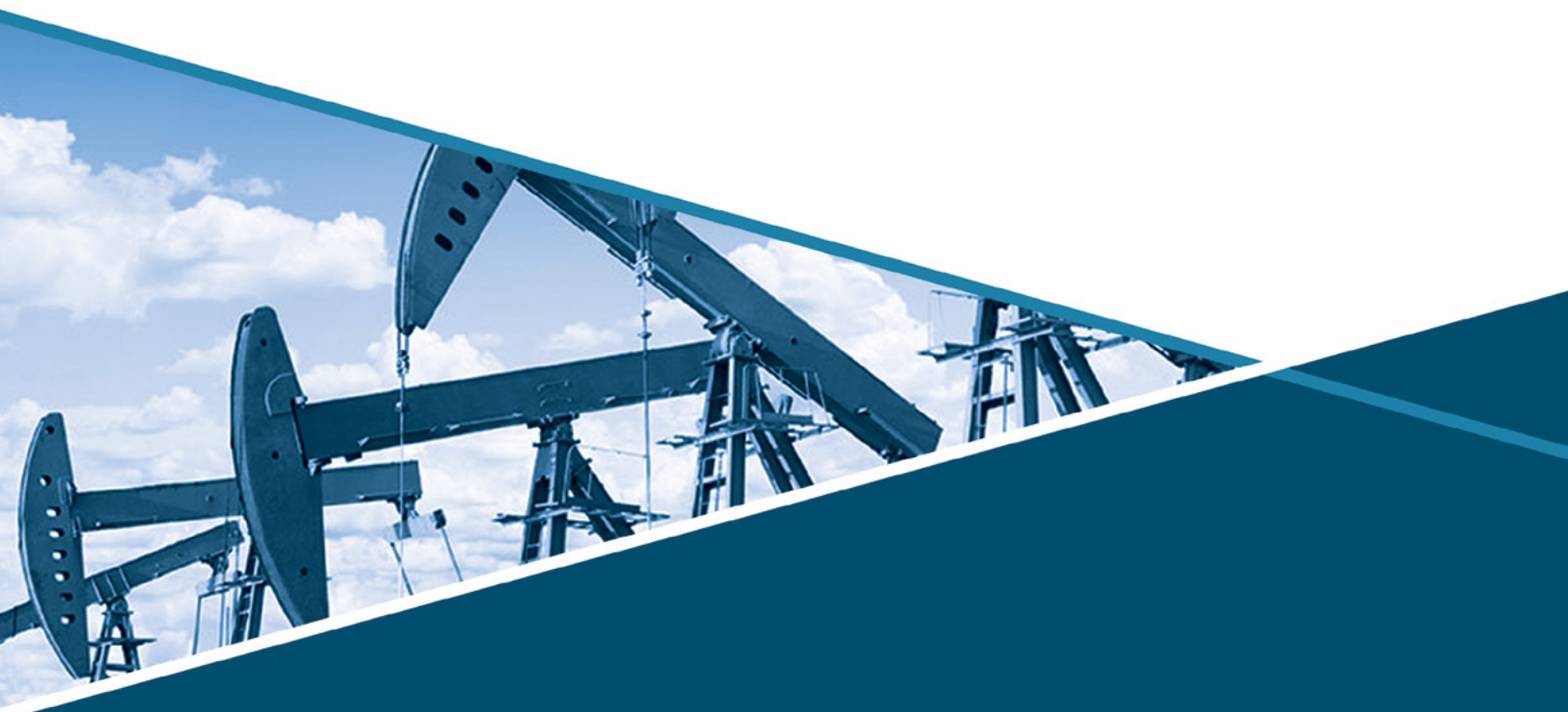
# Notes



# Notes

# Notes

Connecting People With Product



**CPP**  
DISTRIBUTION



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