

# **HOSE & HOSE PROTECION**



GAUGES

PIPE FITTINGS/ VALVES

HOSES

SHEET RUBBER

# **TERMS OF SALE**

#### TERMS:

1/2% 10 Days, net 30 Days

#### FREIGHT:

All shipments are made FOB Seal Fast Inc. or Point of Manufacturer. (Applies to shipments from Houston Warehouse Only) Freight prepaid on 1000 net couplings and accessories, \$1500 Net Couplings, PVC Tubing, Braided Tubing and Fire Hose. Freight prepaid on \$3000 Net Couplings, Rubber Hose, PVC Hose and Sheet Rubber with the exclusion of all PVC Suction including 6" and 8" PVC Suction ONLY orders. If combined with other items freight is prepaid at \$3000 Net, otherwise these items will Not be applied toward prepaid freight. Effective immediately, regardless of invoice value, all uncoupled cut lengths of hoses are shipped FOB Seal Fast Inc. Seal Fast Inc. reserves the right to determine the most Economical shipping method on all prepaid shipments. In addition, Seal Fast Inc. reserves the right to refuse any prepaid shipments exceeding 6% freight cost of the order unless items are added or subtracted to keep said freight cost at or below 6%. Applies to Continental United States, excluding Alaska and Hawaii. Any evidence of shortage must be reported to Seal Fast Inc. within 10 days. Any Damage to hose/hoses, etc. customer is responsible for filing a claim with the delivery carrier within 10 days. Seal Fast Inc. will not issue credit.

ALL UPS prepay and add or collect shipments will endure a \$7.50 shipping and handling fee including All backorders. All drop shipments will endure a \$5.00 fee.

#### WARRANTY:

Products are warranted against defects in workmanship and defects in material. Products having such defects will be replaced or credited as Seal Fast elects. Liability is limited to the invoice value of the defective item. Our responsibility shall not exceed the original purchase price of the defective product. In any event, Seal Fast, Inc. shall not be held responsible for any special or consequential damages.

#### **RETURNED GOODS:**

If for any reason you wish to return goods, please contact Seal Fast Inc. for prior authorization number. Goods must be returned within 30 days and must be in new and resaleable condition. Minimum handling charge is 15%.

All discrepancies in shipment / invoice must be reported within 10 days of receipt of goods.

#### PROMPTPAYMENT:

Orders receive preferred treatment when the account is paid promptly. Orders may be held up if any unpaid invoice exceeds 30 days.

#### MINIMUM INVOICE:

All invoices are subject to a minimum billing charge of 50.00 net. Returned checks are subject to a \$25.00 service charge.

#### **GENERAL:**

Orders will be accepted subject to delays caused by accident, strike, fire or other causes beyond the control of the seller including failure of seller's suppliers to deliver. Prices, discounts and other specifications are subject to change without notice. All prices are subject to any applicable taxes imposed. The possessions of this price schedule is not to be construed as an offer to sell at the prices shown. Special price for volume quotes will be accepted in writing only.

#### **PLEASE NOTE:**

Extra care is taken in the preparation of this literature but Seal Fast, Inc. is not responsible for any inadvertent typographical errors or omissions.

# STOCKING WAREHOUSES

SEAL FAST, INC. 5603 Harvey Wilson Dr. Houston, TX 77020

(713) 675-6324 or 800-231-0734 | FAX (713) 675-0146 or 800-681-1515 | E-mail sales@sealfast.com

PORTER ASSOCIATES

1150 Boot Road Unit 1 Downingtown, PA 19335 (610) 518-2301

**ASPEN MARKETING, INC** 5160 Fox Street Denver, CO 80216

(303) 455-8175 (303) 477-6504 Fax THE WAGNER GROUP 125 State St.

P O Box 1683 Elkhart, IN 46516

(574) 294-2769 (574) 522-2083 Fax

# **DISCLAIMERS**

# **Product Images**

- Seal Fast makes every reasonable effort to show accurate product representation, however pictures are for reference only, and do not necessarily reflect the exact product you will receive.
- Seal Fast reserves the right to alter product appearance without notice. Some product features shown in pictures may no longer be available.

# **Product Specifications**

- Seal Fast is continuously working to provide the best quality for the best price.
- We reserve the right to alter product specifications without notice.

# **Product Usage**

- Our Sales Team will do their best to assist in choosing the best product for a particular application. However, it is ultimately the customer's responsibility to determine the correct product for the correct application.
- Seal Fast will not be held liable for the abuse or misuse of our products in a manner in which they are not designed.
- Seal Fast cannot guaral tee the integrity of an assembly if other manufacturers parts are used.

# **Product Availability**

• Seal Fast reserves the right to discontinue products at any time without prior notice.

# **Product Pricing**

- Seal Fast is constantly doing our best to maintain pricing levels. However, circumstances change and while many prices go down, others will increase.
- Please contact your sales associate for current pricing.

Local: (713) 675-6324 National: (800) 231-0734 Local: (713) 675-6324 National: (800) 231-0734 FIRE PROTECTION

COUPLINGS

**DISCLAIMERS** 

HOSES

# **STANDARD COUPLING METHODS**



maximum hose retention with the add fit of being reparable in the field.





### **OTHER COUPLING METHODS**



#### **POSSIBLE ATTACHMENTS**



#### **STANDARD METHODS**















#### **SPECIALTY COUPLINGS**



#### DISCLAIMER!

HOSES

Seal Fast does not stock or necessarily offer assemblies with all of the parts depicted here. The purpose of this page is to give the customer an idea of the various combinations that can be achieved when they shop at Seal Fast. Not all fittings are suitable for all hoses, and not all clamping methods are suitable for all hose/fitting combinations. Seal Fast offers a variety of material options for the fittings as well. Not all materials are suitable for all applications so please consult with your sales representative before ordering.

\*Hose construction may vary. Hoses might be supplied with 1 or 2 wires. This does not affect working/burst pressure. 2 **GENERAL PURPOSE - PREMIUM** 

economy general purpose air & water hose



• Temp R	tange: -20° F to +176° F
• (	Cover: EPDM/SBR blend
000	Tube: EPDM/SBR blend
nforcement: S	piral braided polyester
$\circ\circ\circ$	Safety Factor: 3:1 min
COMORON	

0116	J.11001	00 101	mean	arri a	aty app	Ziioationo Ziini	tou Oil I to	3010101100							
	Ę		PSI	PSI	# #				TUB	E: Black E	PDM/S	BR			
ID	ength-	0.D.	Working	Burst F	s per	RED = (	(R)	BLACK =	(B)	Green =	(G)	YELLOW	= (Y)	BLUE =	(BL)
	_		۸o	面	sql	Part #	List ft.	Part #	List ft.	Part #	List ft.	Part #	List ft.	Part #	List ft.
1/4"	600'	.51"	300	900	0.123	SFAH 025		SFAHB 025							
3/8"	600'	.65"	300	900	0.163	SFAH 038		SFAHB 038							
1/2"	600'	.82"	300	900	0.242	SFAH 050		SFAHB 050							
5/8"	300'	1.14"	300	900	0.429	SFAH 058		SFAHB 058		SFAHG 058		SFAHY 058		SFAHBL 058	
3/4"	300'	1.14"	300	900	0.429	SFAH 075		SFAHB 075		SFAHG 075		SFAHY 075		SFAHBL 075	
	300'	1.39"	200	600	0.535	SFAH 100		SFAHB 100							
1"	300'	1.44"	300	900	0.537	SFAH 100-2		SFAHB 100-2							
	100'	1.39"	200	600	0.535	SFAH 100 100		SFAHB 100 100							
1-1/4"	100'	1.73"	200	600	0.813	SFAH 125		SFAHB 125							
1-1/2"	100'	2.05"	200	600	1.123	SFAH 150		SFAHB 150							
2"	100'	2.64"	200	600	1.22	SFAH 200		SFAHB 200							

# **GENERAL PURPOSE - PREMIUM ASSEMBLIES**

-			-											$\circ$
	=		1		CROW	FEET				CROWFEET				
		-		BANDS - SS		CRIMP SLEEVES - PLATED STEEL					BANDS - SS		CRIMP SLEEVES - PL	ATED STEEL
	ID	Length	# of Bands	PART #	PRICE	PART #	PRICE	ID	Length	# of Bands	PART #	PRICE	PART #	PRICE
1	/4"	50'		SFAH025B		SFAH025C		3/4"	50'	2	SFAHB075B		SFAHB075C	
3	/8"	50'	2	SFAH038B		SFAH038C		3,4	30	-	31 AT IDO 73D		31 AI 15073C	
1	/2"	50'		SFAH050B		SFAH050C		3/4"	50'	2	SFAHG075B		SFAHG075C	
		25'	2	SFAH07525B		SFAH07525C		3/4"	50'	2	SFAHY075B		SFAHY075C	
3	/4"	50'		SFAH075B		SFAH075C		314	50	4	SFARTU/3B		SFAH 1075C	
-		100'	2	SFAH075100B		SFAH075100C		3/4"	50'	2	SFAHBL075B		SFAHBL075C	
		50'		SFAH100B		SFAH100C								
	1"	50'	2	SFAH100-2B		SFAH100-2C								

\*Hose construction may vary. Hoses might be supplied with 1 or 2 wires. This does not affect working/burst pressure.

SFAH100100C

100' 2 SFAH100100B

# • Temp Range: -22° F to +180° F Cover: Yellow NR/SBR/EPDM

• Reinforcement: High tensile textile fabric • Safety Factor: 3:1 min

FEATURES

TEXTILE - YELLOW

- A heavy duty multi-purpose air hose engineered for applications requiring a rugged hose.
- Excellent wear resistance, ozone resistance & heat resistance.

			YELLOW BLENDED RUBBER									
ID	OD	Length	100 - 300 PSI									
			Working PSI	Burst PSI	lbs per ft	Part #	List ft.					
1"	1.38"	100'	300	900	.44	TEA 100						
1-1/2"	1.97"	100'	300	900	.71	TEA 150						
2"	2.52"	100"	300	900	1.01	TEA 200						
2-1/2"	3.04"	100'	300	900	1.24	TEA 250						
3"	3.51"	100'	300	900	1.51	TEA 300						
4"	4.67"	100'	300	900	2.80	TEA 400						

PUSH ON - BLACK	
FAST 3/4"	• Temp Range: -20° F to +176° F • Cover: Neoprene • Tube: Black NBR • Reinforcement: Braided polyester • Safety Factor: 3:1 min
FEATURES  • A multi-purpose air & water hose designed for use with Push-On fittings, requiring no type of clamping.  • This oil resistant hose is excellent for use with air tools, mild chemicals & various petroleum products.	

AIR

			BLACK NEOPRENE / NBR								
ID	OD	Length									
			Working PSI	Burst PSI	Bend Radius	lbs per ft	Part #	List ft.			
1/4"	0.500"	100' / 300'	300	900	-	9	PH025				
3/8"	0.625"	100' / 300'	300	900	-	12	PH038				
1/2"	0.750"	100' / 300'	300	900	-	15	PH050				



						1000					
			TUBE: BLACK EPDM RUBBER								
ID	OD	Length					BLA	ACK	TAN		
			Working PSI	Burst PSI	Bend Radius	lbs per ft	Part #	List ft.	Part #	List ft.	
3"	3.55"	100'	150	450	12"	1.75	HAB 300		HAB 300T 100		
4"	4.57"	100'	150	450	22"	3.02	HAB 400		HAB 400T 100		

\*Hose construction may vary. Hoses might be supplied with 1 or 2 wires. This does not affect working/burst pressure. 4

HOSES

**WIRE AIR - YELLOW/RED STRIPE** LFAST 2" WIRE AIR HOSE 600PSI W.P. f **FEATURES** Designed for the most severe jobs in mining, quarries,

- Cover: Yellow EPDM • Tube: Black, Smooth, Synthetic Rubber, Heat & Oil mist resistant (SBR) • Reinforcement: Plies of steel wire cord
  - Safety Factor: 4:1 min

• Temp Range: -40° F to +248° F

- industrial & construction service, this mandrel built hose has a high margin of safety & gives a long & trouble-free service under the most arduous working conditions.
- Also known as "Bull Hose".

				YELLOW EPDM / SBR								
ID	OD	Length		500 - 1000 PSI								
			Working PSI	Burst PSI	lbs per ft	Part #	List ft.					
1/2"	.91"	100'	1000	4000	.37	WA 050						
3/4"	1.14"	100'	1000	4000	.50	WA 075						
1"	1.42"	100'	800	3200	.65	WA 100						
1-1/4"	1.69"	100'	800	3200	.80	WA 125						
1-1/2"	1.97"	100'	800	3200	1.05	WA 150						
2"	2.52"	100'	600	2400	1.50	WA 200						
2-1/2"	3.07"	100'	500	2000	2.00	WA 250						
3"	3.62"	100'	500	2000	2.50	WA 300						
4"	4.80"	100'	500	2000	3.90	WA 400						

\*Hose construction may vary. Hoses might be supplied with 1 or 2 wires. This does not affect working/burst pressure.

UHMW - CORRUGATED

**FEATURES** 

OD

1.58"

2.09"

2.09"

2.64"

2.64"

3.67"

4.69"

4.69"

ID

1-1/2"

2-1/2"

• Tube: Clear, Ultra High Molecular Weight Polyethylene; EPDM Reinforcement: High tensile textile fabric; steel wire helix; anti-static copper wire • Safety Factor: 4:1 min

Also available in green

**Burst PSI** Bend Radius | Ibs per ft Part # - Blue Part # - Green UHMW 100G 800 **UHMW 100** 800 **UHMW 125 UHMW 125G** 800 9" .94 **UHMW 150 UHMW 150G** 800 **UHMW 200** UHMW 200G 11" 1.28 **UHMW 250 UHMW 250G** 800 800 1.88 **UHMW 300 UHMW 300G** 2.49 **UHMW 400** UHMW 400G UHMW 600 UHMW 600G 800 31" UHMW CORRUGATED ASSEMBLIES

CAM LOCK CXE - 316SS **CRIMP SLEEVES - 304**SS Length # of Bands PART# PRICE UHMW20020CESSC

BLUE EPDM / ULTRA HIGH MOLECULAR WEIGHT POLYTETHYLENE

**UHMW - SMOOTH** 200PSI W.P. SEALFRS **FEATURES** A flexible chemical hose used for suction & delivery of 98% of industrial chemicals, corrosive liquids & solvents. WARNING: Temp rating depends on concentration of exact chemical used.

200PSI W.P. SEAL, AS

• A flexible chemical hose used for suction & delivery of 98% of industrial chemicals, corrosive liquids & solvents.
• WARNING: Temp rating depends on concentration of exact chemical used.

Working PSI

200

200

200

200

200

200

200

200

Length

100'

100'

100

100

100'

100'

100'

• Temp Range: -40° F to +250° F Cover: Green, EPDM Rubber

• Tube: Clear, Ultra High Molecular Weight Polyethylene; EPDM

· Reinforcement: High tensile textile fabric; steel wire helix; anti-static copper wire • Safety Factor: 4:1 min

			GREEN	GREEN EPDM / ULTRA HIGH MOLECULAR WEIGHT POLYTETHYLENE									
ID	OD	Length			20	0 PSI							
			Working PSI	Burst PSI	Bend Radius	lbs per ft	Part #	List ft.					
1"	1.58"	100'	200	800	6"	.67	UHMWS 100G						
1-1/4"	2.09"	100'	200	800	9"	.94	UHMWS 125G						
1-1/2"	2.09"	100'	200	800	9"	.94	UHMWS 150G						
2"	2.64"	100'	200	800	11"	1.28	UHMWS 200G						
2-1/2"	2.64"	100'	200	800	11"	1.28	UHMWS 250G						
3"	3.67"	100'	200	800	16"	1.88	UHMWS 300G						
4"	4.69"	100'	200	800	31"	2.49	UHMWS 400G						
6"	4.69"	100'	200	800	31"	2.49	UHMWS 600G						

					000		0					
		UHMV	UHMW SMOOTH ASSEMBLIES									
H					C <i>A</i>	AM LOCK CXE-	316SS					
SERLE!	ER STORY					CRIMP SLEEVES - 3	304SS					
		ID	Length	# of Bands	PART #	PRICE						
		2"	20'	2	UHMW20020CESSC							

\*Hose construction may vary. Hoses might be supplied with 1 or 2 wires. This does not affect working/burst pressure.

**XLPE - 200 PSI** • Temp Range: -22° F to +212° F • Cover: Green, EPDM Rubber М • Tube: Clear, Cross-Linked Polyethylene; EPDM Reinforcement: High tensile textile fabric: steel wire helix; anti-static copper wire S • Safety Factor: 4:1 mir ALPE CHEMOS **FEATURES** Used for suction & delivery of acids, solvents & chemicals WARNING: Temp rating depends on concentration of exact chemical used.

				GREEN EPD	M / CROSS-LI	NKED POLY	/ETHYLENE					
ID	OD	Length	150-200 PSI									
			Working PSI	Burst PSI	Bend Radius	lbs per ft	Part #	List ft.				
3/4"	1.26"	100'	200	800	6"	.54	CH 075					
1"	1.50"	100'	200	800	8"	.67	CH 100					
1-1/4"	1.78"	100'	200	800	8"	.81	CH 125					
1-1/2"	2.01"	100'	200	800	8"	.94	CH 150					
2"	2.52"	100'	200	800	10"	1.28	CH 200					
2-1/2"	3.04"	100'	200	800	17"	1.55	CH 250					
3"	3.55"	100'	200	800	18"	1.95	CH 300					
4"	4.65"	100'	200	800	20"	2.76	CH 400					

# XLPE ASSEMBLIES

HOSES

TENCAL	make .		CAM LOCK CXE - 316SS							
	3			CRIMP SLEEVES - 304SS						
ID	Length	# of Bands	PART #	PRICE						
2"	20'	2	CH20020CESSC							

\*Hose construction may vary. Hoses might be supplied with 1 or 2 wires. This does not affect working/burst pressure. 6

М

П

steel wire helix

• Safety Factor: 3:1 min



<ul> <li>FDA tube can also be used for foodstuffs, flour, plastic pellets, etc. Perfect for sandblast return operations. Use Helix Wire for Static Grounding to couplings.</li> </ul>

			GREEN SBR / GUM RUBBER									
ID	OD	Length		75-150 PSI								
			Working PSI	Burst PSI	Bend Radius	lbs per ft	Part #	List ft.				
2"	2.91"	50'	150	450	14"	1.86	BM 200					
3"	3.94"	50'	125	450	23"	2.51	BM 300					
4"	4.96"	50'	100	300	28"	3.58	BM 400					
6"	7.01"	50'	75	150	42"	6.32	BM 600					

# **DRY CEMENT DISCHARGE** Temp Range: -40° F to +158° F • Cover:Black, NR/SBR • Tube: Black, BR/SBR/NR Reinforcement: High tensile tire cord • Safety Factor: 3:1 min ERIAL DISCHARGE 75PSI **FEATURES** Soft wall hose suitable for dry abrasive materials Compounded for long wear resistance in handling of hard, sharp, abrasive materials; anti-static.

ID		Length	Tube Thickness		BL	ACK BLENDI	ED RUBBEF	₹			
ID	OD										
				Working PSI	Burst PSI	Bend Radius	lbs per ft	Part #	List ft.		
	4.37"	50' / 100'	1/8"	75	225	-	1.61	CD 400-1			
4"	4.63"	50' / 100'	3/16"	75	225	-	2.08	CD 400-2			
	4.79"	50' / 100'	1/4"	75	225	-	2.49	CD 400-3			

#### \*Hose construction may vary. Hoses might be supplied with 1 or 2 wires. This does not affect working/burst pressure.

HOSES

**PLASTER, GROUT & CONCRETE** 



• Temp Range: -22° F to +180° F • Cover: Black Synthetic Rubber Tube: Black Conductive Synthetic Rubber • Reinforcement: Spiraled high tensile textile cords • Safety Factor: 3:1 min

			BLACK SYNTHETIC RUBBER						
ID	OD	Length							
			Working PSI	Part #	List ft.				
1"	1.54"	100'	800	2400	3"	.54	PGC 100		
1-1/4"	1.85"	100'	800	2400	4"	.74	PGC 125		
1-1/2"	2.01"	100'	800	2400	5"	1.08	PGC 150		

2400



800

100'

• Temp Range: -22° F to +176° F Cover: Black Synthetic Rubber,; Pinpricked. • Tube: Black Rubber, static conductive • Reinforcement: For 1/2" hose there is a 2 ply tire cord & for 3/4" to 1-1/2" there is a 4 ply tire cord. • Safety Factor: 3:1

PGC 200

1.41

**HOSE COUPLINGS** w/SCREWS ON P.70

ID	Ply	OD	Length		Bl	ACK BLEND		R	
				Working PSI	Burst PSI	Bend Radius	lbs per ft	Part #	List ft.
1/2"	2	1.06"	50' / 100'	150	450	2"	.3	SA 050	
3/4"	4	1.50"	50' / 100'	150	450	3"	.44	SA 075	
1"	4	1.89"	50' / 100'	150	450	3"	.54	SA 100	
1-1/4"	4	2.17"	50' / 100'	150	450	4"	.74	SA 125	
1-1/2"	4	2.36"	50' / 100'	150	450	5"	.84	SA 150	

# PETROLEUM

# PETROLEUM

# INDUSTRIAL RUBBER

**FUEL OIL DELIVERY** 



Temp Range: -40° F to +450° F • Cover: Nitrile (pinpricked) • Tube: Black, smooth, EPDM rubber specially compounded to withstand saturated & super-heated steam • Reinforcement: Plies of steel wire cord

• Safety Factor: 10:1



# **WARNING:**

- Please consult with your coupling manufacture to insure the hose is coupled in accordance with current saftey standards.
   Exposer to steam can cause serious injury or even death.
- Correct hose selection, assembly, maintenance and useage is critical to avoid serious injury or even death.

Pin Prick Cover, for longer life drain after use.

High pressure wire reinforced steam hose designed for service w/Super heated steam in heat control, fire prevention,

thawing, etc., In many industries at max pressure of 17 ATM (250 psi).

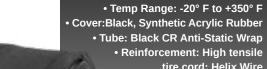
NOT RECOMMENDED FOR STEAM CLEANER.

**FEATURES** 

			BLACK NEOPRENE / NITRILE							
ID	OD	Length	250 PSI							
			Working PSI	Burst PSI	Bend Radius	lbs per ft	Part #	List ft.		
1/2"	.99"	50' / 100'	250	n/a	6"	.37	ST 050			
3/4"	1.25"	50' / 100'	250	n/a	9"	.52	ST 075			
1"	1.50"	50' / 100'	250	n/a	12"	.65	ST 100			
1-1/4"	1.80"	50' / 100'	250	n/a	15"	.83	ST 125			
1-1/2"	2.12"	50' / 100'	250	n/a	18"	1.11	ST 150			
2"	2.60"	50' / 100'	250	n/a	24"	1.50	ST 200			
3"	2.60"	50' / 100'	250	n/a	24"	1.50	ST 300			

#### **HOT TAR**

STEAM





# **FEATURES**

- HOT TAR & ASPHALT HOSE Designed for transfer of high temperature asphalt, tar & hot oils.
- Compounded for long wear resistance in handling of hard, sharp, abrasive materials; anti-static.

\*Hose construction may vary. Hoses might be supplied with

1 or 2 wires. This does not affect working/burst pressure. 10

			Black, Synthetic Acrylic Rubber							
ID	OD	Length	150 PSI							
			Working PSI	Burst PSI	Bend Radius	lbs per ft	Part #	List ft.		
2"	2.71"	100' / 200'	150	600	10"	1.80	HTA 200			
3"	4.63"	100' / 200'	150	600	15"	2.94	HTA 300			
4"	4.79"	100' / 200'	150	600	20"	3.89	HTA 400			



				RED NEOPRENE							
ID	OD	Length	250 PSI								
			Working PSI	Burst PSI	Bend Radius	lbs per ft	Part #	List ft.			
1"	1.500"	100' / 125' / 150' / 175' / 200'	250	1000		n/a	FODH100				
1-1/4"	1.795"	100' / 125' / 150' / 175'	250	1000		n/a	FODH125				
1-3/8"	1.874"	100' / 125' / 150' / 175'	250	1000		n/a	FODH138				
1-1/2"	2.094"	100' / 125' / 150' / 175'	250	1000		n/a	FODH150*				



HOSES

# HOSES



• Reinforcement: High tensile textile fabric; steel wire helix; anti-static copper wire

• Safety Factor: 3:1 min

general purpose uses. • Suitable for up to 50% aromatics

ANK TOIL
TOCK
FEATURES
Designed for transfer of gasoline, oil & other petroleum based products where maximum flexibility is needed; excellent kink resistance.
Excellent for suction & discharge of seawater, oil based mud, and other

Tube: Nitrile Rubber

			BLACK NITRILE BLEND / NITRILE								
ID	OD	Length		150 PSI							
			Working PSI	Burst PSI	Bend Radius	lbs per ft	Part #	List ft.			
1-1/2"	2.64"	100'	150	450	2"	1.34	CTT 100 100				
2"	2.64"	100'	150	450	2"	1.34	CTT 200 100				
3"	3.66"	100'	150	450	3"	1.95	CTT 300 100				
4"	4.76"	100'	150	450	4"	2.96	CTT 400 100				
6"	"	100'	150	450	11		CTT				
8"	11	100'	150	450	11		CTT				

# TANK TRUCK CORRUGATED - 150 PSI REI NK TRUCK HOSE

• Temp Range: -22° F to +212° F • Cover: Black, CR/Nitrile Tube: Nitrile Rubber

• Reinforcement: High tensile textile fabric; steel wire helix; anti-static copper wire • Safety Factor: 3:1 min

HOSES

# FEATURES

- Designed for transfer of gasoline, oil & other
- petroleum based products where maximum flexibility is needed;
- Excellent for suction & discharge of seawater, oil based mud, and other general purpose uses. Suitable for up to 50% aromatics.

			RED NITRILE BLEND / NITRILE								
ID	OD	Length	150 PSI								
			Working PSI	Burst PSI	Bend Radius	lbs per ft	Part #	List ft.			
1-1/2"	2.64"	100'	150	450	2"	1.34	CTT 100R 100				
2"	2.64"	100'	150	450	2"	1.34	CTT 200R 100				
3"	3.66"	100'	150	450	3"	1.95	CTT 300R 100				
4"	4.76"	100'	150	450	4"	2.96	CTT 400R 100				

\*Hose construction may vary. Hoses might be supplied with 1 or 2 wires. This does not affect working/burst pressure.

TANK TRUCK - CONTRACTORS GRADE - 150 PSI FEATURES Excellent for suction & discharge of seawater, oil based mud

· Cover: Black, CR/Nitrile • Tube: Nitrile Rubber

steel wire helix; anti-static copper wire

 Reinforcement: High tensile textile fabric; • Safety Factor: 3:1 min

Н

TRUCK ASSEMBLIES

ПП

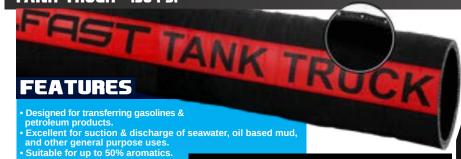
 $\Box$ 

• Temp Range: -20° F to +176° F

and other general purpose uses.

• Suitable for u	ip to 50% aron	naucs.		· ·								
				K NITRILE BLEND / NITRILE								
ID	OD	Length		300 PSI								
			Working PSI	Burst PSI	Bend Radius	lbs per ft	Part #	List ft.				
1-1/2"	1.9"	100'	150	450	9"	0.7	TT 150-E 100					
2"	2.5"	100'	150	450	12"	1.1	TT 200-E 100					
3"	3.5"	100'	150	450	18"	1.8	TT 300-E 100					
4"	4.6"	100'	150	450	24.1"	2.8	TT 400-E 100					
6"	6.6"	100'	150	450	35.9"	5.3	TT 600-E 100					
8"	8.7"	20'	150	450	48.2"	8.8	TT 800-E 20					

TANK TRUCK - 150 PSI



**BLACK NITRILE BLEND / NITRILE** 100-150 PSI Length Working Burst Bend Ibs Part # List ft. PSI Radius per ft 1.46" 450 .67 TT 100 100 100' 150 1.75" 100' 150 450 5" .87 TT 125 100 2.01" 150 6" .94 TT 150 100 100 2.50" 100' / 200' 150 450 8" 1.34 TT 200 100 3.03" 450 1.61 TT 250 100 100' 150 10" 3.54" 100' / 200' 150 450 12" 2.02 TT 300 100 4.67" 100' / 200' 150 16" 2.76 TT 400 100 450

300

• Reinforcement: High tensile textile fabric; steel wire helix; anti-static copper wire • Safety Factor: 3:1 min

• Temp Range: -22° F to +212° F · Cover: Black, CR/Nitrile • Tube: Nitrile Rubber



• Temp Range: -22° F to +212° F

Reinforcement: High tensile textile fabric; steel wire helix; anti-static copper wire

• Cover: Black, CR/Nitrile • Tube: Nitrile Rubber

• Safety Factor: 3:1 mir

TANK TRUCK - 300 PSI

8.88"



HOSES

- igned for transferring gasolines &
- Excellent for suction & discharge of seawater, oil based muc

20'

Sultable for a	ip to 50 % arom	atiosi									
		Length		BLACK NITRILE BLEND / NITRILE							
ID	OD		300 PSI								
			Working PSI	Burst PSI	Bend Radius	lbs per ft	Part #	List ft.			
1-1/2"	2.01"	100'	300	900	6"	.94	TT 150-2 100				
2"	2.56"	100'	300	900	8"	1.41	TT 200-2 100				
3"	3.70"	100'	300	900	12"	2.42	TT 300-2 100				
4"	4.76"	100'	300	900	16"	3.36	TT 400-2 100				
6"	6.89"	100'	300	900	24"	6.72	TT 600-2 20				

450 24" 5.51 TT 600 100

9.07 TT 800 100

32"

\*Hose construction may vary. Hoses might be supplied with

1 or 2 wires. This does not affect working/burst pressure. 12

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**CRUDE OIL SUCTION CORRUGATED** 



					END	ID		
ID	OD	Length						
			Working PSI	Burst PSI	Bend Radius	lbs per ft	Part #	List ft.
1-1/2"	1.89"	100'	150	450	7"	.80	COS 100	
2"	2.45"	100'	150	450	8"	1.00	COS 200	
2-1/2"	3.00"	100'	150	450	10"	1.26	COS 250	
3"	3.50"	100'	150	450	12"	1.80	COS 300	
4"	4.55"	100'	150	450	15"	2.30	COS 400	
6"	6.61"	20'	150	450	26"	5.00	COS 600	
8"	8.70"	20'	150	450	35"	7.60	COS 800	

# **FEATURES**

• Temp Range: -22° F to +212° F • Cover: Black, CR/NBR	LS S
• Tube: CR/NBR Reinforcement: High tensile textile	PE
fabric; steel wire helix; anti-static copper wire	S
• Safety Factor: 3:1 min	

• Cover: Black, CR/NBR

• Safety Factor: 3:1 min

• Tube: CR/NBR

Recommended	for CRUDE OIL	ONLY. *NOT RECOMME	ENDED FOR REFINED PETROLEUM PRODUCTS.							
					NITRILE BL	END				
ID	OD	Length								
			Working PSI	Burst PSI	Bend Radius	lbs per ft	Part #	List ft.		
2"	2.64"	100'	150	450	8"	1.00	CCOS 200			
3"	3.66"	100'	150	450	12"	1.80	CCOS 300			
4"	4.76"	100'	150	450	15"	2.30	CCOS 400			

\*Hose construction may vary. Hoses might be supplied with

 Designed for oilfield vacuum truck service where extra flexibilty is needed; tube & cover are crude oil resistant.

1 or 2 wires. This does not affect working/burst pressure. 14

**CRUDE OIL SUCTION** - "FRAC HOSE"



			Length		NITRILE BLEND							
	ID	OD			100 PSI							
				Working PSI	Burst PSI	Bend Radius	lbs per ft	Part #	List ft.			
		8.66"	40"	100	300	35"	.79	COS 800 40				
	8"	8.66"	48"	100	300	35"	.93	COS 800 48				
		8.66"	60"	100	300	35"	1.39	COS 800 60				



• Temp Range: -22° F to +212° F • Cover: Black, CR/NBR • Tube: CR/NBR Reinforcement: High tensile textile

fabric; anti-static copper wire • Safety Factor: 3:1 min

- Designed for handling gasoline, diesel fuels, oil sludge fuel oils & other petroleum products.
- It is a flexible & easy handling petroleum discharge hose complete with built-in-anti-static wire.

		OD			RED NITRILE BLEND							
	ID		Length		200 PSI							
				Working PSI	Burst PSI	Bend Radius	lbs per ft	Part #	List ft.			
	1-1/2"	2.01"	100'	200	600	-	.79	ODH 150				
	2"	2.48"	100'	200	600	-	.93	ODH 200				
	3"	3.50"	100'	200	600	-	1.39	ODH 300				
	4"	4.65"	100'	200	600	-	2.29	ODH 400				

\*Hose construction may vary. Hoses might be supplied with 1 or 2 wires. This does not affect working/burst pressure.

Designed to meet almost all water hose appliactions,

OD

1.37"

1.65"

1.89"

2.44"

3.00"

3.55"

4.57

6.61"

8.70"

**WATER DISCHARGE** 

FEATURES

Length

100'

100'

100'

100'

100'

100'

100

50'

50'

OD

1.93"

2.48"

3.03"

3.50"

4.61"

6.58"

8.70"

10.71"

12.72"

ID

HOSES

especially designed for use in construction, mining, industrial, & agricultural service. It is flexible and with stands high vacuum.

Length

100'

100'

50' / 60' /100'

50' / 60' /100'

50' / 60' /100'

50' / 60' /100'

50' / 60' /100

20' / 100'

20' / 100'

• A lightweight hose with a tough mandrel built construction, suitable for submersible pumps, irrigation & drainage systems, can be rolled up flat for storage.

PSI

450

450

450

450

450

300

225

180

120

2 PLY

**Burst Weight** 

Per ft.

.71

1.01

1.24

1.51

2.35

3.43

5.58

6.89

8.23

WATER SUCTION 150 PSI W.P

Working

PSI (max)

150

150

150

150

150

150

100

100

100

2 PLY

**BLACK SBR / NATURAL RUBBER** 100 - 150 PSI

Weight Per ft.

0.50

0.60

0.82

1.01

1.50

1.75

2.40

4.84

8.10

**Bend Radius** 

5"

6"

10"

12"

16"

24"

32"

Working

PSI (max)

200

200

200

200

200

200

150

115

100

OD

2.09"

2.68"

3.19"

3.66"

4.80"

6.73"

8.86

10.91"

12.91"

4 PLY

**Burst** 

PSI

450

450

450

450

450

450

300

300

300

**BLENDED WATER SUCTION** 

**FEATURES** 

ID

• Temp Range: -22° F to +180° F

Reinforcement: High tensile

Part #

CWS 100 100

CWS 125 100

CWS 150 50

CWS 200 50

CWS 250 50

CWS 300 50

CWS 400 50

CWS 600 20

CWS 800 20

4 PLY

Per ft.

.91

1.28

1.55

1.88

2.82

4.07

6.42

7.93

9.47

Burst

PSI

600

600

600

600

600

600

450

345

300

• Temp Range: -22° F to +180° F

Cover: Black, SBR/NR

• Tube: Black,

High tensile textile fabric • Safety Factor:

Part #

DH 150

DH 200

DH 250

DH 300

DH 400

DH 600

DH 800

DH 1000

DH 1200

List Ft.

SBR/NR

3:1

П

textile fabric; steel wire helix

· Cover: Black, NR/SBR

• Tube: Black, NBR/SBR

• Safety Factor: 3:1

П

L

List ft.

# **FEATURES**

Pressure washer hose w/Single braid. Tested hydrostatiy.

Bend restrictors on each end w/Male soli by male swivel.

					9 4						PDM R	UBBE	₹	
ID	OD	Length	Color	4000 PSI		Assemblies (M X M)		0	60	6000 PSI		Assemblies (M X N		
				Working PSI	Burst PSI	lbs per ft	Part #	List ft.	Color	Working PSI	Burst PSI	lbs per ft	Part #	List
	0.00"	50'	Black	4000	12000	0.24	PW40003850CL		Dlook	6000	18000	0.24	PW60003850CL	
0/011		100'	Black	4000	12000	0.24	PW400038100CL		Black	6000	18000	0.24	PW600038100CL	
3/8"	0.69"	50'	Blue	4000	12000	0.24	PW40003850BLCL		Dlue	6000	18000	0.24	PW60003850BLCL	
		100'	Blue	4000	12000	0.24	PW400038100BLCL		Blue	6000	18000	0.24	PW600038100BLCL	
1/2"	0.81"	50'	Black	4000	12000	0.24	PW40005050CL							
1/2"	0.81	100'	Blue	4000	12000	0.24	PW400050100CL							

#### HOSE BEND RESTRICTORS HB SERIES

**PRESSURE WASH - 4000 & 6000 PSI** 

Size	Α	В	С	Part #	List ft.
1/4"	0.67"	0.76"	5.74"	HB 40	
3/8"	0.75"	0.85"	6.43"	HB 60	
1/2"	0.82"	0.93"	6.93"	HB 80	







#### **GARDEN FLEX**

#### FEATURES

Kink resistant under pressure & abrasion resistant.

RUBBER GARDEN HOSE - (black)

Green Premium Hybrid Polymer										
ID	Length	Working PSI (max)	Part #	List ft.						
5/8"	50'	125	GFH058050							
3/6	100'	125	GFH058100							



• Temp Range: -40° F to +180° F Cover: Green Premium Hybrid Polymer

HOSES

# OCTAGON RUBBER GARDEN HOSE - (black)

#### **FEATURES**

Oil resitant jacket

			1000
Black Premiu	m Hybrid P	olymer	16

	ID	Length	Working PSI (max)	Part #	List ft.
	5/8"	50'	125	RGH058050	
	210	100'	125	RGH058100	
	3/4"	50'	125	RGH075050	
		100'	125	RGH075100	
	1"	50'	125	RGH100050	

\*Hose construction may vary. Hoses might be supplied with 1 or 2 wires. This does not affect working/burst pressure.

Octagonal shape for reduced kinking

**FEATURES** 



17



Rubb	Rubber/PVC Blend							
ID	Length	Working PSI (max)	Part #	List ft.				
5/8"	50'	125	ORGH058050					

#### \*Hose construction may vary. Hoses might be supplied with 1 or 2 wires. This does not affect working/burst pressure. 16

Working

PSI (max)

150

150

150

150

150

100

75

60

40

**BLACK EPDM RUBBER** 

List Ft.

Part #

DH 150-2

DH 200-2

DH 250-2

DH 300-2

DH 400-2

DH 600-2

DH 800-2

DH 1000-2

DH 1200-2

## CORROSION RESISTANCE OF COUPLING MATERIALS

**CAUTION:** The following data has been compiled from generally available sources end should not be relied upon without consulting and following the specific recommendations of the manufacturer regarding particular coupling materials.

RATINGS: 1. Excellent 3. Fair Condition	nal						3.		
2. Good x. Not Satisfacto		NOTES: N	o rationg ind	dicates no d	data availab	ole			
AGENT	Mall. From Steel	Brass	Bronze	Aluminum	Glass	Stainless 410, 416, 430	Stainless 302, 202, 304, 308	Stainless 316	Monel
Acetate, Solvents, Crude		3				2	1	1	2
Acetate, Solvents, Pure		1	1	1		1	1	1	1
Acetic Acid	Х	Х	Χ	2	1	Χ	2	2	2
Acetic Acid Vapor	X	Χ		3		Χ	2	2	3
Acetic Anhydride	Х	X		2		Χ	2	2	2
Acetone	1	1	1	1	1	1	1	1	1
Acetylene	1	2		1		1	1	1	2
Alcohols	1	2	_	1		1	1	1	1
Aluminum Sulfate	X	3	3	3	1	X	3	2	2
Alums	X	3	2	3	1	X	3	2	2
Ammonia Gas	1	X	3	1	3	1	1	1	X
Ammonium Chloride	1	3		1*		3	3	1	1
Ammonium Hydroxide  Ammonium Nitrate	2	X		2		1	1	1	3
Ammonium Nitrate  Ammonium Phosphate (Ammoniacal)	1	X		2		1	1	1	2
Ammonium Phosphate (Neutral)		3				1	1	1	2
Ammonium Phosphate (Acid)		3				3	2	1	2
Ammonium Sulfate	1	3				2	1	1	2
Asphalt	1	2				2	1	1	1
Beer	2	2	1	1		X	1	1	1
Beet SugarLiquors	1	2	_	1		2	1	1	1
Benzene, Benzol	1	1	1	1	1	1	1	1	1
Benzine (petroleum-naphtha)	1	1	_	1	_	1	1	1	1
Borax	2	2				1	1	1	1
Boric Acid	Х	3		1		3	2	1	1
Butane, Butylene	1	1	1	1		1	1	1	1
Butadiene		1				1	1	1	1
Calcium Bisulfate		X				X	2	1	Χ
Calcium Hypochlorite	3	3	3	Χ	3	X	3	2	3
Cane Sugar Liquors	1	2		1		2	1	1	1
Carbon Dioxide (Dry)	1	1		1		1	1	1	1
Carbon Dioxide (Wet & Aqueous Sol)	2	3		2		2	1	1	2
Carbon Disulfide	2	3		2		2	1	1	3
Carbon Tetrachloride	3	1	2	3	1	1	1	1	1
Chlorine (Dry)	2	2	2	1	2	2	2	2	1
Chlorine (Wet)	X	Χ	3	Χ	2	Χ	Χ	3	3
Chromic Acid		X	Χ	X	1	3	2	2	3
Citric Acid	X	3		1		3	X	1	2
Coke Oven Gas	1	3		2		1	1	1	2
Copper Sulfate	X	X	1	Χ		1	1	1	3
Core Oils	1	1	1	1		1	1	1	1
Cottonseed Oil	1	1	1	1		1	1	1	1
Creosote  Ethers	2	3		1		1	1	1	1
Ethers Ethylene Glycol	2	2		1		1	1	1	1
Ferric Chloride	X	X	X	X	1	X	X	X	X
Ferric Sulfate	X	X	^	X	Τ	1	1	1	3
Formaldehyde	2	2		2		1	1	1	1
- I ormaluellyue	_	_		2		1	1	1	1

\*3 to X at high temperatures. Local: (713) 675-6324 Chemical Chart is reprinted from 1996 RMA Hose Handbook 18 National: (800) 231-0734

#### **CORROSION RESISTANCE OF COUPLING MATERIALS**

**CAUTION:** The following data has been compiled from generally available sources end should not be relied upon without consulting and following the specific recommendations of the manufacturer regarding particular coupling materials.

RATINGS: 1. Excellent 3. Fair Conditional	NO	TES: No ra				الماتالماة.			
2. Good x. Not Satisfactory									
AGENT	Mall. From Steel	Brass	Bronze	Aluminum	Glass	Stainless 410, 416, 430	Stainless 302, 202, 304, 308	Stainless 316	Monel
Formic Acid	Х	2		X		Χ	2	1	2
Freon	3	1	1	1		1	1	1	1
Furfural	1	2		1		1	1	1	1
Gasoline (Sour)	3	3		3		3	1	1	Χ
Gasoline (Refined)	1	1	1	1		1	1	1	1
Gelatin	1	3		1		1	1	1	1
Glucose	1	1		1		1	1	1	1
Glue	1	3		1		1	1	1	1
Glycerine or Glycerol	1	2		1		1	1	1	1
Hydrochloric Acid	X	X	Χ	X	1	X	X	X	X
Hydrocyanic Acid	3	X		1		3	1	1	2
Hydrofluoric Acid	Χ	3	3	Χ	X	X	X	X	X
Hydrogen Fluoride	1	3		1		X	X	3	1
Hydrogen	1	1		1		1	1	1	1
Hyrogen Peroxide	X	X		1		1	2	1	2
Hydrogen Sulfide (Dry)	3	3		2		3	2	1	3
Hydrogen Sulfide (Wet)	3	3		2		3	2	1	3
Lacquers and Lacquer Solvents  Lactic Acid	3	2				Τ	1	1	1
	X	Χ		3		1	3	2	1
Lime-Sulfur Linseed Oil	2					1	1		1
Magnesium Chloride	3	3		1 X		3	1 2	1	1
Magnesium Hydroxide	1	2		X		1	1	1	1
Magnesium Sulfate	2	2		3		1	1	1	1
Mercuric Chloride	3	X		X		X	X	3	X
Mercury	1	X		X		1	1	1	2
Milk	3	3		1		2	1	1	3
Molasses	2	X		2		2	1	1	1
Natural Gas	1	2		1		1	1	1	1
Nickel Chloride		X		X		X	3	2	2
Nickel Sulfate		3		X		3	2	1	1
Nitric Acid	X	X	Χ	3	1	2	2	2	X
Oleic Acid	2	3		1		2	2	1	1
Oxalic Acid	3	3		2		3	2	1	1
Oxygen	1	1	1	1		1	1	1	1
Palmitic Acid	1	3		1		2	2	1	1
Petroleum Oils (Sour)		3				3	1	1	X
Petroleum Oils (Refined)	1	1	1	1		1	1	1	1
Phosphoric Acid 25%	3	Х		3	3	Χ	3	1	2
Phosphoric Acid 25-50%	X	Χ		X	3	Χ	X	2	2
Phosphoric Acid 50-85%	Х	X		X	X	Χ	X	2	2
Picric Acid	3	Χ		3		2	1	1	Χ
Potassium Chloride	2	3		3		3	2	1	1
Potassium Hydroxide	3	Χ		X		1	1	1	1
Potassium Sulfate	2	2		1		1	1	1	1
Propane	1	1				1	1	1	1
Rosin (Dark)	1	2			1	1	1	1	1
Rosin (Light)		Χ		1		1	1	1	2

\*3 to X at high temperatures.

Chemical Chart is reprinted from 1996 RMA Hose Handbook 19 National: (800) 231-0734

#### CORROSION RESISTANCE OF COUPLING MATERIALS

**CAUTION:** The following data has been compiled from generally available sources end should not be relied upon without consulting and following the specific recommendations of the manufacturer regarding particular coupling materials.

RATINGS: 1. Excellent 3. Fair Condition 2. Good x. Not Satisfact	nal	NOTES: N							
AGENT	Mall. From Steel	Brass	Bronze	Aluminum	Glass	Stainless 410, 416, 430	Stainless 302, 202, 304, 308	Stainless 316	Monel
Shellac		2		2		1	1	1	1
Sludge Acid		Χ				Χ	Χ	3	2
Soda Ash (Sodium Carbonate)	1	2		Χ		1	1	1	1
Sodium Bicarbonate	3	1		Χ		1	1	1	1
Sodium Bisulfate	X	3		3		Χ	1	1	1
Sodium Chloride	2	3	2	Χ	1	3	2	1	1
Sodium Cyanide	2	X		Χ		1	1	1	2
Sodium Hydroxide	3	X	3	Χ	X	2	2	2	1
Sodium Hypochlorite	X	Χ		Χ		Χ	3	2	3
Sodium Metaphosphate	X	3		1		2	1	1	1
Sodium Nitrate	1	3		1		1	1	1	1
Sodium Perborate	3	3		1		1	1	1	1
Sodium Peroxide	3	3		1		1	1	1	1
Sodium Phosphate (Alkaline)		3				1	1	1	1
Sodium Phosphate (Neutral)		2				1	1	1	1
Sodium Phosphate (Acid)		2				Χ	2	1	1
Sodium Silicate	1	3		X		1	1	1	1
Sodium Sulfate	1	2		3		1	1	1	1
Sodium Sulfide	1	Х				1	1	1	2
Sodium Thiosulfate (Hypo)	3	Χ		Χ		1	1	1	2
Stearic Acid	3	3		3		2	2	1	1
Sulfate Liquors		Χ				1	1	1	2
Sulfur	2	X		2		2	2	1	3
Sulfur Chloride	X	X				Χ	3	2	2
Sulfur Dioxide (Dry)	2	1		1		1	1	1	1
Sulfur Dioxide (Wet)		Χ				Χ	2	1	Χ
Sulfuric Acid 10%	Х	X	3	3		Х	X	2	2
Sulfuric Acid 10-75%	Х	Χ	Χ	Χ		Χ	Χ	Χ	2
Sulfuric Acid 75-95%	3	X	X	X		3	3	2	3
Sulfuric Acid 95%	2	X	X			2	2	2	X
Surlfurous Acid	X	X		X		X	3	2	X
Tannic Acid	3	3	1	X			1	1	1
Tar	1	2		1		2	1	1	1
Toluene, Toluol	1	1		1		1	1	1	1
Trichlorethylene	3	1		3		1	1	1	1
Turpentine		3		1		3	1	1	1
Varnish	2	2				1	1	1	1
Vegetable Oils	1	2		1		1	1	1	1
Vinegar	3	3		3		3	2	1	2
Water (Acid Mine Water)	3	X		3		2	1	1	3
Water (Fresh)	3	1		1		1	1	1	1
Water (Salt)	3	3	2	X		3	2	2	1
Whiskey	X	2	_	-, \		3	1	1	2
Wines	X	2				3	1	1	2
Xylene, Xylol	2	1		1		1	1	1	1
Zinc Chloride	X	X		X		3	2	1	1
Zinc Sulfate	3	3		3		3	2	1	1

\*3 to X at high temperatures.

Local: (713) 675-6324

Chemical Chart is reprinted from 1996 RMA Hose Handbook

National: (800) 231-0734

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#### **OIL & GASOLINE RESISTANCE**

Rubber hose is used to convey petroleum products both in the crude and refined stages. The aromatic content of refined gasoline is often adjusted to control the octane rating. The presence of aromatic hydrocarbons in this fuel generally has a greater effect on rubber components than do aliphatic hydrocarbons. Aromatic materials in contact with rubber tend to soften it and reduce its physical properties. For long lasting service, the buyer of gasoline hose should inform the hose manufacturer of the aromatic content of the fuel to be handled so that the proper tube compound can be recommended for the specific application.

The effects of oil on rubber depend on a number of factors that include the type of rubber compound, the composition of the oil, the temperature and time of exposure. Rubber compounds can be classified as to their degree of oil resistance based on their physical properties after exposure to a standard test fluid. In this RMA classification, the rubber samples are immersed in IRM 903 oil at 100°C for 70 hours. (See ASTM Method D-471 for a detailed description of the oil and the testing procedure.) As a guide to the user of hose in contact with oil, the oil resistance classes and a corresponding description are listed.

#### PHYSICAL PROPERTIES AFTER EXPOSURE TO OIL:

CLASS A	(HIGH OIL RESISTANCE)	VOLUME CHANGE MAXIMUM +25%	TENSILE STRENGTH RETAINED 80%
CLASS B	(MEDIUM/HIGH OIL RESISTANCE)	+65%	50%
CLASS C	(MEDIUM OIL RESISTANCE)	+100%	40%

#### CHEMICAL RECOMMENDATIONS

The materials being handled by flexible rubber hose are constantly increasing in number and diversity. To assist in the selection of the proper elastomer for the service conditions encountered, the following table has been prepared. The reader is cautioned that it is only a guide and should be used as such, as the degree of resistance of an elastomer with a particular fluid depends upon such variables as temperature, concentration, pressure, velocity of flow, duration of exposure, aeration, stability of the fluid, etc. Also variations in elastomer types and special compounding of stocks to meet specific service conditions have considerable influence on the results obtained. When in doubt, it is always advisable to test the tube compound under actual service conditions. If this is not practical, tests should be devised that simulate service conditions or the hose manufacturer contacted for Recommendations.

The following table lists the more commonly used materials, chemicals, solvents, oils, etc. The recommendation are based on room temperature and pressure conditions normally recommended for the particular type of hose being used. Where conditions beyond this can be met readily, they have been so indicated; where conditions are not normal and cannot be readily met, the hose manufacturer should always be consulted. The table does not imply conformance to the Food & Drug Administration requirements of Federal or State Laws when handling food products.

#### TABLE OF CHEMICAL, OIL & SOLVENT RESISTANCE OF HOSE:

**WARNING:** The following data has been compiled from generally available sources and should not be relied upon without consulting and following the hose manufacturer's specific chemical recommendations. Neglecting to do so might result in failure of the hose to fulfill its intended purpose, and may result in possible damage to property and serious bodily injury.

#### **RESISTANCE RATING**

- A Good Resistance, usually suitable for service.
- **F** Fair Resistance, the chemical has some deteriorative effects, but the elastomer is still adequate for moderate service.
- **C-** Depends on Condition, moderate service may be possible if chemical exposure is limited or infrequent.
- **X-**Not recommended, unsuitable for service.
- I Insufficient Information, not enough data available at the time of publication to determine rating.

#### **RELASTOMERS/PLASTICS**

NR - Natural Rubber IR - Isoprene, synthetic SBR - Styrene-butadiene

CR-Chloroprene
NBR - Nitrile-butadiene

NBR - Nitrile-butadiene
IIR-Isobutene-isoprene
CSM - Chloro-sulfonyl-

SM - Chloro-sultonylpolyethylene **EPDM** - Ethylene-propylenediene-terpolymer **MQ** - Dimethyl-polysiloxane

**FKM-**Fluoracarbon rubber **CM -** Chloro-polyethylene

**ECO/CO-**Ephichlorohydrin **EXLPE-** Chloro-sulfonyl-

polyethylene

Local: (713) 675-6324 21 National: (800) 231-0734

# **TECHNICAL DATA**

# ELASTOMERS

Local: (713) 675-6324

Commonly used Elastomers:									Special	Elasto	ners:	
MATERIAL	NR lor IR	SBR	CR	NBR	IIR	CSM	EPDM	MQ	FKM	СМ	ECO CO	2
		(1)	Maximu	m Tempe	erature	100° F (3	38°C) Un	less Ot	herwise	Specifie	ed	
Acetic Acid, Dilute, 10%	F	C	С	С	А	С	A	А	X	А	F	
Glacial	С	X	Χ	X	F	С	F	F	X	Α	Χ	
Anhydride	С	С	F	F	F	А	1	С	X	Α	Χ	
Acetone	Α	Α	F	X	Α	F	Α	Α	Х	Α	Χ	
Acetylene	А	А	F	А	А	F	А	С	А	- 1	- 1	
Air 150°F (65°C)	А	Α	Α	Α	Α	Α	Α	Α		Α	Α	
Aluminum Chloride 150°F (65°C)	А	А	Α	А	А	А	А	Α	А	Α	Α	
Aluminum Fluoride 150°F (65°C)	А	Α	Α	Α	Α	Α	Α	F			Α	
Aluminum Sulfate 150°F (65°C)	А	А	А	Α	А	А	Α	А	А	Α	- 1	
Alums 150°F (65°C)	Α	Α	Α	Α	Α	Α	Α	Α		Α	- 1	
Ammonia Gas	Α	Α	А	Α	А	Α	Α	А	X	Α	- 1	
Ammonium Chloride	Α	Α	Α	Α	Α	Α	Α	С	Α	Α	Α	
Ammonium Hydroxide	С	F	F	F	Α	Α	Α	Α	А	Α	- 1	
Ammonium Nitrate	Α	Α	Α	Α	Α	Α	Α	Α		I	Α	
Ammonium Phosphate, monobasic	Α	Α	Α	Α	Α	Α	Α	Α		Α	1	
dibasic	Α	Α	Α	Α	Α	Α	Α	Α		I	I	
tribasic	Α	Α	Α	Α	Α	Α	Α	Α			1	
Ammonium Sulfate	A	A	A	A	A	A	A	A	A	A		
Amyl Acetate	F	Χ	Χ	Χ	F	Χ	А	А	Χ	С	Χ	
Amyl Alcohol	А	А	А	Α	Α	Α	А	А	А	Α	А	
Aniline, Aniline Oil	X	X	C	X	A	X	C	C	A	C	X	
Aniline Dyes	F	F	F	F	A	F	С	С			^	
Asphalt	X	X	F	F	X	F	X	3	А		A	
Barium Chloride 150°F (65°C)	A	A	Α	А	A	Α	A	Α	A	А	A	
Barium Hydroxide 150°F (65°C)	А	Α	А	Α	Α	Α	Α	А	Α	Α	Α	
Barium Sulfide 150°F (65°C)	Α	Α	Α	Α	Α	Α	Α	Α	Α	I	Α	
Beer	Α	Α	Α	Α	Α	Α	А	Α	Α	1	Α	
Beet Sugar Liquors	Α	Α	Α	Α	Α	Α	Α	Α	Α	I	I	
Benzene, Benzol	Χ	X	Χ	С	Χ	Χ	Χ	С	Α	С	Χ	
Benzine, petroleum ether and												
Benzine, petroleum etner and Benzine, petroleum naphtha	X	X	С	F	X	F	X	С	А		ı	
Black Sulfate Liquor	A	A	A	A	A	A	A	A	^	ı		
Blast Furnace Gas	C	C	A	C	C	C	C	C	А	ı		
Borax	A	A	A	A	А	A	A	A	A			
		7.	7.1	7.1	, (	7.1	7.	, ,	, ,			
Boric Acid	А	Α	А	А	Α	А	Α	Α	А	I	Α	
Bromine	Х	Х	Χ	X	Χ	С	X	F	Α	С		
Butane	X	X	F	А	Χ	Α	X	Α	А	Α	Α	
Butyl Acetate	С	X	Χ	Х	F	X	F	Α	X	F	Χ	
Butyl alcohol, butanol	А	А	Α	А	Α	Α	Α	Α	А	F	- 1	
Calcium bisulfate	С	С	Α	А	F	Α	F	С	Α	Α	I	
Calcium chloride	А	Α	А	А	Α	А	Α	Α	Α	Α	А	
Calcium hydroxide	А	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	
Calcium hypochlorite	X	X	Χ	X	А	F	А	С	А	Α	F	
Caliche liquors	А	Α	Α	Α	Α	Α	Α				1	
Cane sugar liquors	А	А	Α	Α	Α	Α	Α	Α	Α	Α	Α	

# Chart is reprinted from 1996 RMA Hose Handbook 22

## **ELASTOMERS**

Commonly used Elastomers:									Special	Elastor	ners:	
MATERIAL	NR lor IR	SBR	CR	NBR	IIR	CSM	EPDM	MQ	FKM	СМ	ECO CO	XLPE
		(Ma	aximum	Temper	ature 1	00° F (38	°C) Unle	ess Oth	erwise S	pecified	ı	
Carbon dioxide, dry/wet	Α	Α	А	A	Α	Α	Α	Α	А	Α	Α	Α
Carbon disulfide	X	Χ	X	Χ	Χ	Χ	Χ	С	Α	С		С
Carbon monoxide 150°C (65°C)	С	С	С	С	С	F	С	Α	А	- 1		Α
Carbon tetrachloride	X	Χ	Χ	С	X	X	X	С	А	С	F	А
Castor oil	Α	А	Α	А	Α	Α	Α	A	А	A	Α	Α
Cellosolve acetate	F	F	X	X	Α	1.	Α	С	С	, ,	, ,	Α
CFC-12	X	X	Α	Α	F		F	X	А		Α	I
China wood oil, tung oil	X	X	F	Α	Α	F	Α	Α	С		I	Α
Chlorine, dry/wet	Х	Х	Х	Х	Х	Х	Х	Х	С	Х	Х	F
	V	V	V	V	V	V	V	0	0	0		Δ.
Chlorinated solvents Chloroacetic acid	X	X C	X C	X C	X	X	X	C	C	С		A
			С	С	X	X	I X	С				A F
Chlorosulfonic acid Chromic acid	X	X		_	C		X	С	X	^		
Citric acid	A	X	X	X	A	A	A	A	A	A	Α	F A
Citile aciu	A	А	А	Г	A	A	A	A	A	A	А	A
Coke oven gas	С	С	С	С	С	А		Α	X	А	Χ	С
Copper chloride 150°F (65°C)	С	Α	F	Α	Α	F	Α	Α	А	Α	I	Α
Copper sulfate 150°F (65°C)	С	Α	Α	Α	F	Α	Α	Α	Α	Α	Α	Α
Corn oil	Х	С	F	Α	Α	F	С	Α	Α	Α	Α	Α
Cottonseed oil	X	С	F	А	Α	F	С	Α	А	Α	- 1	Α
Creosote, coal tar	X	X	F	Α	Χ	F	X	С	F		X	Α
Wood	X	X	F	Α	Χ		X	С	Α			Α
Creosols, cresylic acid	С	X	X	С	С	F	X	С		F		Α
Ethers	С	С	С	С	С	F	X	C	X	A		Α
Ethyl acetate	F	X	Χ	X	F	X	F	F	X	F	Χ	А
Ethyl alcohol	А	Α	А	Α	Α	Α	Α	А	А	Α	Α	Α
Ethyl cellulose	F	F	F	F	F		F	С	X	F		Α
Ethyl chloride	А	F	F	X	Α	F	Α	С	F	F	F	F
Ethylene glycol	Α	Α	Α	А	Α	Α	Α	Α	Α	Α	Α	Α
Ferric chloride 150°F (65°C)	Α	А	А	Α	Α	Α	Α	Α	1	А	Α	Α
Ferric Sulfate 150°F (65°C)	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α
Formaldehyde	Α	Α	С	Α	Α	Α	А	Α	Α	А	F	Α
Formic acid	Α	Α	С	F	Α	Α	Α	Α	X	Α	F	F
Fuel oil	X	Χ	Α	Α	X	F	Χ	С	А	F	Α	Α
Furfural	Х	С	С	X	Α	F	С	С	Х	Α	X	Α
Gasoline, Non Leaded	X	Χ	X	Α	Χ	Χ	X		А	С	Α	Α
Gasoline, + MTBE	Х	X	Χ	Α	Х	X	X	С	Α	С	Α	Α
Hi-test-+ MTBE	X	X	Χ	Α	Χ	X	X	С	А	С	Α	Α
Gelatin	А	Α	Α	Α	Α	А	Α	Α	А		Α	А
Glucose	А	А	А	А	А	А	А	А	А		А	А
Glue	F	F	A	A	F	A	A	A	C		A	A
Glycerine, glycerol	A	А	A	A	А	A	A	A	A	А	A	A
Green sulfate liquor	A	A	A	A	A	A	A	A	A	A	A	A
HFC-134A	F	X	A	A	A	F	A		X	F		A
			71	7.			7.		- 1			7.

National: (800) 231-0734 Local: (713) 675-6324 23 National: (800) 231-0734

# **TECHNICAL DATA**

# ELASTOMERS

Commonly used Elastomers:									Special	Elastor	ners: 	
MATERIAL	NR Ior IR	SBR	CR	NBR	IIR	CSM	EPDM	MQ	FKM	СМ	ECO CO	X
		(1	<b>Maximu</b>	m Tempe	erature	100° F (	38°C) Un	less Otl	herwise	Specifie	ed	
Hydraulic fluids												
Petroleum	Х	Х	Α	Α	X	F	Х			Α	Α	
Phosphate ester alkyl	Χ	X	С	X	Α	X	А			Α	X	
Phosphate ester arly	Χ	Х	X	X	С	X	С			С	X	
Phosphate ester blends		X	X	X	X	X	X	С			С	
Silicate ester	Χ	Χ	С	С	Χ	С	Χ			С	С	
Water-Glycol	Α	Α	А	А	А	А	Α		А	А	А	
Hydrobromic acid	С	Х	С	С	Α	Α	Α	С	Α	Α		
Hydrochloric acid	Α	X	Χ	X	С	С	С	С	Α	Α	X	
Hydrocyanic acid	F	F	С	F	С	Α	С	Α	Α			
Hydrofluoric acid	Χ	Χ	Χ	Χ	С	А	С	Χ	Α	Α		
Hydrofluosilicic acid	А	F	F	F	А		А	А	А	А		
Hydrogen Gas	F	F	A	A	A		A	A	A	A	А	
Hydrogen peroxide	X	X	C	C	C	С	C	A	A	Α	A	
Hydrogen sulfide, dry	C	C	F	С	A	Α	A	C	F	7.0		
wet	С	С	F	С	A	A	Α	С	C		F	
Kerosene	Χ	Χ	F	А	Χ	С	X	С	А	А	А	
Lacquers	Χ	Χ	Χ	X	С	Х	Χ		X		X	
Lacquers solvents	Χ	X	Χ	X	С	X	X		X		X	
Lactic acid	С	С	C	С	С	Α	С	Α	Α			
Linseed oil	С	X	F	А	Α	А	А	А	Α	Α	Α	
Lubricating oil, crude	Χ	Χ	F	А	Χ	С	Χ	С	Α		А	
refined	Х	X	F	Α	X	С	Х	С		Α	Α	
Magnesium chloride 150°F (65°C)	Α	Α	Α	Α	Α	А	А	Α	Α	Α	Α	
Magnesium hydroxide 150°F (65°C)	Α	F	F	F	Α	Α	Α	F	Α	Α	Α	
Magnesium sulfate 150°F (65°C)	Α	А	А	А	Α	А	Α	Α	А	Α	А	
Mercuric chloride	F	F	С	F	Α	А	А	А	А		А	
Mercury	A	A	A	A	A	A	A	A	A		A	
Methyl alcohol, methanol	A	A	A	A	A	A	A	A	C	Α	F	
Methyl chloride	С	С	С	C	С	X	C	X	A	, ,	•	
Methyl ethly ketone	X	X	X	X	F	С	А	С	X	С	Χ	
						_	_	_		_		
Methyl isopropyl ketone	Χ	Χ	Χ	Χ	F	С	С	С	X	F	Χ	
MTBE Milk	С	С	F	F	Α	А	А	А	А	Α	А	
Mineral oils	X	С	F	A	X	F	X	A	A	A	A	
Natural gas	C	С	A	A	C	A	X	C	A	A	A	
Nickel chloride 150°F (65°C)	A	A	A	A	A	A	A	A	A	A	I	
Nickel sulfate 150°F (65°C)	Α	A	A	A	A	A	A	Α	A	A	i	
Nitric acid, crude	X	X	X	X	С	С	X	X	С	Α	X	
Diluted 10%	Χ	X	С	X	С	С	X	Χ	С	Α	X	
Concentrated 70%	Χ	X	Χ	X	С	С	X	Χ	С	Х	X	
	Χ	Χ	X	X	X	X	Χ	С	F	С	X	
Nitrobenzene	^	, ,										

#### Chart is reprinted from 1996 RMA Hose Handbook

# ELASTOMERS

Commonly used Elastomers:									Special	Elastor	ners:	
MATERIAL	NR lor IR	SBR	CR	NBR	IIR	CSM	EPDM	MQ	FKM	СМ	ECO CO	XLPE
		(M	aximum	Temper	ature 1	00° F (38	3°C) Unle	ess Oth	erwise S	pecified	t	
Oxalic acid	F	С	F	F	Α	А	А	Α	Α	Α	F	Α
Oxygen	F	С	Α	С	Α		Α	Α	Α	Α	F	Α
Palmitic acid	X	F	А	А	F	F	F	С	А	А	F	А
Perchlorethylene	X	X	X	C	X	X	X	С	A	C	F	Α
Petroleum oils and crude 200°F (95°C)	X	X	F	A	X	C	X	С	Α	С	F	Α
Phosphoric acid, crude	A	С	С	С	C	A	С	С	A	A		Α
pure 45%	Α	С	С	С	С	Α	С	С	Α	Α		1
Picric acid, molten	С	С	С	С	С		I					I
water solution	А	С	F	F	А	Α	1	Α	А			- 1
Potassium chloride	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α
Potassium cyanide	А	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α
Potassium hydroxide	F	F	С	С	Α	Α	Α	Α	С	Α	Α	Α
Potassium sulfate	А	А	Α	А	Α	А	А	Α	А	Α	А	А
Propane	X	X	F	А	Χ	F	Χ	А	А	А	А	А
Sewage	С	C	F	Α	C	Α	C	C	Α	, ,	I	Α
Soap solutions	A	A	F.	Α	A	A	A	A	Α	Α	A	Α
Soda ash, sodium carbonate	A	Α	A	Α	A	Α	Α	Α	Α	Α	Α	Α
Sodium bicarbonate, baking soda	A	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α
<b>3</b>												
Sodium bisulfate	А	А	Α	Α	Α	А	А	Α	Α	Α	Α	Α
Sodium chloride	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α
Sodium cyanide	А	А	Α	Α	Α	Α	Α	Α	А	Α	Α	Α
Sodium hydroxide	F	F	С	С	Α	С	Α	Α	С	Α	F	Α
Sodium hypochlorite	X	Χ	Χ	Χ	А	F	Α	С	А	Α	F	F
0 - 1:			0		٨	_	•	Δ.	٥	Δ.		Δ.
Sodium metaphosphate Sodium nitrate	A C	A C	C	A C	A	F A	A A	A C	А	A	A	A
Sodium perborate	С	С	С	С	A	A	A	A	А	A	A	A
Sodium peroxide	С	С	С	С	A	A	A	C	A			A
Sodium phosphate.monobasic	A	F	С	F	A	A	A	A	A	Α		A
Socialii phosphate.monobasic		1		1			/\					
dibasic	А	F	С	F	Α	Α	А	Α				А
tribasic	А	F	С	F	Α	Α	Α	Α				А
Sodium silicate	А	Α	Α	Α	Α	Α	Α	Α	Α	Α	1	Α
Sodium sulfate	А	Α	Α	А	Α	Α	А	Α	А	Α	А	Α
Sodium sulfide	А	А	А	Α	А	А	Α	А	А	А	- 1	Α
Sodium thiosulfate, "hypo"	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	I	Α
Soybean oil	X	С	F	A	A	A	A	A	A	A	Α	Α
Stannic chloride	A	A	A	A	F	Α	F	Α	A	Α	T	A
Steam 450°F (230°C)	С	С	С	С	A	A	F	С	X		X	X
Stearic acid	X	X	С	F	F	C	F	A	1		F	A
Sulfur	F	F	A	F	A	A	A	F	A		F	C
Sulfur chloride	X	X	С	С	X	A	X	С	A			Α
Sulfur dioxide , dry	C	С	С	С	С	A	С	A	A		I	I
Sulfur trioxide, dry	X	C	C	C	C	F	C	A	A	Λ	^	Λ
Sulfuric acid, 10%	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α

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# **ELASTOMERS**

ommonly used Elasto	omers:									Special	Elaston	ners:	
MATERIA	L	NR lor IR	SBR	CR	NBR	IIR	CSM	EPDM	MQ	FKM	СМ	ECO CO	XLPI
			(1	Maximu	m Tempe	rature	100° F (		less Oth	erwise \$	Specifie		
11%-75%		С	С	С	С	F	Α	С	С	Α	Α	F	Α
76%-95%		Х	Х	X	Χ	С	Α	Х	X	Α	Χ	X	Α
fuming		Х	Χ	X	X	Χ	X	X	Χ	Χ	Χ	Χ	Χ
Sulfurous a		С	С	С	С	С	Α	С	С	Α	Α	С	Α
Tannic aci	id	А	С	Α	С	А	А	Α	А	А	Α	I	Α
Tar		Χ	X	С	С	Χ	С	X	С	F		F	Χ
Tartaric ac	id	А	С	С	С	F	Α	F	Α	Α	Α	F	Α
Toluene, tol	uol	X	X	X	С	Χ	X	X	С	Α	С	Χ	Α
Trichloroethy	vlene	Х	X	X	Х	Χ	X	X	С	Α	С	X	Α
Turpentin		Χ	Χ	Χ	F	Χ	X	X	С	А	F	А	Α
Vinegar		С	С	С	С	А	А	А	А	А	А		А
Water, acid r	mine	A	A	С	A	A	A	A	A	A	A		A
Water, fres		A	A	С	A	A	A	A	A	A	A	A	A
distilled	) I I	A	A	С	A	A	A	A	A	A	A	A	A
Whiskey and	wines	A	A	А	C	A	A	A	A	A	A	I	A
Xylene.xyl		X	Χ	X	С	Χ	X	Χ	С	Α	Χ	Χ	Α
Zinc chlori	de	С	С	С	С	Α	Α	Α	Α	Α	Α		Α
Zinc sulfa	te	А	А	А	А	Α	А	А	А	А	Α	I	Α
<b>IZZLES</b> - SPECS													
Nozzle Style &	& Size	Inlet PSI		ssure PA	Straight GPM		ream IPM	30 GPM	30 IPM	60 GPM	60 1 IPM	90 GPM	90 IPI
•		50		45	18		68	21	79	24	91	27	10
10464		75	_	17	22		83	25	95	28	106	32	12
1"		100		90	24		91	28	106	32	121	36	13
_		50	-	45	45		170	50	189	55	208	60	22
10464		75		17	50		189	55	208	65	246	75	28
1-1/2"		100	_	90	55		208	60	227	75	284	85	32
		50	3	45	90		341	120	454	130	492	145	54
10464		75	_	17	100		379	140	530	150		180	68
2-1/2"		100		90	110		416	165	625	180		205	77
				Threa	ds Per Ir	nch							
1-1/2" Size	2.100 (N	YFD)		1.99	0 (NST)		2.0	93 (NYCC	RP)		1.878	(NPSH)	
				Threa	ds Per Ir	nch							
	6"				7"			7-1/2"			3	3"	
	3.058				3.13			90 (CHICA			3.0	062	
	3.093							3.062 (NS				093	
	3.125						3.1	25 (DETR	OIT)			140	
	3.156											156	
2-1/2"	3.187											312	
	3.234											(NYFD)	
	3.250										3.00 (N)		)
	3.312											(NPSH)	
	2.062 (DITTE		1								70 (01 5	-\/ ^	<b>-</b> \

3.78 (CLEVELAND)

3.062 (PITTSBURGH)