

THE  
**NOVAFLEX**<sup>®</sup>  
GROUP 

**Engineered Hose Systems**



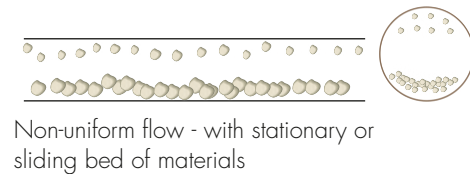
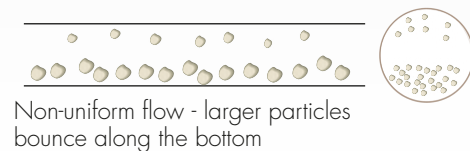
## Hose Wear

For the transfer of material during a manufacturing process, flexible hoses are extensively used in preference to rigid, heavy and hard to install steel or plastic piping. Flexible hoses are used in the transfer of media such as; slurry (*liquid mixed with materials*) or dry material in a pneumatic application (*material blown with air*). To avoid sediment settling in a hose, it is necessary to keep the mixture flowing or turbulent. Deposits on the bottom of the conveying hose reduce efficiency and may cause clogging. Depending on the proportion of liquid to solids as well as the flow rate, material may be carried along in one of the following ways:

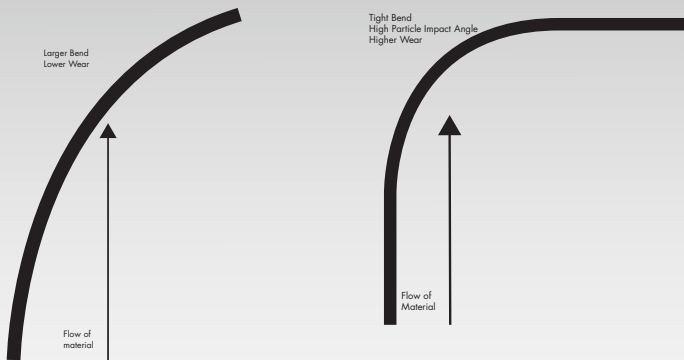
### Causes of Wear

Abrasion is wear or undesirable removal of material from the surface of the hose tube. The degree of wear and or abrasion varies widely and is determined by some of the following factors:

- Material transferred (e.g. *size, sharpness, size distribution, hardness*)
- Velocity - flow rate
- Turbulence
- Angle of material impact - affected by bend radius
- Slurry or dry
- Contamination elements - presence of oil or chemicals (PH value of slurry liquid)
- Temperature



## Hose Tube with Different Bends Depicting Particle Impact



*To increase the service life of hose used in a bend; it is recommended that the hose be rotated around it's axis so that the wear is more evenly distributed.*

There is a cost benefit relationship in the selection of a hose tube for a specific application. Several compounds that can service an application are available. To provide added life, the hose may require a thicker tube. All aspects should be considered; cost of hose, cost of product, hose service life and cost to install and uninstall (plant down time).

In many applications the media is constant, but in some, the media being transferred changes radically. It is always best to evaluate the product in a consistent environment. One of the more valid approaches is measuring tonnage processed. (Exclusive of differences in media conveyed.)

On new or unmonitored applications, it may be necessary to evaluate several compound types to obtain the most cost efficient product for the application. NovaFlex® will develop the best hose for the application.

## Choice of Wear Resistant Material

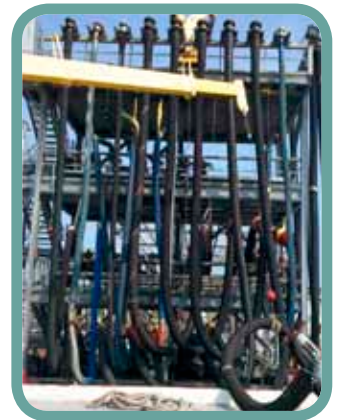
The choice of the tube compound (wear material) in a hose is dependent on the elements of the application.

Compared to the hardest steels, for wear protection rubber compounds are typically soft and elastic and thus display greater wear resistance.

A rubber compound's unique quality to absorb the kinetic energy of particle impact by elastically deforming, rather than chipping the wear surface found on hard surfaces, results in higher wear resistance. Wear resistant rubber typically has a hardness range of 35 to 65 Shore A Durometer.

It is challenging for a single compound to satisfy each abrasion application. Compounds are uniquely formulated to resist abrasion, cutting, ripping and other elements of wear. NovaFlex® utilizes the tube compounds most suited to the abrasion resistance requirements of the application being engineered. Typically, flexible material transfer hoses are designed for applications that require the adaptability to overcome bends, offsets, misalignments, expansion or contraction and vibration. Applications with bends are particularly demanding. It is important to note that the larger the bend radius engineered into a wear application, the greater the service life of the hose.

Hose wear is always on the outside radius of the hose bend. The greater the bend, the lower the angle of impact; therefore the lower the wear. To reduce wear, the optimum bend radius is ten times the inside diameter of the hose.



## Elements of a Custom Hose

### Hose Construction Options

Typically, custom hoses are plied constructions composed of the basic four hose elements: *tube, carcass, cover and hose ends*. Most hose styles are built in standard plied construction using multiple layers of tire cord reinforcement. To maintain hose shape during bends and in vacuum, this may (or may not) include one or more steel helix wires. A gimbal style is available in specific applications that require very high degrees of flexibility. The specific tube recommended for an abrasion resistant hose depends on the material, its size, velocity of transfer, product mix and temperature. Recommendations are only best estimates. The most cost effective hose is usually derived through measured testing.



## Custom Hose Types

### Plied Hose

Built with a smooth or corrugated cover. The plies of reinforcement are uniform throughout the hose. The use of various reinforcement types and combinations will affect the rated working parameters of the hose. A continuous wire helix runs the length of the hose. Some hoses may have two helix wires.



### Gimbal Hose

Built with a smooth or corrugated cover. The plies of reinforcement are uniform throughout the hose. Special helix rings are built into the carcass. This provides extra flexibility as flex points are engineered between each helix ring.



## Tube Wear Resistant Choices

NovaFlex® Compound Name	Rubber Type	Color	Din Abrasion Rating		Static Conductive	Operating Temperatures	Conductive Properties
			Dry (mm <sup>3</sup> )	Wet (mm <sup>3</sup> )			
NovaWear-TG	NR	Tan	208	65	not conductive	-40° to 160°F (-40° to 71°C)	>1000 gigaohms/ft
NovaWear-WG	NR	White	140	24	not conductive	-40° to 160°F (-40° to 71°C)	>1000 gigaohms/ft
NovaWear-BG	NR	Black	243	68	not conductive	-40° to 160°F (-40° to 71°C)	>1000 gigaohms/ft
NovaWear-RG	NR	Red	135	28	not conductive	-40° to 160°F (-40° to 71°C)	>1000 gigaohms/ft
NovaWear-YG	NR	Yellow	120	12	not conductive	-40° to 160°F (-40° to 71°C)	>1000 gigaohms/ft
NovaWear-BS	NR	Black	158	91	conductive	-40° to 160°F (-40° to 71°C)	< 1M ohms
NovaSyn	SBR	Black	320	141	conductive	-20° to 180°F (-28° to 82°C)	< 1M ohms
NovaWear-Petro	XNBR	Black	not applicable	not applicable	conductive	-30° to 300°F (-34° to 148°C)	not rated
Novapetro	NBR	Black	not applicable	not applicable	conductive	-30° to 180°F (-34° to 82°C)	not rated
Novachem	FKM	Black	not applicable	not applicable	not conductive	-30° to 300°F (-34° to 148°C)	not rated
Novalectra	SBR	Yellow	not applicable	not applicable	not conductive	-30° to 225°F (-34° to 107°C)	>1000 gigaohms/ft
Novalectra 2	EPDM	Green	not applicable	not applicable	not conductive	-30° to 250°F (-34° to 121°C)	>1000 gigaohms/ft

The DIN Abrasion Index referenced, is a lab test that confirms to ASTM D5963 and ISO 4649. This lab test attempts to measure the ability of a compound to resist abrasion only! It does not simulate cutting, gouging or tearing. It is a useful guide, but may not be representative of actual compound performance in an application. It is impossible to test NovaFlex® products under all of the conditions to which they might be subjected in the field. It is therefore the buyer and/or end users' responsibility to test all products under conditions that duplicate service conditions prior to installation. Due to continuous improvements, technical data is subject to change without notice.

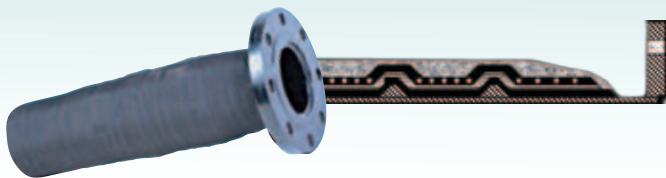
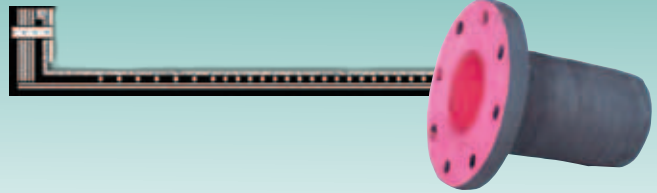
NovaFlex® Compound Name	Recommended Service
NovaWear-TG	very good abrasion, excellent cut and gouge resistance. very good dry /very good wet non oily material transfer, large to small sharp material transfer
NovaWear-WG	very good abrasion resistance, good cut resistance for transfer of abrasive non oily food grade products, small and medium size material transfer
NovaWear-BG	very good abrasion, very good cut & gouge resistance - excellent dry / excellent wet non oily material transfer- large to small, sharp material transfer
NovaWear-RG	excellent abrasion, excellent cut & gouge resistance - excellent dry / excellent wet non oily material transfer - large to small, sharp material transfer
NovaWear-YG	superior abrasion, cut & gouge resistance - superior dry / superior wet on oily material transfer - large to small, sharp material transfer
NovaWear-BS	excellent static conductivity, excellent abrasion, cut & gouge resistance - excellent dry non oily material transfer - small and medium size material transfer
NovaSyn	very good abrasion resistance, very good cut & gouge resistance - very good wet & dry non oily material transfer for medium to small size material transfer
NovaWear-Petro	excellent abrasion resistance - for the transfer of oily materials - small and medium size material transfer
Novapetro	very good abrasion resistance - for the transfer of oily materials - small and medium size material transfer
Novachem	non rated for abrasive material transfer, excellent chemical & petroleum resistance
Novalectra	good abrasion resistance for small material transfer
Novalectra 2	non rated for abrasive material transfer, good chemical resistance

## Hose End Connections

### Duck & Rubber Flange

The tube and all fabric reinforcement is turned up the face of the flange end. A split steel back up flange is fitted to the back of the fabric flange face. Hose and flange are integral.

This design is used for light weight flanged connections and where there is abrasion or the media conveyed can damage standard steel ends.

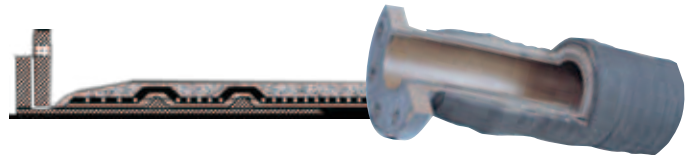


### Steel Nipple

Built-in-Steel nipples with either fixed or floating flanges. The strongest end connection design that can be used in higher pressure hoses. This design has the hose tube butted up against the hose nipple end, and continued over the built in nipple. This type of end is used where the media conveyed is not damaging to the steel connections.

### Steel Nipple (Rubber Lined)

This is a superior design to duck and rubber flanges. The rubber tube is built under the hose nipple and turned up the face of the flange. This is a stronger end connection. This design is used where there is abrasion or the media conveyed can damage the metal used on end connections. The steel back-up flange rotates to easily mate with the bolt holes on the joining flange and eliminates potential damage from hose torque.



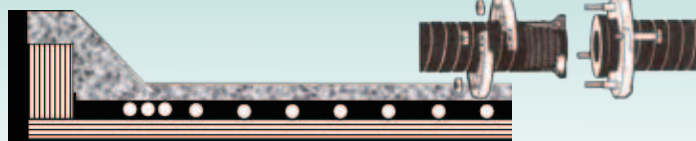
### Capped End

The tube is turned up and vulcanized into the hose cover. The reinforcement of the hose is completely encapsulated in rubber. This design protects the interior and exterior of the hose from the media being conveyed.

### Beaded End

A special angled build up at the hose end designed to provide a rubber to rubber seal.

This type hose end uses metal split back-up rings (150# drilling) to fit the angle of the built up area and are used to pull beaded end tight to its connection forming a good seal.



### Slip Ring End

This special end permits the attachment of large ID discharge hose (8" to 24" ID) with out the use of couplings. This special NovaFlex® end permits full flow and uses the internal hose pressure to form the liquid seal.

## Furnace Cooling Hoses

NovaFlex® manufactures heat resistant hoses for all applications commonly found in metal smelt facilities. Highly flexible hose for furnace door, roof, cable cooling, castor coolant and water supply.

Hose Types	Options
Standard	Hard wall or Soft wall
Gimbal	Smooth or corrugated
	Bumper—spiral or annular
	Fiberglass Shielded
	Non-conductive
	Conductive



### NovaGlass Furnace Roof Cooling Hose

Designed as a more robust hose that has excellent flexibility. The elastomeric design will resist the effects of vibration, heat, flex fatigue and water hammer. This hose is made with multiple layers of fiber glass protection to provide maximum resistance to radiant and direct heat up to 1000°F. This hose is non-conductive with a resistance greater than 1000 gigaohms at 1000 volts DC. Hose can be made in a hard wall design with and without a steel helix in sizes 4" to 10".

### NovaGlass 9155 Furnace Door Hose

Designed to be a highly flexible hose with an external temperature resistance to 1000 °F. This hose is non-conductive with a resistance greater than 1000 gigaohms at 1000 volts DC.



Part No.	I.D.	O.D.	WP psi	WT LBS/FT
9155GS-00500-00	½	1.05	400	0.34
9155GS-00750-00	¾	1.38	400	0.53
9155GS-01000-00	1	1.67	300	0.72
9155GS-01250-00	1¼	1.93	300	0.85
9155GS-01500-00	1½	2.18	250	0.99
9155GS-02000-00	2	2.80	250	1.58
9155GS-02250-00	2¼	3.05	250	1.75
9155GS-02375-00	2¾	3.22	250	1.97
9155GS-02500-00	2½	3.35	250	2.06
9155GS-02750-00	2¾	3.60	250	2.25
9155GS-03000-00	3	3.85	250	2.43
9155GS-03250-00	3¼	4.10	250	2.61
9155GS-03500-00	3½	4.35	250	2.78
9155GS-04000-00	4	4.87	250	3.41
9155GS-04500-00	4½	5.37	250	3.78

### NovaFlex® 9156 Nomex Furnace Door Hose

Designed to be a highly flexible hose with an external temperature resistance to 600° F. This hose is non-conductive with a resistance greater than 1000 gigaohms at 1000 volts DC.



Part No.	I.D.	O.D.	WP psi	WT LBS/FT
9165GS-00500-00	½	1.05	400	0.33
9165GS-00750-00	¾	1.44	400	0.58
9165GS-01000-00	1	1.68	300	0.70
9165GS-01250-00	1¼	1.94	300	0.85
9165GS-01500-00	1½	2.18	250	0.98
9165GS-02000-00	2	2.82	250	1.56
9165GS-02250-00	2¼	3.08	250	1.73
9165GS-02375-00	2¾	3.24	250	1.96
9165GS-02500-00	2½	3.37	250	2.04
9165GS-03000-00	3	3.85	250	2.41
9165GS-03500-00	3½	4.37	250	2.76
9165GS-04000-00	4	4.89	250	3.37
9165GS-04500-00	4½	5.39	250	3.74



## Cable Cooling Hoses

### NovaFlex® 9500

Soft wall hose with a low level of conductivity. This hose works well in applications such as cable covers and scuff barriers for cable. Hose has an electrical resistivity of 50 gigaohms per foot at 1000 volts DC.



Part No.	I.D.	O.D.	WP psi	WT LBS/FT
9500YS-00750-00	¾	1.21	200	0.44
9500YS-04100-00	1	1.46	200	0.58
9500YS-01125-00	1⅝	1.58	200	0.64
9500YS-01250-00	1¼	1.71	200	0.70
9500YS-01375-00	1⅝	1.84	200	0.76
9500YS-01500-00	1½	1.96	200	0.82
9500YS-01625-00	1⅝	2.13	200	0.98
9500YS-01688-00	1 <sup>11</sup> / <sub>16</sub>	2.20	200	1.02
9500YS-01750-00	1¾	2.26	200	1.05
9500YS-01813-00	1 <sup>13</sup> / <sub>16</sub>	2.32	200	1.09
9500YS-01875-00	1⅞	2.38	200	1.12
9500YS-02000-00	2	2.51	200	1.18
9500YS-02125-00	2⅞	2.63	200	1.25
9500YS-02250-00	2¼	2.76	200	1.31
9500YS-02375-00	2⅞	2.88	200	1.37
9500YS-02500-00	2½	3.01	200	1.44

### NovaFlex® 9540

Superior designed non-conductive soft wall hose. Works well in applications such as cable covers and scuff barriers for cable. Hose has an electrical resistivity greater than 1000 gigaohms per foot at 1000 volts DC.



Part No.	I.D.	O.D.	WP psi	WT LBS/FT
9540YS-00500-00	½	1.00	200	0.38
9540YS-00750-00	¾	1.25	200	0.51
9540YS-01000-00	1	1.54	200	0.71
9540YS-01125-00	1⅝	1.72	200	0.86
9540YS-01250-00	1¼	1.84	200	0.93
9540YS-01375-00	1⅞	1.97	200	1.01
9540YS-01500-00	1½	2.09	200	1.08
9540YS-01563-00	1 <sup>9</sup> / <sub>16</sub>	2.16	200	1.13
9540YS-01625-00	1⅝	2.22	200	1.16
9540YS-01750-00	1¾	2.36	200	1.33
9540YS-01813-00	1 <sup>13</sup> / <sub>16</sub>	2.41	200	1.37
9540YS-01875-00	1⅞	2.48	200	1.41
9540YS-02000-00	2	2.71	200	1.71
9540YS-02250-00	2¼	2.99	200	2.11
9540YS-02375-00	2⅞	3.11	200	2.21
9540YS-02500-00	2½	3.23	200	2.31
9540YS-03000-00	3	3.73	200	2.71
9540YS-03500-00	3½	4.23	200	3.11
9540YS-04000-00	4	4.73	200	3.52



## Cable Cooling Hoses

### NovaSil Cable Cooling Hose

Designed for cooling electrical cables. Has a superior external high performance thermal blanket layer. This hose's special exterior heat resistant design and proprietary compounds provide excellent service life. The hose design and working pressure is based on the application and is available with helical and annular bumpers (*see below*) to prevent damage due to cable dancing. This hose is non-conductive with a resistance greater than 1000 gigaohms at 1000 volts DC. The hardwall design uses a non-steel helix.



*Elements of Cable Cooling Hose*

### Hose Bumpers

Hose bumpers are used to prevent damage to the hose carcass due to excessive wear or damage caused by hose or cable dancing, vibration, movement or abuse during installation. (*Bumpers may be added on to any style of hose.*) Bumpers are typically applied in an annular or spiral pattern.

*Spiral pattern bumper on fiberglass*

*Spiral pattern bumper on Novasil*

*Annular pattern bumper on fiberglass*

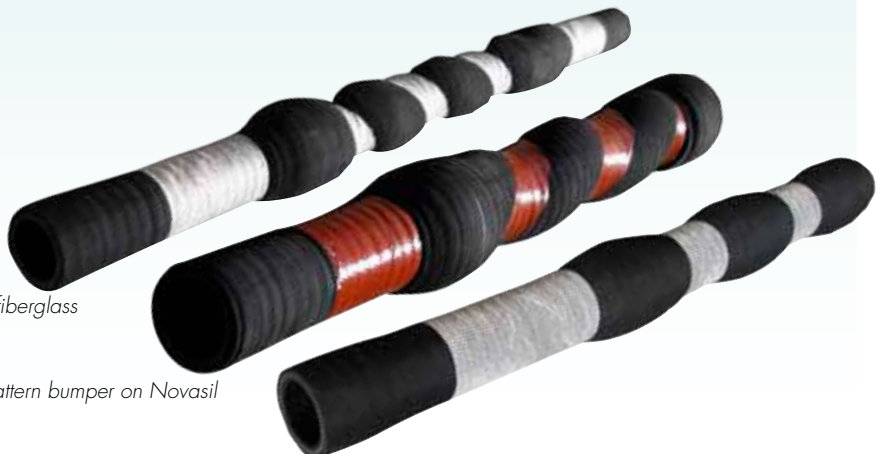


### NovaGlass Hose

Designed for cable cooling hose. This robust hose is built to operate near furnaces that develop external temperatures of up to 1000°F. This hose is made with multiple layers of fiberglass and proprietary compounds for excellent service life. The hose design and working pressure, if based on the application, is available with helical & annular bumpers (*see below*) to prevent damage due to cable dancing. This hose is non-conductive with a resistance greater than 1000 gigaohms at 1000 volts DC. The hardwall design uses a non-steel helix.

### Available Designs

- Working Pressures up to 600 psi
- Hose Diameters 4" to 12"
- Lengths to 100 ft
- Electrical resistivity: Greater than 1000 gigaohms at 1000 volts DC



## Engineered Mining/Slurry Hose

### NovaTransfer

NovaTransfer is flexible rubber hose used in place of rigid piping and where a flexible connection is more advantageous. This hose can be used in both full suction and discharge applications.

NovaTransfer is custom engineered from design specific rubber compounds and various tube thicknesses.

NovaTransfer is manufactured to customer specific requirements and designed to maximize safe hose life.

NovaTransfer may be built with a variety of end connections to best meet the application's requirements.

**End Connection Types:** Full face rubber flange, beaded end (rotating flange), built in steel nipples (fixed or floating flanges), victaulic nipples, crimped on nipples

**Tube Thicknesses:** ¼", ⅜", ½", ⅝", ¾", 1", 1¼"

**Tube Compound Types:** NovaWear TG, NovaWear WG, NovaWear BG, NovaWear RG, NovaWear YG, NovaWear BS, NovaSyn



### NovaTransfer 75psi

Tube	ID inches	ID mm	OD inches	OD mm	Working Pressure	Weight	
						lb/ft	Kg/m
¼"	2	50.80	2.88	73.2	75 psi	1.80	45.7
¼"	2¾	60.33	3.26	82.8	75 psi	2.05	52.1
¼"	2½	63.50	3.38	85.9	75 psi	2.15	54.6
¼"	2¾	73.03	3.86	98.1	75 psi	2.80	71.2
¼"	3	76.20	3.99	101.3	75 psi	2.91	73.9
¼"	3½	88.90	4.49	114.0	75 psi	3.35	80.1
¼"	4	101.60	4.99	126.7	75 psi	3.75	95.3
¼"	4½	114.30	5.5	139.7	75 psi	4.35	110.5
¼"	5	127.00	6.12	155.5	75 psi	5.18	131.6
¼"	6	152.40	7.21	183.1	75 psi	7.00	177.8
¼"	6¾	168.28	7.84	199.1	75 psi	7.88	200.2
¼"	8	203.20	9.24	234.7	75 psi	9.80	248.9
¼"	8¾	219.08	10.12	257.1	75 psi	13.32	338.3
¼"	10	254.00	11.50	292.1	75 psi	15.29	388.4
¼"	10¾	273.05	12.41	315.2	75 psi	17.18	436.4
¼"	12	304.80	13.66	347.0	75 psi	19.05	483.9
¼"	12¾	323.85	14.41	366.0	75 psi	20.15	511.8
¼"	14	355.60	15.84	402.3	75 psi	25.20	640.1
¼"	16	406.40	17.84	453.1	75 psi	30.85	783.6
¼"	20	508.00	22.42	569.5	75 psi	43.30	1099.8
¼"	24	609.60	26.42	676.1	75 psi	53.80	1366.5

### NovaTransfer 150psi

Tube	ID inches	ID mm	OD inches	OD mm	Working Pressure	Weight	
						lb/ft	Kg/m
¼"	2	50.80	2.97	75.4	150 psi	1.98	50.3
¼"	2¾	60.33	3.36	85.3	150 psi	2.32	58.9
¼"	2½	63.50	3.49	88.6	150 psi	2.42	61.5
¼"	2¾	73.03	3.92	99.6	150 psi	2.98	75.7
¼"	3	76.20	4.04	102.6	150 psi	3.09	78.5
¼"	3½	88.90	4.54	115.3	150 psi	3.52	89.4
¼"	4	101.60	5.04	128.0	150 psi	3.96	100.6
¼"	4½	114.30	5.65	143.5	150 psi	5.03	127.8
¼"	5	127.00	6.22	158.0	150 psi	5.82	147.8
¼"	6	152.40	7.35	186.7	150 psi	7.75	196.9
¼"	6¾	168.28	7.97	195.6	150 psi	8.71	221.2
¼"	8	203.20	9.37	238.0	150 psi	10.80	274.3
¼"	8¾	219.08	10.1	258.1	150 psi	13.71	348.2
¼"	10	254.00	11.61	294.9	150 psi	15.72	399.3
¼"	10½	273.05	12.41	315.2	150 psi	17.31	439.7
¼"	12	304.80	13.66	347.0	150 psi	19.20	487.7
¼"	12¾	323.85	14.55	369.6	150 psi	21.97	558.0
¼"	14	355.60	16.00	406.4	150 psi	27.18	690.4
¼"	16	406.40	18.00	457.2	150 psi	33.09	840.5
¼"	20	508.00	22.62	574.5	150 psi	43.70	1110.0
¼"	24	609.60	26.76	679.7	150 psi	57.28	1454.9

# Slurry King Hose

## Slurry King 5000

A tough versatile alternative to engineered hoses or steel pipe installations. This unique system of quick installation hose (up to 14" ID), eliminates excessive down time due to long deliveries for custom length hose. Stock the bulk hose and couplings. Simply cut the hose to length, attach the couplings and install the finished assembly in minutes. Slurry King is available in three tube compounds to maximize service life.

I.D.	O.D.	Lining Thickness (in)	MBR (in)	Max Prod Lgth(ft)	WP psi	WT lbs/ft
2	3.00	3/16	12	100	150	2.0
3	4.50	3/8	14	100	150	4.0
4	5.25	3/8	20	100	150	5.4
5	6.45	3/8	26	60	150	8.0
6	7.50	3/8	30	60	150	9.4
8	9.50	3/8	69	40	150	12.1
10	11.50	3/8	79	40	150	14.8
12	13.75	3/8	99	40	150	18.8
14	16.00	3/8	119	40	150	26.0



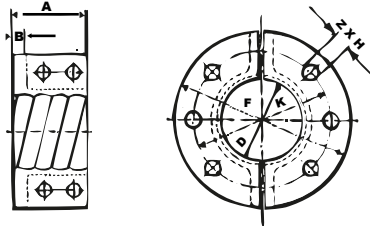
### Tube Options:

- NovaWear - Y Part # 5000YG
- NovaWear - R Part # 5000RG
- NovaWear - T Part # 5000TG

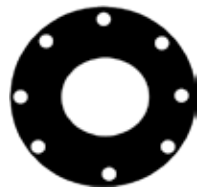
# Slurry King Flanges & Gaskets

## Slurry King Flanges

Aluminum split flanged specifically designed to provide a safe tight seal on Slurry King 5000 hose.



Size"	Part No
2	7SKFGASK02
3	7SKFGASK03
4	7SKFGASK04
5	7SKFGASK05
6	7SKFGASK06
8	7SKFGASK08
10	7SKFGASK10
12	7SKFGASK12
14	7SKFGASK14



## Slurry King Gaskets

Designed to fit and seal with mating 50# drilled flanges

'D' ID Inches	'A' Inches	'B' Inches	'K' Inches	'P' Inches	'Z' Inches	'H' Inches	Approx/ WT/LBS
2	3 11/32	5/8	4 3/4	6	4	3/4	3.30
2 1/2	3 5/16	5/8	5 1/2	7	4	3/4	4.40
3	3 5/16	5/8	6	7 1/2	4	3/4	4.40
4	3 5/16	5/8	7 1/2	9	8	3/4	6.60
4 1/2	4 1/8	5/8	8 1/2	10	8	7/8	7.70
5	4 1/8	5/8	8 1/2	10	8	7/8	7.70
6	4 1/2	1 1/16	9 1/2	11	8	7/8	8.80
8	5 7/8	3/4	11 3/4	13 1/2	8	7/8	13.20
10	6 3/8	1 1/8	14 1/4	16	12	1	25.40
12	7 11/16	1 1/8	17	19	12	1	30.90
14	7 11/16	1 1/8	18 3/4	21	12	1 1/8	35.30

## Dredge Hoses

NovaFlex® has developed a series of custom designed hose styles to meet the demanding requirements of dredging applications. There is NovaDredge Suction, NovaDredge Discharge (available in both a hardwall and softwall version) NovaDredge Sleeve and NovaDredge Gimbal. These hoses are available in various wear resistant tube configurations, based on the specific dredge requirement.

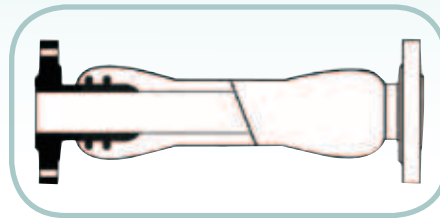
### NovaDredge Suction 5333

I.D.	Tube Gauge	MBR"	WP (psi)	Vac (HG)
8	3/8	48	50	29
8 3/4	3/8	52	50	29
10	1/2	60	50	29
10 3/4	1/2	65	50	29
12	1/2	72	50	29
12 3/4	1/2	77	50	29
14	3/4	84	50	29
16	3/4	96	50	29
18	3/4	108	50	29
20	1	120	50	29
24	1	144	50	29

### NovaFlex® 5333 NovaDredge Suction

Hardwall design with the most rugged tube compound found in the rubber industry NovaWear-YG.

This is a maximum cut, gouge, tear and abrasion resistant tube. The hose design is commonly used for both suction and boom/stinger applications. NovaDredge Suction is built with a helix wire spaced for flexibility and full flow ends for maximum wear resistance.



### NovaFlex® NovaDredge Discharge

Built in both hardwall and soft wall design. Typically used in stern discharge applications.

#### NovaDredge 5334 Hardwall

Hardwall design has a rugged tube with a heavy steel wire helix designed to be used where the bend radius needs to be controlled. This hose holds its shape and handles end pull very well. Tube thickness typically is 3/8" to 1".

#### NovaDredge Discharge - Hardwall

I.D.	Tube Gauge	MBR"	WP (psi)	Vac (HG)
8	3/8	48	150	29
8 3/4	3/8	52	150	29
10	1/2	60	150	29
10 3/4	1/2	65	150	29
12	1/2	72	150	29
12 3/4	1/2	77	150	29
14	3/4	84	150	29
16	3/4	96	150	29
18	3/4	108	150	29
20	1	120	150	29
24	1	144	150	29

#### NovaDredge 5335 Softwall

Softwall design has the same tube but has no helix. This hose has a strengthened carcass with extra reinforcement. This design is used where kinking is unavoidable.

#### NovaDredge Discharge - Softwall

I.D.	Tube Gauge	MBR"	WP (psi)	Vac (HG)
8	3/8	48	50	29
8 3/4	3/8	52	50	29
10	1/2	60	50	29
10 3/4	1/2	65	50	29
12	1/2	72	50	29
12 3/4	1/2	77	50	29
14	3/4	84	50	29
16	3/4	96	50	29
18	3/4	108	50	29
20	1	120	50	29
24	1	144	50	29

# Dredge Hoses

## NovaFlex® 5331 NovaDredge Sleeves

Typically used on discharge piping applications to connect dredge pipe sections. This hose is connected with various end connections or through the use of external clamps.



### NovaDredge Sleeves 5331

I.D.	O.D.	Tube Gauge	WP psi	WT LBS/FT
4½	5.73	¾	150	5.45
6	7.25	¾	150	7.51
6¾	8.017	¾	150	9.26
8¾	10.19	¾	150	12.97
10¾	12.50	½	150	17.83
12¾	14.55	½	150	22.80
14	16.04	½	150	27.21
16	18.04	½	150	30.82

## NovaFlex® 5335 NovaDredge Gimbal

Typically used on vacuum arms found on hopper dredges. Can also be utilized where extra flexibility is required. This type of hose is custom designed for each application. The gimbal design provides maximum flexibility. The thick tube is designed to maximize the longest safe service life possible. (Can be used in applications that require a smaller bend radius than standard helix wire hose can provide.)



### NovaDredge Gimbal 5335

I.D.	Tube Gauge	MBR"	WP (psi)	Vac (HG)
8	¾	24	50	29
8¾	¾	35	50	29
10	½	40	50	29
10¾	½	43	50	29
12	½	48	50	29
12¾	½	51	50	29
14	¾	56	50	29
16	¾	64	50	29
18	¾	72	50	29
20	1	80	50	29
24	1	96	50	29

