

For additional products please visit:  
**[WWW.GRIPWORKS.COM](http://WWW.GRIPWORKS.COM)**



VINYL HAND GRIPS

Page 6



FOAM HAND GRIPS

Page 18



VINYL & FOAM SLEEVES

Page 26



*Quality you can feel*

## The finest hand grips for more than 50 years.

Gripworks is proud to be the leader in hand grip innovation and supplier of the finest hand grips in the industry. For over 50 years, Gripworks has been manufacturing grips in the United States and around the world supplying the broadest selection of standard grips on the market. Whether you need vinyl or foam, Gripworks has the means to provide quality grips utilizing both dip molding and extrusion processes.

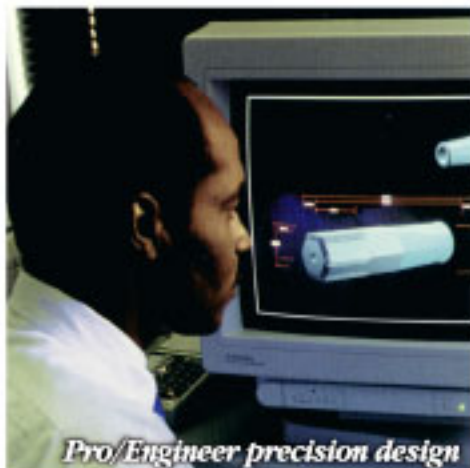


No matter what style grip you need, Gripworks provides quality grips at competitive prices. We accomplish this by manufacturing our tooling on site with our own in-house machine shop, working in conjunction with our experienced engineers and sophisticated engineering software. All materials are compounded on site as well, helping us to maintain excellent controls on all phases of grip production.

Wrap up the production of your grip with a finishing touch. The Gripworks Finishing Department can imprint logos, addresses, trademarks, or other messages directly on the grip for added appeal.



**For more information call:  
1-800-827-GRIP (4747)**



*Pro/Engineer precision design*



*In-house material development*



*Advanced tooling fabrication*



## TABLE OF CONTENTS

- 4. Choosing a Grip
- 5. Vinyl or Foam?

## VINYL GRIPS

- 6. Vinyl Grip Styles
- 7. Vinyl Grip Materials
- 8. Round Grips
- 10. Flat Grips
- 12. Contour Nubbed Grips
- 13. Ribbed Grips
- 14. Contour Angle Grips
- 15. Hanger Grips
- 16. Custom Vinyl Grips
- 17. Double Dip Grips

## FOAM GRIPS

- 18. Foam Grip Styles
- 19. Foam Grip Materials
- 20. Smooth Foam Grips
- 22. Buffed Foam Grips
- 24. Foam Hand Grips (FHG)
- 25. Splined Foam and Custom Foam Grips
- 26. Vinyl Sleeves and Foam Tubing
- 27. Vinyl and TPR Tubing
- 28. Stock Hand Grips
- 29. Finishing and Ordering Information
- 30. Grip Application Methods

## MEET THE S&amp;R FAMILY OF COMPANIES



Sinclair & Rush has been manufacturing products since 1950 and continues to supply quality products throughout the world. Known as a premier supplier to other leading manufacturers, Sinclair & Rush companies continue to search for new technologies, create new materials and find applications that promote value for our customer's products.

**GRIPWORKS®**

The world's grip manufacturer.  
[www.gripworks.com](http://www.gripworks.com)

**STOCKCAP**

The right fit for your business.  
[www.stockcap.com](http://www.stockcap.com)

**VISIPAK®**

The Clear Choice for Transparent Packaging  
[www.visipak.com](http://www.visipak.com)

**VynaFlex®**  
Plastisol Compounds

More than an eminent plastisol supplier... a plastisol consultant.  
[www.vynaflex.com](http://www.vynaflex.com)



International supplier of retail golf accessories.  
[www.castlebay.com](http://www.castlebay.com)

**Software®**

Beverageware With Style!  
[www.software.com](http://www.software.com)

**WWW.GRIPWORKS.COM**

## CHOOSING A GRIP

Your search for the right grip to add value, comfort and appeal to your product is easier now that you have discovered Gripworks. Unless you purchase grips regularly, you may not realize the variety of choices available to you. You may first begin to think about how it should look and feel. What color should it be? How long should it last? All these questions and more can surface when you begin looking for a grip, the right grip.

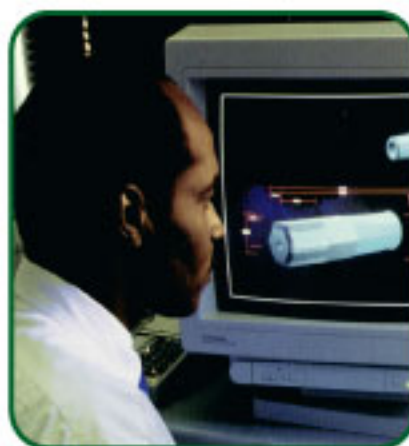
### Why is the right grip so important?

The customer's first contact with your product is likely to be the grip. You want this contact point to make a lasting impression, and you want it to look great. Enhancing your product with a creative or decorative grip can encourage the consumer's perception of the quality of your product, and increase its value. For example, if someone is going to use fitness equipment, they will want a comfortable relaxing grip. The gardener, however, will want a durable waterproof or weather resistant grip. Hand tool users will enjoy an ergonomic benefit and all products take on an upscale appearance when appropriately decorated in grips of different colors and designs. All of these factors should be considered as you prepare to present a finished product to consumers. The more it appeals to the end user, the greater chance of reaching your goal - sales!

### So how do you match your product needs to the right grip?

Come directly to Gripworks where the daily business is focused on matching the right grip for a variety of products. The highly trained Gripworks sales group can offer advice and samples. If a standard grip is not exactly what you need, Gripworks engineers and toolmakers work closely to design a grip with just the right features to enhance your product.

All these reasons make choosing the right grip a very important decision, so get the right grip - from Gripworks.



*"Gripworks engineers and toolmakers can design a grip with just the right features to enhance your product."*



## VINYL OR FOAM?

Now you know why it is so important to choose the right grip, and you know how skilled Gripworks can be in providing the right grip. So what's the next step?

First, let's answer more questions. Is vinyl or foam best for your product? Should you select a grip or a sleeve?

Beginning with vinyl hand grips, Gripworks has assembled a selection of hand grip sizes, styles, and materials that is unrivaled throughout the world. Utilizing the dip molding process, grips are produced in different lengths, wall thicknesses, material characteristics and surface textures without tooling charges.

The word foam itself conveys cushion-like comfort and that is just the feature you need to appeal to the consumer. Gripworks has compiled a variety of formulations to create just the right look and feel while maintaining the highest level of durability for each application.

Sleeves are perfect for long handle items such as brooms, mops and garden tools. They also work well for bars used in manufacturing exercise equipment and even bicycles.

Whether you select vinyl or foam, there are many choices of styles and materials. The following pages will describe many of these options, first for vinyl and then foam. We invite you to explore the information, and we will be pleased to assist you in your search for the right grip.



*"Selecting the proper grip material and style positively influences the consumer's perception of your product."*

## VINYL GRIP STYLES

Grip styles have evolved from the very basic round grip to the most unique custom grips. Perhaps the most common grip design began with the basic bicycle grip, essentially our nubbed grip. Variations developed from this, and today, Gripworks supplies a wide range of grip styles across a vast array of applications.



### Round

Available in nearly every material and the most popular grip style!



### Contour Angle

Contemporary styling will give your product a unique look.



### Flat

Used on tools, ball valves & levers.



### Hanger

Hanger feature adds additional storage utility to any tool.



### Nubbed

Finger nubs for secure grip. Available in many popular sizes.



### Custom

Experienced design team and in-house tooling creates what you need.



### Ribbed

Side ribs styling for value added appearance.

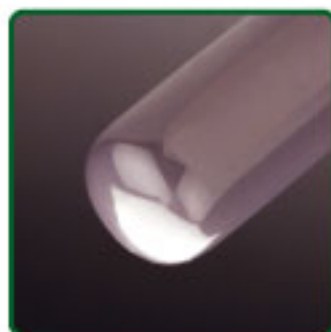


### Double Dipped

Use two colors to add to consumer appeal! Durable inner liner adds strength with a soft exterior.

## VINYL GRIP MATERIALS

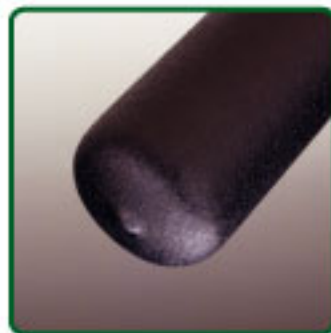
The world of plastic is flooded with different material formulations for specific needs. Finding the right formula can be puzzling so Gripworks begins with six basic vinyl formulas. Each is crafted in the Gripworks in-house material formulation lab and tested for required properties.

**Flexfit™**

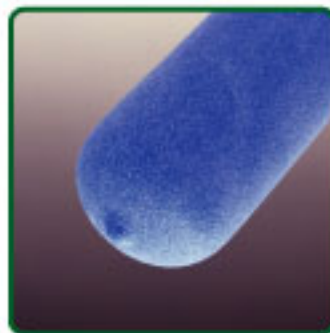
Glossy, general purpose

**Vynaprene™**

Rubbery, with low-gloss finish

**Softex™**

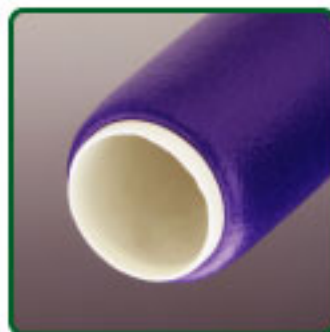
Textured, non-slip finish

**Polysuede™**

Soft, brushed finish with "suede-like" appearance

**Vynafoam™**

Soft, velvet-like finish with the comfort of foam and durability of vinyl

**Tuffoam®**

Vinyl with the look and feel of foam

At Gripworks we have the tools and expertise to create the right blend for any grip need. Let Gripworks help you solve the puzzle and create a grip - the right grip - for your product.

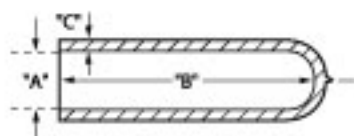




## ROUND GRIPS

Round hand grips are our most popular style of hand grips. These grips are typically used on round tubes or bars such as the ones you see on exercise equipment, lawn & garden equipment and tools, power equipment and many other applications. The round grips are flexible enough to conform to different shapes. Objects that deviate from an exact round form can apply a round grip if the outside diameter of the object is consistent throughout.

Round grips range from 0.165" to 3.500" in diameter. Each set of tooling can manufacture grips in any length up to the maximum inside length (see chart). Grips measuring up to 24" can be made for some of the more standard sizes. For the most popular sizes tooling is available.



Note: "B" dimension, inside length, is measured to center of closed end. The length tolerance is  $\pm 0.062$ " (1.57 mm)

\* Grips are available in various lengths in 1/16 increments up to the maximum inside length as noted.

Standard colors: Black, Red, White, Blue, Green, Orange, Yellow, Gray. Other colors available upon request.

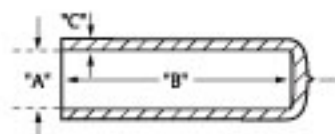
### Round Grips - Round End

Inside Diameter "A"		Maximum Inside Length* "B"		Nominal Wall Thickness "C"					
				MATERIALS					
In	mm	In $\pm .062$	mm $\pm 1.57$	Single Dipped		Double Dipped			
				Flexfit	Softex	Vynaflex	Vynaprene	Polysuede	Tufffoam
0.165	4.19	3.500	88.90	0.055	0.055				
0.187	4.75	3.500	88.90	0.055	0.055				
0.250	6.35	4.250	107.95	0.060	0.060				
0.305	7.75	7.000	177.80	0.060	0.060				
0.313	7.95	6.250	158.75	0.060	0.060				
0.375	9.53	7.000	177.80	0.065	0.065				
0.437	11.10	5.250	133.35	0.065	0.065				
0.500	12.70	5.250	133.35	0.065	0.065				
0.562	14.27	5.250	133.35	0.065	0.065				
0.600	15.24	5.750	146.05	0.065	0.065				
0.625	15.88	11.000	279.40	0.065	0.065	0.150			
		8.500	215.90				0.110		0.180
		10.500	266.70					0.110	
0.687	17.45	5.250	133.35	0.065	0.065				
0.750	19.05	11.000	279.40	0.065	0.065	0.150			
		8.500	215.90				0.110		0.180
		10.500	266.70					0.110	
0.812	20.62	8.500	215.90	0.070	0.070		0.110	0.110	0.180
		8.000	203.20			0.150			
0.843	21.41	10.000	254.00	0.070	0.070	0.150			
		8.500	215.90				0.110	0.110	0.180
0.875	22.23	8.500	215.90	0.070	0.070		0.110	0.110	0.180
		8.000	203.20			0.150			
0.937	23.80	11.000	279.40	0.070	0.070	0.150			
		8.500	215.90				0.110		0.180
		10.500	266.70					0.110	
1.000	25.40	8.500	215.90	0.070	0.070		0.110	0.110	0.180
		8.000	203.20			0.150			
1.062	26.97	5.250	133.35	0.070	0.070				
1.125	28.58	5.250	133.35	0.070	0.070				
1.250	31.75	5.250	133.35	0.070	0.070				
1.500	38.10	5.250	133.35	0.070	0.070				
1.625	41.28	5.250	133.35	0.070	0.070				
Tolerances				0.010	0.010	0.020	0.020	0.030	0.030



## Round Grips - Flat End

Inside Diameter "A"		Maximum Inside Length* "B"		Nominal Wall Thickness "C"				
				MATERIALS				
				Single Dipped		Double Dipped		
In	mm	In ± .062	mm ± 1.57	Flexfit	Softex	Vynaflex	Vynaprene	Polysuede
0.187	4.75	3.500	88.90	0.055	0.055			
0.207	5.26	3.500	88.90	0.055	0.055			
0.281	7.14	5.000	127.00	0.060	0.060			
0.313	7.95	6.000	152.40	0.060	0.060			
0.375	9.53	6.000	152.40	0.065	0.065			
0.437	11.10	4.000	101.60	0.065	0.065			
0.500	12.70	8.500	215.90	0.065	0.065		0.110	0.110
		8.000	203.20			0.150		
0.562	14.27	6.000	152.40	0.065	0.065			
0.610	15.49	6.750	171.45	0.065	0.065			
0.625	15.88	6.000	152.40	0.065	0.065			
0.687	17.45	6.000	152.40	0.065	0.065			
0.725	18.42	24.000	609.60	0.065	0.065			
		23.000	584.20			0.150		
		8.500	215.90				0.110	
		10.500	266.70					0.110
0.730	18.54	6.000	152.40	0.065	0.065			
0.750	19.05	6.000	152.40	0.065	0.065			
0.812	20.62	6.000	152.40	0.070	0.070			
0.830	21.08	6.000	152.40	0.070	0.070			
0.843	21.41	6.000	152.40	0.070	0.070			
0.875	22.23	24.000	609.60	0.070	0.070			
		23.000	584.20			0.150		
		8.500	215.90				0.110	
		10.500	266.70					0.110
0.921	23.39	24.000	609.60	0.070	0.070			
		23.000	584.20			0.150		
		8.500	215.90				0.110	
		10.500	266.70					0.110
0.937	23.80	24.000	609.60	0.070	0.070			
		23.000	584.20			0.150		
		8.500	215.90				0.110	
		10.500	266.70					0.110
0.950	24.13	6.000	152.40	0.070	0.070			
1.000	25.40	24.000	609.60	0.070	0.070			
		23.000	584.20			0.150		
		8.500	215.90				0.110	
		10.500	266.70					0.110
1.062	26.97	6.000	152.40	0.070	0.070	0.150		
1.125	28.58	24.000	609.60	0.070	0.070			
		23.000	584.20			0.150		
		8.500	215.90				0.110	
		10.500	266.70					0.110
1.187	30.15	6.000	152.40	0.070	0.070	0.150		
1.220	30.99	10.000	254.00	0.070	0.070	0.150		0.110
		8.500	215.90				0.110	
1.250	31.75	6.000	152.40	0.070	0.070	0.150		
1.375	34.93	6.000	152.40	0.070	0.070			
1.500	38.10	6.000	152.40	0.070	0.070			
1.625	41.28	6.000	152.40	0.070	0.070			
1.687	42.85	6.000	152.40	0.070	0.070			
1.750	44.45	6.000	152.40	0.070	0.070			
2.000	50.80	6.000	152.40	0.070	0.070			
2.250	57.15	6.000	152.40	0.070	0.070			
2.500	63.50	6.000	152.40	0.070	0.070			
2.750	69.85	6.000	152.40	0.070	0.070			
3.000	76.20	6.000	152.40	0.070	0.070			
3.250	82.55	6.000	152.40	0.070	0.070			
3.500	88.90	6.000	152.40	0.070	0.070			
Tolerances				0.010	0.010	0.020	0.030	0.030



Note: "B" dimension is measured to inside radius.

Note: "C" dimension is measured to .250" (6.35 mm) from open end. Wall thickness tapers slightly heavier to closed end. Heavier or lighter wall thicknesses are available upon request.

\* Grips are available in various lengths in 1/16 increments up to the maximum inside length as noted.

Standard colors: Black, Red, White, Blue, Green, Orange, Yellow, Gray. Other colors available upon request.



Round grips range from 0.165" to 3.500" in diameter.

## FLAT GRIPS

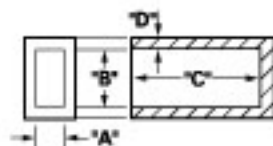
The demand for flat grips remains constant and Gripworks continues to supply the most complete line of these vinyl dip molded grips. Designed to fit on rectangular bars, you will commonly see these in use on ball valves, levers, tools and outdoor power equipment. Our unique dip molding process allows us to vary the design by length, texture, color and more. Call for any design variations and we can create a grip to fit your need.



### Flat Grips - Flat End

Inside Dimension "A"		Inside Dimension "B"		Maximum Inside Length "C"		Nominal Wall Thickness "D"					
						MATERIALS					
						Single Dipped			Double Dipped		
In.	mm	In.	mm	In. ±0.062	mm ±1.57	Flexfit	Softex	Vynafoam	Vynaprene	Polysuede	Tuffloam
0.062	1.57	0.500	12.700	4.250	107.95	0.065	0.065	Consult a sales representative for design assistance.	Some flat hand grips can utilize the double dipping process for creating more functional or attractive grips. Please consult a sales representative for the possibilities and design assistance.		
0.090	2.29	1.000	25.400	5.125	130.18	0.065	0.065				
0.125	3.18	0.500	12.700	4.250	107.95	0.065	0.065				
0.125	3.18	0.562	14.280	4.500	114.30	0.065	0.065				
0.125	3.18	0.750	19.050	4.250	107.95	0.065	0.065				
0.125	3.18	2.250	57.150	4.375	111.13	0.065	0.065				
0.187	4.75	0.937	23.800	5.500	139.70	0.065	0.065				
0.250	6.35	2.000	50.800	6.000	152.40	0.065	0.065				
0.368	9.35	0.970	24.640	6.000	152.40	0.065	0.065				

\* Grips are available in various lengths in 1/16 increments up to the maximum inside length as noted.



- 1) Inside length tolerance:  $\pm 0.062"$  (1.57 mm)
  - 2) Single Dip wall thickness tolerance:  $\pm 0.010"$  (.25 mm)
  - 3) Inside lengths at  $\pm 0.062"$  (1.57 mm) increments.
  - 4) Wall thicknesses are heavier as length increases.
  - 5) Standard colors: Black, Red, White, Blue, Green, Orange, Yellow, Gray.
- Other colors available upon request.



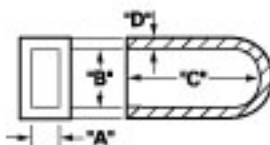
## Flat Grips - Round End

Inside Dimension "A"		Inside Dimension "B"		Maximum Inside Length* "C"		Nominal Wall Thickness "D"					
						MATERIALS					
						Single Dipped			Double Dipped		
in.	mm	in.	mm	in $\pm 0.062$	mm $\pm 1.57$	Flexfit	Softex	Vynafoam	Vynaprene	Polysuede	Tufffoam
0.062	1.57	0.312	7.930	4.000	101.60	0.065	0.065	Consult a sales representative for design assistance.	Some flat hand grips can utilize the double dipping process for creating more functional or attractive grips. Please consult a sales representative for the possibilities and design assistance.		
0.062	1.57	0.343	8.710	3.875	98.43	0.065	0.065				
0.062	1.57	0.375	9.530	4.250	107.95	0.065	0.065				
0.062	1.57	0.437	11.100	4.375	111.13	0.065	0.065				
0.062	1.57	0.625	15.880	4.500	114.30	0.065	0.065				
0.062	1.57	0.750	19.050	4.750	120.65	0.065	0.065				
0.095	2.41	0.875	22.230	4.750	120.65	0.065	0.065				
0.125	3.18	0.437	11.100	4.500	114.30	0.065	0.065				
0.125	3.18	0.500	12.700	4.500	114.30	0.065	0.065				
0.125	3.18	0.675	17.150	3.750	95.25	0.065	0.065				
0.125	3.18	0.750	19.050	5.000	127.00	0.065	0.065				
0.125	3.18	1.000	25.400	5.000	127.00	0.065	0.065				
0.162	4.11	1.250	31.750	6.000	152.40	0.065	0.065				
0.187	4.75	0.500	12.700	4.250	107.95	0.065	0.065				
0.187	4.75	1.500	38.100	8.000	203.20	0.065	0.065				
0.250	6.35	0.750	19.050	5.250	133.35	0.065	0.065				
0.250	6.35	1.000	25.400	5.250	133.35	0.065	0.065				
0.250	6.35	1.250	31.750	5.500	139.70	0.065	0.065				
0.315	8.00	1.772	45.010	5.000	127.00	0.065	0.065				
0.750	19.05	0.750	19.050	5.250	133.35	0.065	0.065				

\* Grips are available in various lengths in 1/16 increments up to the maximum inside length as noted.



Use for most flat handle applications.



- 1) Inside length tolerance:  $\pm 0.062$ " (1.57 mm)
- 2) Single Dip wall thickness tolerance:  $\pm 0.010$ " (.25 mm)
- 3) Inside lengths at  $\pm 0.062$ " (1.57 mm) increments.
- 4) Wall thicknesses are heavier as length increases.
- 5) Standard colors: Black, Red, White, Blue, Green, Orange, Yellow, Gray. Other colors available upon request.



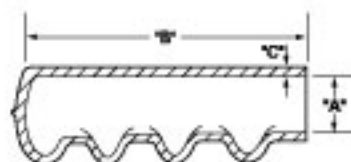
## CONTOUR NUBBED GRIPS

Nubbed grips are essentially based on the design of the original bicycle grip. Today these nubbed grips remain popular for many other applications because they are easy to use and come in a variety of stylish colors. Vinyl nubbed grips will not tear or crack and are excellent for use when moisture or weather are factors that test the grips endurance.



### Contour Nubbed Grips

Inside Diameter "A"		Maximum Inside Length "B"		Nominal Wall Thickness "C"				Double Dipped Materials (Vynaprene, Polysuede, Softex & Tuffoam)
				Single Dipped Materials (Flexfit & Vynafoam)				
				Econo Wall		Heavy Wall		
in.	mm	in	mm	in ±.010	mm ±0.25	in ±.010	mm ±0.25	
0.625	15.88	3.500	88.90	0.065	1.65	0.070	1.78	Some contour nubbed grips can utilize the double dipping process for creating more functional or attractive grips. Please consult a sales representative for the possibilities and design assistance.
0.725	18.42	3.125	79.38	0.075	1.91	0.090	2.29	
0.750	19.05	4.375	111.13	0.075	1.91	0.090	2.29	
0.843	21.41	4.375	111.13	0.080	2.03	0.095	2.41	
0.875	22.23	4.375	111.13	0.080	2.03	0.095	2.41	
0.960	24.38	4.375	111.13	0.080	2.03	0.095	2.41	
1.000	25.40	4.375	111.13	0.080	2.03	0.095	2.41	
1.250	31.75	4.375	111.13	0.080	2.03	0.095	2.41	





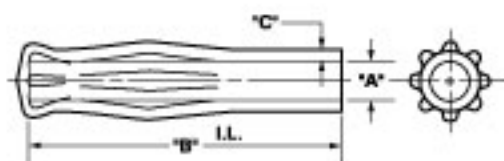


## RIBBED GRIPS

The unique design of these ribbed grips makes them stand out from the traditional grip. The Ribbed Grip adds style to hand and garden tools and exercise and healthcare equipment. Vinyl Ribbed Grips will not tear or shred. They supply excellent resistance to moisture and weather conditions. They are long lasting, easy to install and conform to provide a great fit.

### Ribbed Grips

Inside Diameter "A"		Maximum Inside Length "B"		Nominal Wall Thickness "C"				Some ribbed grips can utilize the double dipping process for creating more functional or attractive grips. Please consult a sales representative for the possibilities and design assistance.
				Single Dipped Materials (Flexfit & Vynafoam)				
				Econo Wall		Heavy Wall		
In.	mm	In	mm	In ±.010	mm ±0.25	In ±.010	mm ±0.25	
0.625	15.88	3.500	88.90	0.065	1.65	0.070	1.78	
0.750	19.05	4.250	107.95	0.075	1.91	0.090	2.29	
0.845	21.46	4.375	111.13	0.075	1.91	0.090	2.29	
1.000	25.40	4.375	111.13	0.080	2.03	0.095	2.41	



## CONTOUR ANGLE GRIPS

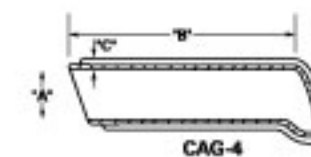
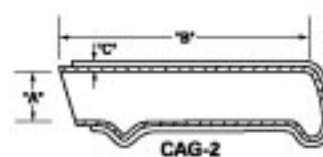
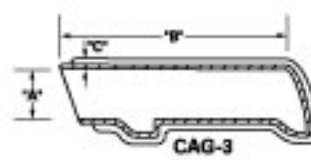
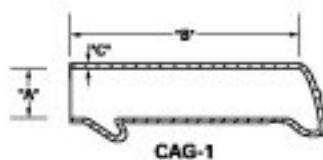
Contour Angle Grips are a variation of our nubbed grips and offer the same excellent qualities. These can be single dipped or double dipped to add value to the end product, and of course, the option to print on the grip will always increase value. Quick and easy installation provides a secure fit.



### Contour Angle Grips

Item	Inside Diameter "A"		Maximum Inside Length "B"		Nominal Wall Thickness "C"	
					Single Dipped Materials (Flexfit, Softex & Vynafoam)	Double Dipped Materials (Vynaprene, Polysuede & Tuffloam)
	In.	mm	In ±.062	In ±1.57	In ±.010	mm ±0.25
CAG-1	0.790	20.07	4.500	114.30	0.080	2.03
CAG-2	0.810	20.57	4.500	114.30	0.080	2.03
CAG-3	0.960	24.38	4.750	120.65	0.080	2.03
CAG-4	0.960	24.38	4.750	120.65	0.080	2.03
	1.230	31.24	5.000	127.00	0.080	2.03

Some Contour Angle grips can utilize the double dipping process for creating more functional or attractive grips. Please consult a sales representative for the possibilities and design assistance.





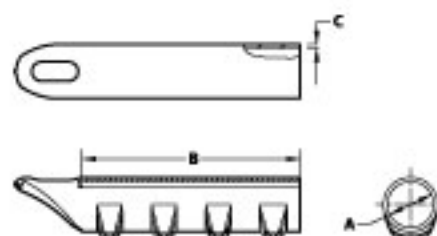


## HANGER GRIPS

Hanger Grips add practicality to many products while maintaining all the durable features found in our other vinyl grips. Found on brooms, brushes, utensils and many other products, these grips can be made in vibrant colors to help promote any brand. Add a logo for increased awareness.

### Hanger Grips

Inside Diameter "A"		Maximum Inside Length "B"		Nominal Wall Thickness "C"			
				Single Dipped Materials (Flexfit, Softex & Vynafoam)		Double Dipped Materials (Vynaprene, Polysuede & Tufffoam)	
in.	mm	in $\pm 0.062$	in $\pm 1.57$	in $\pm 0.010$	mm $\pm 0.25$	Some hanger grips can utilize the double dipping process for creating more functional or attractive grips. Please consult a sales representative for the possibilities and design assistance.	
0.710	18.03	4.250	107.95	0.085	2.16		
0.845	21.46	4.250	107.95	0.095	2.41		
0.970	24.64	4.250	107.95	0.095	2.41		



## CUSTOM VINYL GRIPS

Custom designed hand grips are our primary focus at Gripworks. In fact, our goal to continually come up with innovative designs for our customers has made us a pioneer in the field of custom designed hand grips. Our development of the double dipping process has allowed for numerous advancements in grip technology while our constant creation of new materials continues to enhance and improve the look, feel, and performance of these products.

### Our Design Process

Experienced in the art of ergonomic design, our engineers utilize state-of-the-art computerized design engineering software to draft a custom grip specifically for your application. Our in house tool shop can then construct a working prototype at a fraction of the cost of injection molded grips. These prototypes can typically be made within a few weeks and revisions can be made quickly and inexpensively.



### GripWorks Custom Innovations:

- Dual Wall grips that utilize durable internal liners with soft consumer- friendly exteriors.
- Two color grips that enhance the consumer appeal of a product.
- Channel grips that expand the outside diameter of a grip to make it more ergonomic.
- Vinyl Foam grips utilizing our proprietary Tuff foam® and Vynafoam materials.

Work with the experts. At Gripworks, hand grips are what we do. You can take comfort in knowing that the people designing your custom grip have years of experience and knowledge in hand grip design.

Customize the grip even more by adding a finishing touch. Gripworks can print your logo, address, message, etc., directly on the grip. Our in-house Finishing Department utilizes silkscreen, pad printing, heat stamp, and decal machines to apply single or multi-color prints.



## DOUBLE DIP GRIPS



One of the most important aspects of this development was that Gripworks could create very soft materials that previously would not be able to function as grips. Over the years, the popularity of these double dipped grips has soared. In fact, you will now find our two color, dual wall hand grips on many of the world's most popular and respected hand tools.

Typical applications for dual wall grips utilize a hard inside liner with one of our softer materials such as Vynaprene, Polysuede, or Tufoam. Of course, this process can also be used with other materials for achieving wall thickness or cost targets.

The double dipping process can be used on many different styles of tooling and with a number of materials. Please consult a sales representative to see if this process can be utilized for your hand grip application.



One of the many innovations attributed to Gripworks is the development of dual wall grips utilizing a proprietary double dipping technology. This process was to better satisfy our customers' never ending desire for grips that were extremely comfortable, but that did not wear down or puncture after continued use.

By utilizing technology from our insulated beverageware division, Gripworks engineers were able to create a process that would allow them to manufacture extremely durable hand grips covered with a layer of soft material. It is an in-line process whereby the materials are fused together before they fully cure to produce a one piece grip that will not separate.



## FOAM GRIP STYLES



### Smooth Foam Grip, with Skin

These extruded grips are smooth to the touch as the result of a skin that forms on the outside of the foam as it cures. Often referred to as unground foam.



### Buffed Foam Grip, without Skin

Removing the exterior skin of an extruded foam tube creates this grip's no-slip finish. Buffed foam grips provide a comfortable, cushioned feel and an upscale appearance.



### Foam Hand Grips

There are many varieties of the contour foam hand grips (FHG) and their unique designs provide maximum consumer appeal. Beginning with an extruded foam tube, FHGs are formed or shaped in a variety of ways creating a stylish grip.



### Splined Foam

This grip's unique design yields a cost effective way to add value to your product. Its appearance is similar to that of the ridges found in some knit or woven fabrics.



### Custom Foam Grips

If you have a grip idea in mind, our experienced design engineers can help mold it into shape. From custom designs to custom colors, we manufacture a large number of custom grips for specific requirements.



## FOAM GRIP MATERIALS



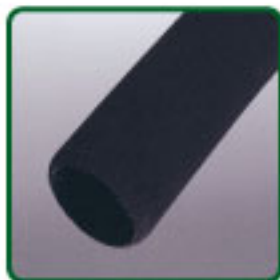
### NPVC

This is the most common foam rubber grip material used, and Gripworks has engineered and mastered many formulations to improve the quality of the grips in use today. These grips possess excellent oil and gas resistance properties.



### Durablend™

This proprietary material is the combination of high-grade rubber compounds, and creates a grip that has excellent ozone and oxidation resistant qualities.



### Resilience™

Another proprietary material, this blend of plastic and rubber has a textured surface similar to our Softex material. These extruded grips are perfect for applications requiring long grips and can be produced in lengths much longer than ground foam or dip molded grips.



### EPDM

When a grip is exposed to excessive outdoor elements, the EPDM foam grips are found to be extremely durable. Available in many design styles.



### UV-NPVC™

This proprietary material results in an economical foam rubber grip that has the same qualities as our NPVC grips with additional outdoor ozone and weather resistant qualities.



## SMOOTH FOAM GRIPS

The Smooth Foam Grips are the most basic and least expensive of our foam grips. There are many applications for this grip or sleeve, including long handled tools, brooms, rakes and u-shaped bars. The inside diameter, the thickness of the wall, and the length constitute a tube's size, and Gripworks provides a wide range of sizes. Our stock sizes are listed on the chart, and tooling charges are minimal if you need a special size or design. Choose from a variety of colors and three standard densities - low, medium and high.



### Foam Tubes - Available Sizes, Diameters, Walls, and Lengths

Material Formulation	Product Type	Inside Dimension "A"		Length Range "B"		Nominal Wall Thickness "C"	
		From	To	From	To	From	To
NPVC	Smooth	0.250	1.500	1.000	72.000	0.150	0.650
UV-NPVC	Smooth	0.250	1.500	1.000	72.000	0.150	0.650
EPDM	Smooth	0.250	1.500	1.000	72.000	0.135	0.400
Durablend	Smooth	0.250	1.500	1.000	72.000	0.135	0.400

\* Density (Pounds per cubic foot) - NPVC 9 lb. to Dense, EPDM 24 to 34 lb., Durablend 18 to 30 lb. Consult your sales representative for specific product inquiries.



Use for most long handle applications.





Foam Tube chart reflects standard sizes, yet Gripworks has tooling available for other common sizes of inside diameters ranging from 1/4" to 1-1/2".

## Foam Tubes - Standard Sizes

Material Formulation	To Fit Outside Diameter		Inside Dimension "A"		Lengths Up To "B"		Nominal Wall Thickness "C"	
	in	mm	in	mm	in	mm	in	mm
NPVC	0.625	15.88	0.500	12.70	25.000	635.00	.200 & .250	5.08 & 6.35
UV-NPVC	0.625	15.88	0.500	12.70	25.000	635.00	.200 & .250	5.08 & 6.35
EPDM	0.625	15.88	0.500	12.70	25.000	635.00	.150 & .200	3.81 & 5.08
Durablend	0.625	15.88	0.500	12.70	25.000	635.00	.140 & .200	3.56 & 5.08
NPVC	0.750	19.05	0.625	15.88	25.000	635.00	.200 & .250	5.08 & 6.35
UV-NPVC	0.750	19.05	0.625	15.88	25.000	635.00	.200 & .250	5.08 & 6.35
EPDM	0.750	19.05	0.625	15.88	25.000	635.00	.150 & .200	3.81 & 5.08
Durablend	0.750	19.05	0.625	15.88	25.000	635.00	.140 & .200	3.56 & 5.08
NPVC	0.875	22.23	0.750	19.05	25.000	635.00	.200 & .250	5.08 & 6.35
UV-NPVC	0.875	22.23	0.750	19.05	25.000	635.00	.200 & .250	5.08 & 6.35
EPDM	0.875	22.23	0.750	19.05	25.000	635.00	.150 & .200	3.81 & 5.08
Durablend	0.875	22.23	0.750	19.05	25.000	635.00	.140 & .200	3.56 & 5.08
NPVC	1.000	25.40	0.875	22.23	25.000	635.00	.200 & .250	5.08 & 6.35
UV-NPVC	1.000	25.40	0.875	22.23	25.000	635.00	.200 & .250	5.08 & 6.35
EPDM	1.000	25.40	0.875	22.23	25.000	635.00	.150 & .200	3.81 & 5.08
Durablend	1.000	25.40	0.875	22.23	25.000	635.00	.140 & .200	3.56 & 5.08
Tolerances	NPVC		in ±.050	mm ±1.27	Length tolerance varies depending on part length, ±.250 in. or greater.		in ±.040	mm ±1.02
	UV-NPVC		in ±.050	mm ±1.27			in ±.040	mm ±1.02
	EPDM		in ±.050	mm ±1.27			in ±.040	mm ±1.02
	Durablend		in ±.050	mm ±1.27			in ±.025	mm ±0.64

\* Density (Pounds per cubic foot) - NPVC 13 lb., EPDM 24 lb., Durablend 23 lb. Consult your sales representative for specific product inquiries.



## BUFFED FOAM GRIPS

Buffed Foam Grips are created from extruded tubing that is put through a buff or grinding procedure that actually grinds off the outer layer of skin. The look and feel that results is a popular, upscale appearance of suede-like grips with a spongy exterior. The ends of the tubes can either remain as a straight cut or radiused, that is, uniformly rounded for a more complete finished look. Along with a variety of color choices, buffed foam grips can be made in many sizes; see the chart for standard sizes. Tooling is available for other common sizes of inside diameters ranging from 1/4 inch to 1-1/2 inches. Still, if a custom size is required, Gripworks has complete in-house capabilities with minimal tooling costs.

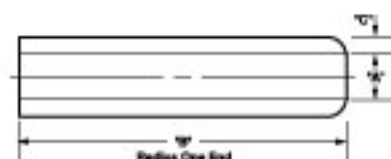


### Buffed Foam Tubes - Available Sizes, Diameters, Walls, and Lengths

Material Formulation	Product Type	Inside Dimension "A"		Length Range "B"		Nominal Wall Thickness "C"	
		From	To	From	To	From	To
UV-NPVC	Buffed	0.500	1.500	1.000	38.000	0.150	0.570
NPVC	Buffed	0.500	1.500	1.000	38.000	0.150	0.570
EPDM	Buffed	0.500	1.500	1.000	38.000	0.110	0.335
Durablend	Buffed	0.500	1.500	1.000	38.000	0.110	0.335

\* Density (Pounds per cubic foot) - NPVC 9 lb. to Dense, EPDM 24 to 34 lb., Durablend 18 to 30 lb. Consult your sales representative for specific product inquiries.

Standard color is Black. Other colors are available upon request.  
Straight end cuts are available immediately.  
End cuts can be radiused, quickly and inexpensively.





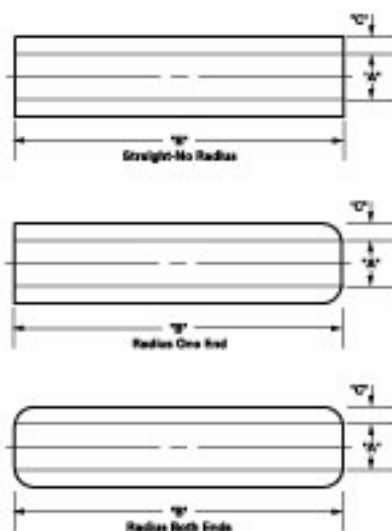
Buffed Foam Tube chart reflects standard sizes, yet Gripworks has tooling available for other common sizes of inside diameters ranging from 1/4" to 1-1/2".

## Buffed Foam Tubes - Standard Sizes

Material Formulation	To Fit Outside Diameter		Inside Dimension "A"		Lengths Up To "B"		Nominal Wall Thickness "C"	
	in	mm	in	mm	in	mm	in	mm
NPVC	0.625	15.88	0.500	12.70	38.000	965.20	.200 & .250	5.08 & 6.35
UV-NPVC	0.625	15.88	0.500	12.70	38.000	965.20	.200 & .250	5.08 & 6.35
EPDM	0.625	15.88	0.500	12.70	38.000	965.20	.150 & .200	3.81 & 5.08
Durablend	0.625	15.88	0.500	12.70	38.000	965.20	.140 & .200	3.56 & 5.08
NPVC	0.750	19.05	0.625	15.88	38.000	965.20	.200 & .250	5.08 & 6.35
UV-NPVC	0.750	19.05	0.625	15.88	38.000	965.20	.200 & .250	5.08 & 6.35
EPDM	0.750	19.05	0.625	15.88	38.000	965.20	.150 & .200	3.81 & 5.08
Durablend	0.750	19.05	0.625	15.88	38.000	965.20	.140 & .200	3.56 & 5.08
NPVC	0.875	22.23	0.750	19.05	38.000	965.20	.200 & .250	5.08 & 6.35
UV-NPVC	0.875	22.23	0.750	19.05	38.000	965.20	.200 & .250	5.08 & 6.35
EPDM	0.875	22.23	0.750	19.05	38.000	965.20	.150 & .200	3.81 & 5.08
Durablend	0.875	22.23	0.750	19.05	38.000	965.20	.140 & .200	3.56 & 5.08
NPVC	1.000	25.40	0.875	22.23	38.000	965.20	.200 & .250	5.08 & 6.35
UV-NPVC	1.000	25.40	0.875	22.23	38.000	965.20	.200 & .250	5.08 & 6.35
EPDM	1.000	25.40	0.875	22.23	38.000	965.20	.150 & .200	3.81 & 5.08
Durablend	1.000	25.40	0.875	22.23	38.000	965.20	.140 & .200	3.56 & 5.08
Tolerances	NPVC		in ±.050	mm ±1.27	Length tolerance varies depending on part length, ±.125 in. or greater.		in ±.020	mm ±0.51
	UV-NPVC		in ±.050	mm ±1.27			in ±.020	mm ±0.51
	EPDM		in ±.050	mm ±1.27			in ±.020	mm ±0.51
	Durablend		in ±.050	mm ±1.27			in ±.020	mm ±0.51

\* Density (Pounds per cubic foot) - NPVC 13 lb., EPDM 24 lb., Durablend 23 lb.  
Consult your sales representative for specific product inquiries.

Standard color is Black. Other colors are available upon request.  
Straight end cuts are available immediately.  
End cuts can be radiused, quickly and inexpensively.



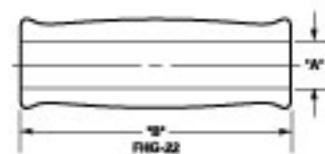
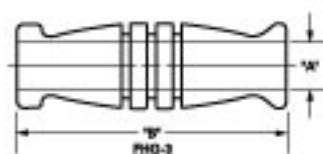
## FOAM HAND GRIPS (FHG)

Foam Hand Grips are one of the most commonly used grips. They can be found on products such as bicycles, fitness equipment and hand tools. Some of the most popular sizes are stocked, as shown on the chart. We can also create custom designed grips to fit your application, and our engineers are on hand to assist you.

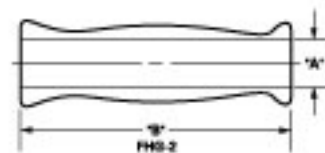


### Stock Foam Hand Grips (FHGs)

Grip Style	To Fit Outside Diameter		Inside Dimension "A"		Length Up To "B"		Nominal Wall Thickness "C"		Density Per Cubic Foot
	In	mm	In $\pm 0.050$	mm $\pm 1.27$	In $\pm 0.125$	mm $\pm 3.18$	In $\pm 0.020$	mm $\pm 0.51$	
FHG-3	0.500	12.70	0.875	22.23	5.000	127.00	0.375	9.53	9
FHG-3	0.625	15.88	0.500	12.70	5.000	127.00	0.375	9.53	9
FHG-3	0.750	19.05	0.625	15.88	5.000	127.00	0.375	9.53	9
FHG-3	0.875	22.23	0.750	19.05	5.000	127.00	0.375	9.53	9
FHG-22	0.500	12.70	0.875	22.23	4.500	114.30	0.375	9.53	9
FHG-22	0.625	15.88	0.500	12.70	4.500	114.30	0.375	9.53	9
FHG-22	0.750	19.05	0.625	15.88	4.500	114.30	0.375	9.53	9
FHG-22	0.875	22.23	0.750	19.05	4.500	114.30	0.375	9.53	9



Other styles available:



Consult your sales representative for specific product inquiries.



## SPLINED FOAM

Splined Foam Grips, Tubes or Sleeves are created utilizing a special tool as it is extruded. This is a great, cost effective way to enhance the look of a grip. No secondary process is required, although the ends can be radiused (uniformly rounded for a more complete finished look). The look is similar to that of the ribs or ridges found in some knit or woven fabrics.



## CUSTOM FOAM GRIPS

Custom Foam Grips can be engineered in many different sizes and styles. The first step is to decide what diameter and length is required. For a snug fit, it is recommended to measure the diameter of the rod or bar that the grip will cover and reduce the diameter by 1/8 inch. Next, determine the length needed. Consider the wall thickness of the grip, which is how much material is between the outer wall of the grip and the inner wall that rests on the bar. The most common wall thickness is about 1/4 inch, and the thicker the wall the more comfortable the grip. Now, for added value, select or design a style with grooves or create different shapes. Just show or tell our experienced engineers your idea and we can create custom grips with your requirements.



## VINYL SLEEVES

Tubing is often referred to as a sleeve when both ends of the tube are open. These grips work best on hand rails, push bars and long handled tools and equipment. Many color choices are available and secondary operations such as punching, slicing and printing can be performed in-house.



## FOAM TUBING

Manufactured from closed cell foam rubber, these sleeves are ready to use as is or they can be buffed or sculpted to enhance the look. Smooth foam tubing can be as long as 72 inches, and buffed foam tubes can be up to 38 inches long. The ends of the tubing can also be radiused for an evenly rounded, finished look. Gripworks has tooling for diameters from ¼ inch to 1-1/2 inches allowing us to offer a large selection of sizes. Combine this with a variety of color options to create a great looking and durable value added grip for your product.





## VINYL TUBING (FPVC)



When you need long lengths and low cost, flexible vinyl tubing is the most economical sleeve to consider. Choose from a glossy or flat finish and select from a wide range of sizes and colors. These are best used on long handled garden tools and u-shaped bars similar to those found on compressors, lawn mowers, and fitness equipment. Call our experienced sales representative with your requirements and we'll guide you to the right grip for your project!

## THERMOPLASTIC RUBBER TUBING

Thermoplastic Rubber tubing, TPR, is an extremely durable, lightweight material. It is flexible enough to conform to curve shaped bars or handles. The most unique characteristic of this material is the touch. It is rubbery, almost tacky to the touch, and retains this non-slip feel even when it gets wet, making it excellent for outdoor applications.



## STOCK HAND GRIPS

Gripworks has been manufacturing and selling hand grips for over 50 years. Through these years we have produced millions of hand grips for many applications, and we have learned what sizes, shapes, materials and quantities are most in demand. The results are stock grips in nine different materials including a range of up to twelve different sizes. Please visit the Stock Hand Grips page on our website for all the latest details. [www.gripworks.com](http://www.gripworks.com)



**Round  
Flexfit**



**Vynafoam**



**Round  
Softex**



**NPVC  
Foam Tubes**



**Tuff foam**



**NPVC  
Foam Tubes with  
Both Ends Radiused**



**Ribbed**



**FHG 22**

**FHG 3**

**Sculpted Grips**



**Durablend  
Foam Tubes**



## FINISHING OPERATIONS



GripWorks offers a full array of finishing operations to satisfy all of your requirements. The below operations are applicable to all of our foam grips and vinyl grips, including tool grips, handle grips, and just about any grip application possible.

- **Imprinting** - Silkscreen, pad printing, heat stamp, and decaling to apply single or multi-color prints.
- **Punching** - Hole punching in the closed end of a grip, air slits, or special cuts at the open end of a sleeve.
- **Slicing** - Most vinyl products can be converted from grips to sleeves with a simple slicing operation.
- **Washing** - Ensures parts are void of any external substance or mold lubricant.
- **Packaging** - Special packaging of all types, consult your sales representative for more information.

## ORDERING INFORMATION

### Clarification of Orders

Ship date will not be scheduled until clarification of purchase order has been completed. Phone orders must be accompanied by confirming orders. Gripworks will not produce orders without bill to and ship to addresses.

**Cancellations:** No cancellations without approval of Gripworks. A \$50 cancellation fee may apply.

**Credit Terms:** Net 30 days subject to credit approval. Mastercard, Visa and American Express are accepted.

**Freight:** (claims, breakage or shortages)

We ship collect F.O.B. our factory. If carrier is not specified when order is placed, Gripworks will select a carrier. We are not responsible for the delay of any freight carrier. All goods are shipped at the buyer's risk. We do not insure on-time transit or safe carriage of goods. Goods insured by standard carrier coverage only.

**Overruns & Underruns:** Due to the difficulty in manufacturing exact quantities, shipments consisting of 10% over or under the amount ordered are considered complete.

**Returns:** Returns will not be accepted without a Return Authorization number provided by Gripworks. Restocking charges will apply in certain instances.

**Finishing Operations:** Printing, Punching, Slicing, Die Cutting, and custom packaging available. Contact Gripworks for more information.

## GRIP APPLICATION METHODS

Applying Grips can be accomplished through a variety of methods. Speed, convenience and simplicity dictate the method of choice. In most cases, the preferred methods are:

**Heat** - Exposure to any heat source reaching temperatures of 140°F (60°C) to 180°F (82°C) will soften the vinyl, making it easier to apply. Once the grips are installed and cooled, it maintains its original rigidity and secure fit. (Note: Heating does not cause the grips to dilate to a larger diameter.)

### Recommended Heat Sources:

**1. Heat Lamps:** For best results, spread the grips over a wide surface with the heat radiating down on the top layer of grips. One lamp should adequately heat a 3' x 3' area. In many cases several lamps positioned over a larger surface area allow multiple operators to work from a central workstation.

**2. Hot Box:** Placing the grips inside a low temperature oven allows a larger quantity of grips to be pre-heated for application. Grips can remain in their shipping cartons or be transferred to a reusable container. Any type of circulating air oven is suitable with temperatures between 140°F (60°C) to 180°F (82°C). This method will require double handling, moving the grips from box to oven to workstation.

**3. Heat Guns:** Mounted over a workstation or conveyor system, heat guns can produce enough heat to soften the grips for application. Grips should be no more than two to three layers deep. Again, a centrally located heating area could accommodate multiple users.

**4. Hot Water:** Grips can be submerged in heated water and applied wet, directly onto the handle. The water effectively works as a lubricant to aid in the installation. After a 24 hour period (approx.), the water will evaporate and the resulting fit will be tight and secure.



Heat Lamps



Heat Guns



## GRIP APPLICATION METHODS

**Adhesives:** Regardless of the amount of interference fit between the grip and the handle, the only guarantee against slippage is the use of adhesive. Plus, there is the added benefit of the glue working as a lubricant during installation. Due to the varying handle materials, e.g. wood, plastic, metal, etc., several adhesives should be tested for function and ease of use.

The following manufacturers are excellent sources for a wide range of adhesives: 3M, Loctite, Permabond International. Contact your local dealer for more information. Please note that the grip diameter may not require the same degree of interference to fit the handle when using adhesive.

**Lubrication:** The use of certain types of lubrication can be extremely effective in speeding the installation of grips. An undersized grip will slide easily onto the substrate by adding a lubricant to the installation process. Hair spray or a soapy water solution works well with any style vinyl or rubber grip. We recommend a concentration of 1 teaspoon liquid detergent per 1 gallon warm water. Both the hair spray and residual soap provide the secondary benefit of acting as an adhesive after drying.

To apply a soap lubrication solution, simply spray or dip the handle in the solution prior to grip installation. Grips exceeding 5" in length with undersized diameters will require lubricant to be applied to both the substrate and the inside of the grip. Otherwise, the grips may "squeeze" the lubricant off the substrate during installation, leaving minimal or no lubricant for the greater portion of the length.

**Air:** Especially effective with extremely long foam grips capable of expanding when inflated. With one end sealed against the substrate, a fixture designed to seal the other end of the grip while introducing air pressure facilitates sliding the grips into desired position.

**Automation:** Grip installation can be automated with equipment designed for high volume application. With a relatively simple machine design involving a carousel indexing table, grips with extremely undersized diameters can be installed quickly and consistently. Please contact a Gripworks Sales representative for more information.



Air



**UNITED STATES**

Sinclair & Rush, Inc.  
123 Manufacturers Drive  
Arnold, MO 63010  
Tel: 636-282-6800  
Fax: 636-282-6888  
E-mail: [corporate@sinclair-rush.com](mailto:corporate@sinclair-rush.com)



3545 Scarlet Oak Boulevard  
St. Louis, MO 63122  
Tel: 636-282-6800  
Fax: 636-282-6888  
E-mail: [corporate@sinclair-rush.com](mailto:corporate@sinclair-rush.com)

**ENGLAND**

Sinclair & Rush, Ltd.  
Units 11-13 Spectrum West  
20/20 Maidstone Business Estate  
Maidstone Kent ME16 0LL  
Tel: 44-1622-693200  
Fax: 44-1622-693201  
E-mail: [sales@sinclair-rush.co.uk](mailto:sales@sinclair-rush.co.uk)

**AUSTRALIA**

Sinclair & Rush, Pty. Ltd.  
51 Wellington Street  
Riverstone 2765 NSW Sydney  
Tel: 61-2-9627-3211  
Fax: 61-2-9627-5156  
Toll Free: 1-800-00-3211  
E-mail: [info@sinclair-rush.com.au](mailto:info@sinclair-rush.com.au)

**MEXICO**

Sinclair & Rush  
Av. Benito Juárez #1406  
Guadalupe, N.L.  
México CP 67140  
Tel: 52-81-8030-4787  
Fax: 52-81-8030-4796  
E-mail: [ventas@sinclair-rush.com.mx](mailto:ventas@sinclair-rush.com.mx)

**CHINA**

S&R (Changzhou)  
Rubber and Plastic Products Co., Ltd.  
15B, Jintong Park, No. 8, Xihu Road, Wujin Hi-tech  
Changzhou, Jiangsu  
China 213164  
Tel: 86-519-8622-6080  
Fax: 86-519-8622-6085  
E-mail: [sales\\_china@sinclair-rush.com](mailto:sales_china@sinclair-rush.com)

# GRIPWORKS®

A Sinclair & Rush Company

**800-827-GRIP (4747)**  
**WWW.GRIPWORKS.COM**