company overview

For more than 65 years, Caplugs has been the leader in product protection with innovative parts that solve industrywide challenges. Comprehensive manufacturing capabilities, processes and a wide range of materials allow us to meet your needs.

Over 400 million caps, plugs, packaging, tubing and masking products are always in-stock and ready to ship. While a dedicated team of in-house engineers is also available for complete custom designs. With a global manufacturing and sales presence and responsive customer service representatives, Caplugs brings solutions you can rely on.

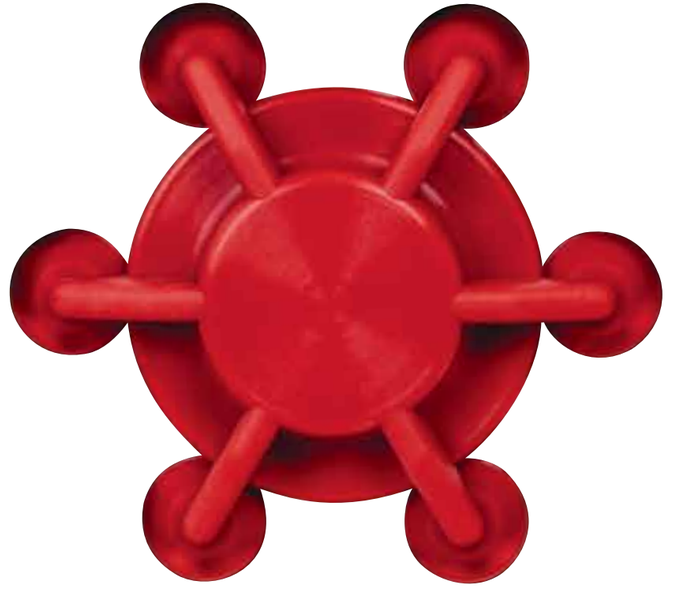
shercon® masking product line

As the experts in precision masking solutions, we can offer the most comprehensive range of standard masking devices and in-house custom capabilities with the full Shercon masking line. Our broad range of parts securely protects your product during any finishing process including painting, powder coating, anodizing, plating and e-coating.

caplugs® | SHERCON® masking products

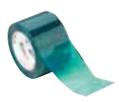
Masking Protection Solutions

6,000+ masking parts in-stock and ready to ship




caps


plugs


tapes


die-cuts


hooks & racks

why caplugs?

As the industry leader, we are uniquely positioned to provide the best masking solutions. We don't just sell parts - we're here to ensure your needs are met with the **right part** that protects your product. Whether it's through one of our standard parts, or by working with you one-on-one to design a custom part, we are committed to **your unique product needs**.

Masking Solutions Made Easy

Most Comprehensive Products and Capabilities

- Most standard parts in-stock and ready to ship
- Broadest range of product styles and sizes
- Most extensive in-house custom capabilities
- Stringent quality management system to ensure the highest quality
- Proven supplier across all industries and applications
- THE industry experts

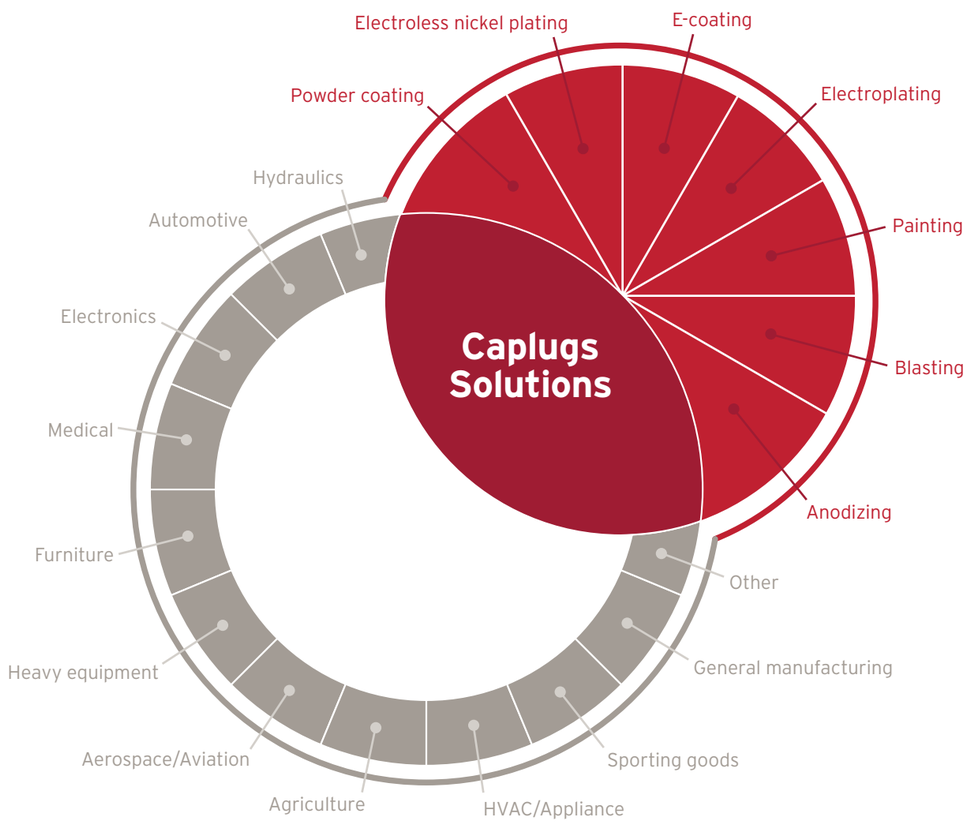
Unmatched Service and Support

- Responsiveness to match your fast-paced business needs
- Over 100 sales representatives and direct sales for local support
- 20+ customer service representatives
- Expert technical representatives
- Global coverage, localized service
- Comprehensive web site with free samples and easy ordering

experience and expertise

Caplugs has experience solving challenges across a wide range of industries and applications, including **masking solutions** used in harsh environments **during an array of finishing processes**.

Processes



Industries Served

quality certifications

Caplugs has a comprehensive **quality management** system and the latest technologies in testing and measurement equipment to provide consistent quality.

Critical processes are followed to ensure a **high level of accuracy, consistency, repeatability** and record retention is achieved.

Caplugs ensures a **superior** and **consistent** product is delivered with the documentation our customers need.

Caplugs comprehensive quality management system includes:

- Formal internal auditing process
- Six Sigma method
- FMEA
- Gage R & R
- Dimensional report
- Risk assessments
- Statistical process controls
- Measurement equipment:
  - CMM
  - Vision System
  - Beta LaserMike
  - CNC RAM Optical Instrumentation
  - Mark-10 Digital Force Fixture up to 50 lbs.

ISO 9001
ISO/TS 16949
ISO 14001
ISO 13485
REGISTERED

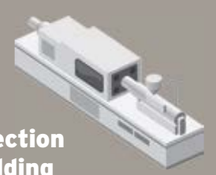
Quality Certifications

Caplugs' stringent quality management systems ensure the necessary process controls exist to provide our customers with consistent, quality products.

- Our quality systems in the New York and Pennsylvania facilities are certified to ISO 9001 & ISO/TS 16949
- Our quality systems in our California and Texas facilities are certified to ISO 9001
- Our quality systems in Shaghai and Hangzhou, China are certified to ISO 9001 & ISO/TS 16949
- Buffalo, NY ISO 13485 certification applies to all clean room medical products
- Our environmental systems in the New York, Pennsylvania and California facilities are certified to ISO 14001

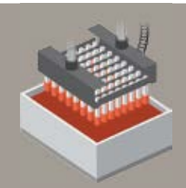
production capabilities

With our multiple production processes, we can provide a solution that best meets your needs. Caplugs boasts the largest inventory available, with over 15,000 standard parts and 6,000+ different, masking-specific parts in-stock and ready to ship.



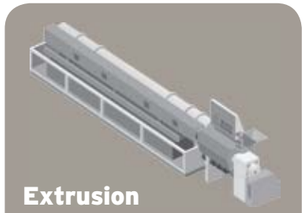
Injection Molding
- 9 to 700 ton presses
- Quick-change procedures
- Interchangeable molding system

Compression Molding
- 100 to 1,200 ton presses
- Prototypes in 15 days
- Capable of rubber-to-metal bonding



Vinyl Dip-molding
- Variety of shapes, sizes and colors
- Inexpensive tooling with quick turnaround

Die-cutting
- Any shape and size
- Choose from a variety of materials
- Prototypes in 24 hours



Extrusion
- Tubing, netting, edge liners and other profiles
- Cut to desired length in-line or run in spools

Part Modification
We can also alter existing parts through secondary operation processes including pad printing, slicing, cutting or hole punching

Materials

Our team of knowledgeable design engineers will help you select the right materials from many available standard options to suit your particular application.

Compound mixing and development

- In-house chemists can mix materials to achieve desired performance characteristics
- Custom compounds are also available to meet specific requirements

ULTRA™ BAKE

A resilient, reusable silicone material recommended for temperatures up to 600°F (315°C)

FLEX® 500

An economical vinyl material ideal for one-time use recommended for temperatures up to 500°F (260°C)

ULTRA BAKE

SC-SH Series

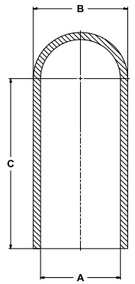
Silicone Caps

SC-SH Series Ultrabake™ Silicone Caps are designed to mask plain and threaded studs, tube ends and even slotted holes; they will mask off the stud and allow finishing up to it. Recommended for powder coating, e-coating, plating and anodizing.

- Recommended temperatures up to 600°F (315°C)
- Rugged and durable
- Can stretch to mask larger dimensions
- Reusable

Material: Silicone **Color:** See chart for color coding

Note: Caps can also be produced in EPDM 350°F (177°C)



Caplugs No.	Color	Dimensions								Packaging
		Fits Thread		A		B		C		Quantity Per Bag
		Metric	UNC	In	mm	In	mm	In	mm	
SC37-0500	Clear			.037	.94	.100	2.54	.500	12.70	1000
SC62	Dark Blue			.062	1.57	.187	4.75	1.000	25.40	1000
SC70	Clear	M2	2-56	.070	1.78	.170	4.32	1.000	25.40	1000
SC93	Pink		3-48	.093	2.36	.195	4.95	.750	19.05	1000
SC93-0500	Dark Grey		3-48	.093	2.36	.195	4.95	.500	12.70	1000
SC93-1000	White		3-48	.093	2.36	.195	4.95	1.000	25.40	1000
SC100-0500	Dark Blue	M3	4-40	.100	2.54	.200	5.08	.500	12.70	1000
SC100	Light Green	M3	4-40	.100	2.54	.200	5.08	1.000	25.40	1000
SC109-0500	Yellow		5-40	.109	2.77	.215	5.46	.500	12.70	1000
SC109	Grey		5-40	.109	2.77	.215	5.46	.750	19.05	1000
SC109-1000	White		5-40	.109	2.77	.215	5.46	1.000	25.40	1000
SC125-0500	Light Blue		6-32	.125	3.18	.250	6.35	.500	12.70	1000
SC125	Black		6-32	.125	3.18	.250	6.35	1.000	25.40	1000
SC140-0500	Clear			.140	3.56	.265	6.73	.500	12.70	1000
SC140	White			.140	3.56	.265	6.73	1.000	25.40	1000
SC148-0500	Dark Blue	M4		.148	3.76	.240	6.10	.500	12.70	1000
SC148-0750	Dark Grey	M4		.148	3.76	.240	6.10	.750	19.05	1000
SC148	Pink	M4		.148	3.76	.240	6.10	1.000	25.40	1000
SC156-0500	Light Green		8-32	.156	3.96	.280	7.11	.500	12.70	1000
SC156	Yellow		8-32	.156	3.96	.280	7.11	1.000	25.40	1000
SC156-1250	Clear		8-32	.156	3.96	.280	7.11	1.250	31.75	1000
SC164-1000	Black			.164	4.17	.292	7.42	1.000	25.40	1000
SC172-0500	Grey		10-24	.172	4.37	.300	7.62	.500	12.70	1000
SC172	Light Blue		10-24	.172	4.37	.300	7.62	1.000	25.40	1000
SC172-1500	Clear		10-24	.172	4.37	.300	7.62	1.500	38.10	1000
SC180	Black	M5		.180	4.57	.280	7.11	1.000	25.40	1000
SC187-0500	White		12-24	.187	4.75	.315	8.00	.500	12.70	1000
SC187-0750	Light Blue		12-24	.187	4.75	.315	8.00	.750	19.05	1000
SC187	Clear		12-24	.187	4.75	.315	8.00	1.000	25.40	1000
SC218	Yellow			.218	5.54	.338	8.59	1.000	25.40	500
SC223-0500	Dark Blue	M6		.223	5.66	.345	8.76	.500	12.70	500
SC223-1000	Black	M6		.223	5.66	.345	8.76	1.000	25.40	500
SC223	Pink	M6		.223	5.66	.345	8.76	1.500	38.10	500
SC234-0500	White		1/4-20	.234	5.94	.360	9.14	.500	12.70	500
SC234	Light Green		1/4-20	.234	5.94	.360	9.14	1.000	25.40	500
SC234-1500	Yellow		1/4-20	.234	5.94	.360	9.14	1.500	38.10	500
SC250-0500	Clear			.250	6.34	.380	9.65	.500	12.70	500
SC250	Grey			.250	6.35	.380	9.65	1.000	25.40	500

Caplugs No.	Color	Dimensions								Packaging
		Fits Thread		A		B		C		Quantity Per Bag
		Metric	UNC	In	mm	In	mm	In	mm	
SC281-0500	Yellow		5/16 - 18	.281	7.14	.400	10.16	.500	12.70	500
SC281	Light Blue		5/16 - 18	.281	7.14	.400	10.16	1.000	25.40	500
SC295-0500	Black	M8		.295	7.49	.420	10.67	.500	12.70	500
SC295-1000	Light Green	M8		.295	7.49	.420	10.67	1.000	25.40	500
SC295	Clear	M8		.295	7.49	.420	10.67	1.500	38.10	500
SC312	White			.312	7.92	.440	11.18	1.000	25.40	500
SC312-1500	Pink			.312	7.92	.440	11.18	1.500	38.10	500
SC340	Black			.340	8.64	.460	11.68	1.000	25.40	500
SC355	Light Green		3/8 - 16	.355	9.02	.485	12.32	1.500	38.10	500
SC375-0500	Pink	M10		.375	9.53	.505	12.83	.500	12.70	500
SC375-0750	Dark Blue	M10		.375	9.53	.505	12.83	.750	19.05	500
SC375	Yellow	M10		.375	9.53	.505	12.83	1.000	25.40	500
SC375-1500	Grey			.375	9.53	.505	12.83	1.500	38.10	500
SC406	Light Blue		7/16 - 14	.406	10.31	.531	13.49	1.000	25.40	500
SC437	Black			.437	11.10	.565	14.35	1.000	25.40	500
SC456-1000	Pink	M12		.456	11.58	.581	14.76	1.000	25.40	500
SC456	Clear	M12		.456	11.58	.581	14.76	1.500	38.10	500
SC468	White			.468	11.89	.593	15.06	1.000	25.40	500
SC480-1000	Light Grey		1/2 - 13	.480	12.19	.605	15.37	1.000	25.40	500
SC480	Pink		1/2 - 13	.480	12.19	.605	15.37	1.500	38.10	500
SC500	Light Green			.500	12.70	.625	15.88	1.500	38.10	500
SC535	Yellow	M14		.535	13.59	.635	16.13	1.500	38.10	250
SC535-3000	Grey	M14		.535	13.59	.635	16.13	3.000	76.20	250
SC562	Light Blue			.562	14.27	.686	17.42	1.500	38.10	250
SC600	Black	M16	5/8 - 11	.600	15.24	.724	18.39	1.500	38.10	250
SC625	Clear			.625	15.88	.750	19.05	1.500	38.10	250
SC625-2500	White			.625	15.88	.750	19.05	2.500	63.50	250
SC687	Pink			.687	17.45	.812	20.62	1.500	38.10	250
SC730	Light Green	M19		.730	18.54	.855	21.72	1.500	38.10	250
SC750	Yellow			.750	19.05	.875	22.23	1.500	38.10	250
SC750-3500	Grey			.750	19.05	.875	22.23	3.500	88.90	250
SC780	Light Blue			.780	19.81	.905	22.99	1.500	38.10	250
SC812	Black			.812	20.62	.937	23.80	1.500	38.10	250
SC875	Clear			.875	20.62	1.000	23.80	1.500	38.10	250
SC937	White			.937	23.80	1.062	26.97	1.500	38.10	250
SC970	Pink	M25		.970	24.64	1.095	27.81	1.500	38.10	250
SC1000	Light Green			1.000	25.40	1.125	28.58	1.500	38.10	250
SC1000-2000	Yellow			1.000	25.40	1.125	28.58	2.000	50.80	250
SC1062	Grey			1.062	26.97	1.187	30.15	2.000	50.80	100
SC1125	Light Blue			1.125	28.58	1.250	31.75	1.500	38.10	100
SC1187	Black			1.187	30.15	1.312	33.32	1.500	38.10	100
SC1250	Clear			1.250	31.75	1.382	35.10	1.500	38.10	100
SC1350	White			1.350	34.29	1.484	37.69	1.750	44.45	100
SC1500	Pink			1.500	38.10	1.625	41.28	1.000	25.40	100
SC1500-1750	Light Green			1.500	38.10	1.625	41.28	1.750	44.45	100
SC1750	Yellow			1.750	44.45	1.875	47.63	2.000	50.80	100
SC1875	Grey			1.875	47.63	2.000	50.80	2.000	50.80	100
SC2000	Light Blue			2.000	50.80	2.125	53.98	2.000	50.80	100

material selection by temperature

Up to 600°F

600°F/315°C — **Silicone**
CSPP-SH, DFPP-SH, HFPP-SH, HUPH-SH, HUP-SH, HWP-SH, MDT-SH, MPP-SH-SP, MPP-SH, MSP-SH, MT-SH, PTM-SH, RMCP-SH, SC-SH, SFC, SFP-SH, SHPP-SH, SM-SH, SMT-SH, SPP-SH, SP-SH, SRC-SH, SRT-SH, ST-SH, SWP, TS, UC-SH, UDPP-SH, UFP-SH, UHCP-SH, UMFP-SH, UPH-SH, UP-SH, US-SH, UST-SH, UTM-SH, UVCP-SH, UVC-SH, UWM-SH, UWPPLS-SH, UWPP-SH, UW-SH, WC-SH, ZC-SH

500°F/260°C — **Polyimide**
22-SH, KP-SH

500°F/260°C — **Glass Cloth**
PC198-SH, GC-SH

500°F/260°C — **Flex500® Vinyl**
HCR, HETV, HEZ, HFC, HJS, HTP, HVC, HVTP

425°F/218°C — **Polyester**
PR-SH, PC11-SH

400°F/204°C — **Teflon**
TF-SH

400°F/204°C — **Polyester**
PC21-SH, PC25-SH, PC30-SH, PC90-SH, PB-SH, PCD-SH, PC-SH

400°F/204°C — **Paper**
PSC, PTC, PTP

Up to 350°F

350°F/177°C — **Standard Vinyl**
ETV, EZ, TP, VC, VFC, VTP

350°F/177°C — **Neoprene**
BN-SH, EP58-SH, GN-SH

350°F/177°C — **EPDM**
CM-SH, PP-SH, MT-SH

300°F/149°C — **Crepe Paper**
AIR-SH, KD11-SH, KD-SH

300°F/149°C — **Cork**
RCK-SH, SCK-SH

300°F/149°C — **Aluminum Foil**
AIR-SH, AF-SH

250°F/121°C — **Styrene Butadiene**
FP-SH

225°F/107°C — **Lead-Foil**
LF-SH

212°F/100°C — **Rubber**
RMCP-SH

200°F/93°C — **Crepe Paper**
EZ-SH

Up to 190°F

170°F/77°C — **Anodizing Vinyl**
AD-SH

170°F/77°C — **Electroplaters Vinyl**
EV-SH

The information in this chart depicts the intermittent temperature-resistance characteristics of the entire list of Caplugs materials. For complete service temperature information and other physical properties of Caplugs materials, consult the Material Data Chart on page 107. And, of course, take advantage of our free samples to test a part in your specific application before ordering.

For any special material requests, please contact customer service at 1.888.CAPLUGS for further information.

materials process matrix

CAPS & PLUGS	Cork	Neoprene	Vinyl	EPDM	Paper	Flex500®	Silicone
Price	$	$	$	$$	$	$$	$$$
Temperature Limit °F	300	350	350	350	400	500	600
Re-usability	High	High	High	Med	High	Low/NR	High
Liquid Paint	B	B	B	B	B	O	O
Powder Coating	NR	NR	NR	O	O	O	B
E-Coating	NR	NR	NR	O	NR	O	B
Plating	NR	B	B	B	NR	O	B
Anodizing	NR	B	B	B	NR	O	B

Key	
B	Best
O	Optional
NR	Not Recommended
NA	Not Available

TAPES	Vinyl	Anodizing	Lead Foil	Aluminum	Crepe	Teflon®	Polyester	Polyimide	Silicone	Glass Cloth
Price	$$	$$	$$$	$$$	$	$$$	$$	$$$	$$$	$$$
Temperature Limit °F	170	170	225	300	300	400	400	500	500	500
Re-usability	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Liquid Paint	B	B	NR	NR	B	O	O	O	B	NR
Powder Coating	NR	NR	NR	NR	NR	NR	B	O	B	O
E-Coating	B	B	NR	NR	NR	NR	B	NR	B	O
Plating	B	B	B	O	NR	B	B	NR	B	O
Anodizing	B	B	B	O	NR	B	B	NR	B	O

material data

Properties*	Silicone Rubber	Vinyl		Flex500®**
		Standard	High-Temperature	
MECHANICAL CHARACTERISTICS				
Specific gravity (density)	1.18	1.2	1.2	1.35
Tensile strength, p.s.i.	200 - 1500	2300	2100	2000
Elongation, %	700	400	270	150
Compressive strength, p.s.i.	–	–	–	–
Tear strength (ASTM D1004)	200pli	185pli	270pli	270pli
Impact strength, ft. lb./in. of notch (1/2x1/2 in. notched bar, izod test)	–	–	–	–
Hardness, Rockwell	A25 - 80 (Shore)	A60 - 70 (Shore)	A80 - 90 (Shore)	15 Second A84-94 (Shore)
ELECTRICAL CHARACTERISTICS				
Volume resistivity, ohm/cm³ (50% RH and 23°C)	–	–	–	–
Dielectric constant, 60 cyc.	–	–	–	–
Dissipation (power) factor, 60 cyc.	–	–	–	–
SERVICE TEMPERATURES				
Continuous °C/°F	232/450	93/200	149/250	149/300
Intermittent °C/°F	316/600	177/350	246/475	260/500
Brittleness °C/°F	-32/-29	-32/-26	–	–
RESISTANCE CHARACTERISTICS				
Water absorp., 24 hr., 1/8" thick, %	–	–	–	–
Burning rate (flammability), in./min.	Very Slow	Slow	Slow	Slow
Effect of sunlight	Very Resistant	Good Resistance	Good Resistance	Good Resistance
Effect of weak acids	Poor	Very Resistant	Very Resistant	Very Resistant
Effect of strong acids	Poor	Resistant	Resistant	Resistant
Effect of weak alkalies	Poor	Resistant	Resistant	Very Resistant
Effect of strong alkalies	Poor	Resistant	Resistant	Resistant
Effect of organic solvents	Moderate	Good Resistance to alcohols, aliphatic hydrocarbons and oils	Good Resistance to alcohols, aliphatic hydrocarbons and oils	Good Resistance
Machine qualities	Poor	Poor	Poor	Good
Clarity (Natural Material)	Clear to opaque	Clear to opaque	–	Opaque
Abrasion resistance	Low	Very Good	Very Good	Very Good

*Property specifications of Caplugs parts are subject to change without notification.
**Independent Third Party Testing supports our published claims of Flex500® successfully performing under intermittent service temperatures of over 500°F.

DIMENSIONAL TOLERANCES

Caplugs parts are designed in accord with functional dimensions and will perform to dimensions listed in this catalog. In view of the flexibility and stretch of most of the materials used in Caplugs parts, it is recommended that the following tolerances be used in checking purposes, especially by those unfamiliar with measuring this material.

Tolerances for inch dimensions given to three decimal places.
±.010" per each inch of length. Minimum is ±.010" where dimension is less than one inch.
Examples:
Tolerance for .750" dimension is ±.010"
Reason: Although .750" x ±.010" = ±.0075", ±.010" is the minimum.
Tolerance for 1000" is ±.010".
Reason: 1.000" x ±.010" = ±.010"
Tolerance for 1.500" dimension is ±.015"
Reason: 1.500" x ±.010" = ±.015".

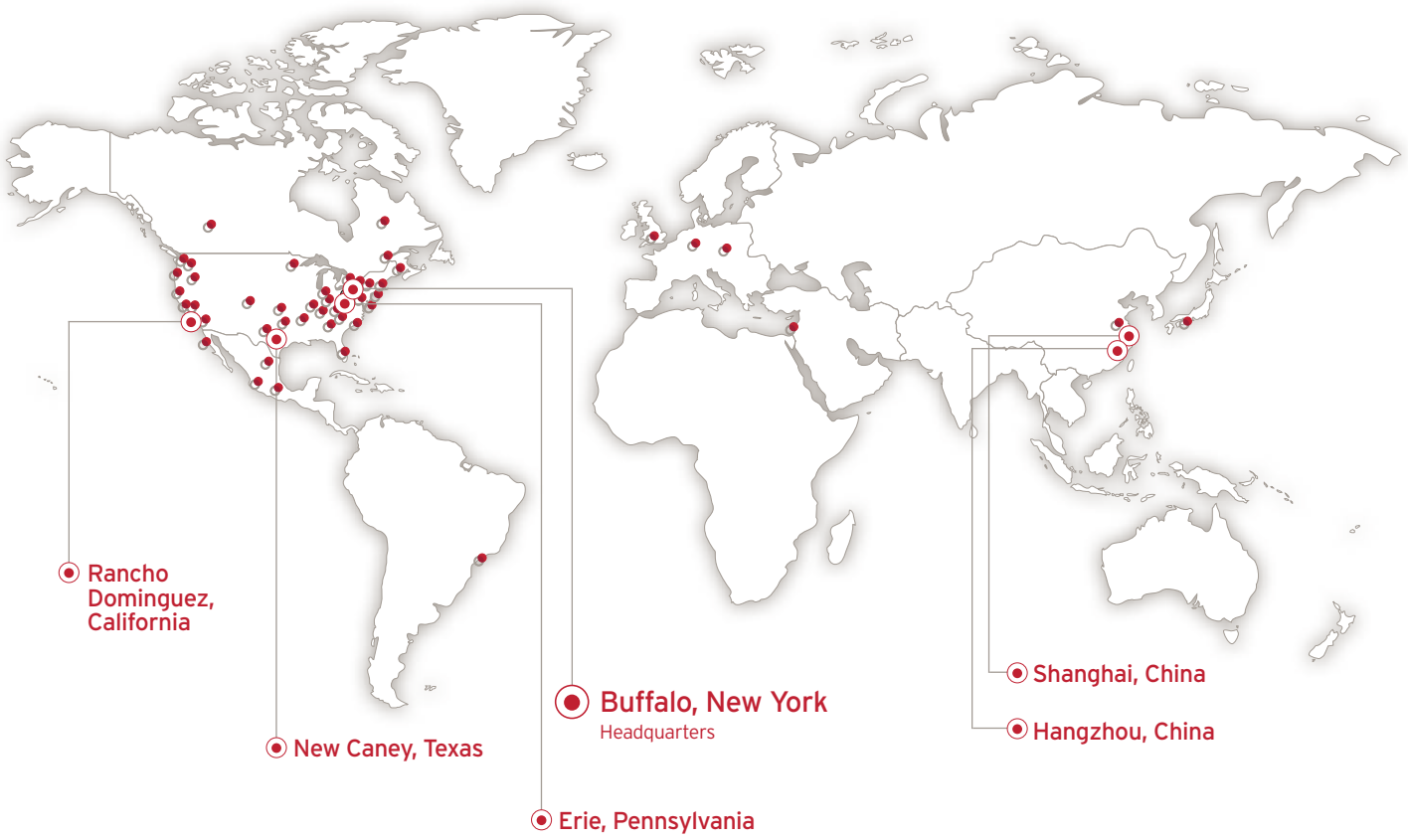
Tolerance for inch dimensions given to two decimal places.
±.020" per each inch of length. Minimum is ±.020" where dimension is less than one inch.
Examples:
Tolerance for .75" dimension is ±.020".
Reason: Although .75" dimension is ±.020" = ±.015" ±.020" is the minimum.
Tolerance for 1.00" dimension is ±.020" = ±.50mm.
Reason: 1.00" x ±.020" = ±.020".
Tolerance for 1.50" is ±.030".
Reason: 1.50" x ±.020" = ±.030".

Tolerance for metric dimensions given to two decimal places.
±.25mm per each 25.40mm of length (.01 mm per mm). Minimum is ±.25mm where dimension is less than 25.40mm.
Examples:
Tolerance for 19.00mm dimension is ±.25mm.
Reason: Although 19.00mm x ±.01 is ±.19mm, .25mm is the minimum.
Tolerance for 25.40mm is ±.25mm = ±.010".
Reason: 25.40mm x ±.01mm = ±.25mm.
Tolerance for 38.10mm is ±.38mm.
Reason: 38.10mm x ±.01mm = ±.38mm.

Tolerance for metric dimensions given to one decimal place.
±.5mm per each 25.4mm of length (.02 mm per mm). Minimum is ±.5 where dimension is less than 25.4mm.
Examples:
Tolerance for 19.00mm dimension is ±.5mm.
Reason: Although 19.0mm x ±.02mm = ±.38mm, ±.5mm is the minimum.
Tolerance for 25.4mm dimension is ±.5mm.
Reason: 25.4mm x ±.02mm = ±.5mm.
Tolerance for 38.1mm dimension is ±.76mm.
Reason: 38.1mm x ±.02mm = ±.76mm.

caplugs®

Caplugs is the leader in product protection and masking with manufacturing locations and sales representatives all over the world to serve every customer efficiently.



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