



**PACTUMAX**

**INTERNATIONAL PTE LTD**

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Welcome to our new issue of Pactumax Monthly Advanced Product Alert for the Year 2023 – keeping you informed of new product and materials advancements.

We will like to also introduce to you our latest wide range of products available from CarrLane & Reid Supply, etc.

Click on the hyperlink below to view our e-catalogs from our website to view more:

<https://pactumax.com/technical-resources/>

This month's featured items are **SEMITRON® POM CNT** and **POLYCARBONATE MACHINING GRADE**.

**SEMITRON® POM CNT** is an extruded Static Dissipative POM C based polymer system developed for applications such as electronic fixture.

**POLYCARBONATE MACHINING GRADE** is non-UV-stabilized polycarbonate stock shapes commonly known as PC1000. It is natural, non-optical industrial quality (clear, translucent).

Remember, Pactumax is **GROWING** – we are now your **One-Stop Source** for all your materials and products' needs!

# ADVANCED PRODUCT ALERT OF THE MONTH

## SEMITRON® POM CNT

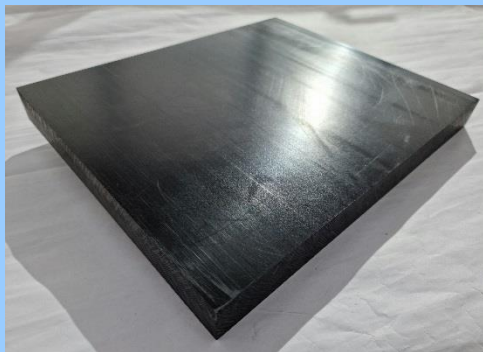
Manufactured by



### PRODUCT OVERVIEW

**SEMITRON® POM CNT** is an extruded Static Dissipative POM C based polymer system developed for applications such as electronic fixture. **SEMITRON® POM CNT** offers a precise surface resistivity range and increased dimensional stability as compared to other POM with ESD products.

### SEMITRON® POM CNT



### PRODUCT COLORS

- Black

### ADVANTAGES

- ESD Characteristics
- Constant Conductivity between  $10^6$  &  $10^9$

### APPLICATIONS

- Integrated Chip Test Jigs
- Basic Electronics Assembly Fixturing
- Basic Test Sockets & PCB Test Jigs

**TYPICAL PROPERTIES OF SEMITRON® POM CNT**

<b>General Properties</b>	<b>ASTM or UL Test</b>	<b>SEMITRON® POM CNT Typical Values</b>
<b>PHYSICAL</b>		
Density (g/cm <sup>3</sup> )	D792	1.34
Water Absorption, 24 hrs (%)	D570	-
<b>MECHANICAL</b>		
Tensile Strength (MPa)	D638	40.9
Tensile Elongation (%)	D638	23
Flexural Strength (MPa)	D790	48.3
Flexural Modulus (GPa)	D790	1.63
IZOD Notched Impact (J/m)	D256	98
IZOD Un-Notched Impact (J/m)	D256	-
Hardness, Shore D	D2240	-
<b>THERMAL</b>		
Coeff. of Linear Thermal Expansion (x 10 <sup>-5</sup> / K)	D696	-
Heat Deflection Temperature (°C) at 264 psi	D648	80
Thermal Conductivity (BTU-in/ft <sup>2</sup> -hr-°F)	D3418	-
Flammability Rating	UL94	HB
<b>ELECTRICAL</b>		
Surface Resistivity (ohms)	ESD 11.11	10 <sup>6</sup> to 10 <sup>9</sup>
Volume Resistivity (ohm-cm) at 73°F, 50% RH	D257	-
Static Decay, 15% RH (seconds)	MIL-B-81705-B	-

# POLYCARBONATE MACHINING GRADE

Manufactured by



## PRODUCT OVERVIEW

**POLYCARBONATE MACHINING GRADE** is non-UV-stabilized polycarbonate stock shapes commonly known as PC1000. It is natural, non-optical industrial quality (clear, translucent).

### POLYCARBONATE MACHINING GRADE



### PRODUCT COLORS

- Natural (Clear, Translucent)

### ADVANTAGES

- Excellent Impact Resistance, Toughness and Elongation Properties Elasticity
- The Material has a 290°F (145°C)
- Transparent
- Good Dielectric Properties
- Economical Thermal Performance

### APPLICATIONS INCLUDE

- Insulators
- Sight Glasses
- Manifolds

## TYPICAL PROPERTIES OF POLYCARBONATE MACHINING GRADE

General Properties	ASTM or UL TEST	POLYCARBONATE MACHINING GRADE Typical Values
<b>PHYSICAL</b>		
Specific Gravity (g/cm <sup>3</sup> )	D792	1.20
Water Absorption, 24 hrs (%)	D570	0.20
<b>MECHANICAL</b>		
Tensile Strength (psi)	D638	10,500
Tensile Modulus (psi)	D638	320,000
Tensile Elongation at Break (%)	D638	100
Flexural Strength (psi)	D790	13,000
Flexural Modulus (psi)	D790	350,000
Compressive Strength (psi)	D695	11,500
Hardness, Rockwell	D785	M75
IZOD Notched Impact (ft-lb/in)	D256	1.5
<b>THERMAL</b>		
Coefficient of Thermal Expansion (x10 <sup>-5</sup> in./in./°F)	E831	3.9
Heat Deflection Temp (°F/ °C) @ 264 psi	D648	290/143
Glass Transition Temp (°F/ °C)	D3418	293/145
Max Operating Temp (°F/ °C)	-	250/121
Thermal Conductivity (BTU-in/ft <sup>2</sup> -hr-°F)	F433	1.29
Flammability Rating	UL-94	HB
<b>ELECTRICAL</b>		
Dielectric Strength (V/mil) short time	D149	400
Dielectric Constant at 106 Hz	D150	3.17
Dissipation Factor at 106 Hz	D150	0.0009
Surface Resistivity (ohm/sq) at 50% RH	ANSI/ ESD STM 11.11	>10 <sup>13</sup>

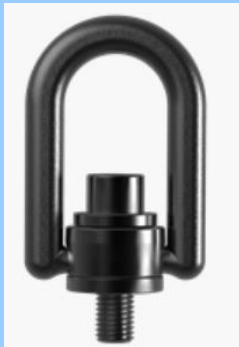
# CL-33314 –SHR-Heavy-Duty® Swivel Hoist Rings (Standard Ring)

Manufactured by



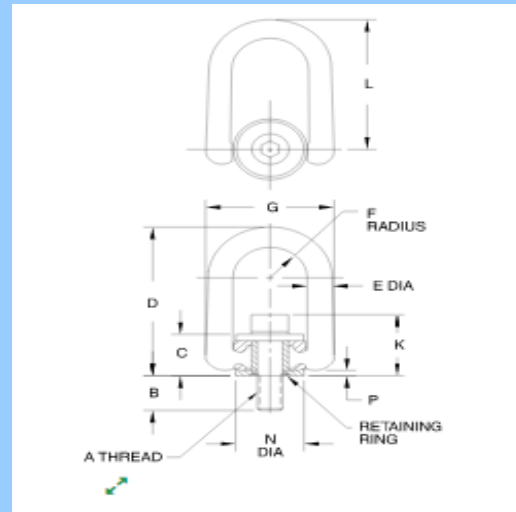
Carr Lane Manufacturing is well known in the industry for its industrial parts and standard tooling components. It is specially known for jig & fixture tooling components. Carr Lane Manufacturing has a huge variety of products ranging up to 100,000 industrial parts, components, tools & accessories, toggle clamps, handles, knobs, etc.

## CL-33314 –SHR-Heavy-Duty® Swivel Hoist Rings (Standard Ring)



- Forged Lifting Ring feature and simpler construction for easy disassembly
- Swivel Host Rings pivot 180° and swivel 360° simultaneously to allow lifting from any direction
- Safety Factor = 5:1
- Available with inch or metric threads in load capacities up to 30,000 lbs with a choice of bolt length
- Complies with ASME B30.26, CEN/TC 168 Reference EN 1677-1: 2000 Part 1 and 2006/42/EC.
- Meets OSHA standards and Military Specification MIL-STD-1365(11) or MIL-STD-209C.
- Patent no. 4,570,987, 4,641,986, 5,405,210, and other patents pending.
- Made in USA
- Material: 4140 Steel, Heat Treated
- Finish: Black Oxide Finish (Cadmium Plating available as a special)

## CL-33314 –SHR-Heavy-Duty® Swivel Hoist Rings (Standard Ring)



**Part Number:** CL-33314-SHR

**Load Rating (lbs):** 1000

**A(THREAD):** 3/8-16

**B:** 1.06

**C:** 0.96

**D:** 3.23

**E (Dia):** 0.44

**F:** 0.65

**G:** 2.29

**K:** 1.34

**L:** 2.98

**N (Dia):** 1.25

**P:** 0.15

**Installation Torque (ft-lbs):** 12

# Voltage and continuity tester 0.5 - 1,000V

Manufactured by



Wiha seeks to make daily life much easier for users with a product assortment of innovative hand tool solutions geared towards user needs. This is why Wiha develops, designs and manufactures products that meet the strictest requirements for quality, functionality, durability and ergonomic design. As a trusted, strategic partner of specialist retailers, Wiha offers a wide range of quality products for the professional segment.

## Voltage and continuity tester 0.5 - 1,000V



**Dimensions:** 240 x 75 x 30mm

**Standards:** IEC 61243-3:2014, IP64, CE CAT III 1.000V / CAT IV 600V

**Voltage and continuity tester 0.5 - 1,000V** is used to test voltage of a wide range from 0.5V to 1000 V AC or 1500 V DC. In addition, **Voltage and continuity tester 0.5 - 1,000V** is used to perform optical rotational field, single-pole and continuity testing as well as automatic polarity detection. Furthermore, resistance and frequency measurements can also be conducted.

**Voltage and continuity tester 0.5 - 1,000V** has a large LCD display with background illumination as well as an LED display which allow measurements results to be readable immediately. In addition, it also has signal sound which indicated the flow of current during the continuity check. The check can be easily carried out on sockets with single hand due to the integrated spacer.

**Voltage and continuity tester 0.5 - 1,000V** has an integrated flashlight function which provides optimal illumination on areas with poor lighting. In addition, simultaneous pressing of both buttons on both handles of the test tips allow the functional test of the FI protective switch by connecting to a load.

According to the measurement categories CAT III up to 1000V and CAT IV up to 600V, **Voltage and continuity tester 0.5 - 1,000V** is able to provide maximum safety for users who are working on sources of low-voltage installations as well as building installation.

For more information on our products and availability, please do not hesitate to contact our nearest Pactumax International office, or e-mail us at [sales@pactumax.com](mailto:sales@pactumax.com). We look forward to hearing from you!

Highlights from the next issue of Pactumax Monthly Advanced Product Alert – Rulon® LR/J, Tivar® 1000 (UHMW -PE), Stud Track Roller (Reid Supply), Tool backpack mechanic (wiha), Stay tuned!