



This chart details our most popular compounds. Menges Roller can cover your roll with virtually any compound on the market or custom-blend formulas to suit your unique specifications. Speak to a Menges Sales Engineer: we can walk you through the advantages and properties of each material.

PHYSICAL PROPERTIES	E-Zone	Tough Coat	Super Tough Coat	Nitrile PVC	Hydrogenated Nitrile	High Speed Web Offset	Converter Preen	Corona Treater	Natural Rubber	Viton	Aqua Preen	Millable Urethane -Ether	Millable Urethane -Ester	Tiger Max	EconoSil	Silicone Our Specialty
Hardness Range Shore A	30-40	29-95	40-95	60-90	45-98	20-40	30-95	70	25-99	55-85	30-90	40-95	40-95	60-90	40-90	40-90
Hardness Range P&J	60-200	10-200	20-170	25-95	15-185	N/A	40-250	60	5-250	45-115	30-300	40-250	40-200	25-100	15-140	25-185
Abrasion Resistance	3	3	5	4	5	3	4	4	5	2	3	5	5	5	3	1
Tear Resistance	2	3	5	3	5	3	3	3	5	3	4	5	5	5	2	1
Load Bearing	3	4	5	3	5	4	5	5	5	3	4	5	5	5	2	1
Hysteresis	2	2	1	1	3	4	2	2	5	2	4	5	5	4	3	5
Resistance to Denting	2	3	2	1	3	3	2	3	5	2	2	5	5	5	3	5
Max Service Temp (C°-F°)	177°/350°	121°/250°	135°/275°	121°/250°	177°/350°	121°/250°	149°/300°	149°/300°	100°/212°	260°/500°	121°/250°	100°/212°	100°/212°	121°/250°	194°/400°	260°/500°
Ozone Resistance	5	1	1	3	5	3	5	5	1	5	3	4	4	5	5	5
Resiliency	3	3	2	2	4	5	3	2	5	3	4	4	4	4	4	1
SOLVENT RESISTANCE																
Acids	5	2	2	3	3	2	3	3	3	5	3	1	1	2	4	4
Caustics	5	3	3	3	4	3	4	4	3	5	4	1	1	2	4	4
Aliphatic Hydrocarbons	1	5	5	5	3	5	3	3	1	5	3	2	5	3	1	2
Aromatic Hydrocarbons	2	3	3	4	5	3	2	2	1	5	2	1	5	2	2	3
Chlorinated Hydrocarbons	1	1	1	1	4	1	1	1	1	5	1	1	2	2	2	3
Water	5	4	3	4	1	4	3	3	5	4	3	2	1	5	4	4
Ketones	5	2	2	1	2	2	3	3	5	1	3	1	2	2	5	3
Alcohol	5	5	4	5	5	5	4	4	5	2	4	3	4	3	4	4
Esters	5	1	1	1	1	1	3	3	5	2	3	1	2	5	2	3
RECOMMENDED APPLICATIONS																
Coatings	✓	✓				✓	✓				✓	✓	✓			✓
Embossing					✓		✓								✓	
Flexography				✓				✓	✓							
Laminating										✓					✓	✓
Laser Engraving									✓							
Metal Decorations	✓	✓	✓				✓							✓		
Offset Printing				✓		✓										
Paper Industry							✓		✓		✓	✓		✓		✓
Plastics			✓	✓	✓		✓							✓	✓	
Plate Processors	✓													✓		
Steel Mill Rollers			✓	✓	✓					✓	✓	✓		✓		
Textile/Non-Wovens														✓		
Wood Industry	✓	✓	✓				✓				✓	✓		✓	✓	✓

More Experience, Better Choices - Outstanding Results

As a leader in the development, testing and final application of all types of elastometric compounds, Menges knows rubber, silicone and urethane like no other roller company. Our Tiger Max compound won several prominent awards, and our renowned Tough Coat and Super Tough Coat compounds lead the way in nitrile-based applications. We're also one of very few companies capable of blending silicone and rubber compounds to create hybrid rollcovers that take advantage of each compound's advantages.

The below descriptions correlate with the attached chart, giving detail on our most popular rollcover compounds. As always, the Menges Roller Team is here to provide expert advice and technical solutions relating to rollcovers and so much more.

E-Zone

This EPDM-based product offers excellent ozone resistance. It stands-up to chemicals very well and has above average abrasion and dent resistance. This balanced mix of physical & chemical properties make our E-Zone perfect for an array of applications.

Tough Coat

Menges Tough Coat, a nitrile-based cover, is a real workhorse. Exceptional physical properties and good chemical resistance make it a cost-effective cover for many idler, nip and pull rolls.

Super Tough Coat

Super Tough Coat is one of our most popular rollcovers. This compound is similar to nitrile rubber, but the polymer backbone is chemically modified with carboxylic acid. The result is a very durable rollcover, with great abrasion & chemical resistance, far superior to standard nitrile.

Nitrile PVC

We've blended two compounds, keeping the best traits from each: combining strong physical strength with great chemical resistance. As a rollcover, it's used in many printing applications. It offers specific resistance to aliphatic hydrocarbons (oil-based inks), plus improved ozone and abrasion resistance over standard nitrile.

Hydrogenated Nitrile

Known also as HNBR, Menges offers this material as an alternative to polyurethane. *It surpasses standard NBR in these areas:*

- Mechanical and dynamic properties
- Oil and fuel resistance
- Heat resistance: Physical properties are maintained over a broad temperature range, as opposed to urethane, which degrades as temperatures increase.
- Abrasion, tear & chunk-out resistance
- Retention of roll geometry: Initial higher costs are repaid multiple times over the long term via lower maintenance costs, less downtime & improved performance.
- **Menges HNBR lasts 3-5 times longer than typical rollcover compounds**

Viton

Viton (fluoroelastomer) has excellent heat, cut and abrasion resistance, as well as good resistance to fuel oil & many popular chemicals. Viton is often used when no other compound will work, so the cost is always paid back with better output, less downtime and faster linespeeds.

Converter Preen

One of our most popular elastomers, this hypalon-based cover has outstanding abrasion & cut resistance, coupled with excellent heat, ozone and chemical resistance. It's a hard-working rollcover you can rely on for use in corona treating, laminating, coating and in cast film nip roll applications.

Corona Treater

Our corona treater cover is hypalon-based, but augmented to withstand the rigors of its environment. This compound has great dielectric strength, enabling it to insulate against high voltage. Many materials have been tested against corona discharge, but Menges Corona Treater is proven to stand up best.

Natural Rubber

The original rollcover, it is still widely used in some applications. It has strong load bearing qualities & tensile strength, it's abrasion resistant, and resists key solvents (esters & ketones); plus it's available in extremely hard durometers (required by paper & textile industries).

EconoSil

This hybrid compound is a unique blend of silicone and EPDM, marrying the best properties of each. This unique formula is best for rolls required to perform well when hot, to deliver high release, while having structural strength & chemical resistance. For some processes, 100% silicone or 100% EPDM may not work: this is where Menges EconoSil is the *perfect solution*.

High-Speed Web Offset

Menges Roller has developed a proprietary elastometric compound that is perfectly suited for high-speed web offset presses. See your Sales Engineer for more details.

Silicone - A Menges Specialty

Silicone is its own category, known for its release properties (materials don't stick) and for being extremely heat resistant. Menges Roller has specialized in silicone since the 1960s. We offer standard industrial grades plus custom blends to bring out certain characteristics:

- Ultra-high release blends
- Thermally conductive blends
- FDA approved formulas
- Anti-static compounds

All have outstanding resiliency and most are capable of handling temps up to 500°F. Speak to a Menges Sales Engineer to choose one that's right for your application.

Tiger Max

Tiger Max is an award-winning TPU-based elastomer developed by Menges Roller. It's one of the toughest rollcovers we offer, with superior pressure, abrasion and cut resistance. This high-tech cover also has exceptional ozone & chemical resistance. Ideal for high-pressure uses, Tiger Max is employed in steel coil converting, plastic processing, and the manufacturing of paper, roofing & nonwovens materials.

Aqua-Preen

With a neoprene base, this compound has good tensile strength, tough cut resistance and low compression set. Although somewhat replaced by more advanced formulas neoprene-based rollcovers are still preferred for many select applications.

Millable Urethane - Ether & Ester

Urethanes offer extremely good wear resistance, with great solvent resistance. We have wide experience working with urethane-based compounds. Menges can formulate a urethane-based compound (Ether or Ester) to meet your specific needs and solve your process challenges.

Chemical Category Definitions:

Ketones:	Methyl Ethyl Keytone (MEK), Methyl Isobutyl Keytone (MIBK), Acetone
Chlorinated Hydrocarbons	Methylene Chloride, 1.1.1 Trichloroethylene, Perchloroethylene
Aliphatic Hydrocarbons	Kerosene, Gasoline, Hexane, Naphtha, Mineral Spirits
	Most offset printing inks, Many lubricants & greases
Aromatic Hydrocarbons	Toloul or Toluene, Xyol, Xylene
Esters:	Ethylacetate, Dioctyl Phthalate, Tricresyl Phosphate
Acids-Mineral	Nitric, Sulfuric, Hydrochloric, or Phosphoric Acids
Acids-Organic	Acetic Acid, Boric Acid
Caustics	Sodium Hydroxide, Calcium Hydroxide
Alcohols:	Methanol, Ethanol, Isopropyl Alcohol
Glycols:	Ethylene Glycol, Glycerin

Sales@MengesRoller.com
www.mengesroller.com

260 Industrial Drive
Wauconda, IL 60084

Phone: 847-487-8877
Fax: 847-487-8897

