Silicone Rubber Roller Solutions

United Silicone’s rollers are the ideal choice for peripheral hot stamping of cylindrical shapes and roll-on decorating of large, flat or curved surfaces. The rubber conforms readily to surface variations in molded plastic parts, ensuring smooth application of hot stamping foils and multi-color heat transfers. Silicone rubber rollers are used in a variety of applications including banding, laminating, printing and decorating. Carefully engineered and crafted, our rollers are specifically matched to your application.

**Roller Specifications**
- New and “Recoat”
- 40-90 Durometer (Shore A)
- Flat, Contoured, or Stepped
- Face Lengths up to 110”
- Finished OD to 20”
- Outside Diameter (A)
- Rubber Thickness (D)
- Face Length (E)

**Metal Core**
- Aluminum, Standard
- Steel
- Outside Diameter (B)
- Inside Diameter (C)

**Common Applications:**
- Heat Transfer & Hot Stamping
- Extruded Products
- Heat Sealing
- Edge Banding
- Cylindrical Shapes
- Packaging
- Laminating
- Feed & Guide Rollers
- Liner-less Labels

**Benefits:**
- Excellent Silicone-to-Metal Bond
- Thermally Conductive
- Heat Tolerant to 550°F
- Various Formulations
- Resistant to Compression Stress
- 40-90 Durometer (Shore A)
- FDA-Grade & 3A Certified Materials
- Seamless Finish
- Expedited Lead Times
- Recoats Available

Trusted Partner for Your Product Decorating Needs
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United Silicone, part of Industrial Decorating Solutions (IDS), specializes in the design and production of standard and custom hot stamp and heat transfer decorating machines.

United Silicone also provides a complete range of supplies including: silicone rubber dies, rollers, sheets, part holding fixtures and heat seal supplies.

As a leading designer and manufacturer of state-of-the-art plastics decorating systems, United Silicone has the in-house engineers to provide solutions to your toughest decorating problems.

**Properties of Silicone Rubber Formulations**

<table>
<thead>
<tr>
<th>Formulation</th>
<th>Duro (Shore A)</th>
<th>Tensile Strength (PSI)</th>
<th>Elongation (%)</th>
<th>Compression Set (%)</th>
<th>Heat Resistance</th>
<th>Specific Gravity</th>
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<tbody>
<tr>
<td>Ultrasil (Red)</td>
<td>90</td>
<td>1110</td>
<td>125</td>
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</table>

**Ultrasil**

Demanding vertical & peripheral operations requiring high temperatures and/or high pressures – typically manually fed.

**Thermosil**

Semi – Automatic and fully automated sealing applications requiring very stable high temperatures and rapid heat recovery.

**FDA-3A**

3A Sanitary - Class I Test Specifications.

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**Durometer** – The Hardness of a material as measured on the Shore A Scale

**Tensile Strength** – The pulling stress just before the material breaks into 2 pieces

**Elongation** – The fractional increase in length of a material, stressed in tension, just before it breaks into two pieces

**Compression Set** – The measure of material resiliency after being subjected to compression and heat

**Heat Resistance** – Ability of a material to remain bonded to metal during exposure to extreme temperature.

**Specific Gravity** – The density of material divided by that of water