Jewel® MagSnap Wrist Straps meet or exceed the requirements of ANSI/ESD S20.20 and ANSI/ESD S1.1 including section 5.4 Breakaway Force "With the ground cord connected to the cuff in a normal manner, a force of 0.45 kg (1 lb) but ≤ 2.3 kg (5 lb) applied to the ground cord, in the normal disconnect direction, shall be required to separate the ground cord from the cuff."

Per ANSI/ESD S20.20 Paragraph 6.2.2.1. Personnel Grounding Requirements "All personnel shall be bonded or electrically connected to ground or contrived ground when handling ESD sensitive items. When personnel are seated at ESD protective workstations, they shall be connected to the common point ground via a wrist strap system."

"At first glance, the ground cord appears to be a relatively simple assembly. However, the design requirements are considerable, given the wide range of user applications and the durability requirements of constant tugging, flexing, and dragging over the edge of workstation tops and equipment chassis."

(ESD Handbook TR20.20 paragraph 5.3.2.2.2 Wrist Strap Ground Cord)

NOTE: Complete wrist strap kits include an alligator clip. Wrist strap kits include an alligator clip for occasions when a grounded banana jack is not available. However, "Wrist strap ground cords must be connected to a groundable point or an equipotential bonding point. Do not connect to a snap on a dissipative mat unless it is the groundable point for the mat. Do not clip a wrist strap to the edge of a dissipative mat." (ESD Handbook TR20.20 section 5.3.2.7)

ESD Handbook TR 20.20 paragraph 5.3.2.4.4 Test Frequency "Because wrist straps have a finite life, it is important to develop a test frequency that will guarantee integrity of the system. Typical test programs recommend that wrist straps that are used daily should be tested daily. However, if the products that are being produced are of such value that knowledge of a continuous, reliable ground is needed, and then continuous monitoring should be considered or even required."

Continuous Monitors pay for themselves improving quality, productivity, eliminating wrist strap daily testing and test result logging. Per ESD-S1.1 paragraph 6.1.3 Frequency of Functional Testing "Daily (Wrist Strap) testing may be omitted if constant monitoring is used."

Improve wrist strap contact with Reztore™ ESD Hand Lotion.

- Patented revolutionary magnetic interconnect technology (U.S. Patent 5,004,425)
- Creates magnetic connection between wristband and coil cord; meets ANSI/ESD S20.20 and ESD S1.1, including disengagement force test (1-5 lbs). More consistent disengagement force than standard 4 mm designs.
- Dual-wire wrist strap provides redundancy
- If one dual wire strap conductor is severed, operator still has reliable path-to-ground with other wire
- 3.5 mm mono plug compatible with 3M and other brand Continuous Monitors
- More reliable design
- MagSnap revolutionary design provides consistent retention and release performance.
- Premium metal expansion wrist strap
- Comfortable, designed not to pinch or pull hair
- Durable metal band
- Long wearing, easy to clean
- Superior contact with skin
- For reliable removal of generated static charges
- Non-flaking or scratching laminated insulator on all external surfaces
- Protects wearers from electrical hazards; provides many years of product life
- Superior resistor connection strain relief
- Superior reliability. Greatly exceeds ESD S1.1 Bending Life Test. Tested at over 11 million cycles vs. the 16,000 requirement
- Covered by one or more of the following patents:
  - Wristband: 4,639,825
  - Superior reliability. Greatly exceeds ESD S1.1 Bending Life Test. Tested at over 11 million cycles vs. the 16,000 requirement
  - Covered by one or more of the following patents:
- UL Listed

Note: This product is not recommended for use on equipment with operating voltage exceeding 250 VAC.

CAUTION: The ESD Series is for electrostatic control. It will not reduce or increase your risk of receiving electric shock when using or working on electrical equipment. Follow the same precautions you would use without wrist straps, including:

- Make certain that equipment having a grounding type plug is properly grounded.
- Make certain that you are not in contact with grounded objects other than through the ESD Series.

<table>
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<tr>
<th>ITEM</th>
<th>DESCRIPTION</th>
<th>Min. Cir.</th>
<th>Max. Cir.</th>
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<tbody>
<tr>
<td>23676</td>
<td>Jewel® MagSnap Dual-Wire Metal Wristband, Large</td>
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<td>11-1/2”</td>
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<tr>
<td>23677</td>
<td>Jewel® MagSnap Dual-Wire Metal Wristband, Medium</td>
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Meets ESD S1.1 cuff resistance interior =100 kilohms (1 x 10E2 ohms)
Meets ESD S1.1 cuff resistance exterior =10 megarhms (1 x 10E7 ohms)

See Drawing TD-23580 for details on Jewel® MagSnap Dual-Wire Coil Cords

Jewel® MagSnap Dual-Wire Metal Wrist Strap

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DRAWING NUMBER: TD-23676
DATE: October 2010