Antistatic Powder Feed Tubing

Description
See Figure 1. Antistatic powder feed tubing is clear, plastic tubing with a conductive copper ground wire molded into the wall, which provides a path to ground. Antistatic tubing provides the following benefits over traditional feed tubing:

- Elimination of tribocharging, which reduces pinholing in the feed tubing
- Higher, more consistent powder flow
- Cleaner spray gun, reducing maintenance time
- Less powder buildup and impact fusion inside the feed tubing

Parts
Order antistatic powder feed tubing in one-foot increments.

NOTE: Refer to your powder feed center manual for the required hose clamp part numbers. Feed centers manufactured before July 2006 require new hose clamps to use antistatic tubing.

- **Spectrum II Powder Feed Center:** 1060125B or later
- **Original US Powder Feed Center:** 334590B or later

<table>
<thead>
<tr>
<th>Part</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>768176</td>
<td>TUBING, powder, antistatic, 11 mm (0.43 in.) ID</td>
</tr>
<tr>
<td>768178</td>
<td>TUBING, powder, antistatic, 12.7 mm (0.5 in.) ID</td>
</tr>
<tr>
<td>1069787</td>
<td>TUBING, powder, antistatic, 19 mm (0.75 in.) ID</td>
</tr>
</tbody>
</table>
Installation Guidelines

**CAUTION:** The black stripe with the molded copper braid must contact the metal pump throat holder.

**Preparation**

Prepare the tubing and pump to make tubing installation easier:

- Use a tapered punch to widen the ID of the tubing.
- Slightly moisten the throat holder.

**Ground Contact**

See Figure 2. The integrated copper wire braid makes ground contact through the inside of the tubing to a grounded, metal throat holder.

The ground path must continue through the throat holder’s conductive O-ring, pump body, pump adapter with conductive O-ring, hopper lid, ground wire, and on to a true earth ground.

**Powder Feed Centers**

**NOTE:** As of July 2006, all powder feed centers ship with antistatic powder feed tubing.

See Figure 2. When used in a powder feed center, the tubing’s ground path is through the hose clamps at the top of the lance assembly.

New hose clamps are required to retrofit existing feed centers. Contact your Nordson representative for more information.
Recommended Usage

Use the following illustrations to determine whether or not to use antistatic powder feed tubing with your pump.

**DO Use Antistatic Powder Feed Tubing with These Pumps**

![Diagram of 100 PLUS Standard Flow](image1)

**NOTE:** Throat holder 249506D or later is tapered to make installing 11-mm feed tubing easier.

![Diagram of Modular Transfer Pumps](image2)

![Diagram of Inline with Powder Feed Center](image3)

Figure 2  DO Use Antistatic Powder Feed Tubing with These Pumps

**DO NOT Use Antistatic Powder Feed Tubing with These Pumps**

These pumps have nonmetallic hose barbs, which would not allow the antistatic powder feed tubing to establish a path to ground. Antistatic powder feed tubing will work with these pumps, but you will not have the benefit of an electrostatic discharge path.

![Diagram of 100 PLUS Low Flow](image4)

**with Tivar hose adapter 139943**

![Diagram of Transfer Pumps](image5)

**with PTFE throat 244642**

**or Tivar throat 226713**

Figure 3  DO NOT Use Antistatic Powder Feed Tubing with These Pumps