

All Connectors Are Created Equal. **WRONG!**

CINCINNATI, OHIO

SALES BULLETIN SB-0700

Pssst! Interested in a HOT TIP?

If you think all connectors are the same, you need to take a closer look. Sometimes little things can make a big difference. Little things like . . . **PIN TIPS**.

We know it's not rocket science, but there are a few subtleties to making a superior connector. At Crane, we "sweat the small stuff," taking considerable pride in the fact that our pin tip geometry – we call it the **MATE-RITE TIP™** – is arguably the best in the industry.



Crane's pin tip geometry is one of the reasons our pin strip headers were selected for use on a control arm for the Space Shuttle. Designers concerned with performance – especially in harsh environments – consistently favor the rugged reliability of Crane pin strip headers with **MATE-RITE TIPS™**.

How Most Tips Are Formed

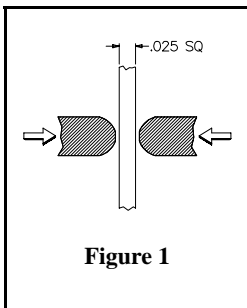


Figure 1

The most common pin manufacturing process in the connector industry is one called swaging. In this process, **pre-plated** 0.025" SQ wire is drawn into a punch press where it is struck by two dies (see Figure 1 to the left).

As a result of this pin manufacturing process, many connector companies produce (or broker) parts with sharp angles at the "shoulders" (see Figure 2 at right) of their terminal pins. They may even be UN-PLATED (and exposed) on the tips.

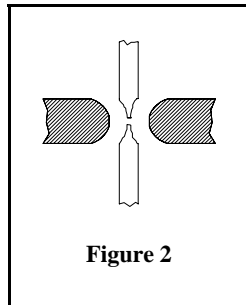


Figure 2

When these parts are mated with a socket, the rough edges can scrape the mating surface. This often leads to:

- base metal exposure and possible contamination
- scraping of metal surfaces and possible shorting
- exposure of dissimilar metals and possible corrosion
- higher insertion forces due to harder entry

To eliminate these problems and provide the best pin tip geometry available, Crane Connectors furnishes its pin strip headers with its unique **MATE-RITE TIP™**.

The MATE-RITE TIP™ Process

Compare Crane's **MATE-RITE TIP™** with those of competitor parts in the photograph to the right. This enlarged view reveals a Crane part (right) free of the "chopped off" and "sunken pyramid" tips of competitor parts (left and center).



The formation of a Crane **MATE-RITE TIP™** begins with the selection of precision drawn phosphor bronze wire. A primary stamping operation cuts the terminal to the desired length. A secondary stamping operation provides a smooth tip that minimizes the burrs and slivering. Our POST-PLATE operation insures that the tips are fully plated and protected from exposure to harsh environments.

**Extra VALUE,
Not Extra COST!**

Buyers concerned with the need to manage costs, appreciate the fact that the **MATE-RITE TIP™** is a **Crane standard** and comes at **no additional cost**. So to avoid tough scrapes with your PCB interconnects, be sure to specify Crane Connectors with the **MATE-RITE TIP™**.