

Methode Electronics, Inc.

Project: Produce high volume of electric connection terminals that require tight tolerances.

Goal: Keep up with demand for products while maintaining superior quality.

Results: High-quality, high-speed production of 15 million parts per month with zero defects.

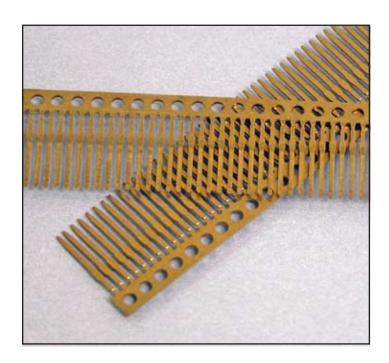
Anyone familiar with computers has seen the familiar gold-colored male and female terminals used for electric connections. With a demand for these terminals ranging from 10 million to 20 million parts per month, Methode Electronics needed a supplier that could maintain extremely tight tolerances at high-volume production.

When the company encountered problems with quality and delivery with an existing vendor, Beloit Precision stepped up to fill the void.

Methode Electronics manufactures component and subsystem devices employing electrical, electronic, wireless, sensing and optical technologies. Its products are used in consumer electronics, industrial, aerospace and military equipment markets worldwide. Methode Electronics emphasizes quality, delivery and service in dealing with its customers and seeks the same attributes in vendors. The manufacturer found a like-minded partner in Beloit Precision.

Beloit Precision took the bold step of building the tooling required to stamp the male and female parts on spec. That dramatic move paid off for Methode Electronics and Beloit Precision. We became the company's top-rated vendor, producing the highest volume of parts at tolerances of $\pm .0005$ inches with absolutely no recorded defects.

The key to achieving the specified high tolerances consistently throughout high-volume runs lay in the tooling deign. In this particular application, the thin strip of raw metal was coined down to two-thirds the material thickness prior to being formed. Maintaining the depth of the coin after the material was formed proved a significant challenge for Methode Electronics' previous supplier. Beloit Precision was able through its innovative tooling design to overcome the distortion of the strip.





Methode Electronics contracted Beloit Precision to manufacture the male part. Operating a press with the capability to run 350 strokes per minute around the clock, seven days a week, Beloit Precision satisfied the customer's quantity and quality needs. Pleased with the results, Methode Electronics redirected Beloit Precision's efforts to the higher-volume female part.

To accommodate Methode Electronics' monthly demand for 15 million parts, Beloit Precision upgraded to a high-volume press with the heightened capability of 1,425 strokes per minute. Once the new press ramped up to full production on both the male and female parts, the quality, delivery times and service exceeded anything Methode Electronics had experienced in the past.