

# Semiconductor supplier saves more than \$205,000 through MSC's Application Optimization Program



**OVERVIEW:**

## Semiconductor Industry Supplier

A leading supplier to the worldwide electronics industry, this business unit — part of a Fortune 100 company — is one of the world's largest and most vertically integrated producers of high-purity metals and sputtering targets used for semiconductor manufacturing. In addition, the facility also produces a wide range of materials used for semiconductor packaging applications, including thermal management and electrical interconnect.

**Application:** Metalworking tool conversions and application optimization

**Location:** More than 100 manufacturing locations throughout the U.S.

**CHALLENGE:**

**Cut manufacturing costs and drive productivity**

Customer was looking for a strategic partner, not just a product house, to identify productivity and savings opportunities.

**SOLUTION:**

**MSC's Application Optimization Program provides TCO\* visibility**

By understanding the customer's business, MSC identifies and delivers improved performance and savings.

\*Total Cost of Ownership

**RESULTS:**

**Tooling conversions and Application Optimization saved \$205,000+ in one year**

MSC and tooling partners like Norton and Kennametal make changes in drilling, grinding, milling and cutting.

“This customer ... told us we’ve outperformed past suppliers significantly, documenting some of the highest productivity savings that they’ve seen across the country.”

Gary Garrity, MSC National Account Manager

### CHALLENGE

As a result of its manufacturing scale, this large semiconductor industry customer knows that every opportunity to drive cost savings and achieve productivity gains can have a major impact on their business. In addition, this particular location deals with exotic and pure materials that are more difficult and expensive to machine, so improved efficiency and reduced scrap translate directly to significant cost savings.

One of the benefits of partnering with MSC involves its national account program, which is based, in part, on MSC’s metal-working and manufacturing expertise and the expectation that MSC can uncover and implement cost savings for the customer.

“This customer has a definite desire, at each of their sites, for MSC to use our expertise and supplier relationships to help them drive productivity at the spindle,” says Gary Garrity, MSC National Account Manager. “They’ve told us that we’ve outperformed past suppliers significantly, documenting some of the highest productivity savings that they’ve seen across the country.”

### SOLUTION AND RESULTS

Three factors helped this customer save \$205,640.20 in one year: tooling conversions identified through MSC’s unique Application Optimization Program; a deep understanding of the customer’s business and daily manufacturing challenges; and strategic supplier partnerships that identify opportunities to increase productivity and cut costs while providing complete TCO visibility.

Some of these improvements included:

#### Solid Drilling

> [Reduced consumption by 96%](#)

MSC and Kennametal helped the customer move from two operations (drill and mill) to one operation with a flat-bottom drill, boosting productivity by 2,400 percent, with per-part cycle time cut in half. In one year, the customer reduced consumption by 96 percent and saved over \$44,000 in tooling and time.

#### Grinding

> [Longer tool life reduced process time and saved over \\$62,000](#)

MSC and Norton identified an opportunity to switch to a Norton Bluefire grinding wheel for this customer’s Ti-Tungsten

manufacturing process. The new wheel lasted 4x longer, and saved half an hour in time required to remove mold flash on each process. While tool cost savings were \$6,718.92, process time savings amounted to \$62,400, for a total savings of \$69,118.92.

#### Indexable Milling

> [Boosted productivity by 211%](#)

Working together, MSC and Kennametal saw an opportunity to boost productivity with an indexable cutter that reduced passes by 50 percent and produced 15x the number of parts per index. Productivity rose by 211 percent and cost savings for the year were \$5,284.

#### Bandsaw Cutting

> [Reduced tool consumption by 50%](#)

By moving from uncoated to coated blades, MSC cut the number of blades used in one process by more than half—saving the customer \$41,997.61. The change also saved an average of one minute per cut, which saved \$41,600—nearly as much as the reduced tool cost. Adding in savings for the blade change-outs, the customer saved \$86,762.61 during the year.

### SUCCESS FACTORS

**Build productive relationships:** Increased productivity/cost savings is not about finding the lowest-cost tool. It’s about building relationships with suppliers who can use their expertise to bring you the lowest TCO, which includes factors such as tool cost, durability, throughput and labor.

**Look through a new lens:** When you have a preferred supplier proactively working with you on a TCO program or with a commitment to find you new and unique ways to cut costs, you will find that it’s not just piece price; it’s many hidden components that contribute to TCO.

**Visibility is key:** Make sure your supplier is prepared to properly document your productivity gains and savings, with a rigorous process to capture different categories of spending, and to present those to you after a year.