

Case Study: Material Cost Reduction

California-based manufacturer achieves significant savings in stainless steel by avoiding nickel surcharges

→ **The Situation**

A midsized manufacturing firm based in southern California was consuming roughly \$3 million worth of stainless steel annually to build its products. The manufacturer, which specializes in producing beverage dispensers, was seeing its material costs become prohibitive due to the rising cost of a key ingredient in stainless steel – nickel, as well as wild fluctuation in steel prices.

Five years ago, the beverage dispenser manufacturer began applying the principles of continuous improvement to each aspect of its business. In 2005, the time came for this company to address its purchasing and procurement processes.

This manufacturer maintains a Membership in the private buying group Prime Advantage in order to gain predictable access to low-priced materials used in its products.

Through a collaborative effort with a Prime Advantage Supplier, Macsteel Service Centers USA, the manufacturer identified three significant savings and improvement opportunities in stainless steel, a major raw material purchased to build its products.

In analyzing its product development requirements, this beverage dispenser manufacturer recognized that most of its stainless steel purchases were made of grade 304 stainless, considered a top performing grade in areas such as corrosion resistance, forming, welding, and appearance.

→ **The Issue**

The stainless steel market was fluctuating greatly in both price and availability. Two components made up that price fluctuation, the base price for the metal, and surcharges, which were based in part on the amount of nickel in the steel.

→ **The Program**

Macsteel Service Centers USA, which is based in Newport Beach, CA, was able to offer stability in the form of locked-in pricing and designated inventory thus the surcharges based on that inventory commitment were able to be firmed.

Macsteel Service Centers USA offered a base price that was locked for six months at a time, contingent upon on a committed inventory level, which enabled the manufacturer to avoid several increases.

The surcharges on stainless steel, which is an additional cost added to the base price and a by-product of the amount of nickel comprised in the steel, had been fluctuating greatly and drastically increasing the cost for this manufacturer. Macsteel Service Centers was able to customize a program to help address the fluctuating surcharge.

Savings associated with the price and surcharge initiatives ranged between 10-15 percent.

The analysis then moved to the current grade of stainless steel the Member was using. Grade 304 stainless steel, which the manufacturer had been using, has high nickel content and therefore a higher surcharge factor than other potential alternative materials. Through an evaluation of the functionality of the manufacturer's end product, Macsteel Service

Centers USA coordinated a collaborative evaluation process that ultimately resulted in converting roughly 25-30 percent of the stainless usage to grade 201 stainless steel.

The characteristics of T201 emulated certain performance criteria provided by grade 304 in areas deemed critical to the manufacturer: but the lower nickel content resulted in lower material surcharges. Savings associated with the grade substitution ranged between 30-40 percent of material surcharges, resulting in thousands of dollars in material savings for the manufacturer.

Lastly, working closely with mill sourcing, Macsteel Service Centers USA was able to address inventory and freight logistics with the manufacturer. In that the manufacturer was able to commit to specific inventory and releases, Macsteel Service Centers has been able to offer an on demand delivery performance that was needed, without any delay. This is a significant change from the manufacturer's old supply chain.

Another aspect - vendor managed inventory program (VMI) resulted in the manufacturer's ability to avoid carrying costs associated with inventory and complemented its continuous improvement philosophy. Savings associated with the VMI program, which were enabled via both companies' Membership in Prime Advantage, are about three percent annually.

Through its Membership in Prime Advantage, this manufacturing firm also enjoys additional rebates and discounts on the raw material and components they purchase through the group, in addition to the savings related to the value added services provided by Macsteel Service Centers USA.

➔ **Background**

Prime Advantage is a private buying group dedicated to bringing its clients the best possible savings on raw materials, components, supplies and services. By combining the purchasing power of industrial manufacturers, Prime Advantage negotiates volume rebates and discounts with an exclusive group of world-class global Suppliers.

Through its privileged relationships, Prime Advantage also provides savings on supplies, raw materials and components that are typically unavailable from a traditional broker relationship, as well as access to world-class Suppliers that provide additional value added services customized to the specific needs of Prime Advantage Members. Macsteel Service Centers USA, has over 32 locations and processes and distributes carbon, stainless, aluminum and specialty metals to customers throughout North America. Products include a full range of flat rolled, plate, tubing, pipe, bar and structurals. The company also supplies a full range of steel building products, coated and prepainted metals. The company is an Endorsed Supplier in Prime Advantage and provides competitive pricing, volume based rebates, and extensive value added services to Prime Advantage Members, all in an effort to make them more efficiently run, profitable, manufacturing organizations.

