



## Hypertherm | Case Study Bharat Foils Limited

### **Bharat Foils Cuts Costs and Raises Productivity with Genuine Cutting Consumables** *Hypertherm Finds Success with its Anti-counterfeiting Efforts Again*

In this day and age where competition is rife, productivity and cost-effectiveness are often key differentiators that allow companies in the manufacturing sector to stand out amongst their business rivals. Over the years, manufacturing processes have progressed steadily with the advent of technology, and one of the key aspects of production lies in the machinery, where metalworking plays an important role.

For many equipment manufacturers, sheet metal cutting is a common procedure in their factory. India-based Bharat Foils Limited is one such company. Established in 1975, the family-owned business has a long history in equipment manufacturing, and currently specializes in the production of equipment used in the grain milling industry, spanning the entire process from cleaning to drying, milling processing, and packing. In Bharat Foils' daily operations, plasma cutting systems play a pivotal role as the company cuts 10 to 12 tonnes of sheet metal per day on average.

Modern cutting technologies, such as plasma systems, are capable of producing high quality cut parts at fast speeds, requiring little or no post-production processes. That said, the performance of a plasma system is also dependent on the consumable parts used with the torch. Even the latest advances in technology and torch designs are not exempted from this 'rule' - a high performance plasma system can be rendered mediocre when inferior consumables are used.

Often times, instead of purchasing consumables directly from the cutting system provider or authorized retailers, manufacturers may seek out cheaper alternatives from other suppliers in an attempt to reduce operating costs. This can lead to increased risks of purchasing counterfeit products unknowingly, since counterfeits are usually close copies of the genuine product that look similar in appearances, but are sold at relatively lower prices.

Despite being functional and cheaper, the usage of counterfeit consumables can be more counterproductive than beneficial, as experienced first-hand by Bharat Foils.

#### **Counterfeits Uncovered**

A satisfied customer of Hypertherm for several years, Bharat Foils currently uses six Powermax85 plasma systems in their factory. As part of its service standards, Hypertherm routinely checks in with customers even after a purchase has been made. It was during one such occasion that a channel partner discovered that Bharat Foils had been purchasing consumables from another source in the open market. They had noticed from their records that Bharat Foils had not been purchasing consumables from them despite owning six plasma systems.

The matter soon came to Hypertherm's attention and after further investigations, it was revealed that unbeknownst to Bharat Foils, the consumables they had purchased were, in fact, counterfeit products, as they looked virtually identical to the genuine consumables. Mr Sunil Gupta, Managing Director of Bharat Foils Limited, shared, "Our purchase department was instructed to source from the open market, to see if we could get the consumables at a better price than what was offered by the channel partner. We found a product which looked like Hypertherm's to me, and so we started to purchase from that source."

Upon understanding the situation, Hypertherm immediately contacted Bharat Foils to explain the consequences of using counterfeit parts, and the benefits associated with using genuine consumables. During a discussion with the operators at Bharat Foils, Hypertherm also found out that they had to reduce the cutting speed in order to maintain acceptable cut quality, which resulted in cutting issues like dross that required secondary work. The consumables' performance were also found to be inconsistent and had to be changed frequently.

#### **Trials, Tests & Results**

The high consumable consumption ultimately resulted in higher expenses in cutting operations for the company, in addition to reduced cut quality and decreased productivity. To illustrate the difference in performance between the genuine and counterfeit consumables, Hypertherm proposed the idea of conducting some trials in the factory.

Mr Gupta revealed, “We were initially reluctant to do the trials but Hypertherm continued to follow up with us closely. Eventually, we were won over by their sincerity and agreed to give it a try.”

Two separate trials - one with Hypertherm Cu+ consumables and the other with Bharat Foils’ existing consumables - were conducted simultaneously for three days under similar conditions, on mild steel plates of varying thickness (8 mm, 10 mm, and 12 mm). As the trials progressed, the differences in performance became apparent to Mr Gupta. For the same amount of cutting, Bharat Foils had to use three sets of counterfeit consumables compared to just one set of genuine consumables. The team also observed a significant increase in cutting speed (around 68% on average) with the use of the genuine consumables. During the trial, it was also noted that the counterfeit consumables had inconsistent lifespans, with the first set getting damaged after just 9 meters of cutting.

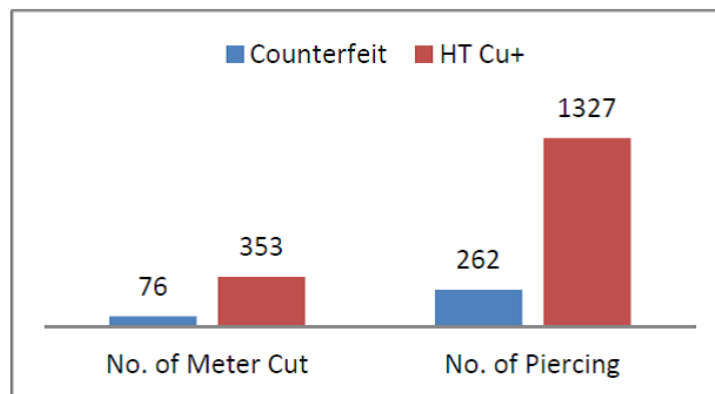


Photos taken during the trial



Improvements in hole and slot cut quality were observed in the part cut with genuine Cu+ consumables.

Quality-wise, the machine fitted with genuine consumables also delivered parts with better hole and slot cut quality. Upon assessing the results, Mr Gupta became convinced of the benefits brought by the use of genuine consumables, and immediately made the decision to switch to Hypertherm’s consumables.



Results of the trial showed that the original consumable performed 3 to 4 times better in terms of cut length and number of pierces.



## Satisfaction All-Round

Since switching to genuine consumables, Bharat Foils has experienced smoother operations, lesser down time, and better customer service levels. These benefits has led to a significant overall improvement in their manufacturing process, notably in the areas of productivity, cost effectiveness, and customer satisfaction.

“With Hypertherm’s consumables, our consumption level has gone down by 40% while the quality of our cutting has improved greatly. Our customers have also started to notice the differences in our products. Now, the company is growing rapidly because our productivity has increased, and I’m able to offer a high quality product that is on par with my competitors,” said Mr Gupta.

To Bharat Foils, their relationship with Hypertherm is one that they are keen on maintaining in the long run. Moving forward, Mr Gupta intends to adopt other cutting solutions to enhance Bharat Foils’ operations, with high definition plasma cutting systems being next on his list.

More than just a manufacturer and supplier of cutting solutions, Hypertherm endeavours to offer close support to its customers, allowing them to fulfil their business goals. This level of dedication was keenly felt by Bharat Foils through this episode.

Mr Gupta concluded, “Hypertherm is not merely providing me a machine. They are giving me technical support and aftersales service. They’re here to improve my company’s productivity, and we appreciate this partnership with them.”

###

## About Bharat Foils Limited

Established in 1975, Bharat Foils Limited offers total integrated services and solution for all grains (wheat/paddy/soya/pulses/maize), from post-harvest grain management (cleaning/drying/storage) to processing/milling, blending, and packing systems. With a strong presence across every state in India with machinery installed in more than 1000 mills, the company has established themselves as a reputable grain mill consultants and machinery supplier in the country. Solutions provided by Bharat Foils include consultancy, design, production, assembly, erection, trial commissioning, and after sales support.

[www.bansalsgroup.org](http://www.bansalsgroup.org)

## About Hypertherm

Hypertherm designs and manufactures advanced cutting products for use in a variety of industries such as shipbuilding, manufacturing, and automotive repair. Its product line includes plasma, laser and waterjet cutting systems, in addition to CNC motion and height controls, CAM nesting software, and consumables. Hypertherm systems are trusted for performance and reliability that result in increased productivity and profitability for hundreds of thousands of businesses. The New Hampshire based company’s reputation for cutting innovation dates back nearly 50 years to 1968, with Hypertherm’s invention of water injection plasma cutting. The 100 percent associate owned company, consistently named one of the best places to work in America, has more than 1,400 associates along with operations and partner representation worldwide.

[www.hypertherm.com/en/](http://www.hypertherm.com/en/)