



ISO 9002 Registration

EVS Metal is proud to announce that we have achieved ISO 9002 registration. This represents the culmination of several months of concerted effort on the part of all of our employees in order to provide our customers with enhanced quality and service.

This achievement is another step in our path to becoming the leading supplier of custom sheet metal parts and assemblies. We feel that being ISO 9002 registered will further illustrate to our existing and prospective customers that we are a cut above our competitors and should give us a sound foundation for continued growth. Our customers can feel comfortable that the orders they place with EVS Metal will be consistently produced and rigorously checked, ensuring an uninterrupted flow into and through their process. This system has become the foundation for our production and support processes, and it provides the structure under which we are able to manage the challenges of the competitive marketplace.

The employees of EVS Metal deserve a round of congratulations on this accomplishment and we are confident that their efforts are rewarded with continued growth and prosperity.

by Scott Philhower-QA Manager

Trade Show Dates

Job Shop Show
April 2001,
Cherry Hill, NJ

Atlantic Design Show
June 5-7, 2001,
Jacob Javits Center, New York City

Job Shop Show
October 2001,
Marlborough, MA

Robots taking over!

EVS Metal has just taken delivery of the Astro-100 robotic press brake from Amada America, Inc. The Amada Astro-100 is a fully automated cell comprised of a NC press brake with robotics controlling the forming and load/unload parts handling. The Astro-100 system maintains a production rate of approximately 10 seconds per bend providing consistent productivity through the punching and forming processes. This will enhance our ability to provide our customers with on-time delivery of close tolerance, high quality parts.

This is another example of an acquisition of the most technologically advanced equipment available to meet our customers growing demand for mid to high volume, complex products. When EVS installed the automatic load/unload system for our Amada Vipros King turret, we experienced an escalation in our productivity in the punching sector of our business. This was achieved by utilizing the



"Lights-Out" potential of the automated equipment by running through employee breaks and during off-hours. The purchase of the Astro-100 is EVS's first installation of automation in the forming process, which will yield the same productivity and consistency benefits that we have experienced through automating our punching process.

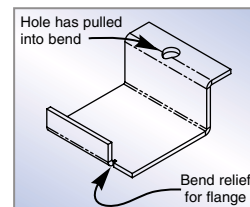
If you are interested in a first-hand review of our automation capabilities or any of our other processes, please contact our sales department to arrange a tour.

"Success is to be measured not so much by the position that one has reached in life as by the obstacles that one has overcome while trying to succeed."

Booker T. Washington-Educator

Ask Tom . . . bending Basics

Q: I submitted a drawing to EVS Metal and they told me that there was a hole that was going to pull due to its proximity to the bend. They also told me that my design had no bend relief and that it would have to be added. What does this mean?



A: To answer this question, we must first look at some fundamental elements of forming (bending) sheet metal. When specifying a bend in sheet metal, the only piece of information that we at EVS are generally given is the inside bend radius. It may be called out as a certain size (e.g. 1/16 rad.) or with a note indicating "Minimum bend radius". In either case, this bend radius works in conjunction with the material type and thickness to assist us in choosing the correct tool to bend the part. The press brake, used to bend sheet metal, utilizes a punch (the upper tool) which is some variation of a "V" shaped blade, and a die which is the "V" shaped opening into which the punch will force the metal, thus creating an even, square bend. Unfortunately, some customer designs contain geometry which lies too close to the bend line. In this case, the hole was located such that it was partially over the "V" opening in the die. When this happens, noticeable distortion will occur through the hole and the size and repeatability of the bend dimension will be negatively influenced. The most logical solution to a "Pulling" problem is to move the hole away from the bend. Similarly, when a flange is bent off the surface of a part, and it does not extend the full length of the edge, it must be given bend relief, which is a means to allow the formed portion of the part to merge with the unformed portion. If bend relief were not present, the metal adjacent to the flange would tear and distort. For further information, or to explore options for individual designs, contact EVS Metal's engineering department.

Tom Supko-Engineering Manager