

5 QUESTIONS WITH AN EXPERT



Bob Southwell

Vice President—Sales and Marketing, Aida-America,
www.aida-america.com

Evaluating the Return on Investment of a Servomechanical Press

1 How can stampers justify the return on investment (ROI) for the initial higher acquisition cost of a servomechanical press, compared to a conventional press?

In most ROI cases, increased productivity is measured first, including higher strokes/min. But the bottom line really is the increased parts per shift and parts per day, which results from more than just higher strokes/min., but also from a significant reduction in setup time, as well as reduced scrap rate/higher quantity of good parts, and fewer stoppages related to die problems—fewer mis-feeds, die-protection nuisance faults and pulled slugs, for example.

2 Beyond improved productivity, what other improvements/cost savings can metal stampers expect to realize from a servo press?

Other savings result from a reduction in material cost, as servo presses often can form good parts from materials with a wider allowable range of mechanical properties. Servo presses also allow stampers and die designers to combine die stations, eliminate restrike stations and move secondary operations such as in-die tapping and assembly into the die. Tool life also typically improves with a servo press, by as much as three to four times.

3 How important is application-specific training when optimizing the ROI of a servo press?

After conducting the original ROI analysis, continuous and ongoing application training for engineers/programmers and operators—in the classroom and on the floor—will lead to additional productivity gains. We

tell our customers, “Do not stand still.” After press startup and initial training, stampers should keep investing in training to ensure that their production and engineering teams continue to learn and understand how to optimize press performance. Those that do will find that they are able to keep pushing the envelope and improve performance and productivity.

4 What role does appointing a “servo champion” play in optimizing ROI?

Stamping-company managers must allow their engineers to serve as champions of the technology, by letting them invest the time needed to develop and test new servo press-production programs. This will lead to ongoing cycle-time improvements. Otherwise, you can grow stagnant or even slide backward—perhaps reverting to an old process originally developed for a conventional press. This management commitment to investing in human resources will ensure that the servo press ROI continues over the course of the equipment’s life cycle. Many of our customers assign an engineer to this role, and dedicating the majority of the engineer’s time to continuously improving servo press productivity.

5 How can metal stampers develop a continuous-improvement plan, including testing new servo press motion profiles?

Often, making small changes to press profiles and programs will further reduce cycle times, and increase stroke rate and part quality. Companies that gain the initial savings from using a servo press and then stop looking for additional opportunities to improve have only scratched the surface. With a servo press, stampers should never stop learning.