Control the Metal Flow

Electronic Shimming™ adjusts the flow of metal dynamically during the deep draw and greatly improves products quality.

Higher Product Quality
- Eliminate wrinkles and cracks by electronic control of material flow
- Deeper draw possible compared to conventional system
- Less tension in final product and smaller grain size

Lower Unit Cost – Increased Productivity
- Produce up to 200 more products each day
- Avoid annealing
- No start up time
- Easy and fast tool changing
- Reduced polishing cost

Cost Efficient
- Payback time: Typically 3-9 months
- Adapt to existing die and presses
- Extended die life and lower maintenance on dies

The Electronic Shimming™ Plate is a 80 mm thick metal plate with built-in membranes that transfer hydraulic pressure to the metal sheet.

Wrinkles and buckles as a result of uncontrolled material flow during deep draw.

Electronic Shimming™ produces flawless products due to extreme blankhold control.

Double bowl sink
Metal thickness 0.6 mm.
Made in one draw with Electronic Shimming™ technology.
Lower Unit Cost and Higher Output of Deep Drawn Products

Hydraulico’s patented Electronic Shimming™ allows production of complex geometric shapes from sheet metal. Improve productivity, product quality and bring down production costs.

Throw away the shims!

Hydraulico’s patented Electronic Shimming™ Plate offers extreme blankhold control and short start-up time in monoblock deep drawing. With deep drawing, material flow changes significantly during drawing, often causing problems with wrinkles and cracks.

Electronic Shimming™ reduces scrap rates, facilitates production control, and allows for quick and uncomplicated tool changing.

The system

The Electronic Shimming™ system developed by Hydraulico has three components: The Electronic Shimming™ Unit which is a complete electronic and hydraulic system, a control panel and the Electronic Shimming™ Plate. The shimming plate holds individual pockets or zones, each pressurized by hydraulic oil and each controlled individually. The control panel allows users to set up pressure zones on the plate, modify pressure during a part of the press cycle and save the settings for future recall.

Computer simulation of metal flow

Hydraulico offers free computer simulations of specific drawing processes to determine the optimum shimming configuration. Please contact us for more information.

Fits into any hydraulic press

The Electronic Shimming™ System can be fitted into any hydraulic press. If desired, Hydraulico can build the plate directly into a new die – a very cost-efficient solution.

We offer a range of shimming plates – single bowl, double bowl, 1 1/2 bowl and 2 1/2 bowl models, but many other types are possible.

The system: The Electronic Shimming™ Unit, the control panel and the Electronic Shimming™ Plate.

More information

Please contact us for more information on Electronic Shimming™ systems, and find and instructive video on our website.