



# HIGH SPEED AUTOMATED ANGLE SHEAR

**Flat Rock Metal's** High-Speed, Automated Angle Shear is a unique piece of equipment/ processing line that offers an optimal approach for producing detailed configurations common to several automotive laser-welded blanks. This blank configuration is rectangular at one end and trapezoidal at the other; commonly referred to as a "half trap". Because of the Angle Shear's flexibility, it is capable of processing blanks with any angle up to a 60° cut; whereas most oscillating coil press blanking lines are limited to 30° angles.

Our technique is to multi-blank to a double length rectangle and then process this individual double length blank on our high-speed, automated angle shear in a "One Sheet In/Two Blanks Out" method. The ability to start with wide master coils, multi-blank in a 3, 4, 5 or 6-out process and continue with the two-out angle shear reduces costs due to the more efficient approach, elimination of potential tooling charges and reduction in steel/sizes extras.

Like other sheet fed processing lines at Flat Rock Metal, the Angle Shear is an automated line with pneumatic de-stacking and magnetic blank conveyors and stacking systems. After stacking, if necessary, the lifts can be turned over on the installed in-line pack turner. Many of these blank configurations are a left/right type part that requires one of the stacks to be turned.

Flat Rock Metal's own Engineering, Maintenance and Operations Workforce are accredited for the design, fabrication, gauge and dimensional control system of the patent-approved High-Speed, Automated Angle Shear.

## FINISHED

**MINIMUM ANGLE:** 0°  
**MAXIMUM ANGLE:** 60°

## FINISHED

**MINIMUM WIDTH:** 12" @ 0°  
12" @ 60°

## FINISHED

**MAXIMUM WIDTH:** 48" @ 0°  
36" @ 60°

**MAXIMUM HEIGHT:** 24" bundle  
(including dunnage)

**MAXIMUM GAUGE:** 0.200" @ 50,000 psi



In-Line Turnover



Half Trap