

SESCO PRODUCTS GROUP
OSCILLATING SHEAR DIES

Sesco Products Group provides a variety of coil processing machinery that is designed to optimize production efficiency and material utilization. These machines are typically incorporated into Cut-to-Length Lines and Blanking Lines to provide the end-user with the most versatile and flexible coil processing system possible. The shear blade oscillates up to ± 30 degrees with each press stroke to produce near net-shaped blanks for optimum material utilization.

The Oscillating Shear Die turns a conventional blanking press into a high production trapezoid and parallel shape blanker. This unique tool is provided on a self-contained die set for easy locating and clamping to the bolster plate. The center pivoting mechanism is driven by a close tolerance ground rack and pinion geartrain. The pivoting plate floats on a unique air-bearing system to reduce friction and optimize speed. The hardened trim steels have multiple cutting edges for ease of sharpening.

As standard, the Oscillating Shear Die is designed as a “bump-die” configuration and is not attached to the upper ram of the press. This system is designed with a hydraulic shock dampening system that reduces bounce of the upper die and allows production rates up to 60 SPM. For high speed applications a “ram-attached” die is recommended. In this design the upper die is positively bolted to the ram and production rates up to 80 SPM are achieved.

The Oscillating Shear Die combines the capabilities of conventional shears with modern servo technology to provide a high production and flexible shearing operation. SESCO Products Group uses state of the art servo driven positioning systems, where other builders use mechanical and hydraulic systems. Programmability of the necessary shear angle is possible with these dies and part set-up information is typically stored in the Job Recipe matrix and recalled through the Panelview MMI.

Other features of the die include a pivoting entrance support conveyor, self-centering material edge guide system, a shifting exit conveyor that can be designed as a variable speed or indexing conveyor, quick disconnect power cables for quick die change capability, and a freestanding operator console.



Photo of Servo Driven Oscillating Shear Die