*ADDENDUM TO THE OPERATION MANUALS FOR*

# CINCINNATI®

# 90-350 PROFORM AND MAXFORM HYDRAULIC PRESS BRAKES

## POWEREXPRESS™ HYDRAULIC DIE CLAMPING

**Addendum to EM-506 & EM-537**

CINCINNATI®

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EMA-14 (N-8/08)

This sign is attached to the ram adjacent to the DANGER sign. It indicates that only upper dies that have a proper safety tongue are to be installed when using the PowerExpress™ upper die clamping system.


## LOCKOUT / TAGOUT – POTENTIAL HAZARDOUS ENERGY

The last sentence of the first paragraph should now read:

Examples of hazardous energy sources on machinery are rotating flywheels, springs being compressed or stretched, hydraulic pressure (accumulators), air pressure (tanks), machine rams that are up in their stroke and unblocked, and upper tooling with incorrect safety tongue (with PowerExpress™ hydraulic clamping).

## INSTALLING, REMOVING, AND TRANSFERRING TOOLING (DIES)

Insert after 2. b.:

**! WARNING !**

**WITH POWEREXPRESS™ UPPER CLAMPING, TOOLING WITH INCORRECT SAFETY TONGUE MAY FALL OUT. WHEN MAIN DRIVE IS TURNED OFF CLAMPING PRESSURE IS LOST.**

PowerExpress™ is a trademark of Wilson Tool International

## DEFINITION OF TERMS

**SAFETY TONGUE:** The upper dies can include a safety style tongue that stops the die from falling out of the upper clamping when the upper clamping is released. With the PowerExpress™ hydraulic clamping, the proper safety tongue geometry is required for safe operation and the self seating feature to function properly. The following illustrates the proper safety tongue geometry.

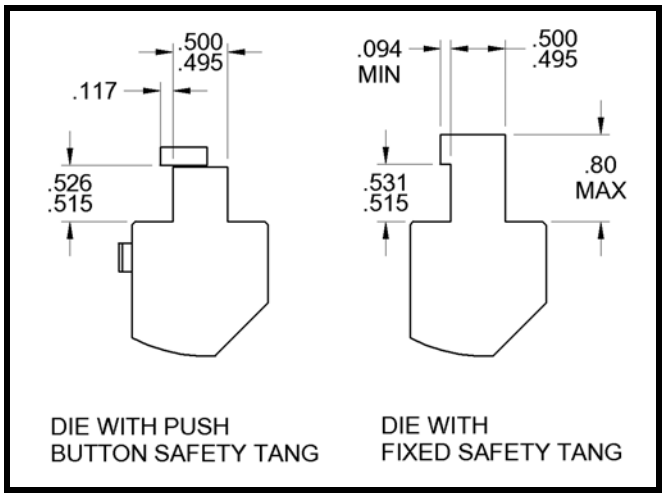


*FIGURE 4- Safety Tongues*

**! WARNING !**

**WILSON TOOL INTERNATIONAL UPPER DIES WITH THE PUSH BUTTON SAFETY TANG MANUFACTURED BEFORE 2008 MAY NOT CONFORM TO THESE DIMENSIONS. IF THEY DO NOT COMPLY, CONTACT WILSON TOOL INTERNATIONAL (1-800-445-4518) FOR UPDATED BUTTON KITS. DO NOT USE DIES UNTIL UPDATED.**

## CAPACITIES

### STRIPPING CAPACITY

PowerExpress™ hydraulic clamping is not rated for stripping loads.

### ECCENTRIC LOAD CAPACITY

### (FRONT-TO-BACK)

Occasionally special forming setups are made which do not have their load centers located on the bed and ram centerlines. See "Eccentric Load" figure that follows. When this condition exists, care must be taken not to exceed the maximum eccentric (front-to-back) load capacity of the machine. See "Eccentric Loading Capacity" figure on the next page. The slope of the line is 0.66 inch-Tons/inch (5.88 kN-mm/mm).

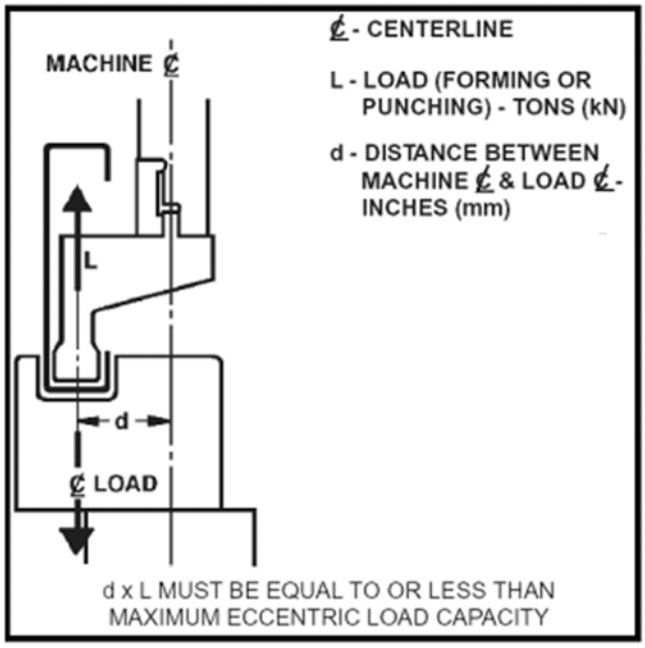


*FIGURE 4- Eccentric Load*

**! ! DANGER ! !**

**EXCEEDING THE ECCENTRIC LOAD CAPACITY COULD OVERSTRESS BED, DIE CLAMP, AND RAM NOSE ATTACHMENT BOLTS CAUSING THEM TO SHATTER AND POSSIBLY CAUSE SERIOUS INJURY TO PERSONNEL. DAMAGE COULD ALSO OCCUR TO THE SLIDES AND GUIDES AND SINK UPPER BED BOLTS INTO THEIR COUNTERBORES, CAUSING THE BED OR GUIDING CONNECTIONS TO LOOSEN.**

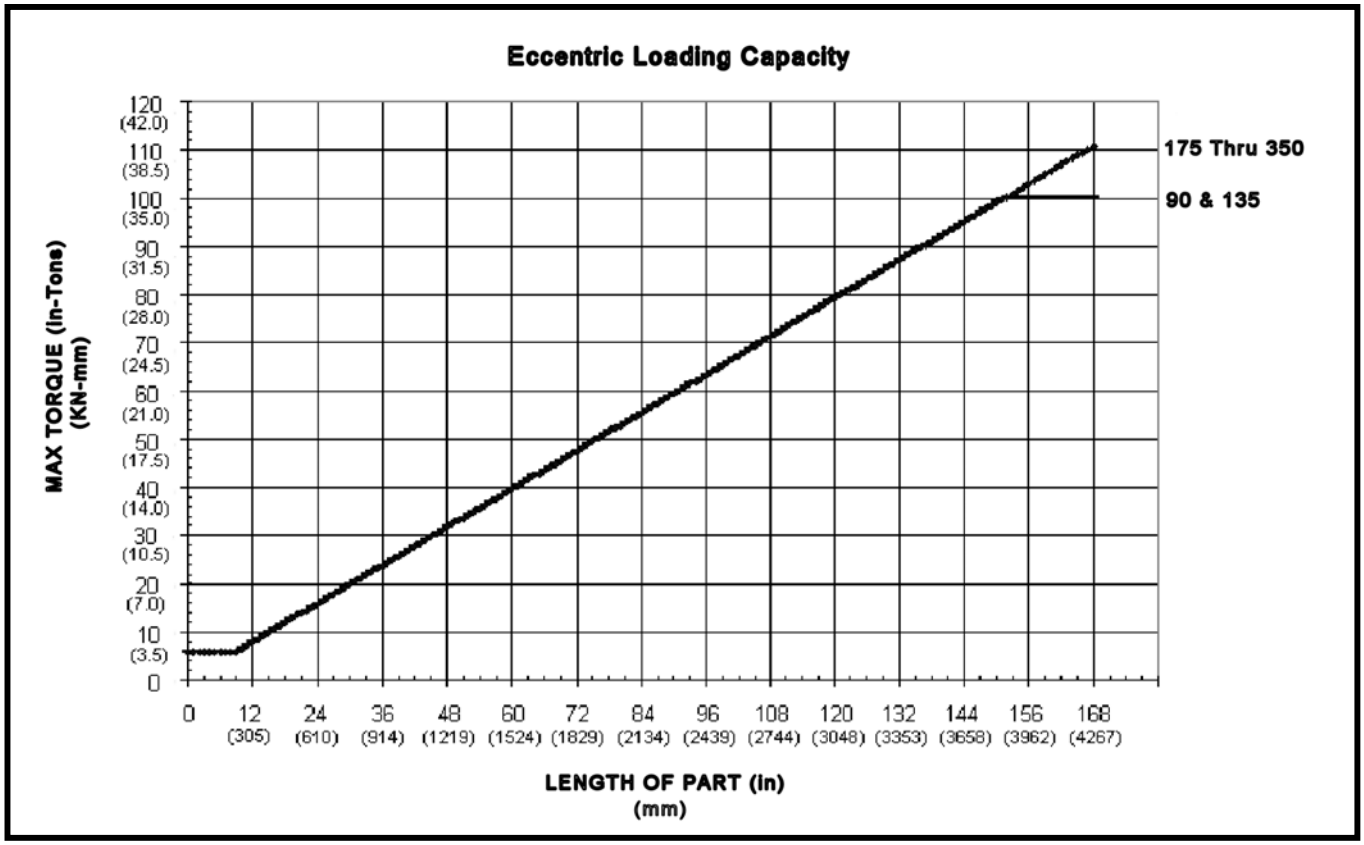


*FIGURE 4- Eccentric Loading Capacity*

## TOOL INSTALLATION

Insert under step 13.:

***IMPORTANT: DO NOT use E-Stop or Main Drive Stop, and Main Drive Start buttons for unclamping and clamping dies in the PowerExpress™. This is not an acceptable method. Frequent stopping and starting of the Main Drive causes excess heat and premature wear of the Main Drive Motor, starter contacts, and 24-volt control circuitry.***

Insert under step 15.:

**! WARNING !**

WITH POWEREXPRESS™ UPPER CLAMPING, TOOLING WITH INCORRECT SAFETY TONGUE MAY FALL OUT. WHEN MAIN DRIVE IS TURNED OFF CLAMPING PRESSURE IS LOST.

Replace the last paragraph of the ***IMPORTANT*** note under step 20 with:

***An example for a 350 ton (3114kN) machine, the minimum lower die area for a capacity load is 350 divided by 15, or 23.3 square inches (15030 sq. mm). Minimum upper die area is 11.7 square inches (7520 sq. mm). If PowerExpress™ option is added, and upper die is thicker than 1.94" (49.3mm), minimum length of die at maximum tonnage is 8.33" (212mm).***

Revise the figure under the ***IMPORTANT*** note below step 20 to the following:

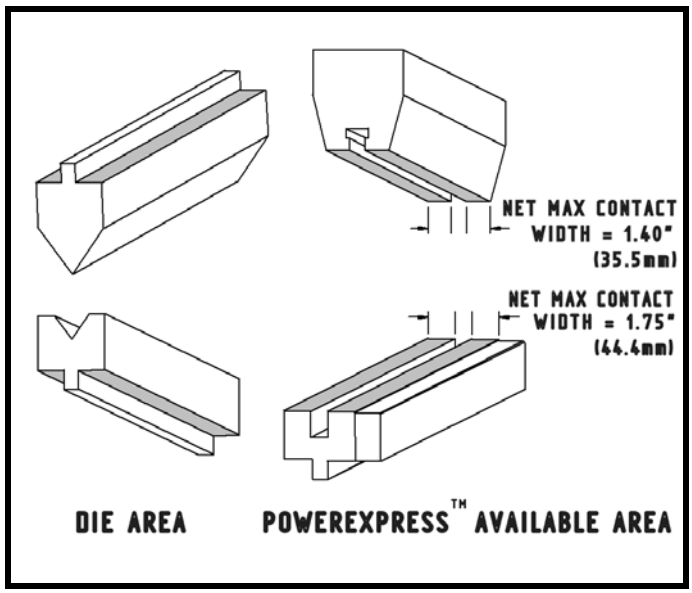


***FIGURE 5 - Minimum Area***

## TOOLING AND SETUP

Insert under **DO** select tooling…

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After POWER CLAMP and related figure 'Ram Power Clamp', insert the following new option description and photo:

## POWEREXPRESS™

PowerExpress™ eliminates the need to loosen and retighten Quick Clamp screws (MAXFORM) or Die Clamp nuts (PROFORM) when changing dies. Hydraulic power is used to clamp the dies in place. This option also self-seats the upper dies. When hydraulic power is removed from the PowerExpress™ clamp, the dies are no longer held in place. Tooling with the correct safety tongue must be used with the PowerExpress™ upper clamping. See *SECTION 4 – SPECIFICATIONS* for proper safety tongue dimensions.

**! WARNING !**

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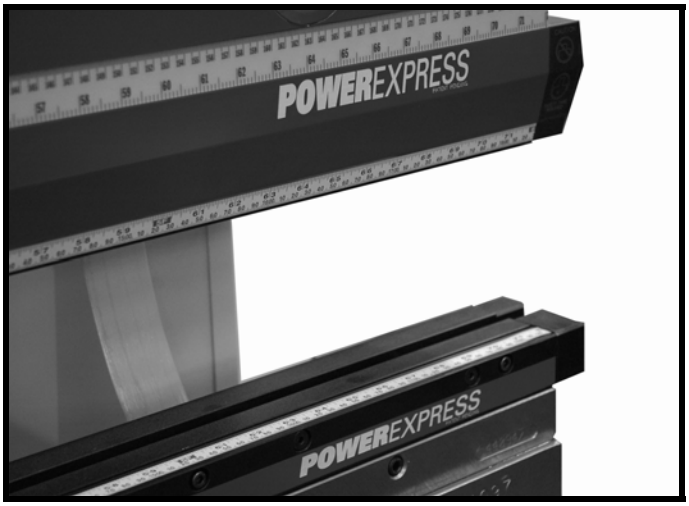


***FIGURE 8 – PowerExpress™***

## LOCKOUT / TAGOUT PROCEDURE

Insert after step 2.:

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