

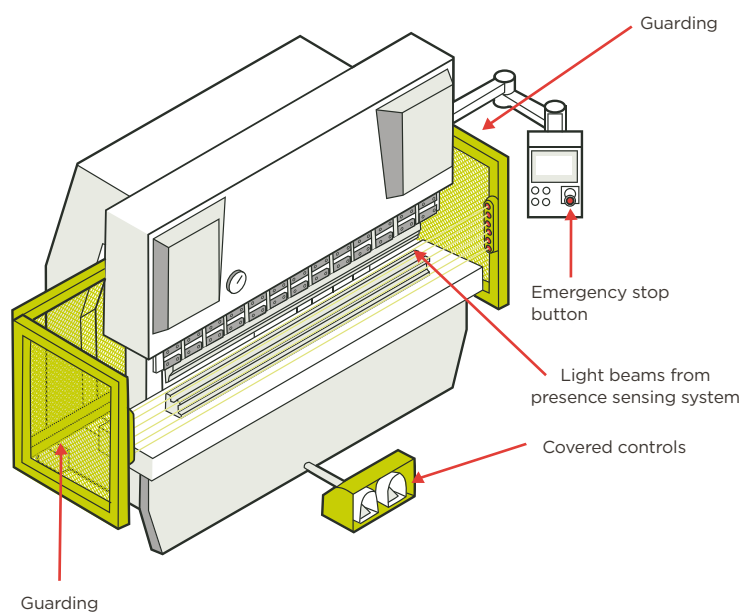
## FACT SHEET

# PRESS BRAKES (BRAKE PRESSES, BRAKES)

Press brakes are an unforgiving piece of machinery, and a frequent cause of workplace amputations. They are a mechanical or

hydraulic machine for bending sheet metal and plate material, and a common machine in engineering workshops.

FIGURE 1: PRESS BRAKE



### HAZARDS:

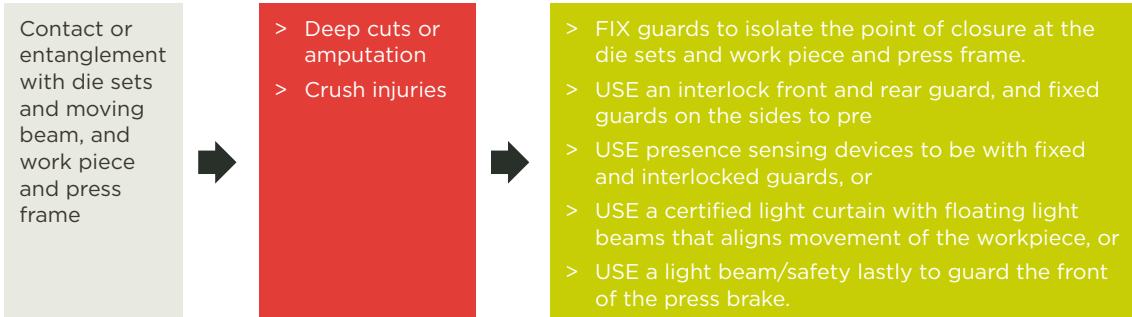
- > Handling sheet metal
- > Contact or entanglement with die sets and moving beam, and workpiece and press frame
- > Noise
- > Slips, trips and falls
- > Leaking hydraulic oil
- > Contact or entanglement with moving parts (during maintenance, cleaning and repairs)
- > Faulty or altered machinery (maintenance & cleaning)

### PPE:



### TASK - INSERT WORKPIECE & MAKE THE BEND

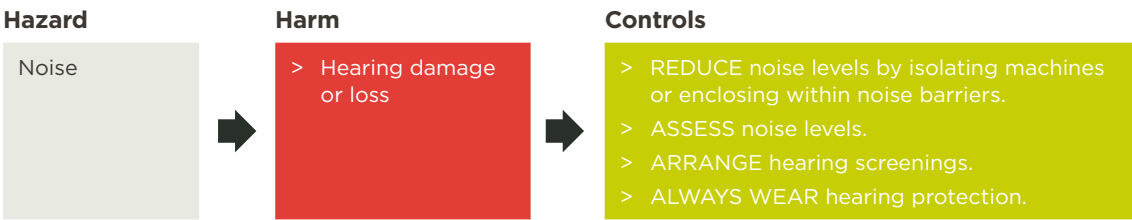




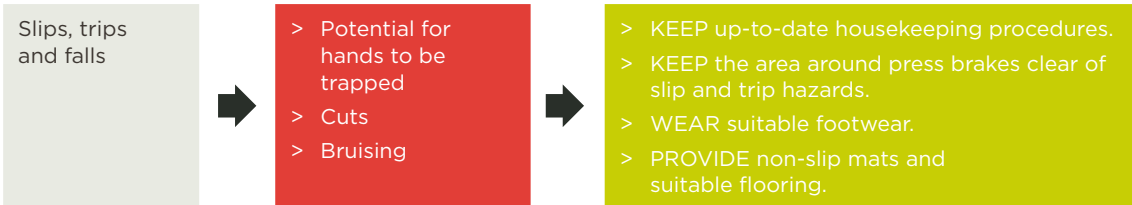
LED-based solution is installed on the upper die of the press brake. If the system detects something, the machine will stop immediately or reduce power and speed.

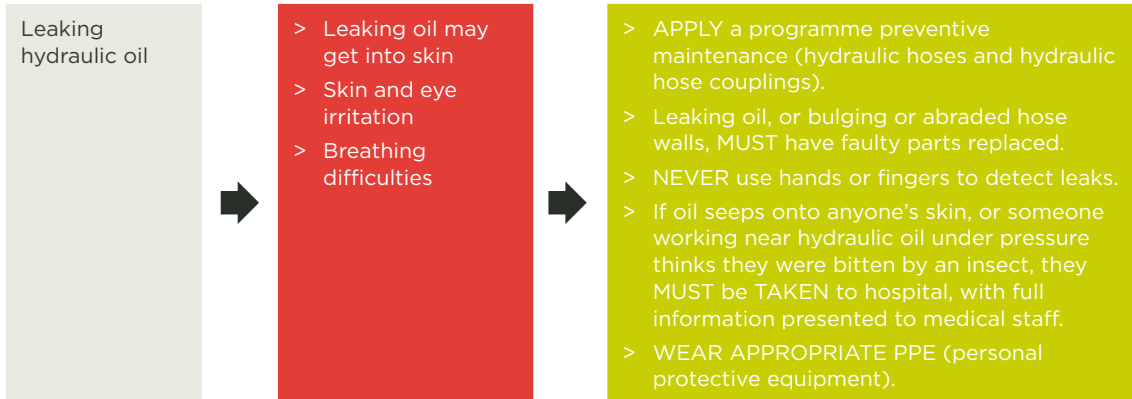
Closed tool method reduces the press brake's opening to 6 mm, limiting the risk of body parts entering the hazardous zone. USE WITH a presence sensing system.

**OTHER (NON-MECHANICAL) HAZARDS**



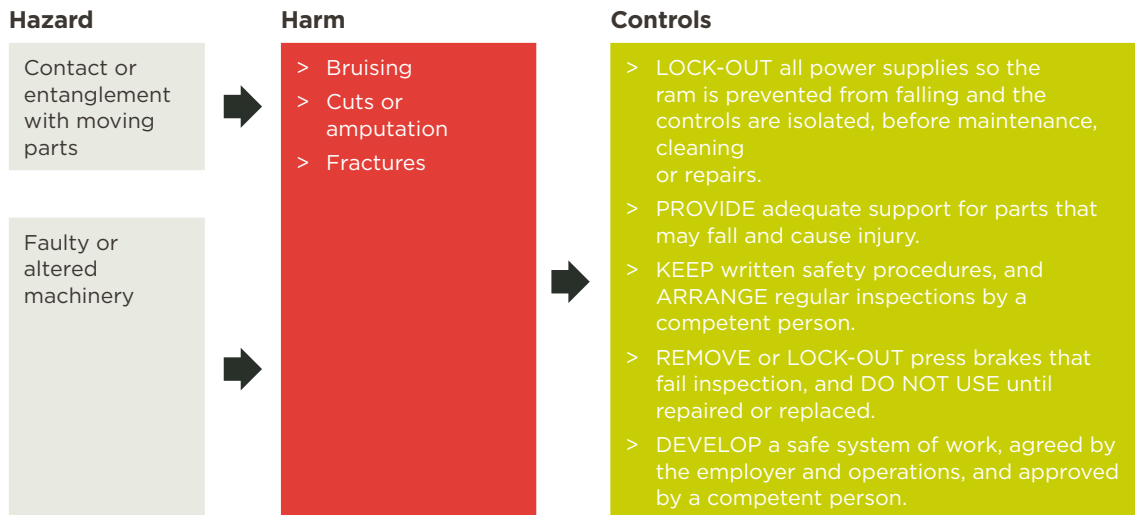
A safe noise level over an eight hour day is 85dB(A). A press brake may exceed this noise intensity.



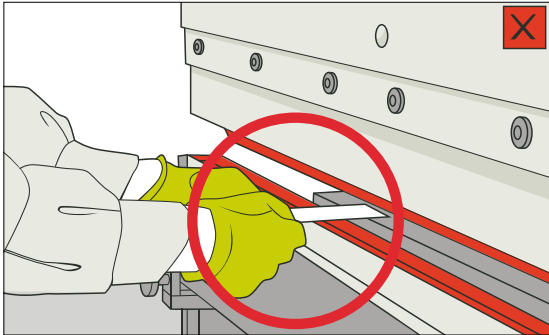


May leak with high pressure jets of oil. Hydraulic oil under pressure will get into skin, even through leather gloves.

### TASK - MAINTENANCE, CLEANING & REPAIRS

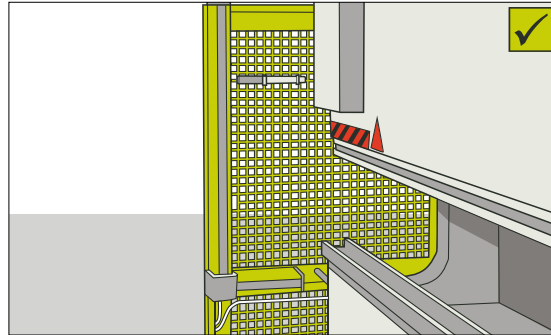


**FIGURE 2: UNGUARDED BRAKE PRESS**



An unguarded brake press means workers' hands are too close to the hazardous trapping space.

**FIGURE 3: A LIGHT CURTAIN**



A light curtain guard can prevent workers from accessing the brake press.

References, current standards and further information can be found on the Safe Use of Machinery project page at: [www.worksafe.govt.nz](http://www.worksafe.govt.nz)

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