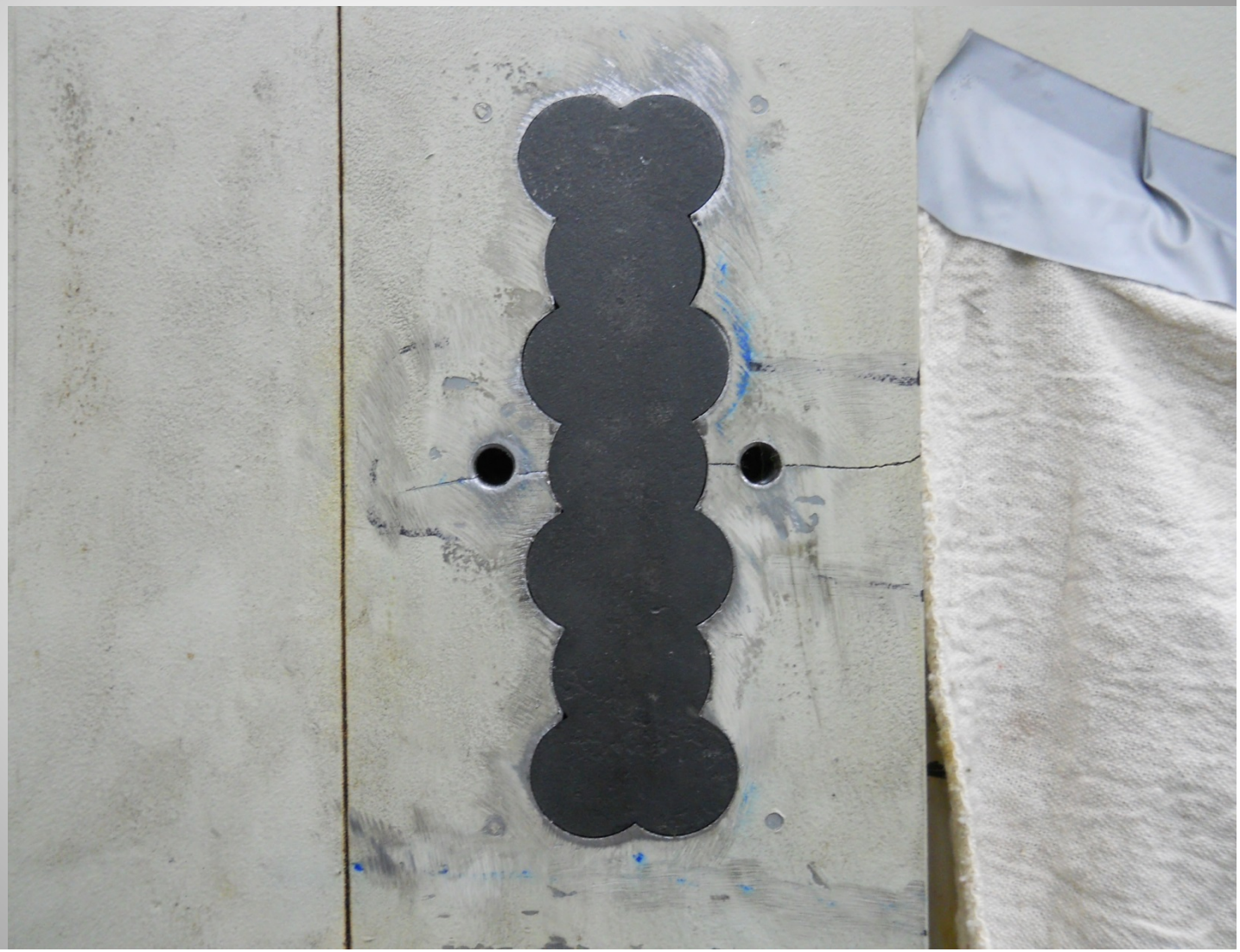
Crack repairs to an embossing machines fabricated steel frame

Laying-out the Lock pattern which will add additional strength across the repair. This crack was formed by the cyclic strain that stretches the frame on every stroke.

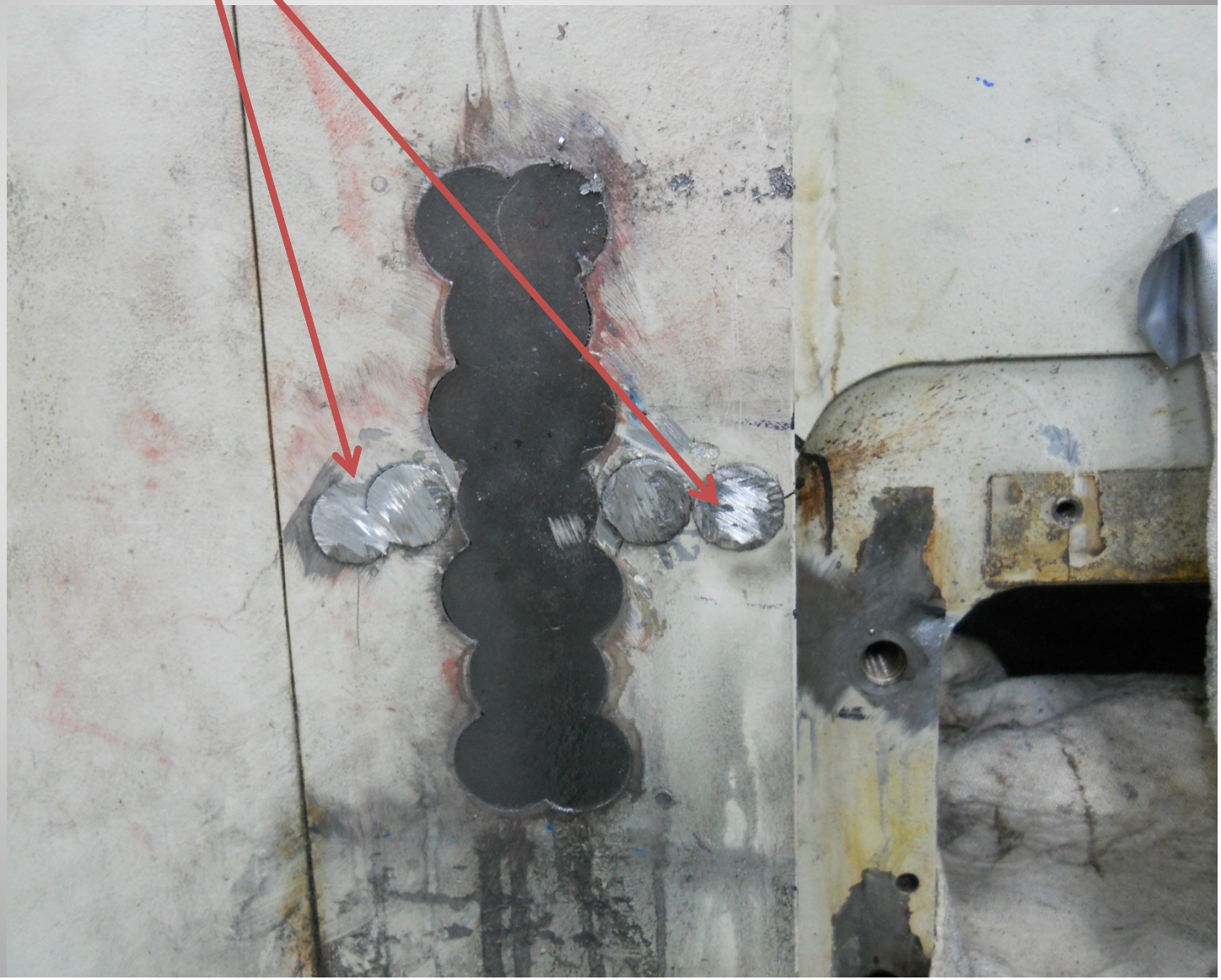
Drilling the lock pattern using a magnetic base drill using a special drill fixture produced by *LOCK-N-STITCH*

Lock pattern drilled out using the Mag base drill and precision drill fixtures

L60 lock installed and ready to have the crack stitched and hand finished.



Using C4 Castmaster stitching pins to repair the crack.



Receiving pattern for the L30 lock on the side frame of the press.

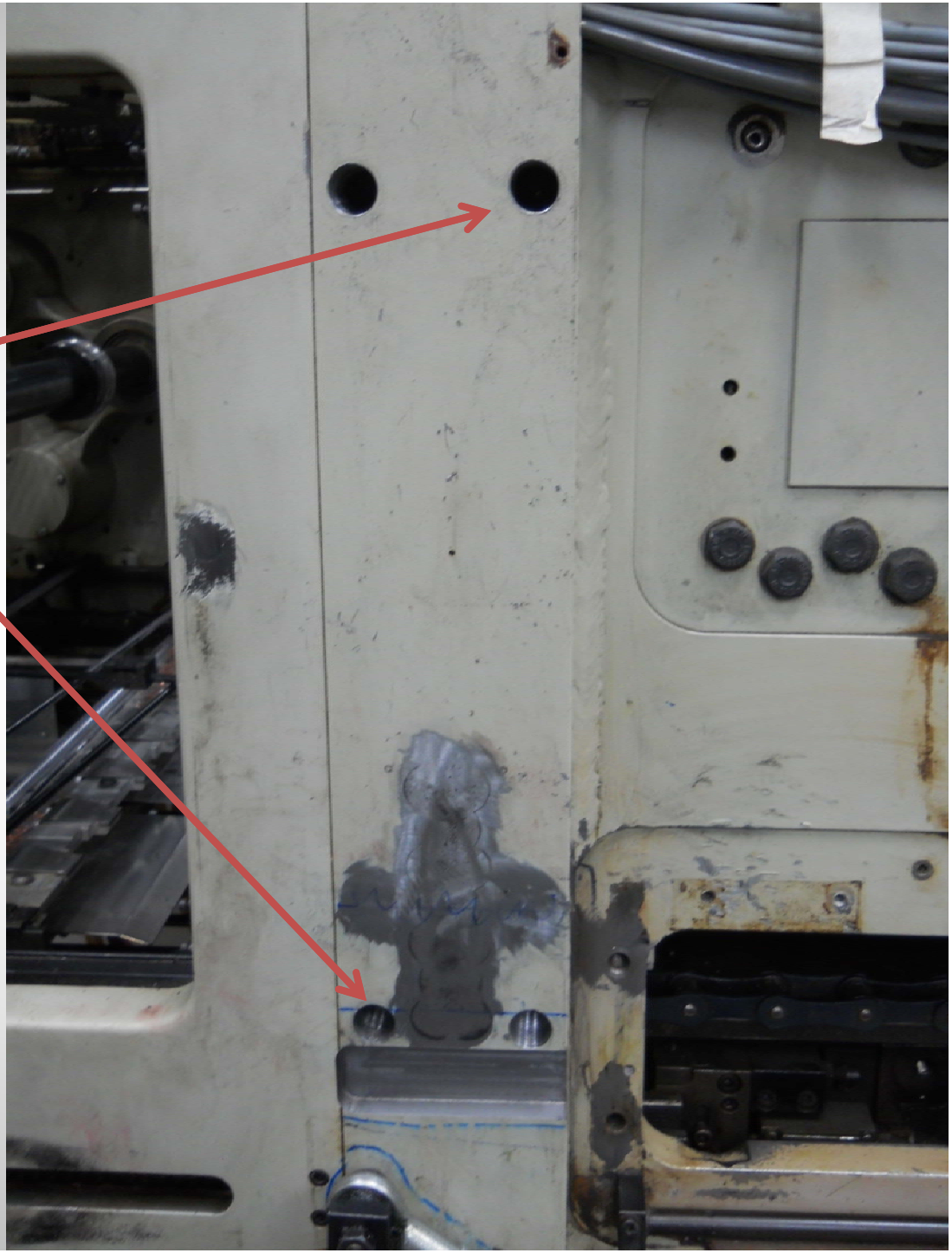
L30 lock installed

Milling out pocket to accept reinforcement bracket.

Reinforcement bracket which will be mounted over the side of the frame on the press. The crack occurred under normal operating conditions. This meant that the repair would need to be stronger than new. This is a common failure on this type of machine.

Drilling a mounting bolt hole for the bracket.

Milling complete and holes drilled to mount reinforcement bracket.



The bracket was bolted over the stitching repair. When heated the bracket grew in length and shims were placed under the overhang at the top of the bracket so as it cools the bracket is under tension to add strength to the area and make it stronger than new.

An additional bracket was mounted on the opposite side of the press to strengthen it as well.

Repair completed and ready to be put back into production.