




**[www.metallock.co.uk](http://www.metallock.co.uk)**

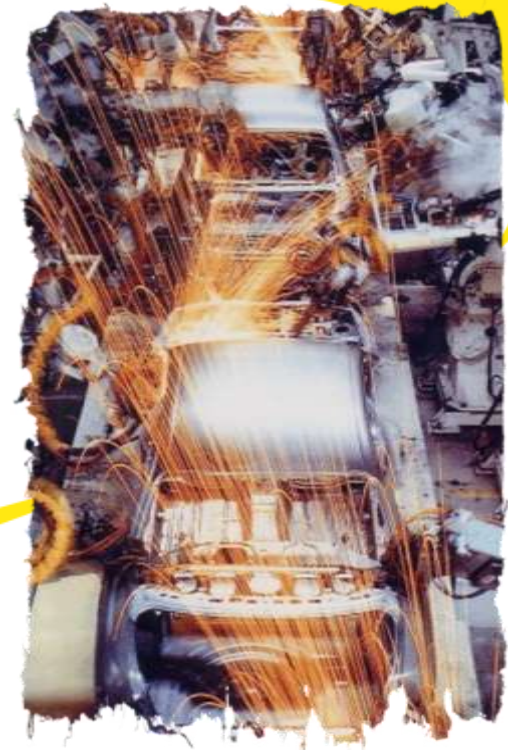
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## ***The Industries we serve***

- Marine
  - Steel and Aluminium
  - Mineral Processing and Cement
  - Power Generation
  - Offshore
  - Pulp and Paper
  - Petro Chemical
  - Bridges / Heritage
  - Railways
  - General Engineering
  - Pressing and Forging
- 

# ***Metalock Engineering UK***

## **The Pressing Industry**



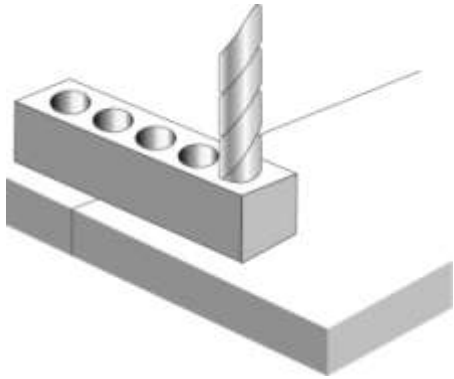
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# **Metalock Engineering UK Ltd**

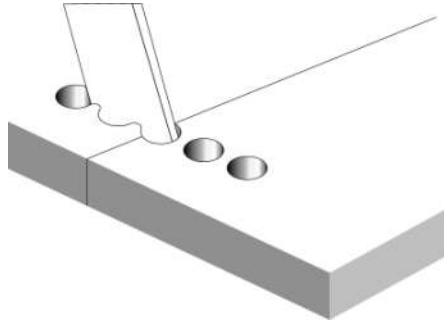
Specialist Casting Repairs

Since 1947

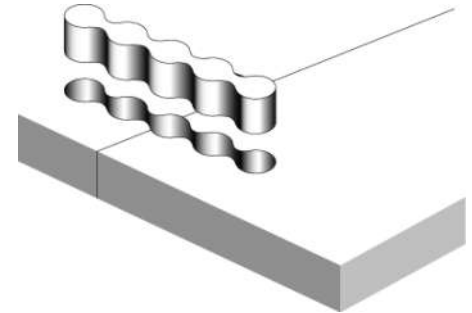
Mechanical Services & Repairs



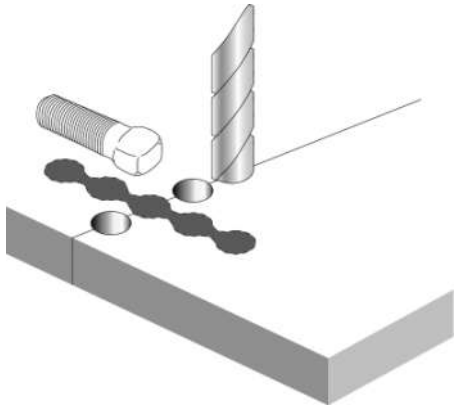
**1. Using a drill jig, rows of blind holes are drilled perpendicular to the direction of the crack, each row to act as a key.**



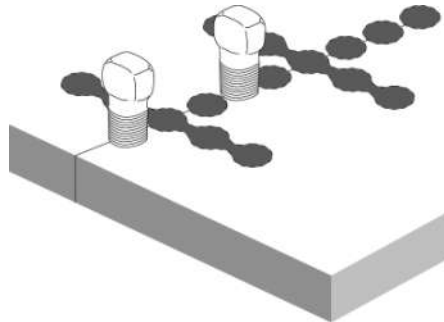
**2. The intermediate partitions are removed with pneumatic chisel.**



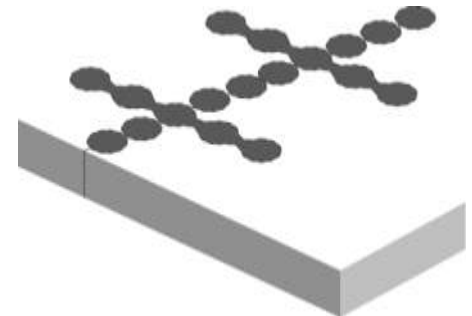
**3. Metallock keys are driven into the openings and caulked.**



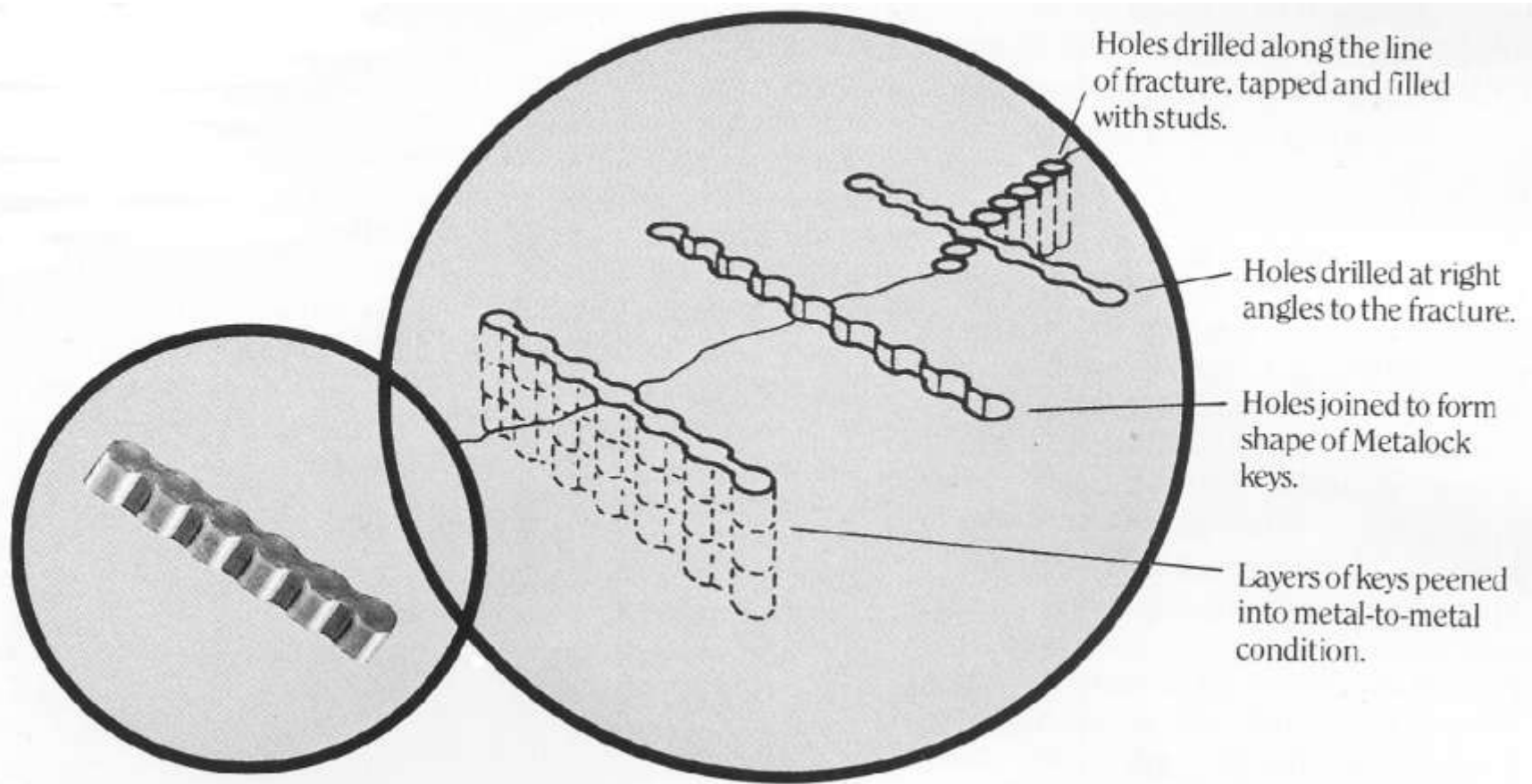
**4. Holes for Metallock screws are drilled along the crack between the keys.**



**5. The screws are fitted so close together that they overlap.**

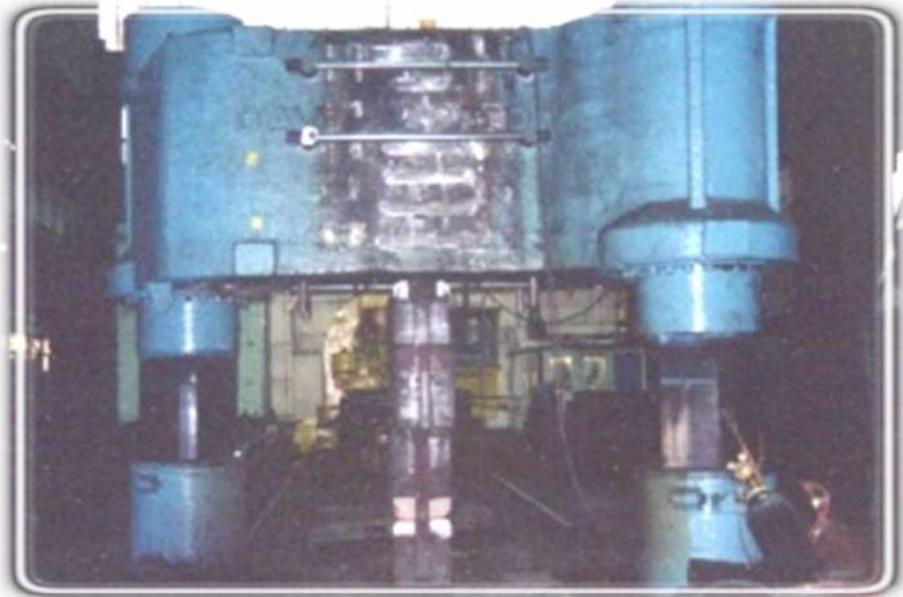


**6. Finally, the entire installation is caulked to ensure stability and pressure tightness.**





## Press & Forging repairs



**Press Frames**

**Crowns**

**Slides**

**Rams**

**Tools & Dies**

**Con Rods**

**Gear & Flywheels**

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## Power Press – Ram repairs





**Ram broken through Skirt  
and Slides**

**Damaged Faces hand  
dressed for location  
purposes**





**Metalock repair eliminates  
the need to re machine the  
Slide Ways**





**Steel Collar used to assist with the repair**



**Masterlocks secured at strategic points across the fracture**

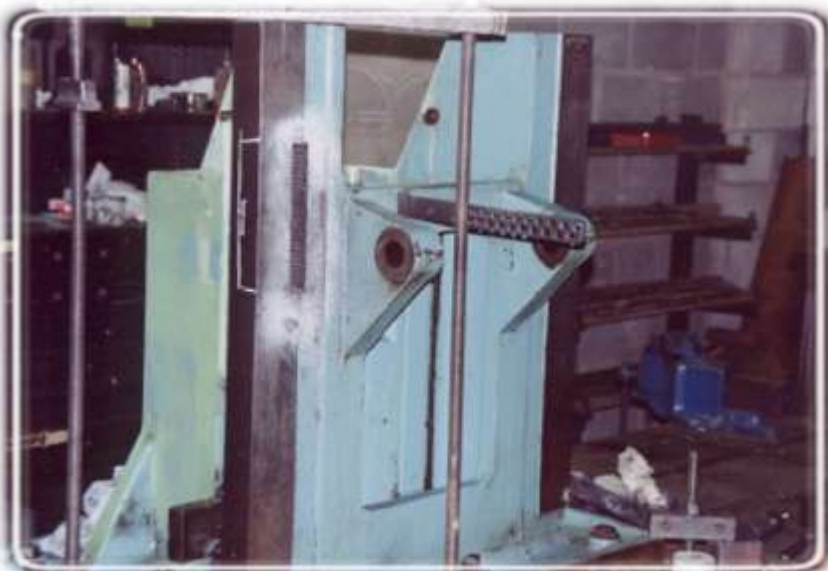




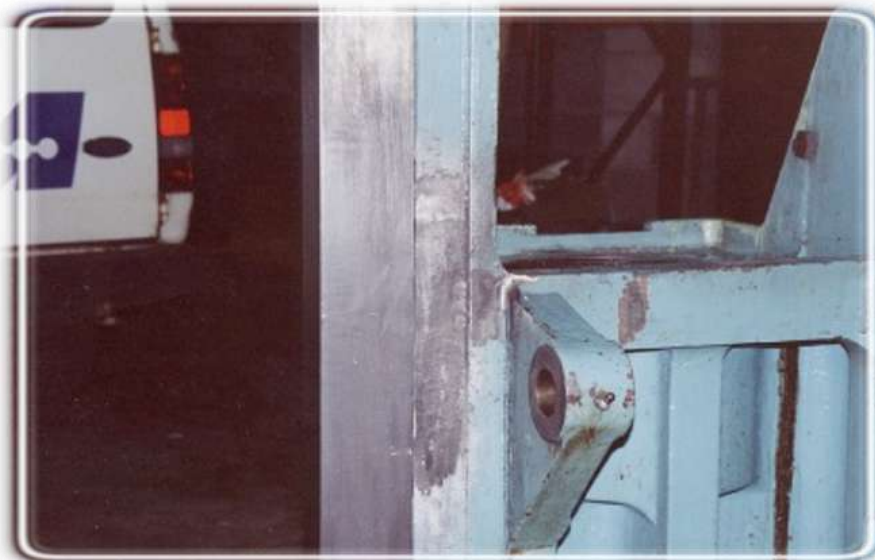


**Masterlock placed just behind the Ram Slide to maximise return of strength**





**Many types of Rams are repaired by Metalock**



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# Power Press – Gear & Flywheels





**Many repairs are secured with a Steel Ring**

**Rings are mechanically fitted rather than shrinking to give a stronger repair**



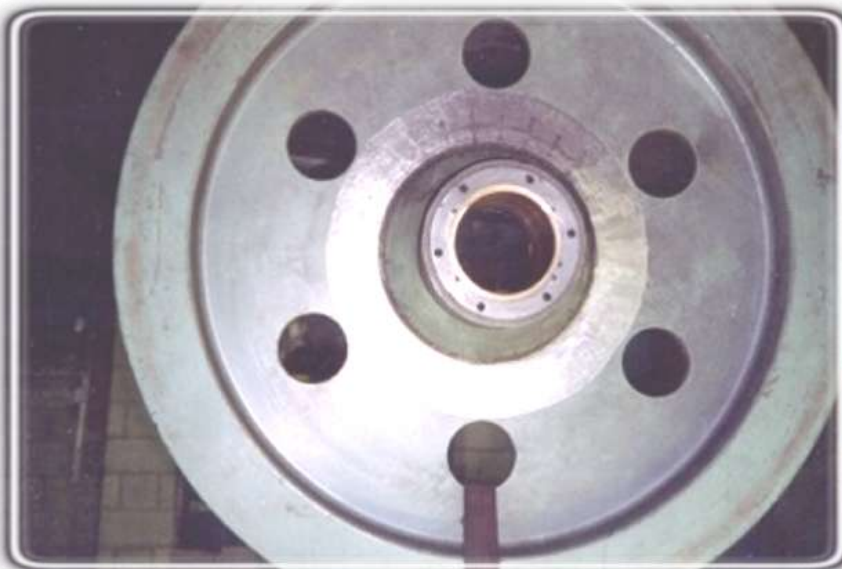


**The Rings are secured  
by dowels and studs**



**Once completed the repair  
is painted**

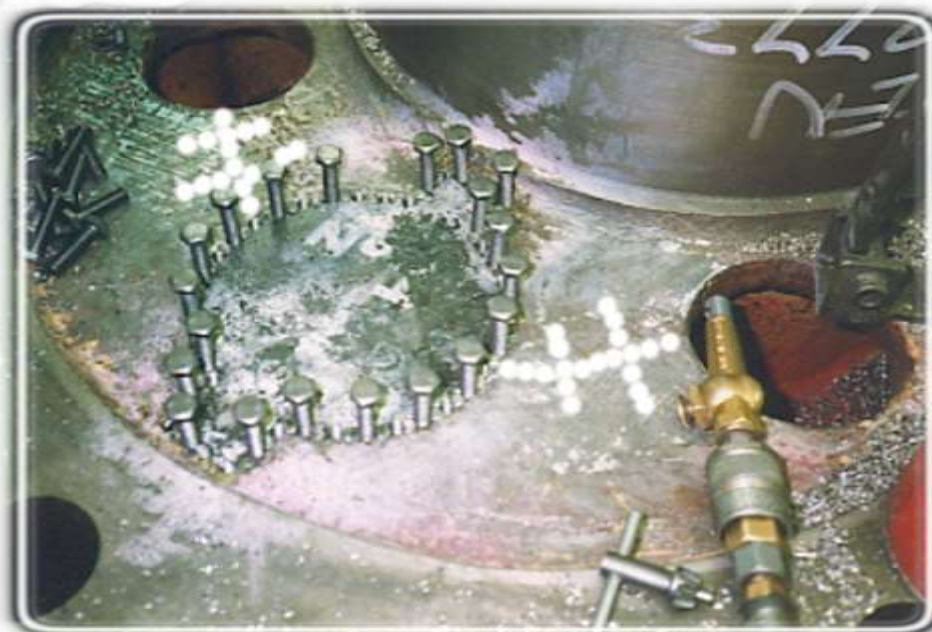






**Utilise existing holes to  
fit and secure steel  
inserts**

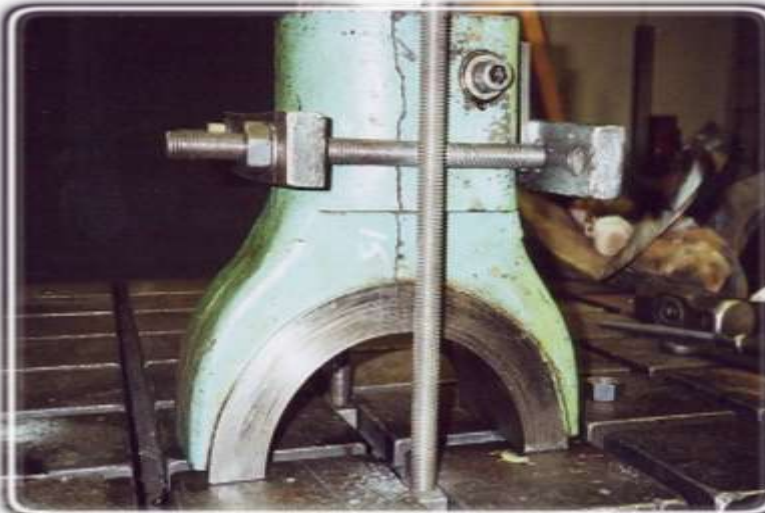
**Inserts secured by  
dowels and studs**



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## **Power Press – Con Rods & Gibb Strips**



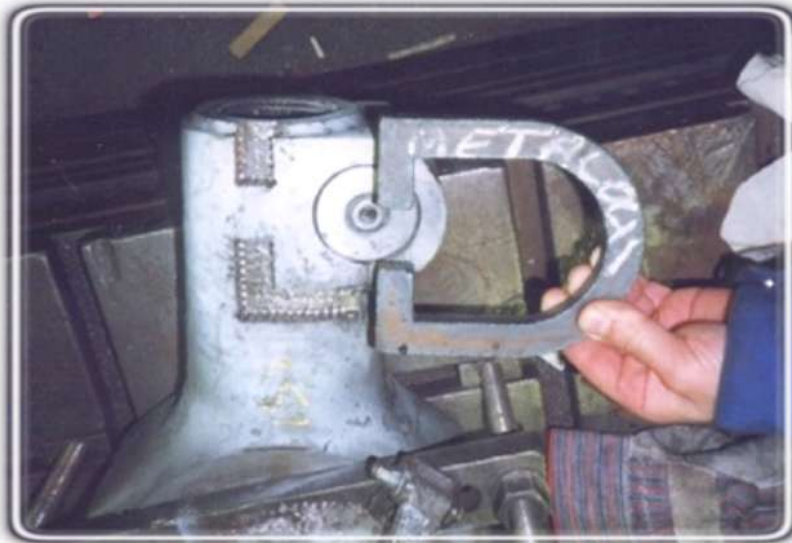
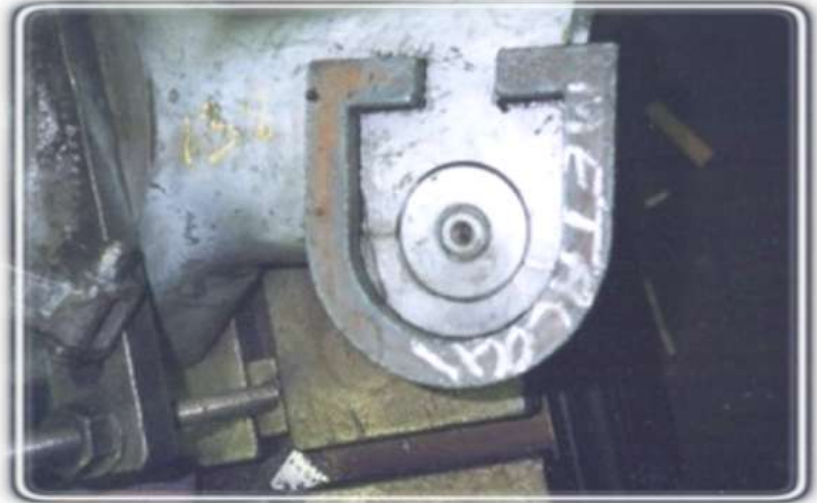
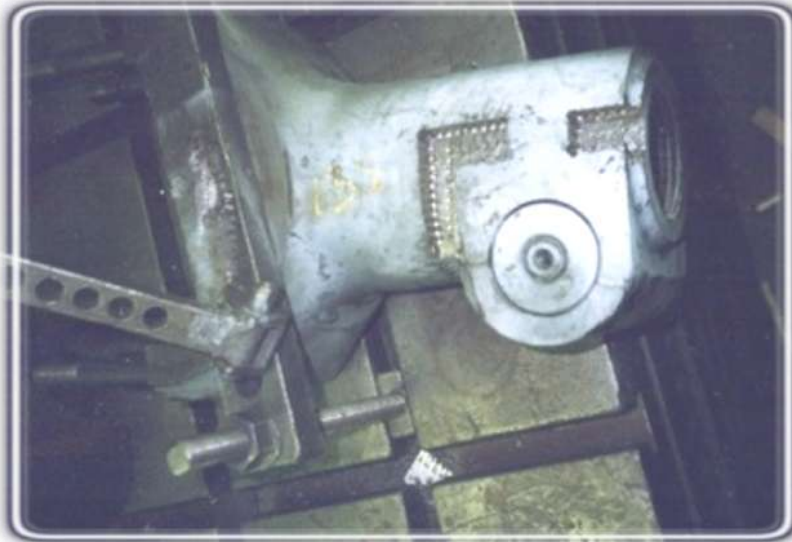




**Metalock keys & studs  
superimposed on the  
completed repair**







**Insufficient parent metal to  
repair, Blister used to follow  
contour and return the  
strength**



**Alignment critical for this type  
of repair to minimise machining**

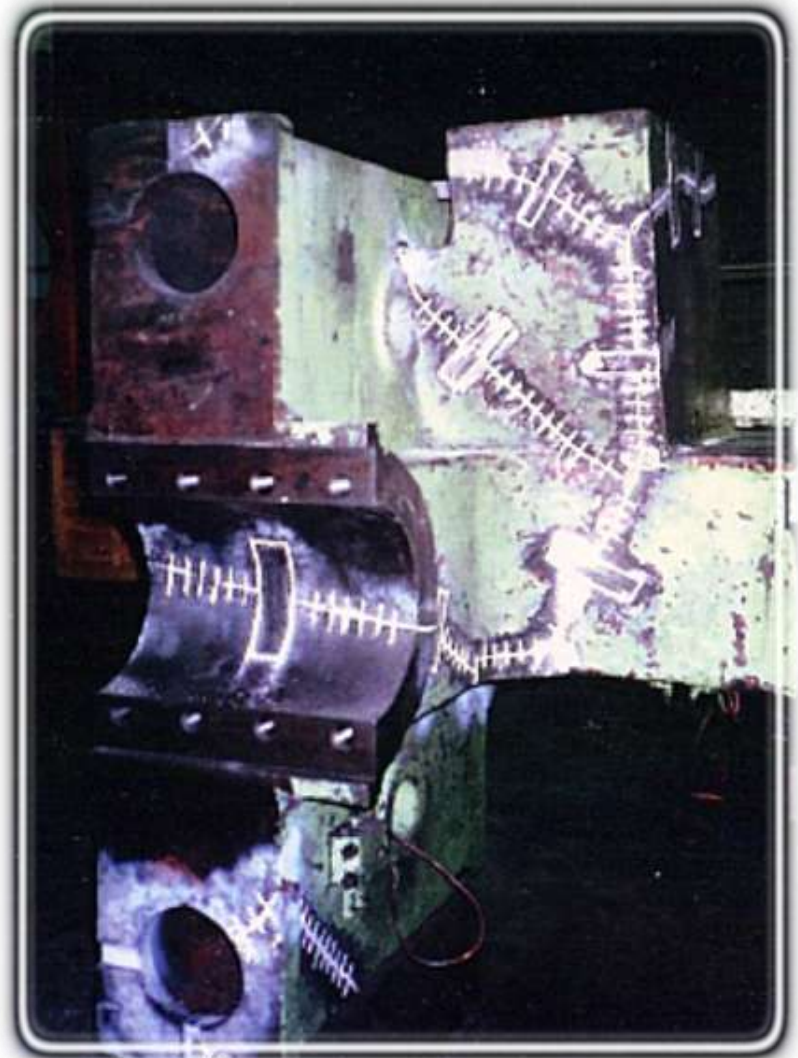
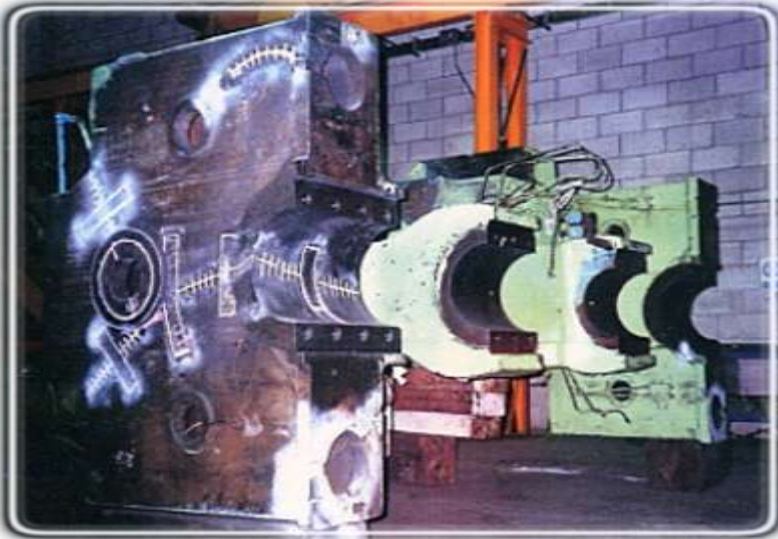
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# Power Press – Crowns and Tables

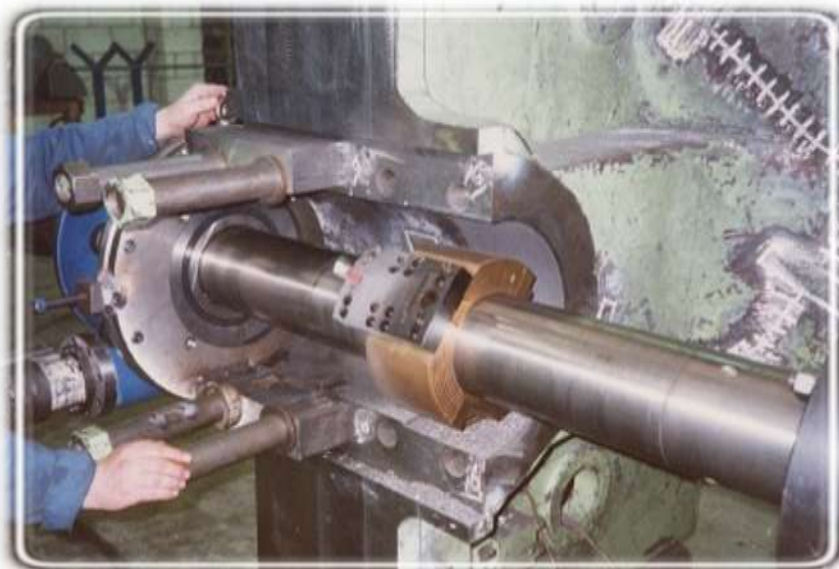




**650 Ton Press Crown suffers major damage**



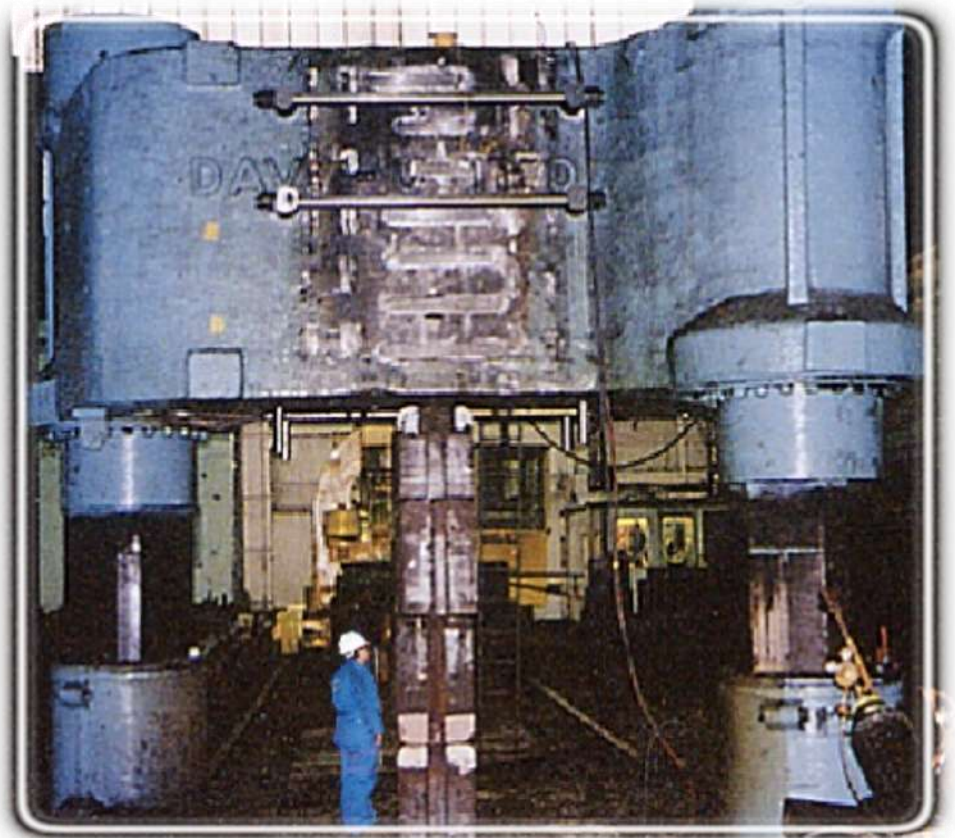






## **Metalock saves the day**

**3000Ton Forging Press  
suffers further cracks at  
attempt to weld**

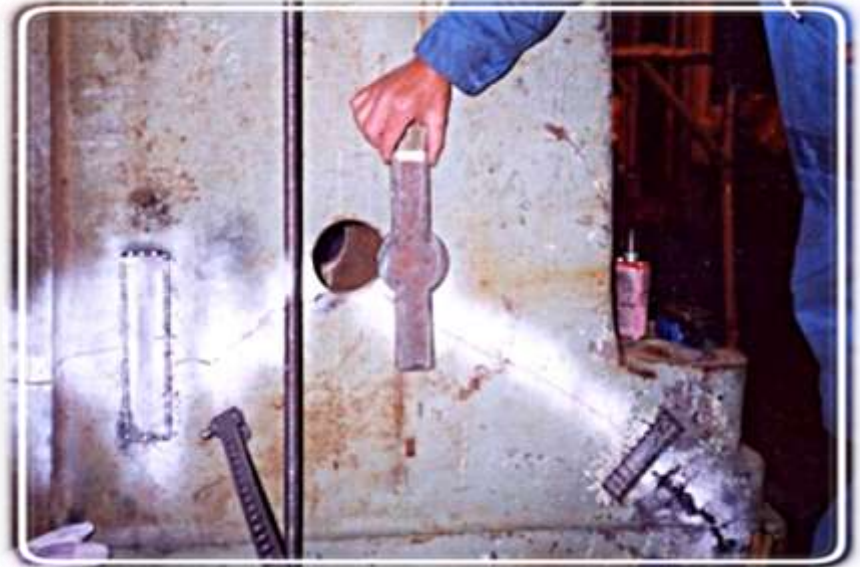




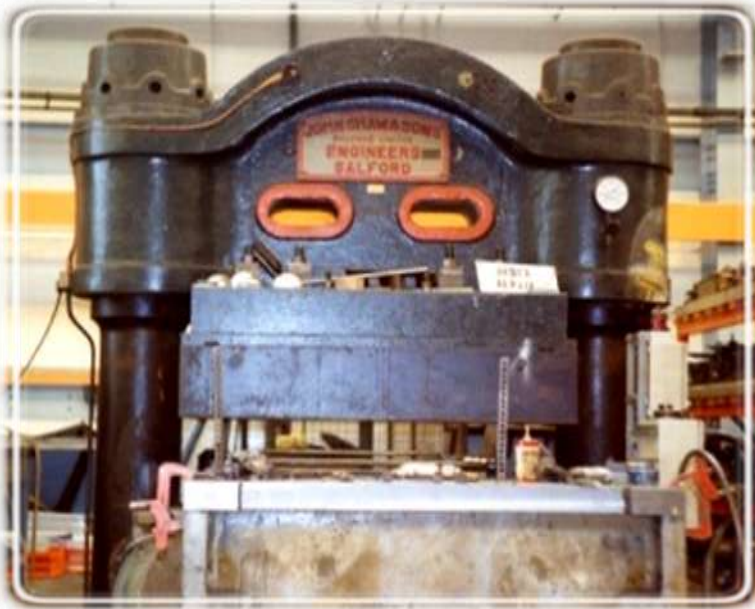


**Power Press Support  
Frame returned to  
original specification**





**Forging Leg returned to service upon completion of a Metalock repair**



**New lease of life given to  
Press by replacing both outer  
edges with new steel inserts  
tailed into the existing  
casting**







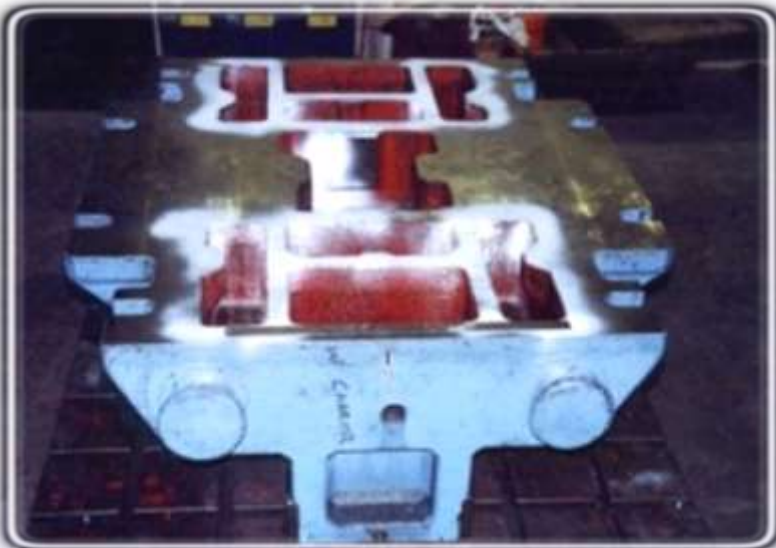
**Forging Anvil repaired with  
the use of a steel collar to  
give far greater strength  
than the conventional  
Metalock repair**

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# Power Press – Tools & Dies









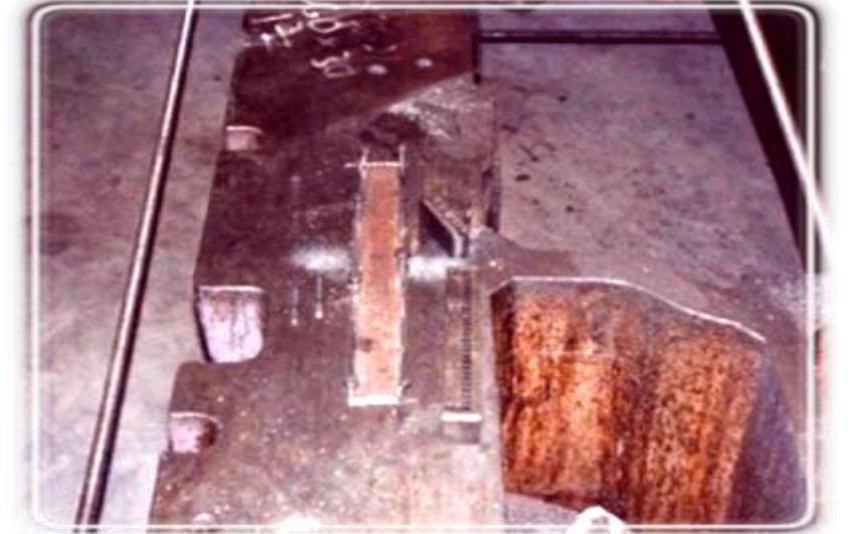


**Utilising the pockets of a Press Tool to fit and secure steel strengthening plates that will become an integral part of the casting**

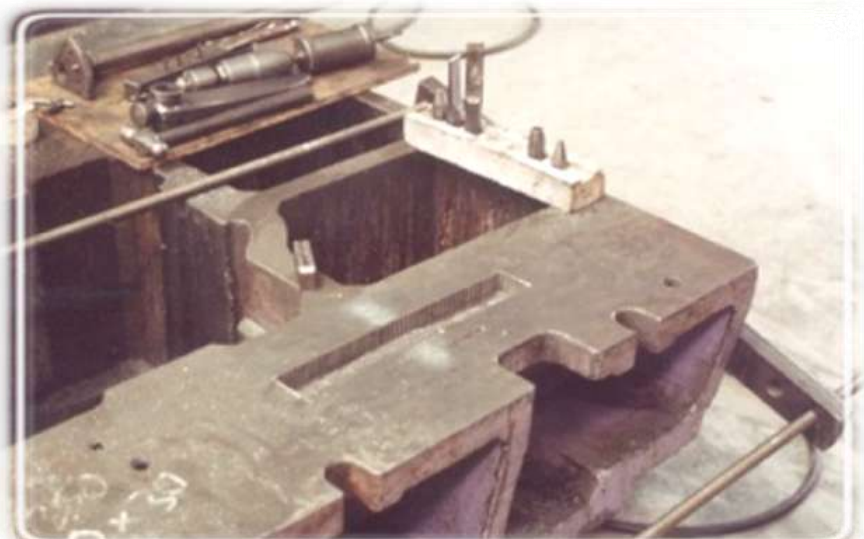
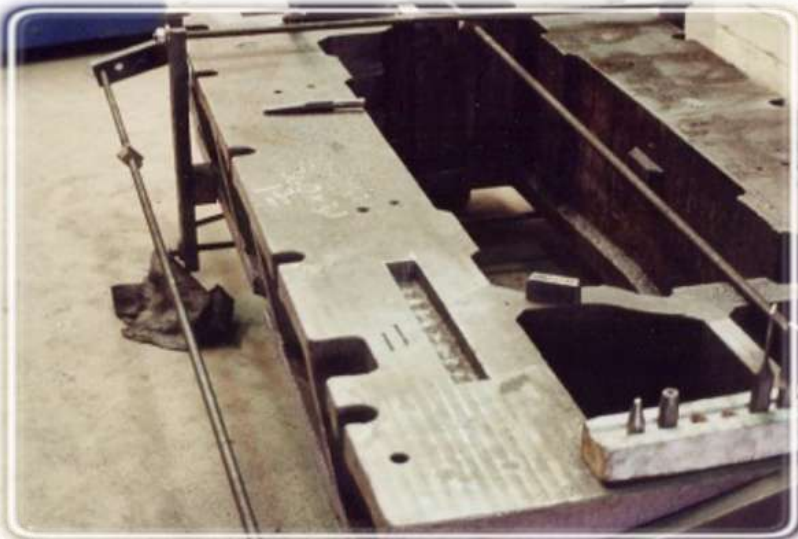


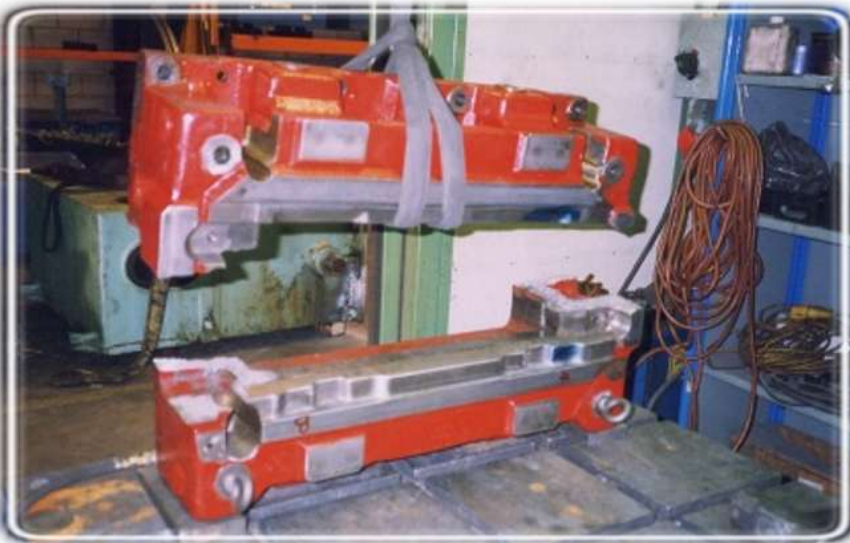












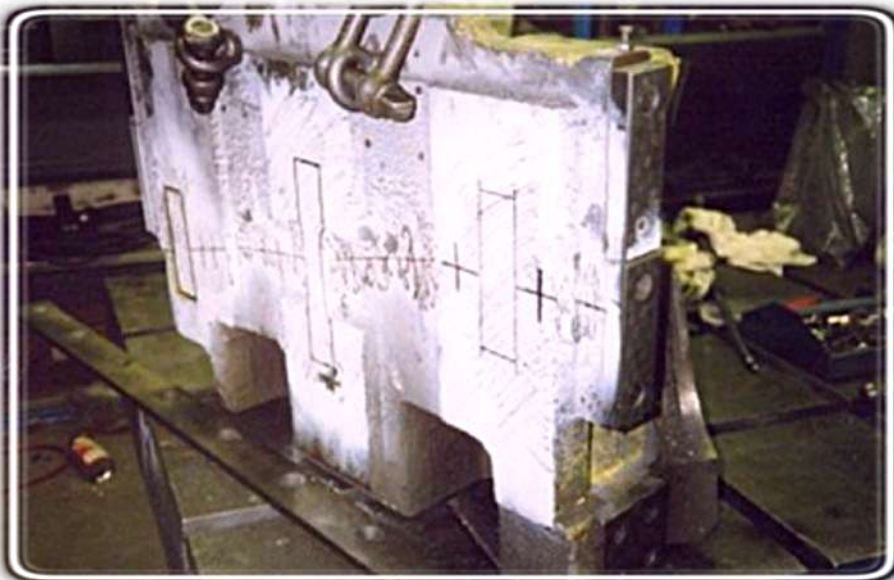




**Aluminium Dies repaired to  
customers specification**





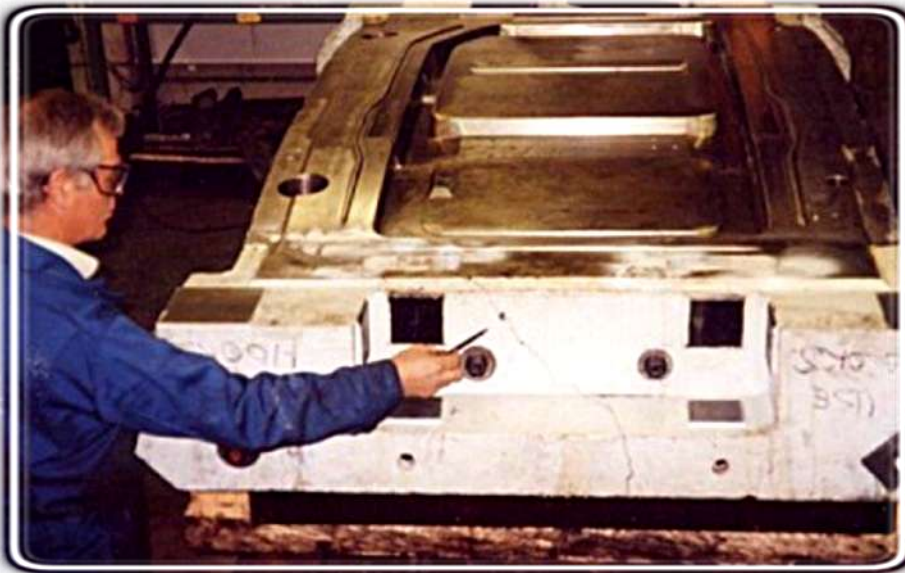


**Any size of Tool repair  
can be undertaken**



**Repairs can be carried  
out in our Workshop or  
if preferred the repair can  
be carried out on-site**

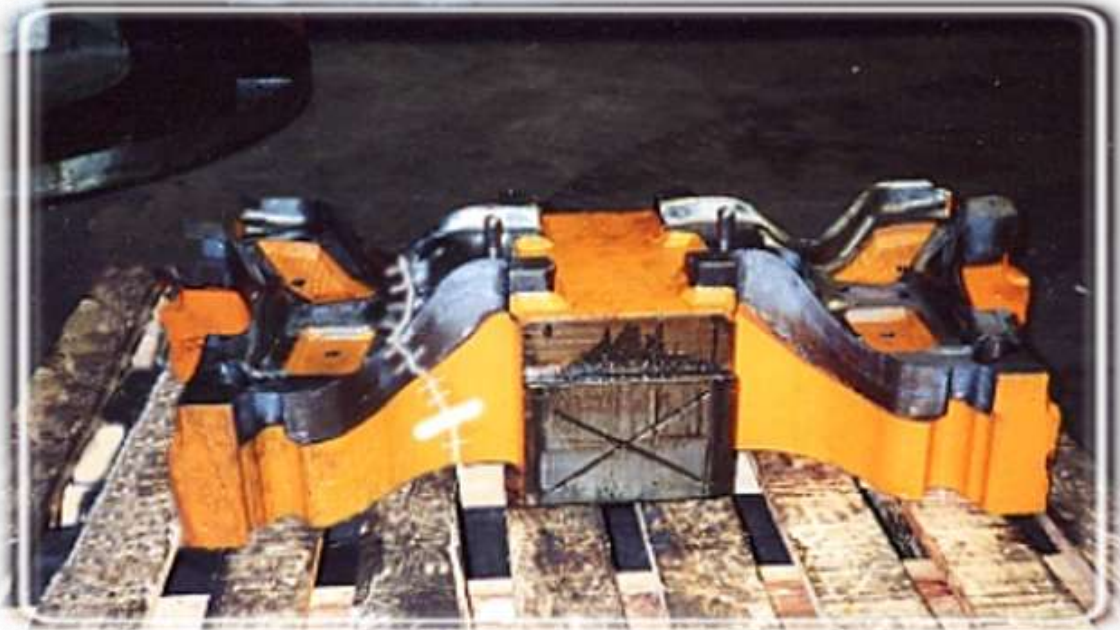
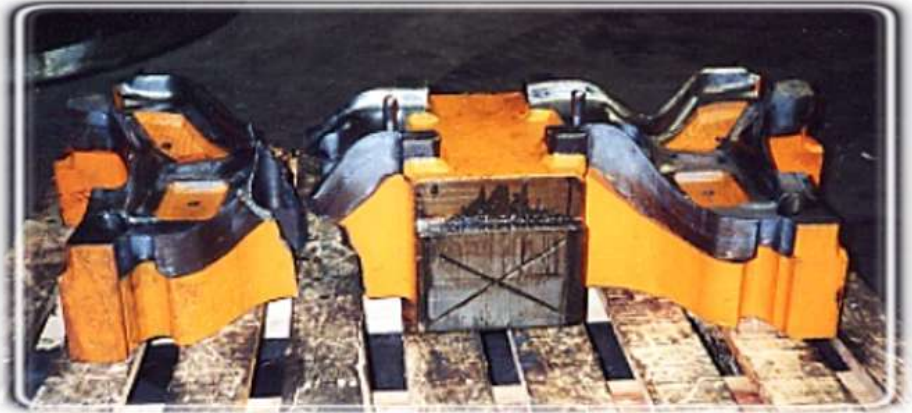
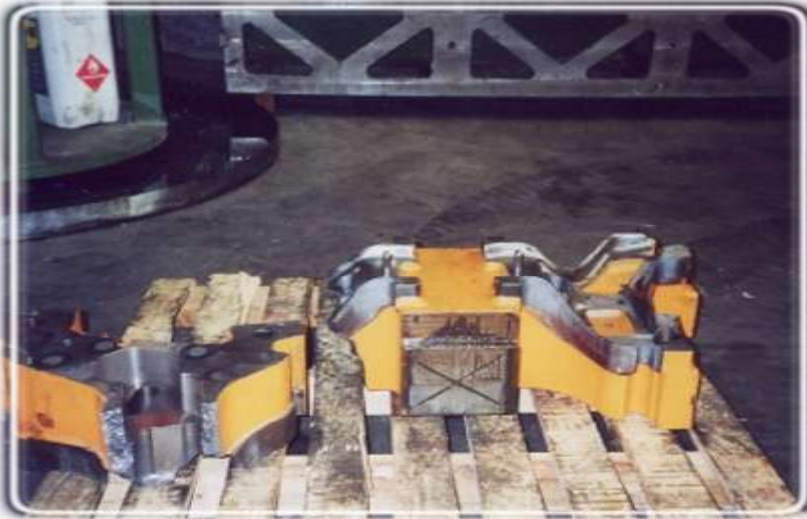




**Steel Box Frames are used to repair the underside of the Press Tool where access inside the cracked pockets is limited**









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