

Hydraulic Shop Presses

DT Workshop Equipment Reference — D&T / STEM resource for school workshops | Metalworking Machines

A hydraulic shop press uses a hand or powered hydraulic pump to apply tons of force for pressing bearings, straightening metal, bending parts and pressing out pins and bushings. With the right tooling it performs workshop jobs that are impossible by muscle.

Key Features

- Capacities from 10 to 50 tons
- Hand or air-hydraulic pumps
- Press plates and ram attachments
- Gauges showing applied pressure
- Adjustable bed heights

Typical Uses in the Workshop

- Press bearings and bushings in and out
- Straighten bent bars and components
- Bend metal for projects
- Press-fit and part assemblies

Safe Operation

1. Check the press and tooling are clean
2. Centre the work under the ram
3. Use the guard or work safely at the press
4. Pump steadily and watch the gauge
5. Release pressure slowly and remove work

SAFETY NOTES

- Never put hands or fingers under the ram
- Wear eye protection - parts can fly
- Use the correct tooling - never crush with loose blocks
- Stand clear of the work area while pressing
- Check the hydraulic system for leaks

Maintenance & Consumables

- Check the hydraulic oil level
- Bleed air from the system if spongy
- Inspect hoses and rams for leaks
- Keep the press and area clean
- Have the press serviced yearly

Specification & Buying Notes

A 10-12 ton press with press plates and a bearing kit covers school needs. Bench models save space. Check the ram travel and bed height suit the work the workshop does.