

Document Cameras for Demonstration Benches

DT Workshop Equipment Reference — D&T / STEM resource for school workshops | Design & Documentation



Photo: Unknown authorUnknown author — GFDL — via Wikimedia Commons (Mass_demonstration_in_Iran,_date_unknown.jpg)

A document camera projects live images of tools, components, worksheets and small demonstrations onto a screen or board, letting a whole class watch precise techniques close-up. It is the modern replacement for the overhead projector at the teaching bench.

Key Features

- Full HD or 4K live output
- Auto-focus and zoom functions
- Flexible arms and gooseneck mounts
- USB and HDMI connections
- Freeze-frame and annotation features

Typical Uses in the Workshop

- Demonstrate wiring, soldering and assembly close-up
- Show small parts, tools and safety checks
- Present worksheets and drawings live
- Record and replay technique demos

Safe Operation

1. Position the camera over the demonstration area
2. Connect to the display via HDMI or USB
3. Set the focus and zoom for the viewing distance
4. Freeze frames to hold the display
5. Annotate over the image while explaining

SAFETY NOTES

- Check cabling is clear of the bench
- Do not drop or bump the camera arm
- Keep the lens clean
- Secure the arm against accidental knocks
- Restrict access to the connection ports

Maintenance & Consumables

- Clean the lens with a soft cloth
- Check the arm joints and clamps
- Update software and drivers
- Store the camera arm folded
- Keep the USB and HDMI cables with the unit

Specification & Buying Notes

Choose a Full HD model with autofocus, a flexible arm and both USB and HDMI outputs. Freeze-frame and annotation help teaching. A carrying case keeps the unit safe between rooms.