

Pillow Block Bearings

DT Workshop Equipment Reference — D&T / STEM resource for school workshops | Robotics & Mechatronics



Photo: Dodge Manufacturing Company — Public domain — via Wikimedia Commons (Pillow-block-bearing.jpg)

Pillow blocks are bearing housings that support rotating shafts at their base, mounted to frames and plates while the shaft spins through a ball or roller bearing inside. They carry conveyor rollers, shafts and drivetrains.

Key Features

- Insert ball bearings in housings
- Bore sizes 5-40 mm
- Lubrication nipples on serviced types
- Bolted base mountings
- Sealed or shielded variants

Typical Uses in the Workshop

- Support line shafts and conveyor rollers
- Mount drive shafts on machine frames
- Reduce friction in rotating assemblies
- Support augers and agitator shafts

Safe Operation

1. Align the pillow blocks to the shaft
2. Bolt the blocks to a flat frame
3. Lock the set screw or collar on the shaft
4. Check the shaft turns freely
5. Lubricate per the service schedule

SAFETY NOTES

- Keep fingers and hair clear of rotating shafts
- Check guards around exposed shafting
- Do not run bearings without lubrication
- Tighten the mounting bolts firmly
- Inspect bearings for noise and heat

Maintenance & Consumables

- Lubricate at the scheduled interval
- Check the seals and shields
- Tighten the set screws
- Listen for noise and feel for heat
- Replace worn bearings promptly

Specification & Buying Notes

Match the bore to the shaft size and select sealed bearings for dusty classrooms. Pillow block pairs must be aligned to the shaft. Quality housings clamp without distortion.