

Shaft Collars (Clamped and Set Screw)

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



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(Roman_pin,_Crummy_Type_5,_detail_of_collar_on_shaft_(FindID_246106).jpg)

Shaft collars lock components in position on rotating or sliding shafts: set-screw collars are light and adjustable, while clamped collars grip without marking the shaft. They locate pulleys, gears, wheels and bearings precisely.

Key Features

- Set screw and clamp styles
- Bores 3-30 mm
- Zinc, stainless and aluminium
- Threaded and two-piece versions
- One and two screw types

Typical Uses in the Workshop

- Position pulleys and gears on shafts
- Retain bearings and wheels
- Set side play on axles
- Protect ends of threaded rod

Safe Operation

1. Slide the collar to the position
2. Tighten the set screw or clamp bolt in the right order
3. Check the shaft still rotates freely
4. Use two collars to locate a part
5. Match the collar bore to the shaft

SAFETY NOTES

- Tighten clamping collars evenly
- Check set screws seat on flats where possible
- Keep fingers clear of spinning collars
- Do not over-tighten and deform the shaft
- Check collars are secure before running

Maintenance & Consumables

- Check the screws and threads
- Clean the bores of oil and grit
- Retighten after the first run
- Store sorted by bore
- Keep grub screws with the stock

Specification & Buying Notes

Clamped collars are the better default; set-screw collars for light duty. Stock the bore sizes matching the shafts used. Quality collars clamp evenly without wobble.