

Hex Nuts and Lock Nuts

DT Workshop Equipment Reference — D&T / STEM resource for school workshops | Fasteners & Hardware



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Hex nuts tighten onto bolts to clamp parts together; lock nuts (Nyloc or deformed) resist loosening under vibration. Both are stocked in every metric and imperial size as the partner to bolts and studs.

Key Features

- Metric M3-M16 and imperial sizes
- Standard, Nyloc and nylon insert types
- Zinc, stainless and brass finishes
- Full and thin (jam) profiles
- Washer-faced options

Typical Uses in the Workshop

- Clamp components with bolts
- Prevent loosening on vibrating machines
- Fix wheels, guards and brackets
- Create adjustable assemblies

Safe Operation

1. Select the nut class to match the bolt
2. Clean the thread and start the nut
3. Tighten with a wrench or socket
4. Use Nyloc where vibration is present
5. Torque to the specified value

SAFETY NOTES

- Use the correct spanner size - rounded nuts slip
- Check the bolt length gives full thread
- Do not reuse damaged Nyloc inserts
- Keep fasteners out of young children's reach
- Check tightened joints before loading

Maintenance & Consumables

- Keep nuts sorted by size
- Check threads for damage
- Replace stripped nuts
- Store in labelled bins
- Check Nyloc inserts before reuse

Specification & Buying Notes

Buy nuts in bulk assortments with the bolts they fit. Nyloc types in the vibration-prone sizes. Quality nuts have clean threads; cheap blanks strip easily.