



# Machine Guarding

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February 2024

# Housekeeping



**Muster Point**



# Presenter & Introductions



**Safety begins with me!**





Why am I here?

**You are the KEY to SAFETY!**

# Importance of Machine Guarding



# Pinch Point Safety: Understanding The Hazards

**PINCH POINT  
SAFETY**

**UNDERSTANDING  
THE HAZARDS**







# Parts of Machines

**Point of Operation**

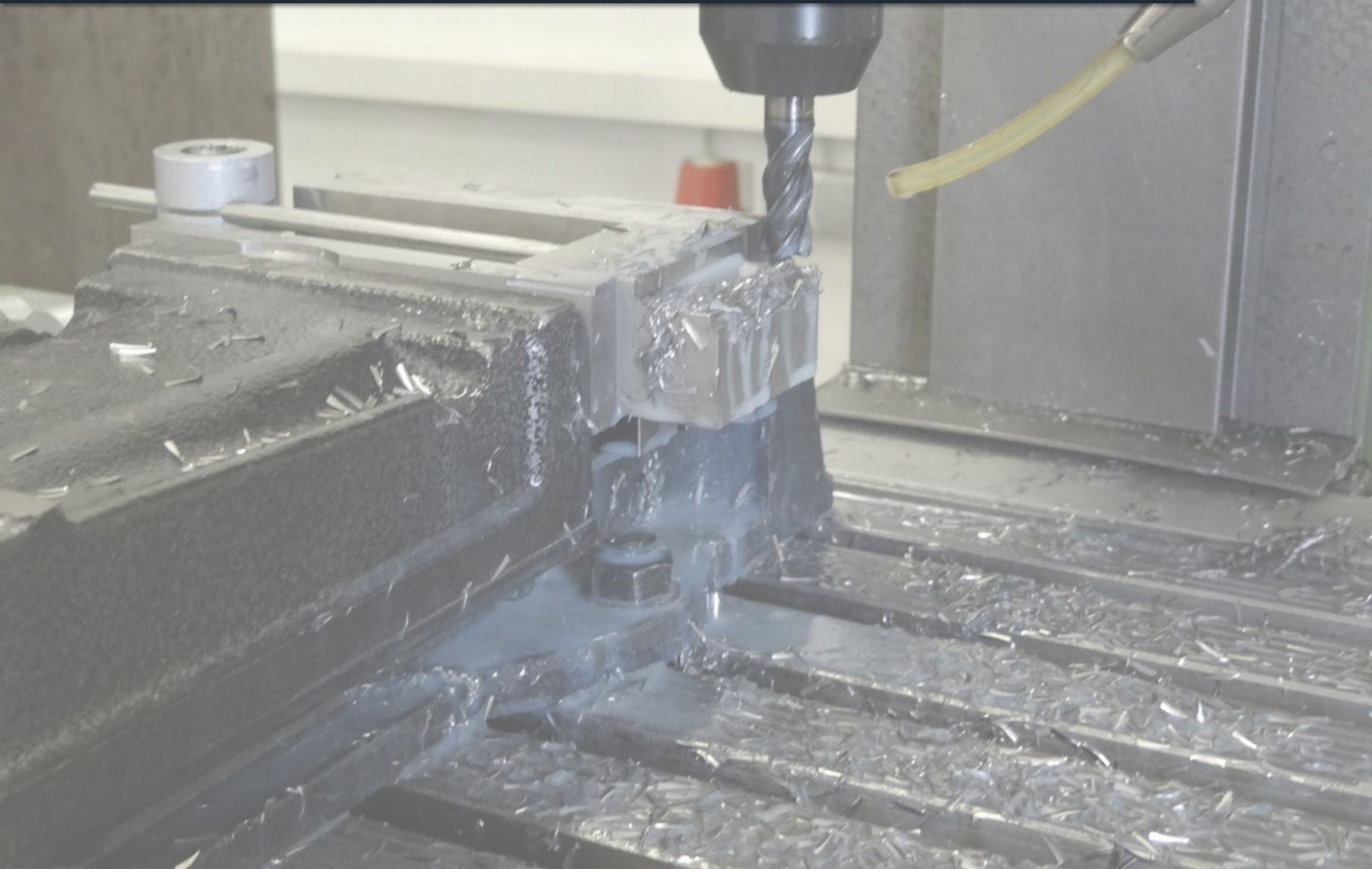
**Power Transmission Device**

**Operating Controls**





# Hazardous Motions and Actions

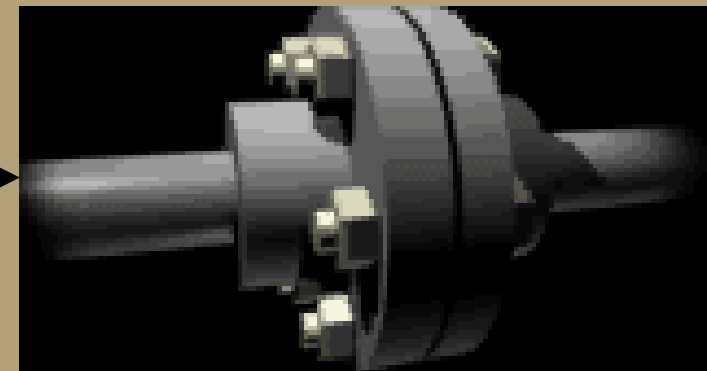




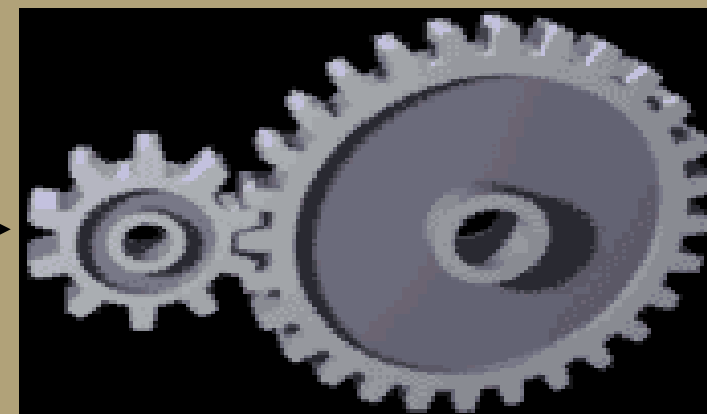


# Hazardous Motions

**Rotating**



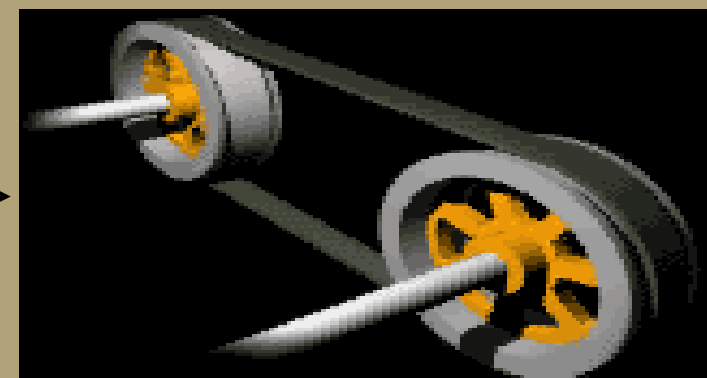
**In-running nip points**



**Reciprocating**



**Transversing**





# Hazardous Actions

**Cutting**

**Punching**

**Shearing**

**Bending**



# Guarding Methods

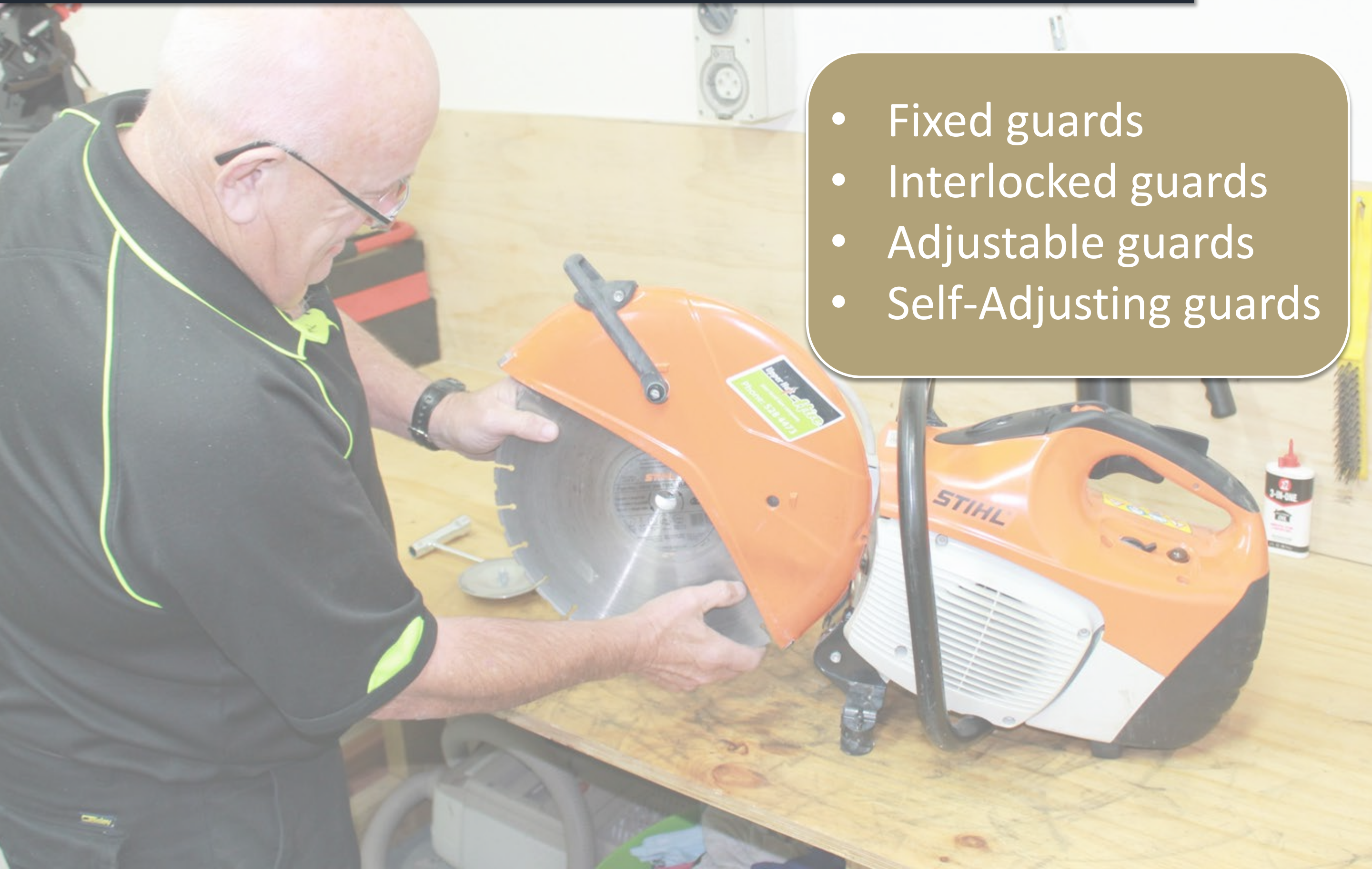
**Feeding & Ejecting Methods**

**Robots**

**Miscellaneous Aids**

# Types of Guards

- Fixed guards
- Interlocked guards
- Adjustable guards
- Self-Adjusting guards





# Types of Safeguarding Devices

- Photoelectric (optical)
- Radiofrequency (capacitance)
- Electromechanical
- Pullback
- Restraint (holdback)
- Safety Trip Controls (pressure-sensitive body bar, safety tripod, safety tripwire)
- Two-Hand Control
- Two-Hand Trip
- Gate

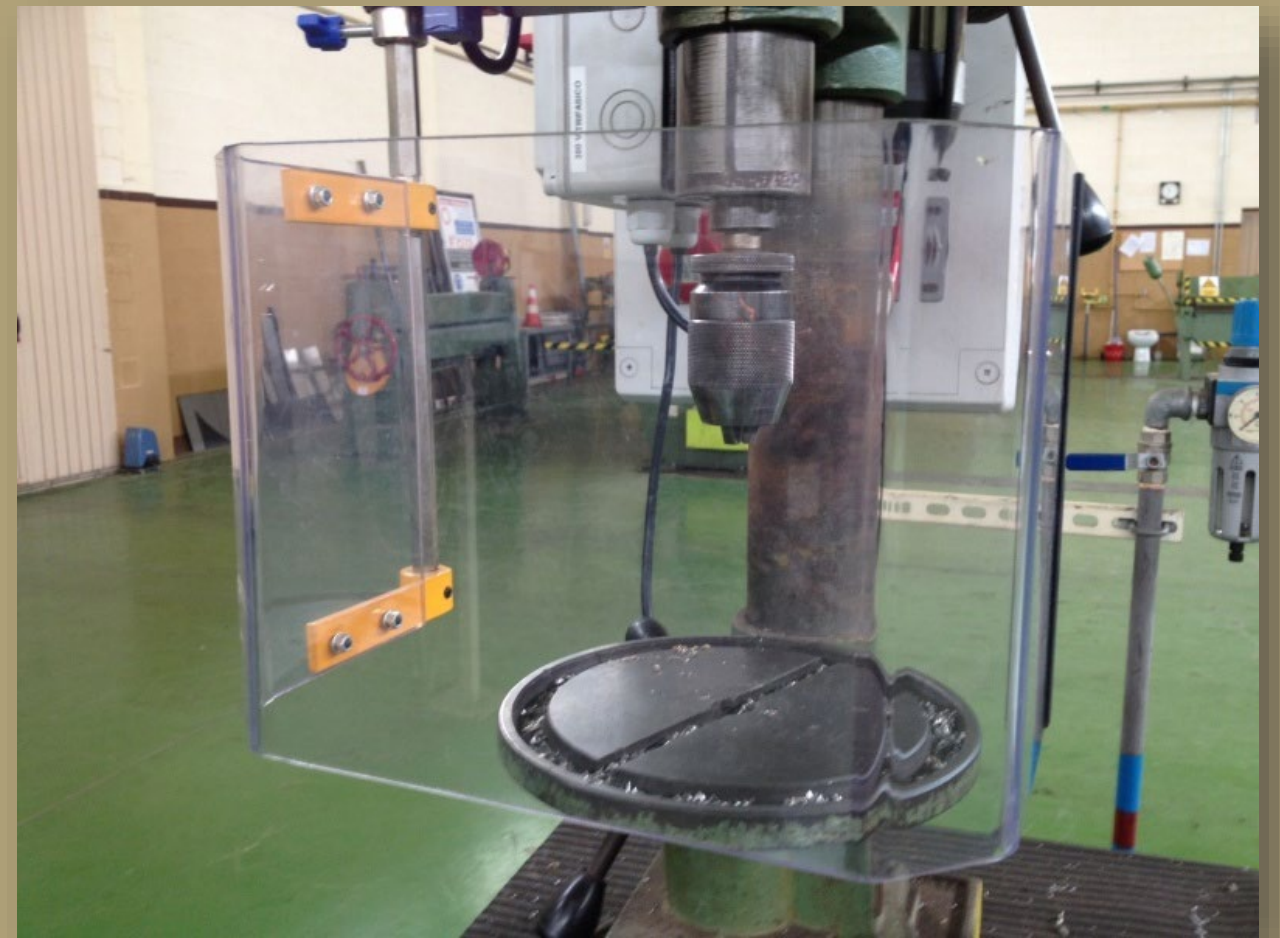


Image: <http://previpedia.es/Archivo:Resguardo de máquina.jpg>





# Machine Guarding Requirements





# Guard Construction



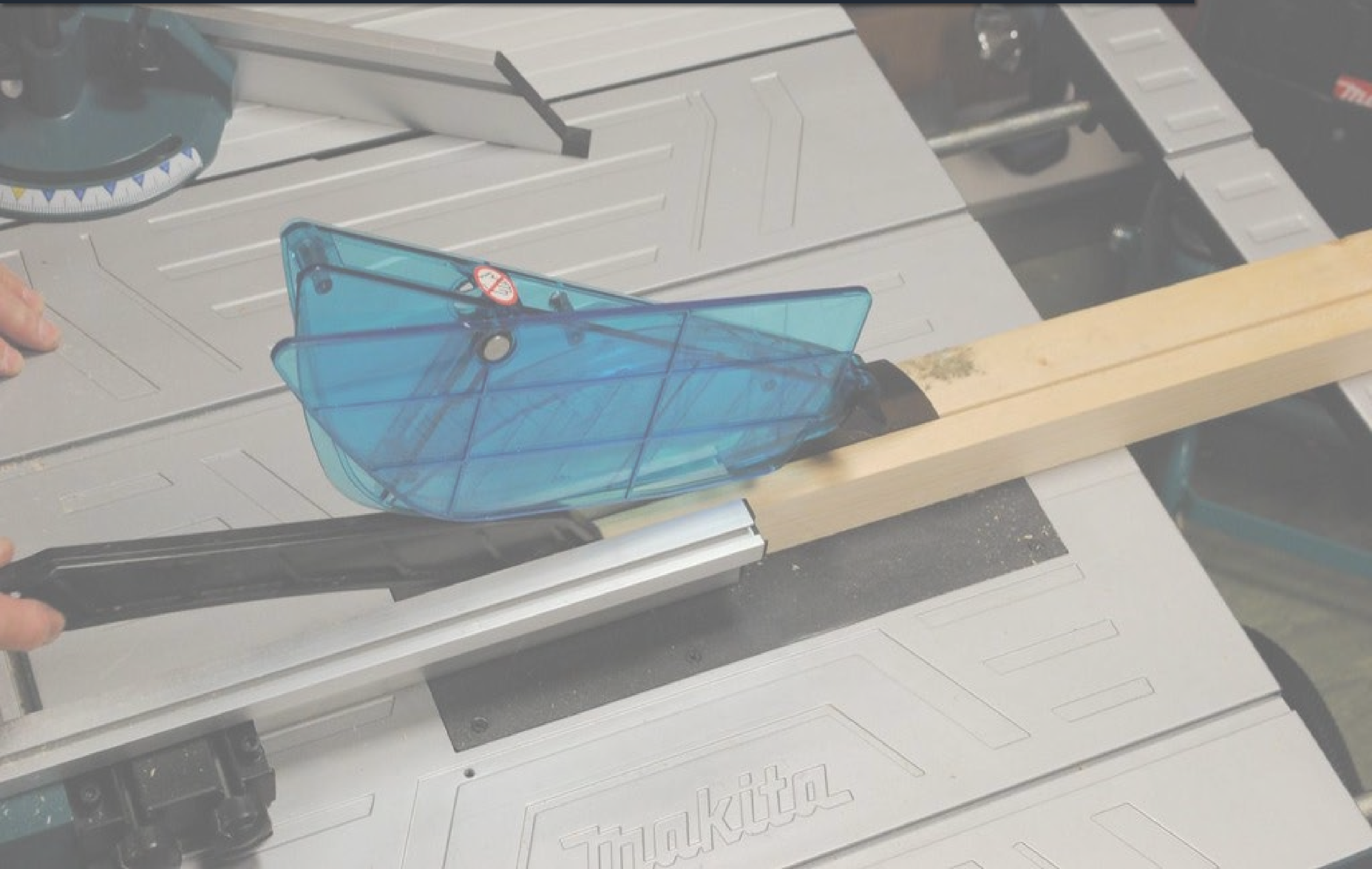


# Machines Requiring Guards





# Miscellaneous/Additional Aids



Don't Touch the Guards!







# Machinery Maintenance and Repair



One Team

**QUESTIONS?**

