# Ohmura Technical Report

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# Manual copy-lathe manufacturing

Rough magnesium machining • Reference Surface machining • Rough machining Thin parts of difficult-to-machine materials • Even only one piece Repairing seemingly unserviceable parts - Leave these up to Ohmura Manufacturing!

Operators in action!



### The advantages of the old ones

• These manually operated versatile machines have long service life

- Well balanced physical properties - the internal stress has been long relieved
- One can learn the basics of the machines
- NOT an out-of-date technology or skill

### Copy-machining, it's analog!

- Copy-machining is depending on the template
- Double radius joint is a chance for a person to show his skill









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## Why? Even now?

#### The flexibility toward materials

- No need to set program
- Faster than CNC, if only one piece
- Test piece is not necessary
- Rough machining is fast and flexible

#### Easy to suspend operation anytime

- Dimensional verification is possible anytime
- It is possible to confirm everything on the spot
- Visual confirmation of the cutting tool during operation is possible
- The modification of the rotational speed is possible, even in the middle of operation

### Affect the five senses!

- Realize the temperature of the scraps
- The operator can feel the edge of the blade
- The condition of the cutting process is visible
- Skin sensation
- One can learn how the shape and color of the scraps change according to the cutting process
- One can learn the basics of the machine cutting
- · Scrap disposal is simple man and machine working together
- The operator is able to visually and tactile confirm the status of the process

## It's still working!

#### Live and learn

- Manufacturing time depends on and varies with individual skills
- · Learn the proper use of the normal and reverse rotation
- Machining sequence is decided individually
- Design and create tailor-made machining tools
- The dimensions aren't determined only by the scale
- Workpiece warps, cutting tool dislocates easily







