

**M-TMD 4/1**

## **TROWAL DRAG FINISHING MACHINE**

**Range M-TMD 4/1**

### **Applications**

The drag finishing systems developed by Trowal represent a special technology for surface finishing of:

- high-value and delicate components
- parts with many contours and complex geometry
- extremely hard materials which are difficult to machine

The applications for the Trowal drag finishing technology range from aggressive grinding and radiusing all the way to surface smoothing and high gloss polishing of decorative parts.

### **Examples**

- surgical implants
- turbine blades
- precision compressor and pump parts
- parts made from hard metals and materials
- sintered parts, etc.

**We improve surfaces**



## Functional principle

The components are attached to special fixtures and "dragged" in a planetary movement through a bed of grinding or polishing media.

- The process provides up to 40 times higher grinding performance, when compared to mass vibratory finishing
- The components are individually attached onto fixtures and, therefore, cannot impinge on each other

## Technical characteristics

- Compact design requiring very little space
- Main rotary station driven by robust geared motor
- Raising/Lowering of the rotary drive system with positive spindle drive
- Work bowl lined with wear-resistant polyurethane
- Quick and easy change of media, e.g. from grinding to polishing media via simple replacement of movable work bowls
- "User friendly" control panel with individually selectable processing programs
- Frequency converter for variable adjustment of rotary speed

## Equipment

- Work stations

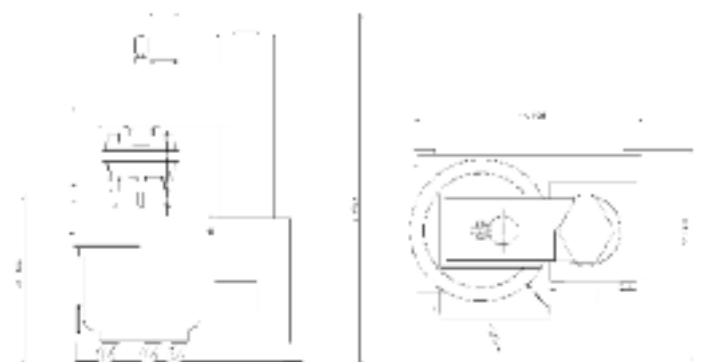
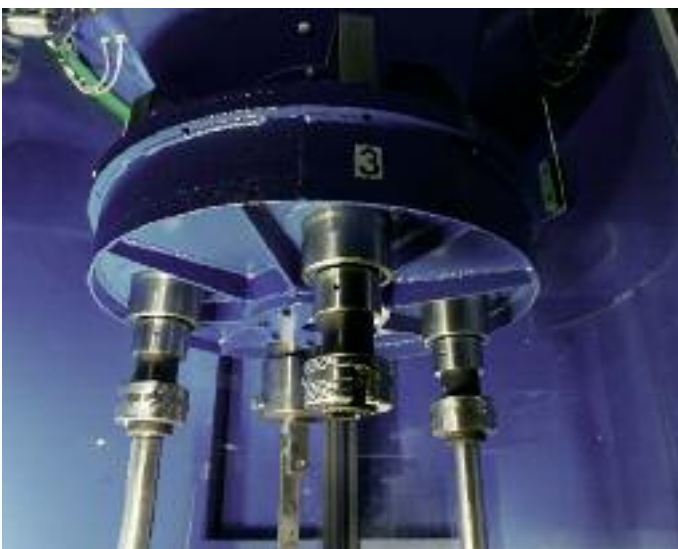
Either:

- Simple single rotary station or
- 4 rotating work stations or
- Planetary drive with up to 4 work stations

## Tooling positions

- Adapter shaft with bayonet locking device or
- Tooling position "MS" for pneumatically operated locking and unlocking of the work piece fixtures
- Up to 4 tooling positions

| Technical Data                   | M-TMD 4/1                                                                       |
|----------------------------------|---------------------------------------------------------------------------------|
| Dimensions                       | 1700x1600x2600 mm                                                               |
| Weight                           | 1560 kg                                                                         |
| Dimensions work bowl             | 830 mm Diameter<br>245 Liter Volume                                             |
| Drive System main rotary station | RPM range – main drive 25-70 U/min<br>RPM range – fixturing device 37-105 U/min |
| Max. work pieces                 | 2 tooling positions 320 mm<br>4 tooling positions 230 mm                        |
| Stroke length                    | 600 mm                                                                          |



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