

New features for a variety of processes:

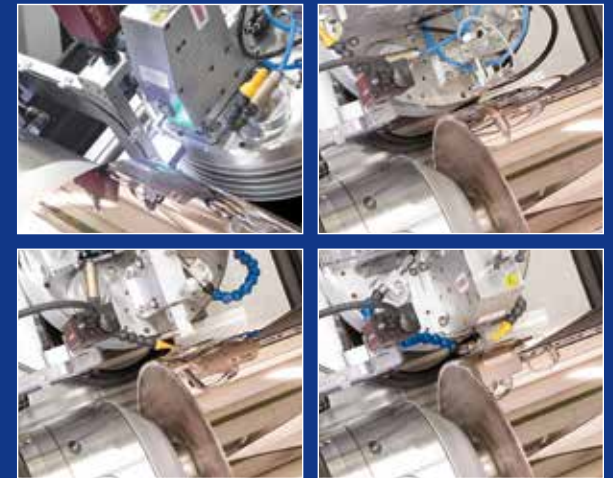
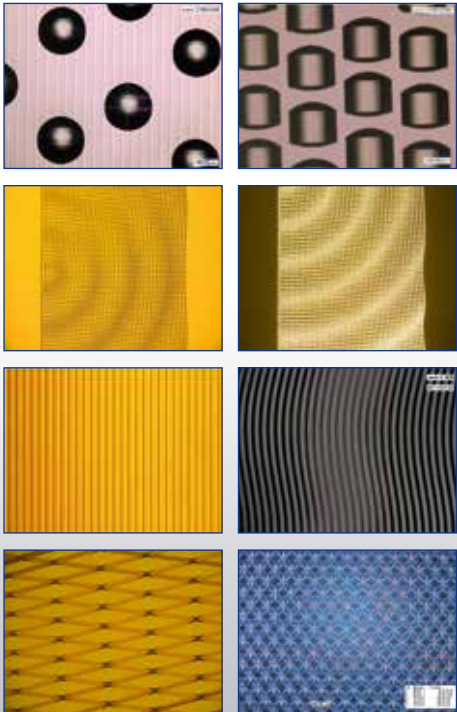
- Pre-machining
- Mirror finish
- Single-spiral cut
- Multi-spiral cut
- Plunge cut
- Cross hatched grating
- Pyramidal structure
- Sine wave structure
- Fast Tool Servo (FTS) structure
- Micro milling | Micro drilling



## MEET PRECISION!

MEET EXPERTISE, KNOW-HOW, EXPERIENCE!

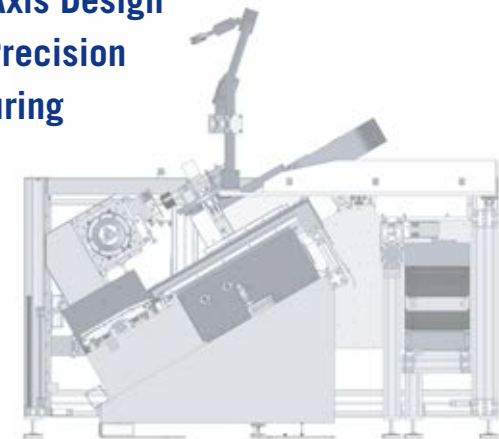
GET IN TOUCH WITH KUGLER



PRECISION IN A NEW DIMENSION

Drum Turning Lathes TDM 1600 | 2000

- Large Capacity
- Multi-Axis Design
- Ultra-Precision Structuring



Ultra-precision systems specially designed for:

**Diamond Turning of Optical Micro Structures on Roller Drum Surfaces**

What do you need? Make your choice!

**TDM-1600**



- Turning diameter: 160 – 500 mm
- Machining length: 1600 mm
- Workpiece weight: 800 kg
- Hydrostatic** axes Y, A, and C

**TDM-2000**



- Turning diameter: 180 – 600 mm
- Machining length: 2000 mm
- Workpiece weight: 3000 kg
- All axes hydrostatic** (Y, A, C and Z)

**New high-grade features for enhanced customer value:**

- **BRAND-NEW High-grade software** for easy and fast programming of complex structures

**>>>NEW! Pattern Generator (KPG)**



- Easy to use CAM Program
- NC programs based on customer's pattern location files
- Bitmap import or regular/random pattern
- Dot - Trapezoidal – Freeform shapes
- Pattern analyzing functions
- Shape tuning functions
- Tested program size: > 500 GB

**>>>NEW! V-Groove Generator (KVG)**

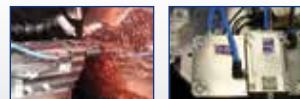


- CAM program for KUGLER TDM series
- Creates NC-programs for different V-Groove structures
- Cutting options:
  - Plunge cut
  - Single spiral OR multi spiral (e.g. 1High/3Low)

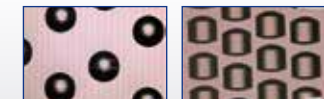
- **BRAND-NEW Single- or dual-axis Fast Tool Systems (FTS)**

**>>>NEW! FTS-40**

**>>>NEW! FTS-40/75**



- Stroke: 40/75 µm – Single-/Dual-axis
- Direct drive (no flexure transmission)
- Bandwidth 1500 Hz (-3 dB)
- Up to 800 dot shapes / second



Great variety of application fields:

**Application examples**

- Functional films for display technology: Diffuser plates, Light guide plates, Anti-reflection films, Anti-spy films >>> For watches, smartphones, tablets, TV-screens, industrial and medical instrumentation,...
- Decorative films
- Holograms & safety features
- Lighting: Microlens optics for LED lamps, LED fixtures, Decorative elements

