Microfinish of Balls, Cups and Discs

SPHERO

Microfinish Task
Flexible machining of form and surfaces of spherical parts

Microfinish Advantages
Minimizing of the surface roughness and improving roundness, thus ensuring a better ball-socket fit and further reducing friction and wear

Special Machine Features
- Workpiece interchangeability across small or large production series without time-consuming categorization
- Flexible machine tooling and thus ability to finish both ceramic and metal based (e.g. Cobalt-Chromium) components
- Flexible finishing of balls, cups and flat surfaces as an option
- Optional addition of gauging systems or various automatic loading systems

User-friendly machine design
Flexible machine tooling
Polishing process can be integrated

MACHINE DATA

Machining Ø: up to 75 mm
Workpiece spindle: 0 – 2,000 min⁻¹
Tool spindle: 1,500 – 15,000 min⁻¹
Tool changer: up to 10 tools

TYPICAL RESULTS

Workpiece Roundness Roughness
Endoprothesis (ball and cup) 1 – 2 µm Ra ≤ 0.03 µm
Spherical washers 2.0 µm Ra ≤ 0.03 µm
Slide shoes 2.5 µm Ra ≤ 0.08 µm
Ball valves and seats 3 – 6 µm Ra ≤ 0.03 µm

Contact:
Yannick Kettler
Tel. +49 (0) 202 481-215
kettler@thielenhaus.com

Thielenhaus Technologies GmbH
Schweizerstraße 50
42285 Wuppertal, Germany
+49 (0)2 02 - 4 81-0
+49 (0)2 02 - 45 04 45
info@thielenhaus.com
www.thielenhaus.com