

PLINT TRIBOLOGY PRODUCTS



PHOENIX TRIBOLOGY

**By far the most extensive range of
tribometers and tribological
test machines**

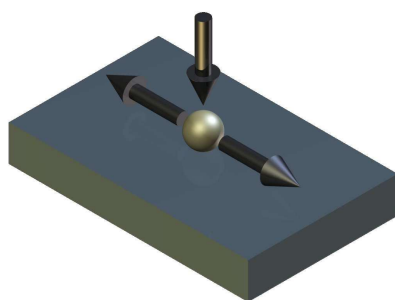
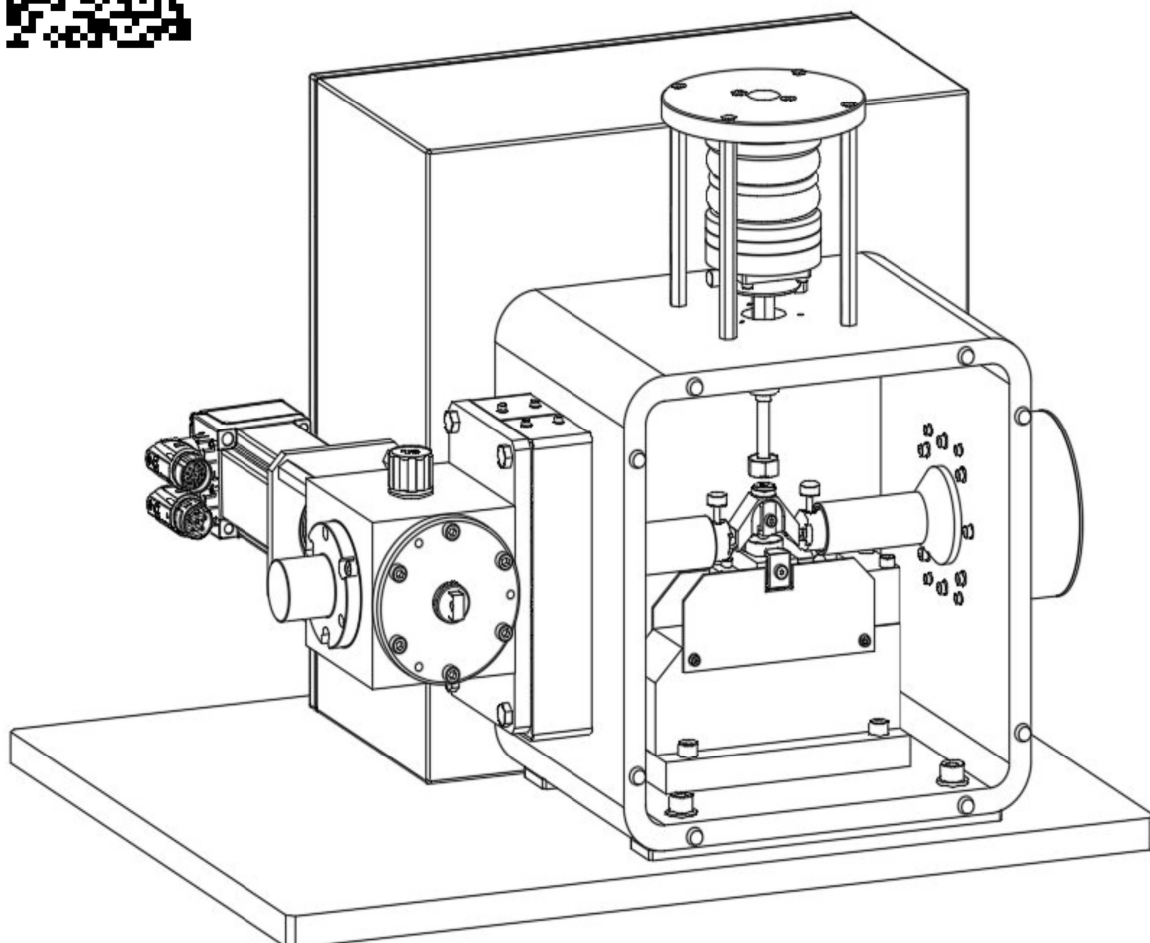
Phoenix Tribology has been a provider of world-leading tribo-testing equipment for over 60 years.

We offer an extensive range of testers, as well as custom solutions designed to meet your testing needs.

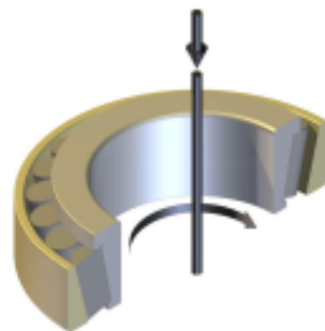
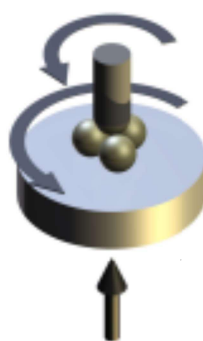
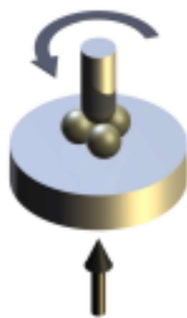
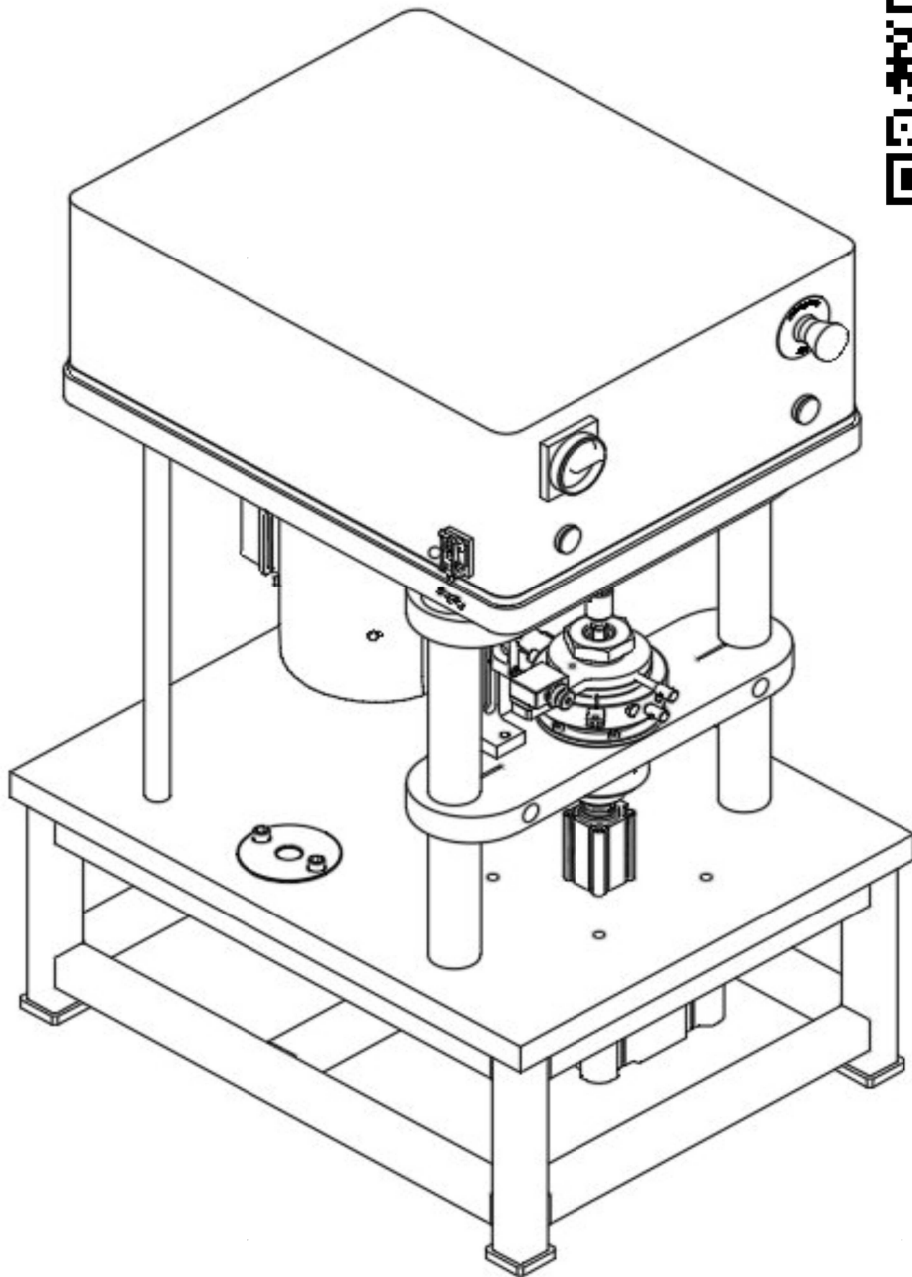
We have experience with high pressure, ultra-low vacuum, high temperature and high speeds, as well as specialist gases such as Hydrogen.

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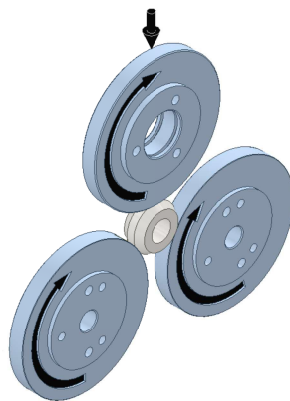
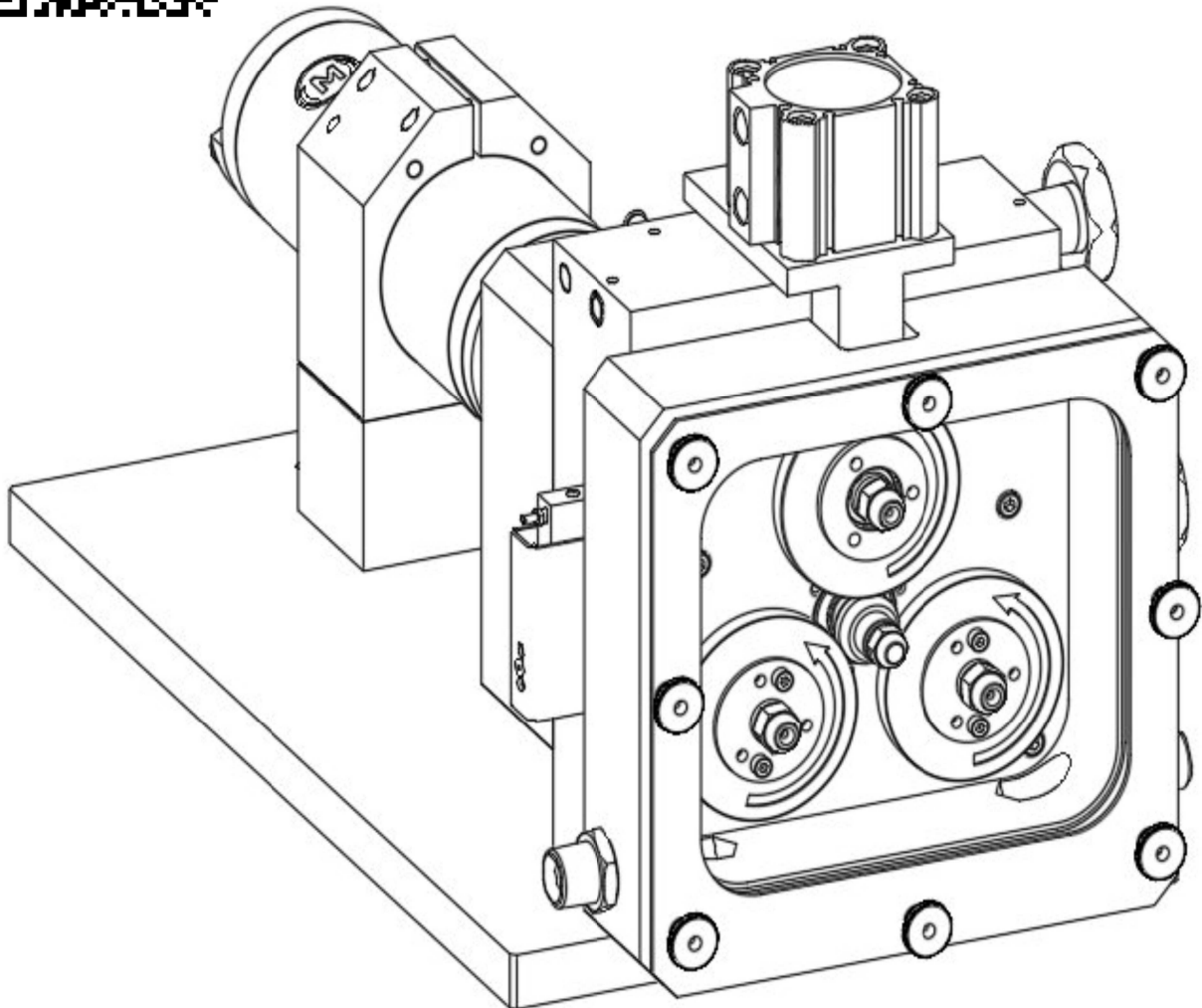
ST-RT RECIPROCATING TRIBOMETER



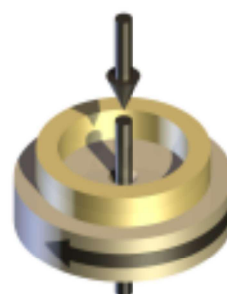
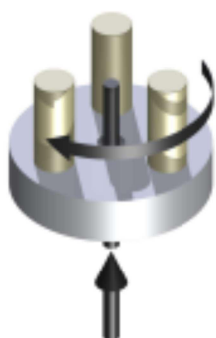
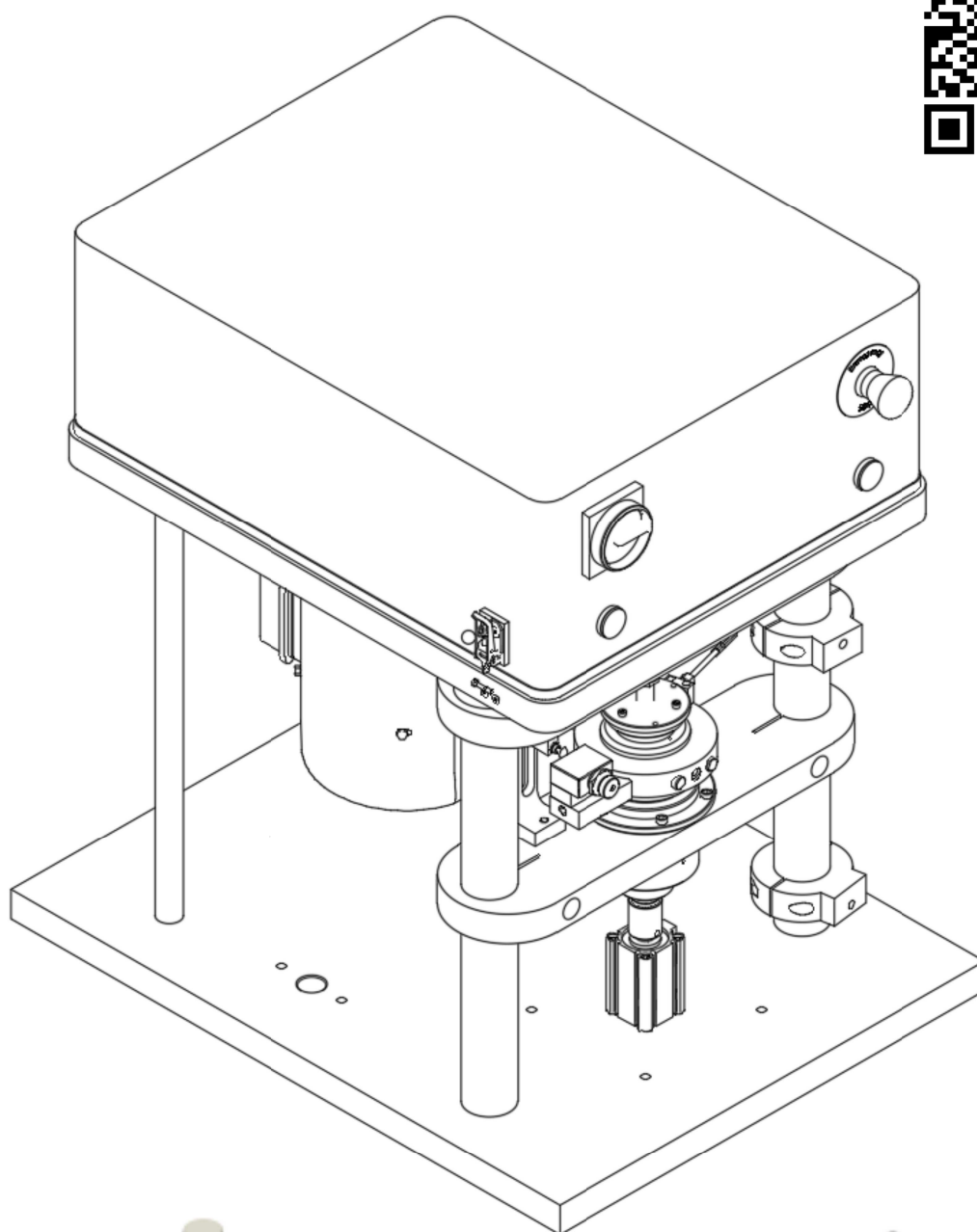
ST-FB FOUR BALL EP & WEAR



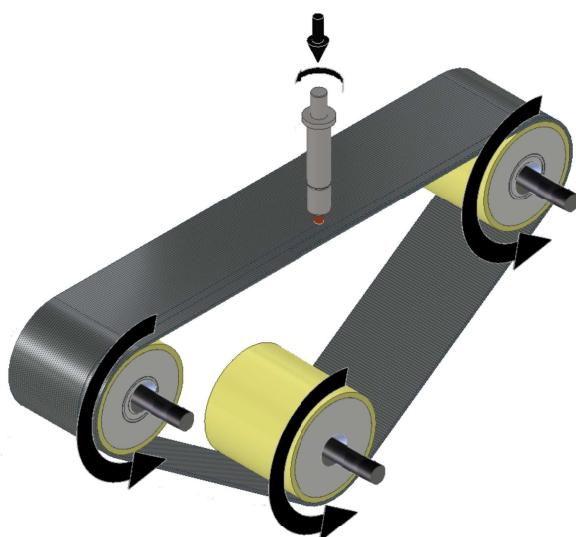
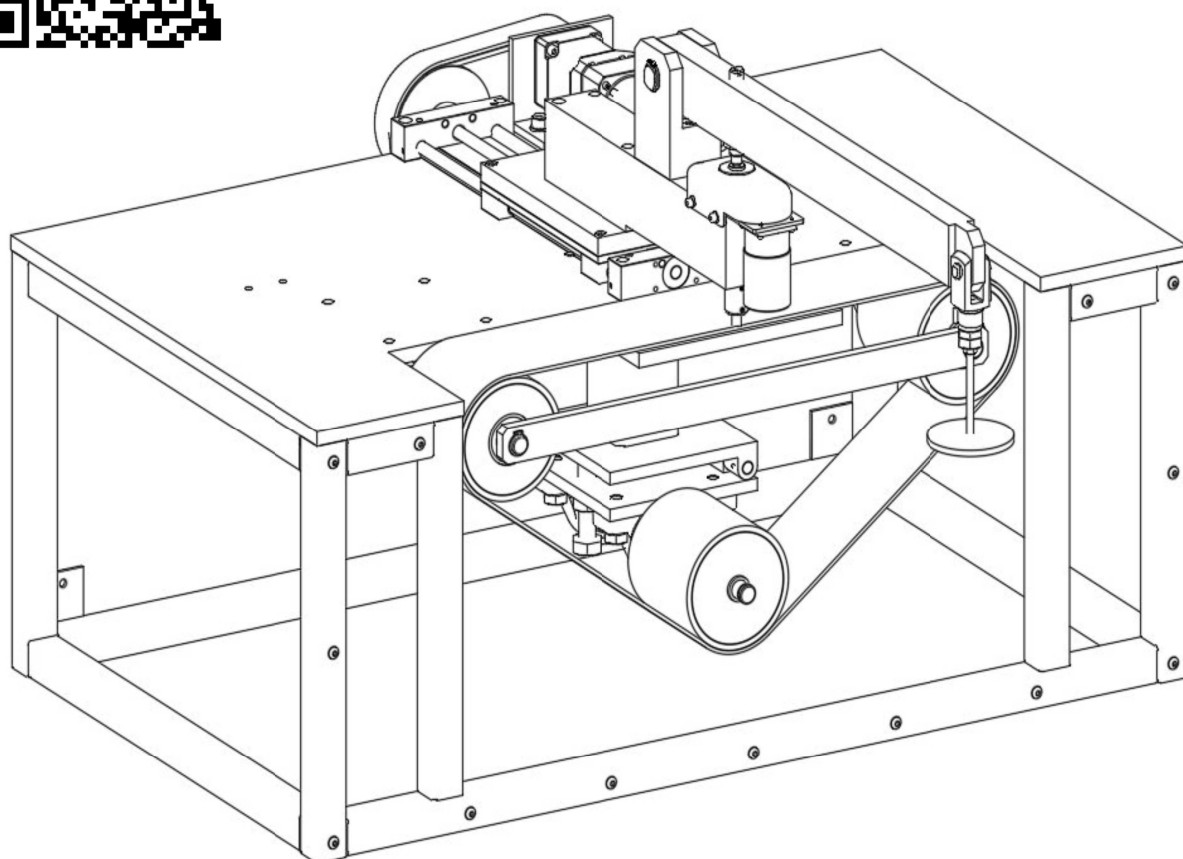
ST-PR PITTING RIG - THREE DISC ON ROLLER



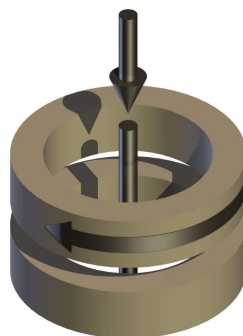
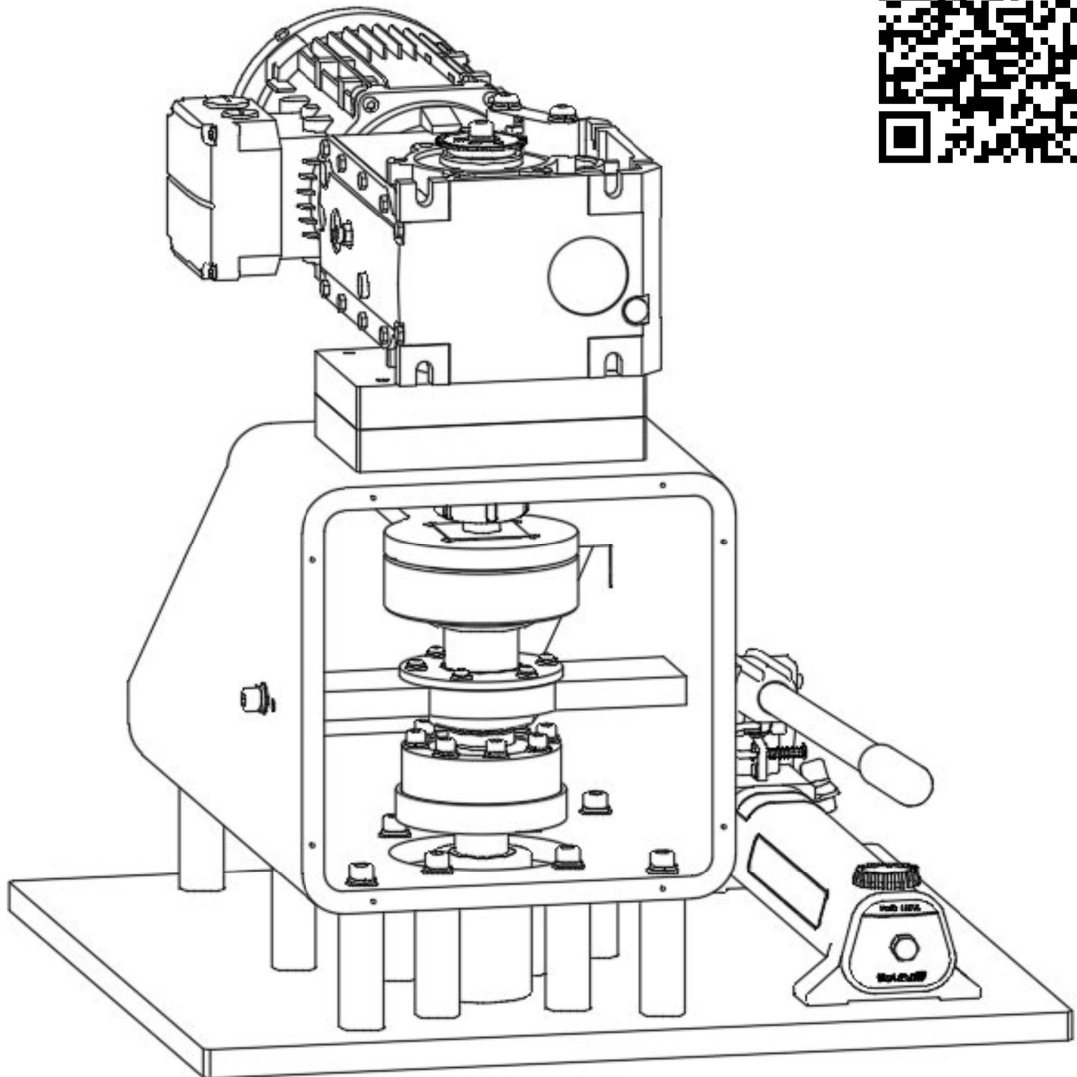
ST-TW THREE PIN ON DISC/THRUST WASHER



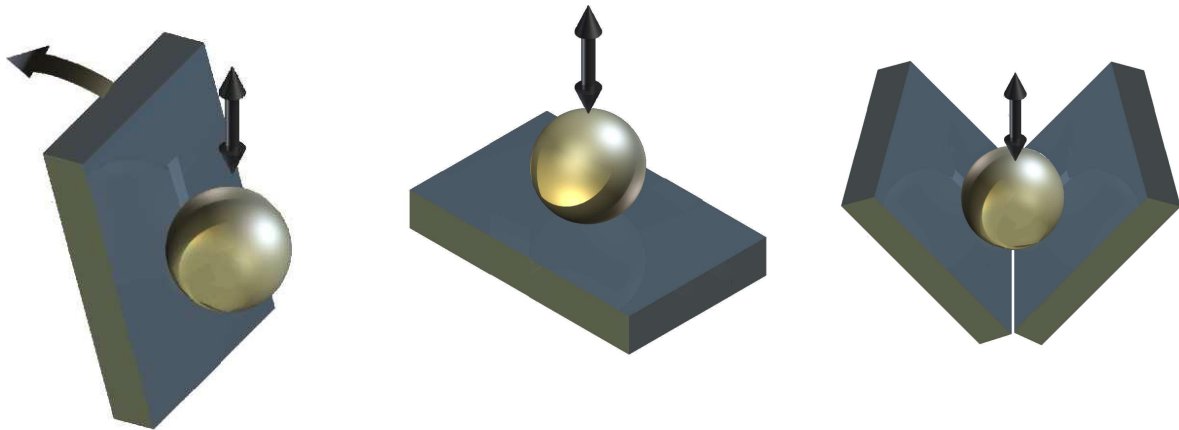
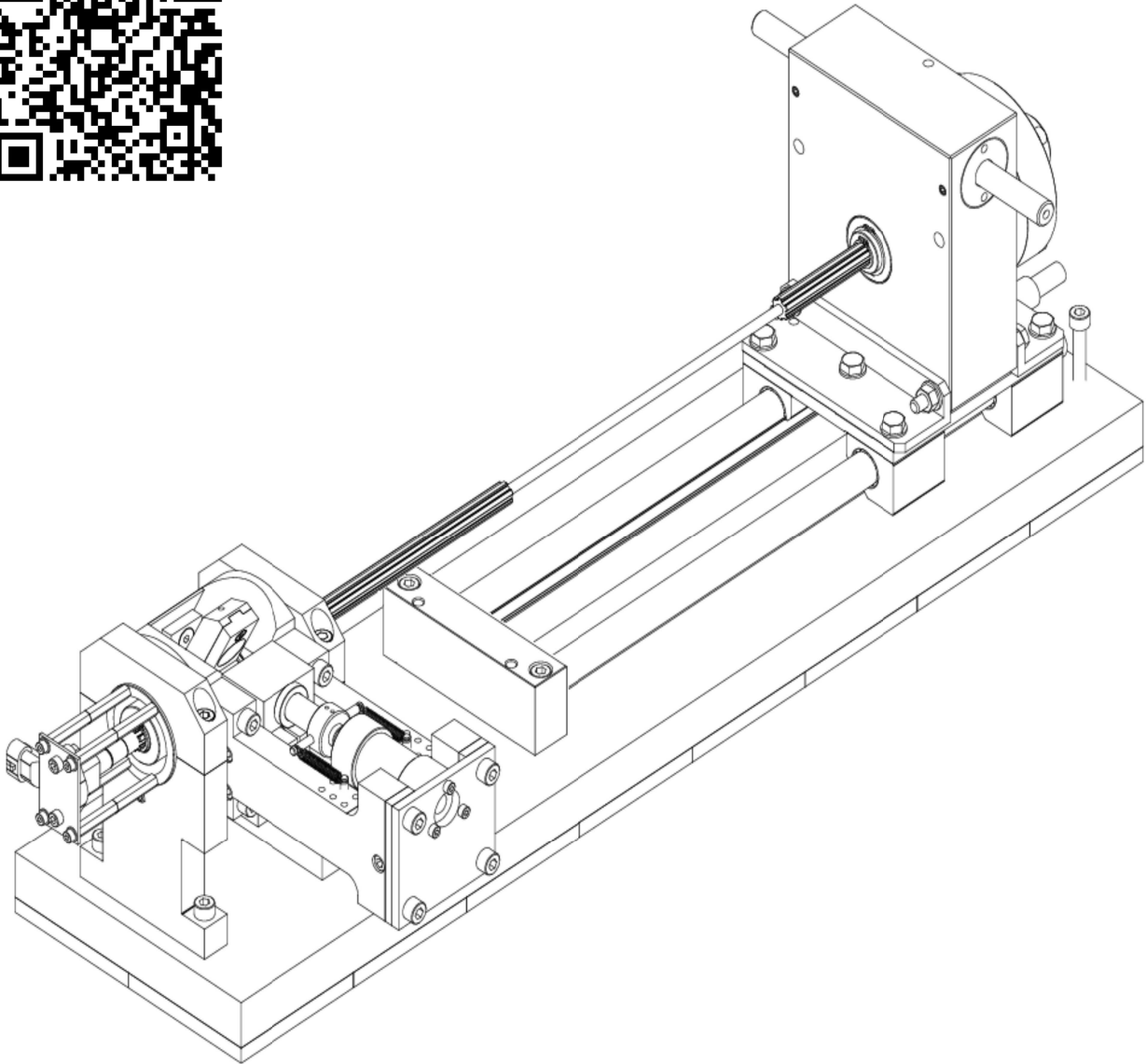
ST-BA BELT ABRASION



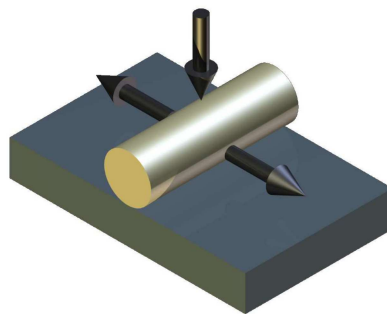
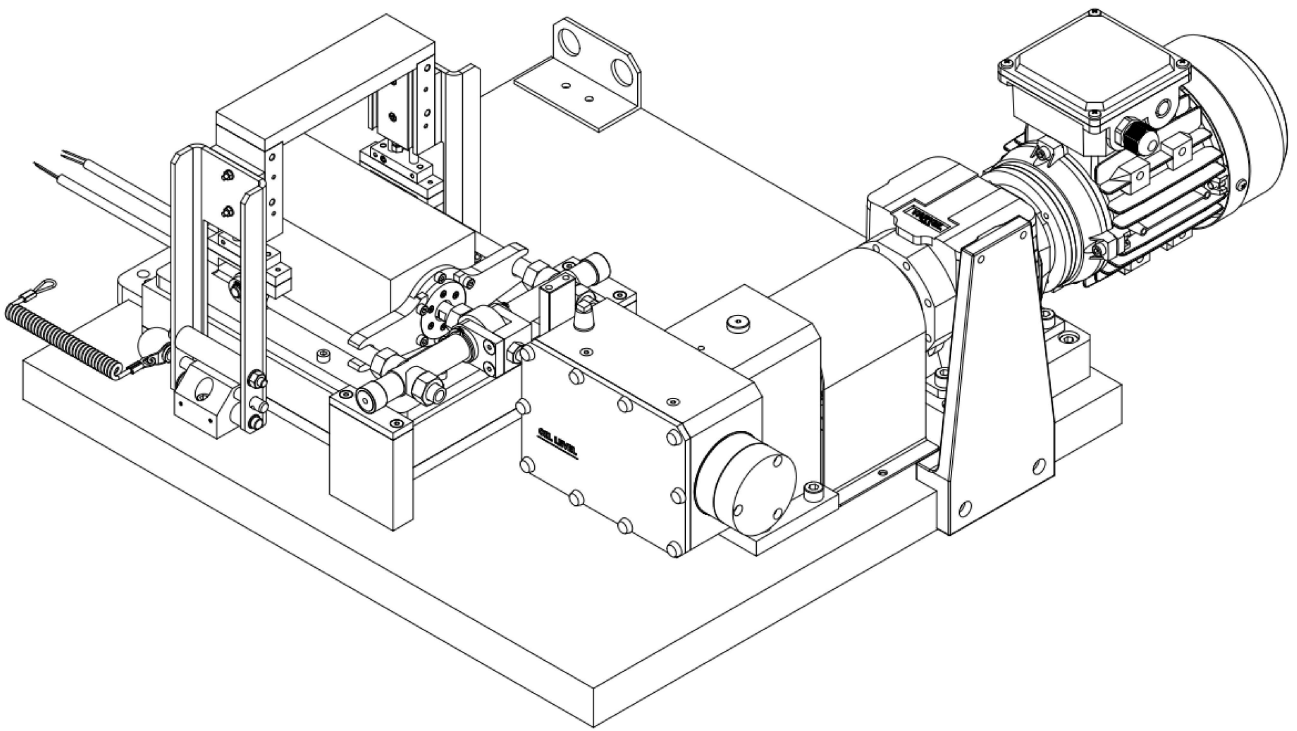
ST-TC TWIST COMPRESSION



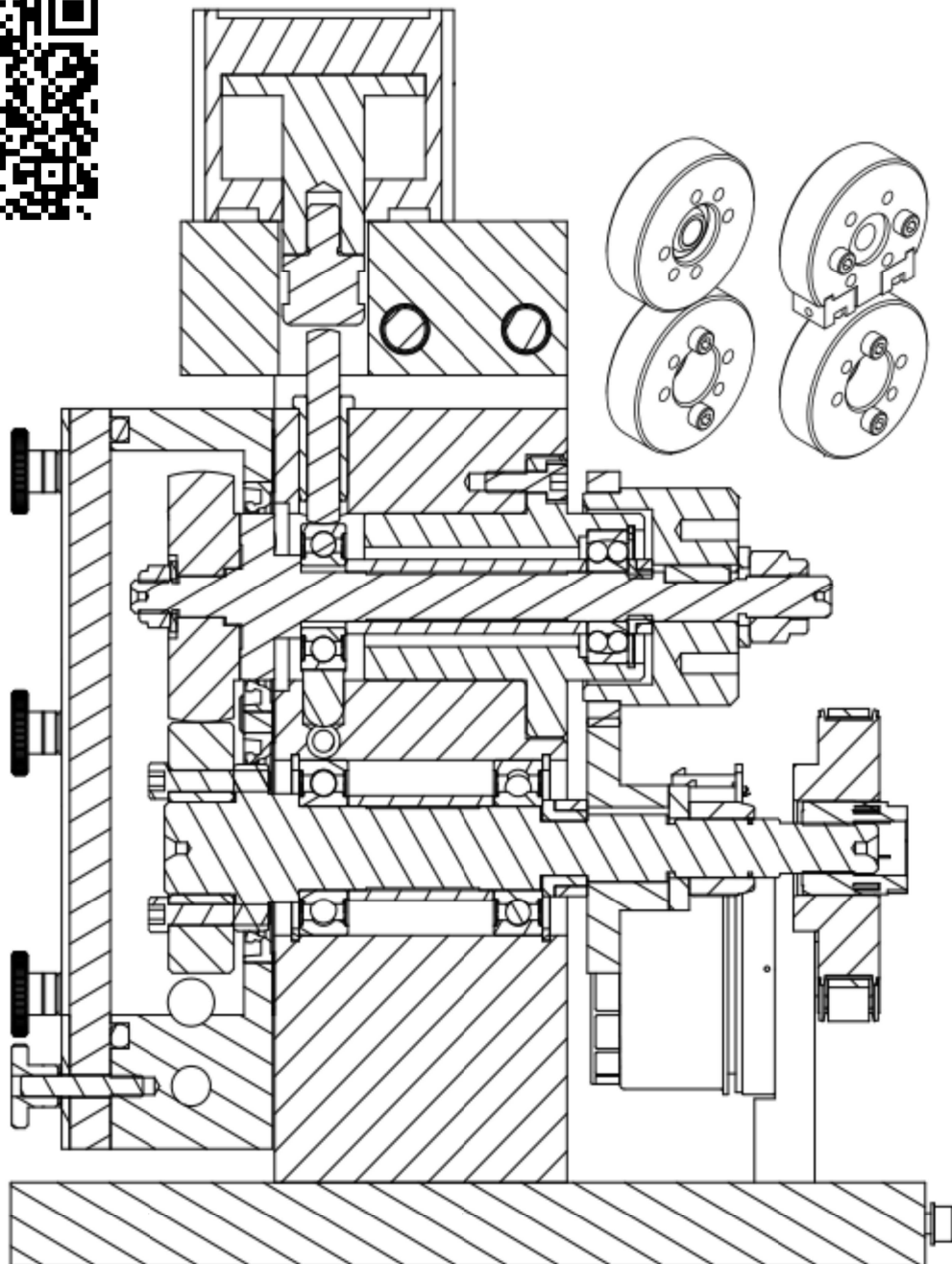
TE 43 IMPACT SLIDING RIG



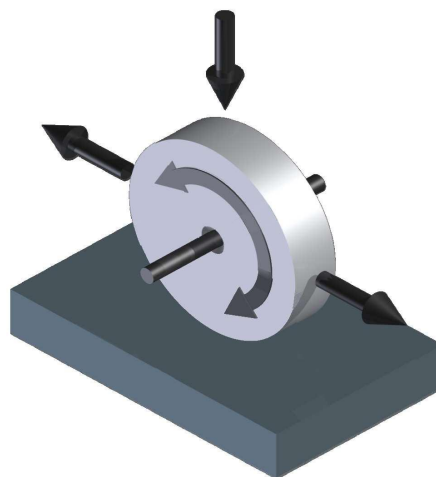
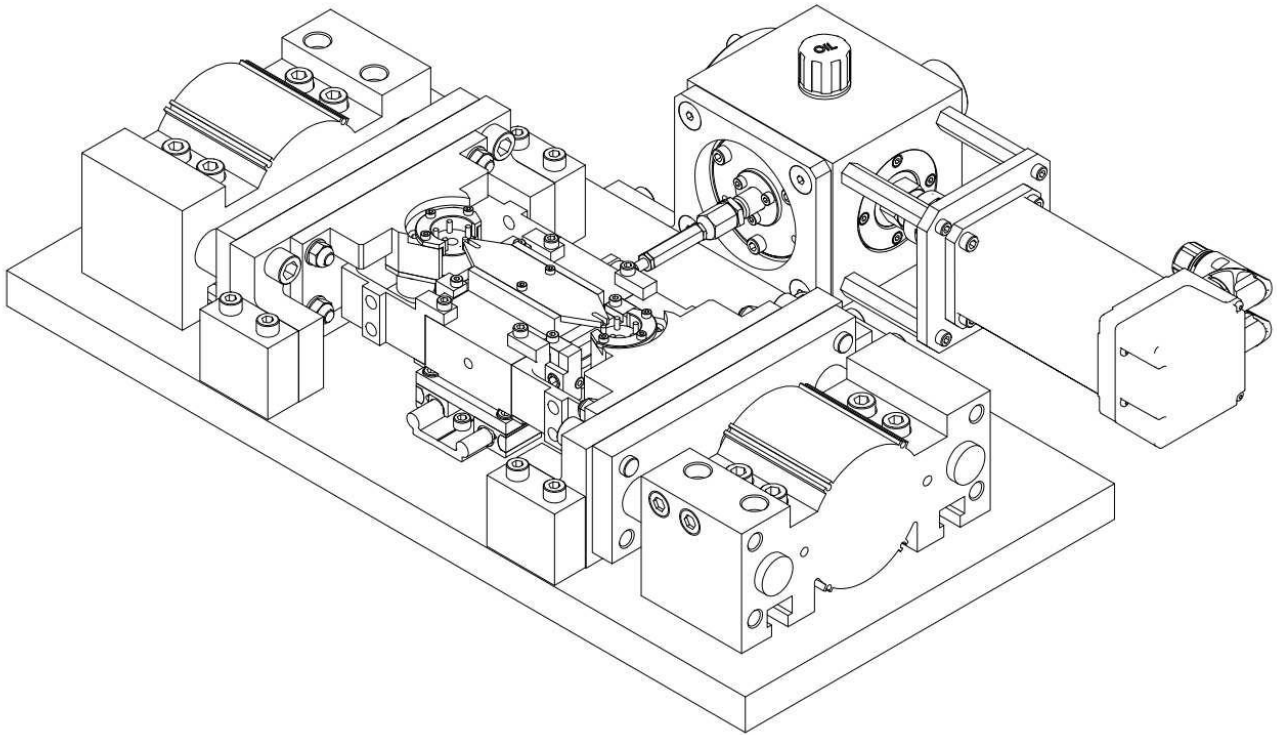
TE 50 PRESSURISED WEAR RIG



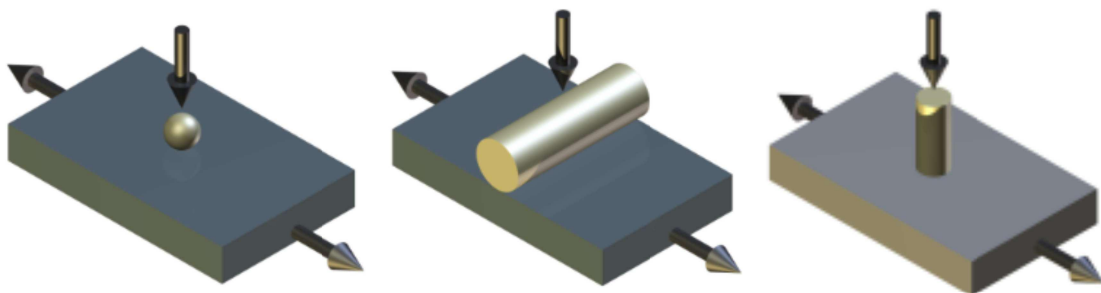
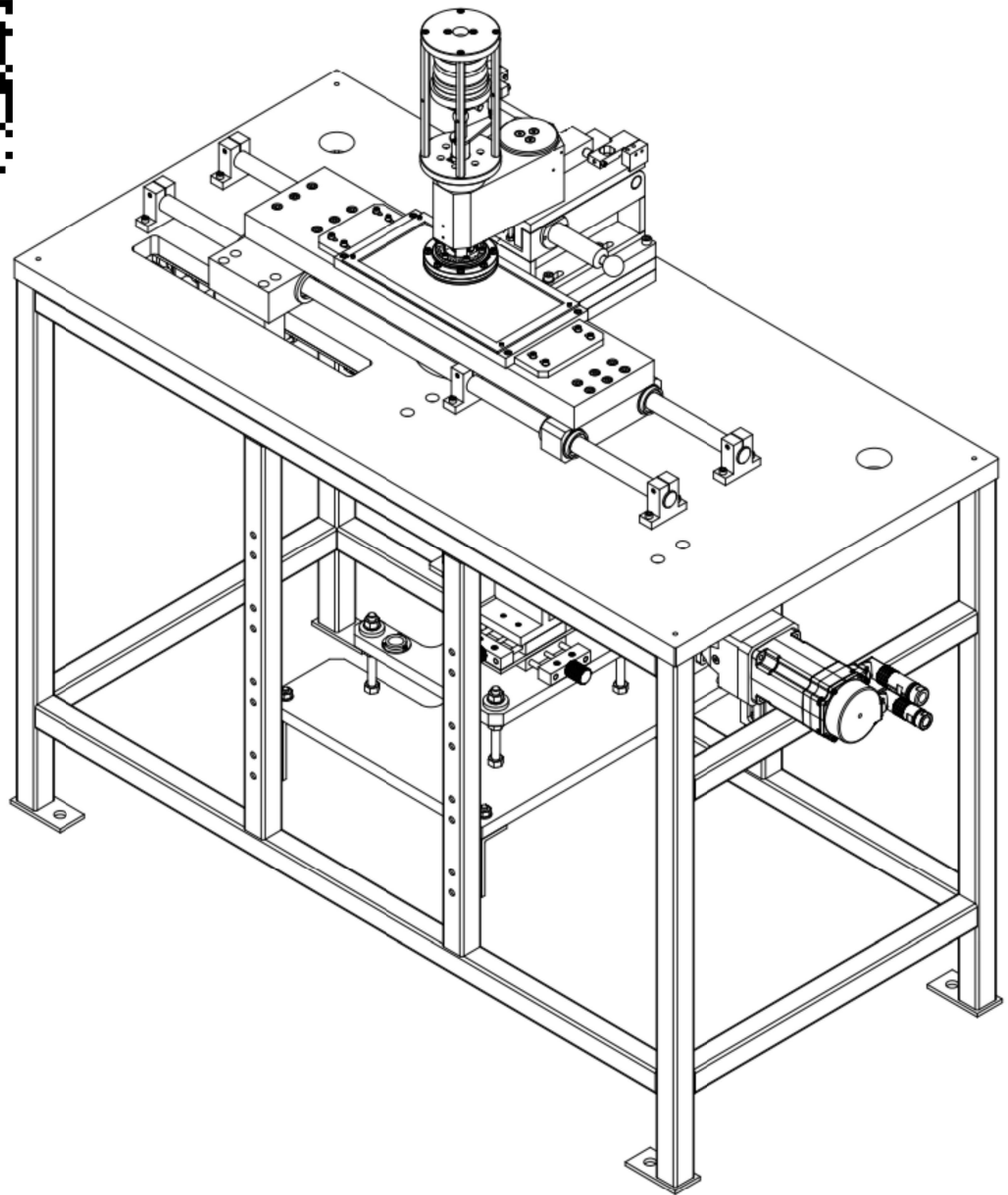
TE 53 MULTI-PURPOSE FRICTION & WEAR



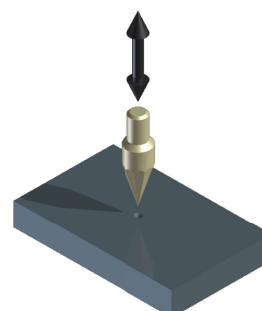
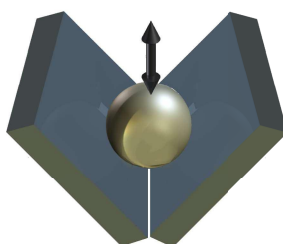
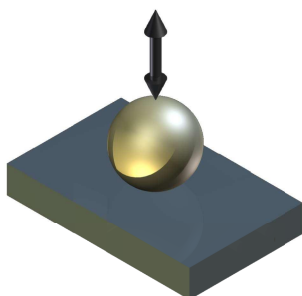
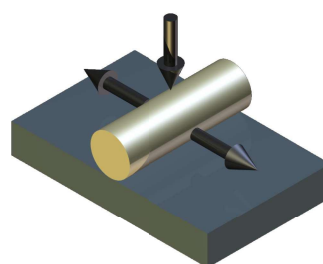
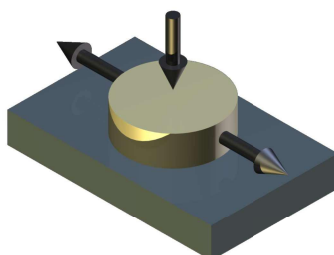
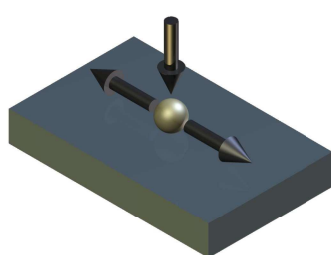
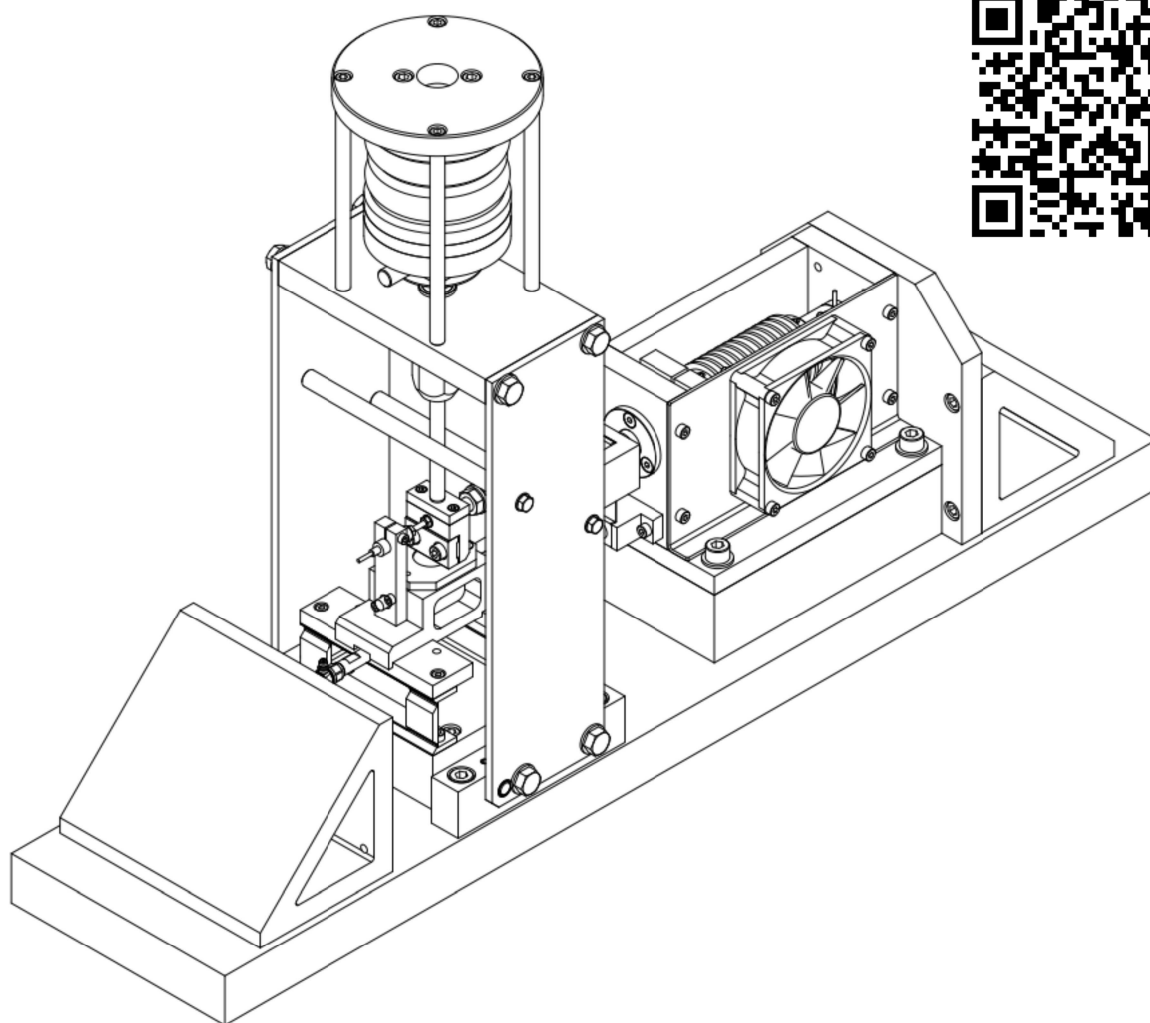
TE 55 MICRO-PITTING/BEARING FRETTING RIG



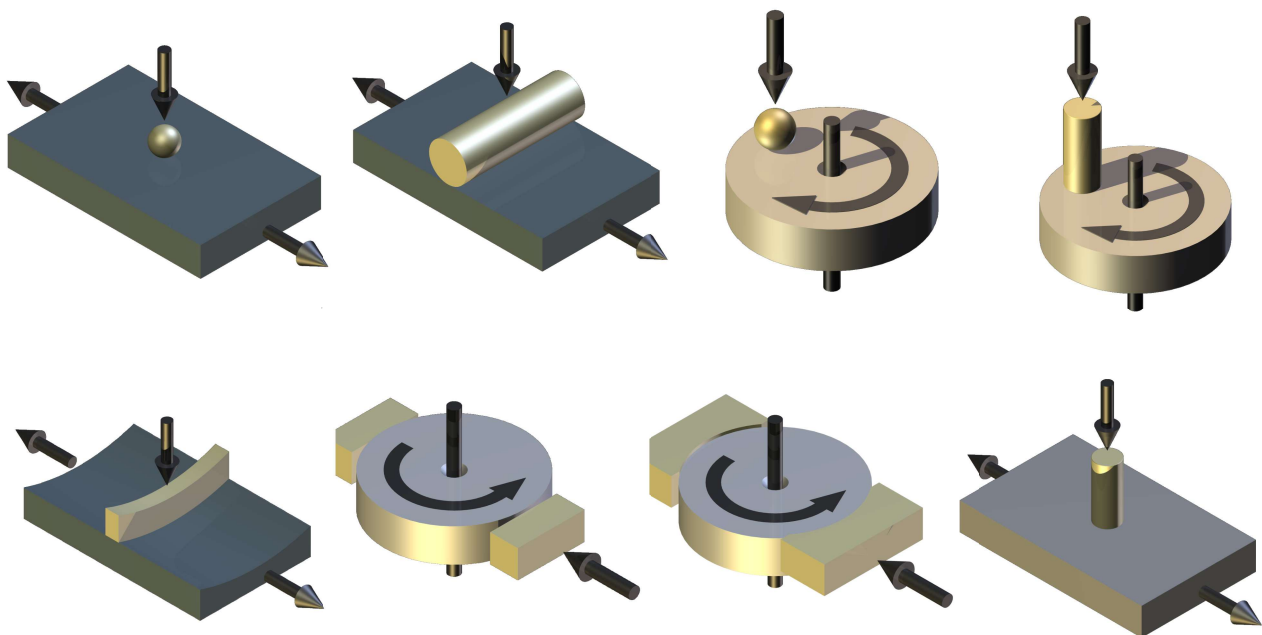
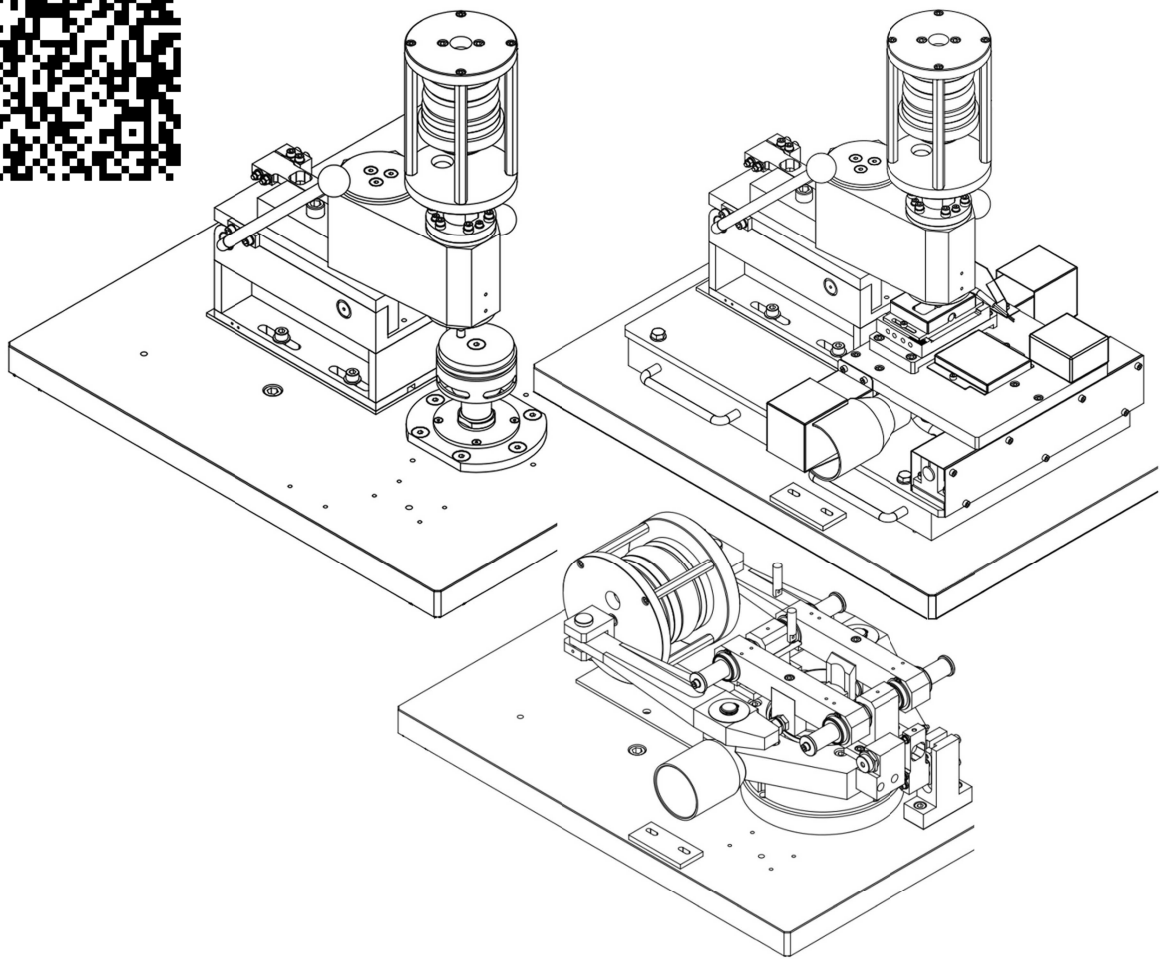
TE 37 BOWDEN-LEBEN MACHINE



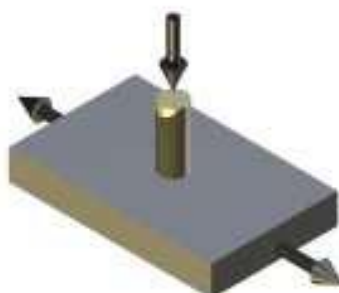
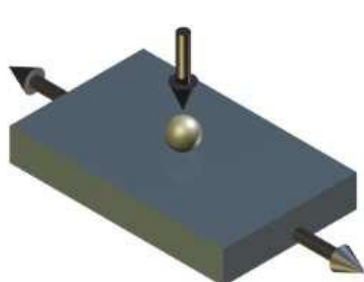
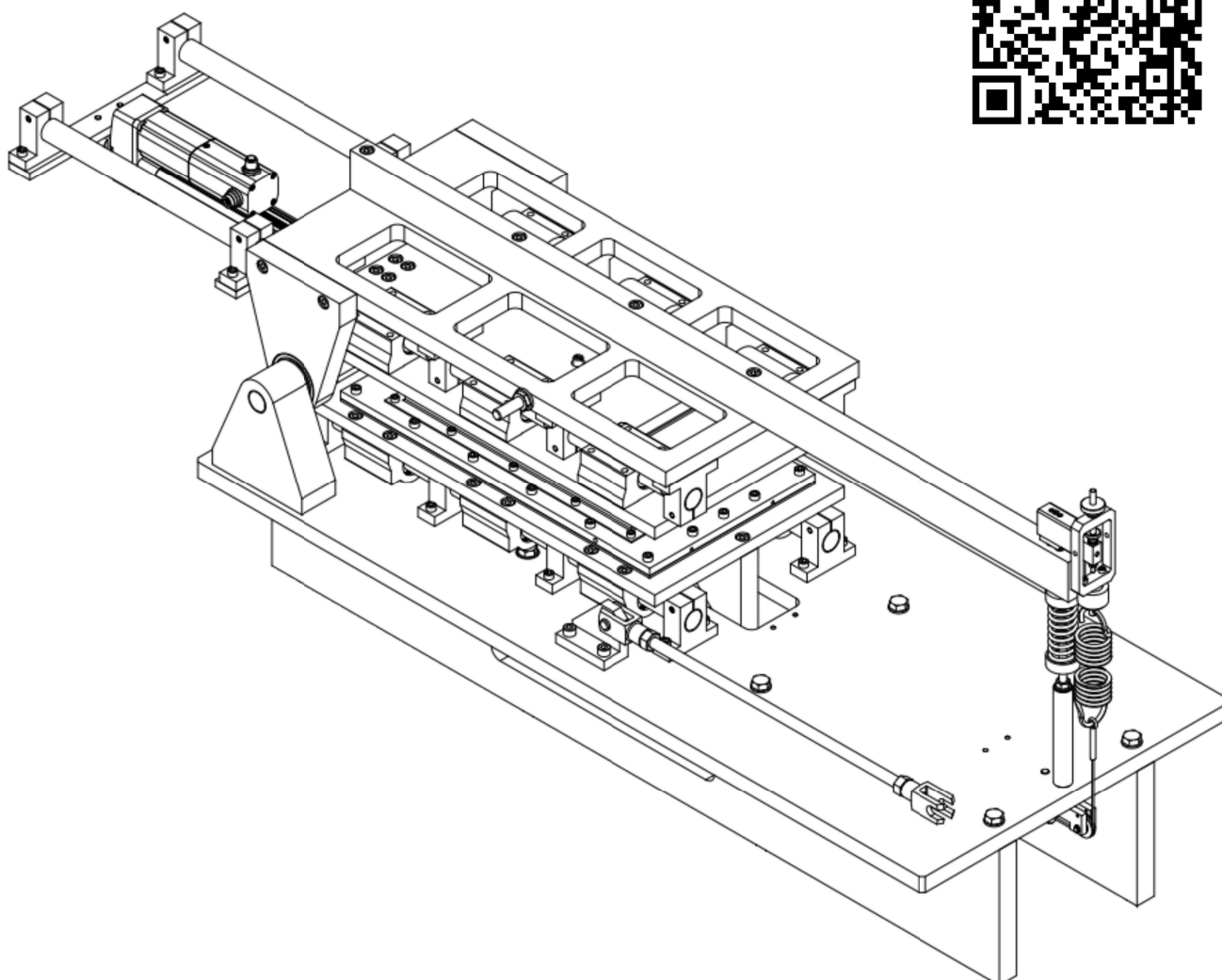
TE 44 PIEZO FRETTING RIG



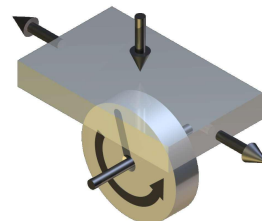
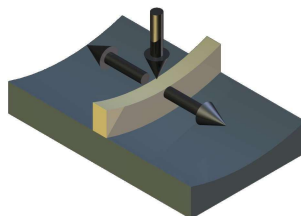
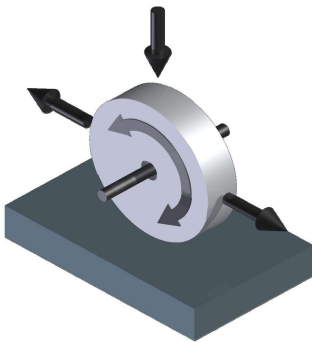
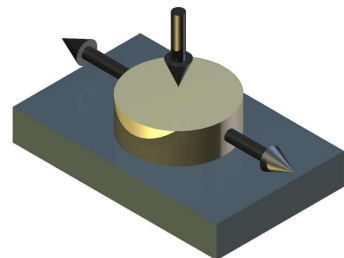
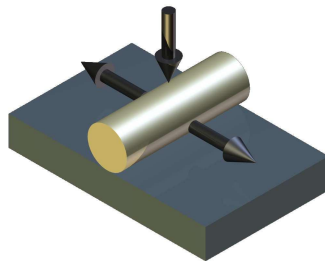
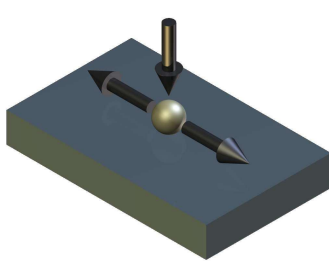
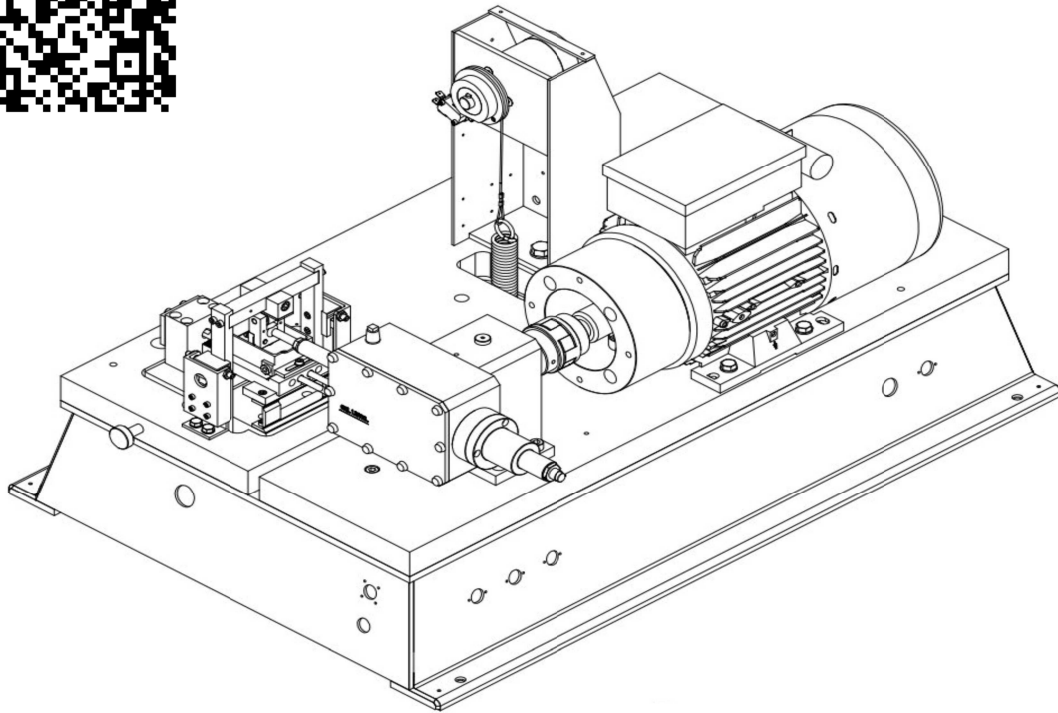
TE 67 PIN ON DISC MACHINE



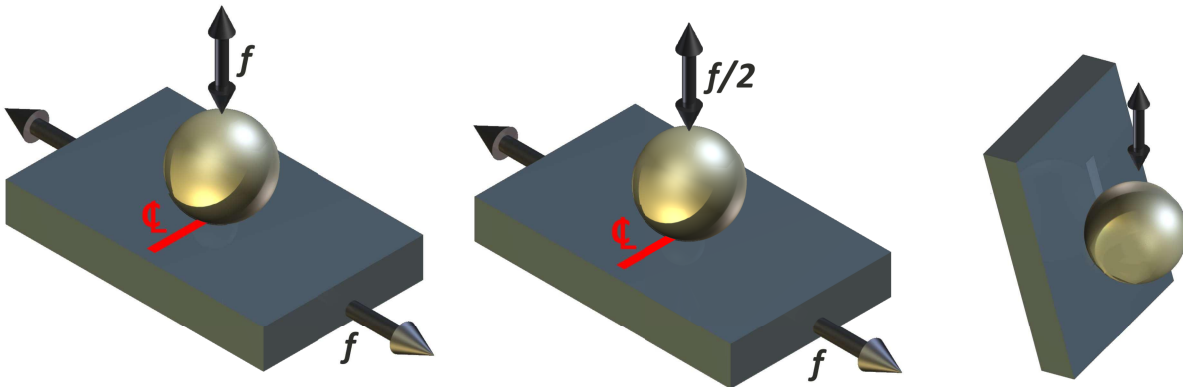
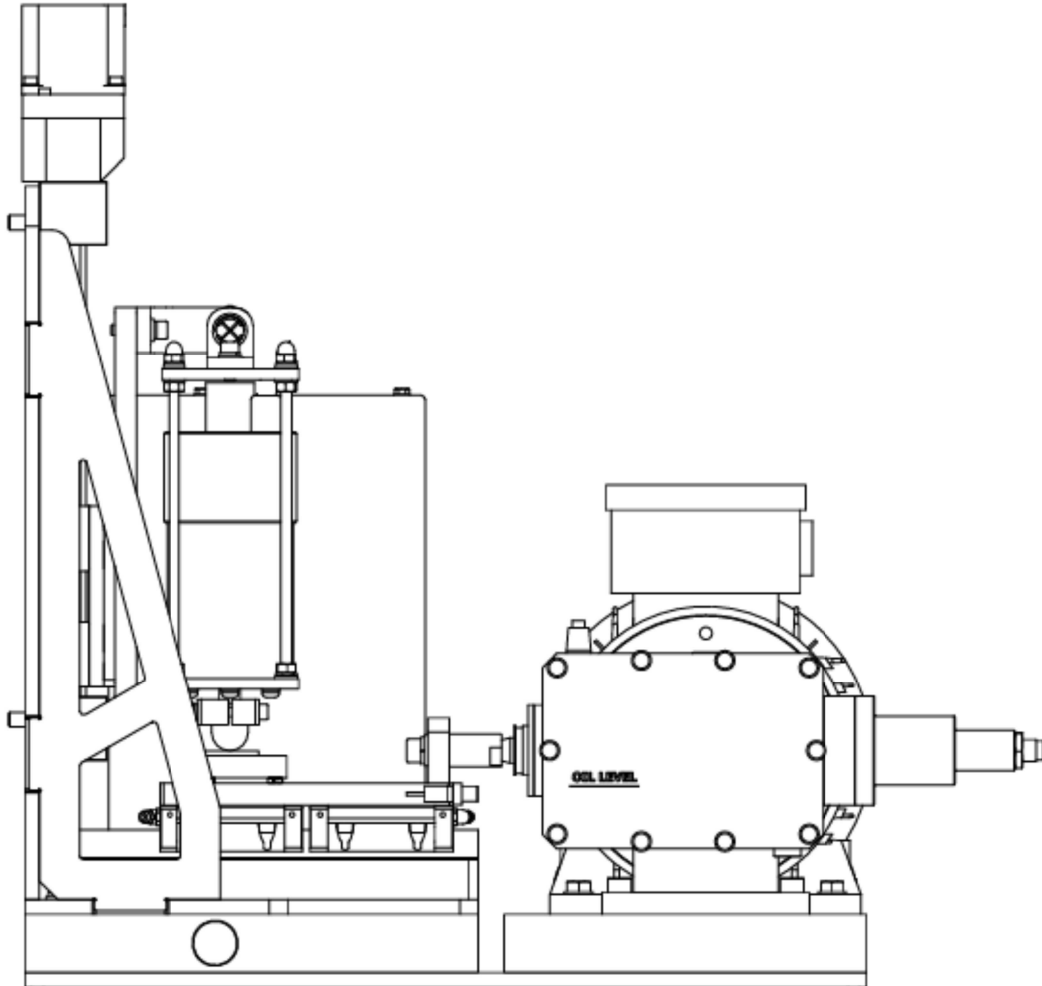
TE 69 LOAD SCANNER



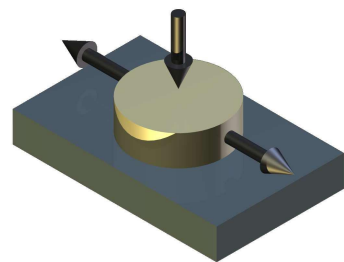
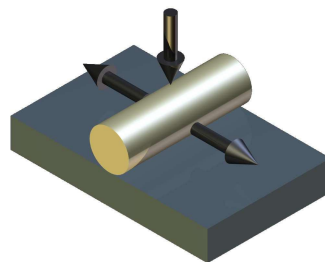
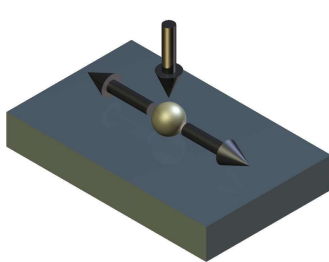
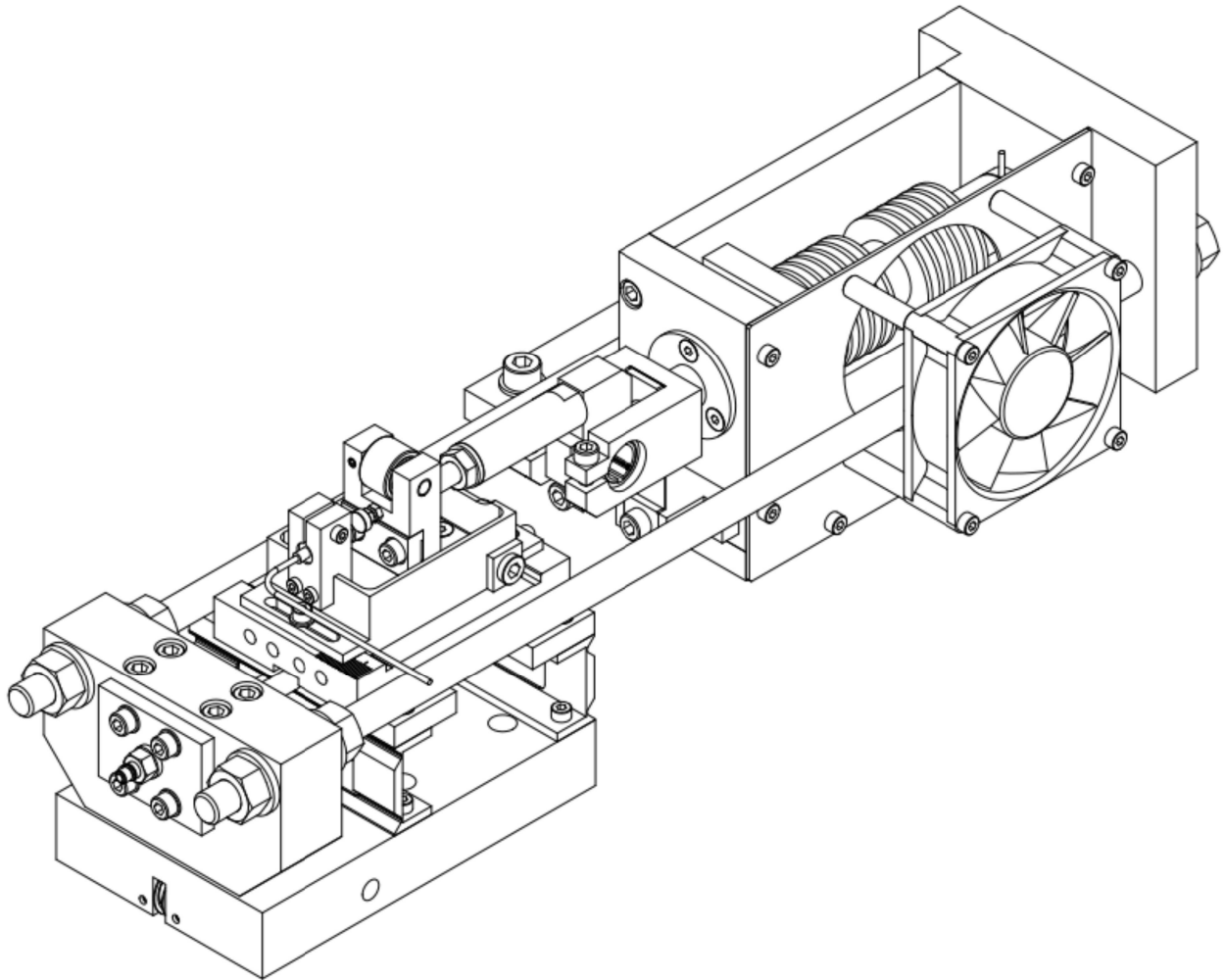
TE 77 HIGH FREQUENCY FRICTION MACHINE



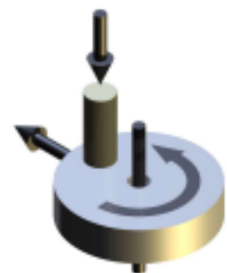
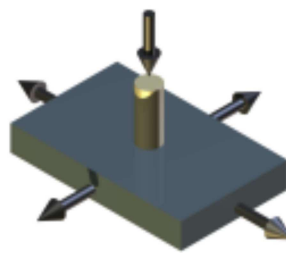
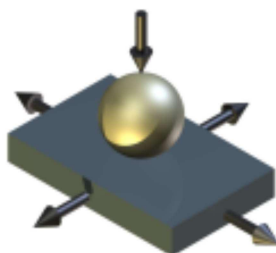
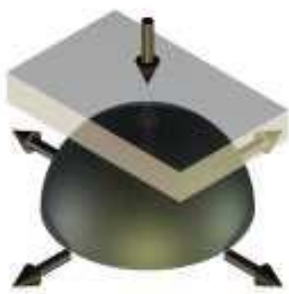
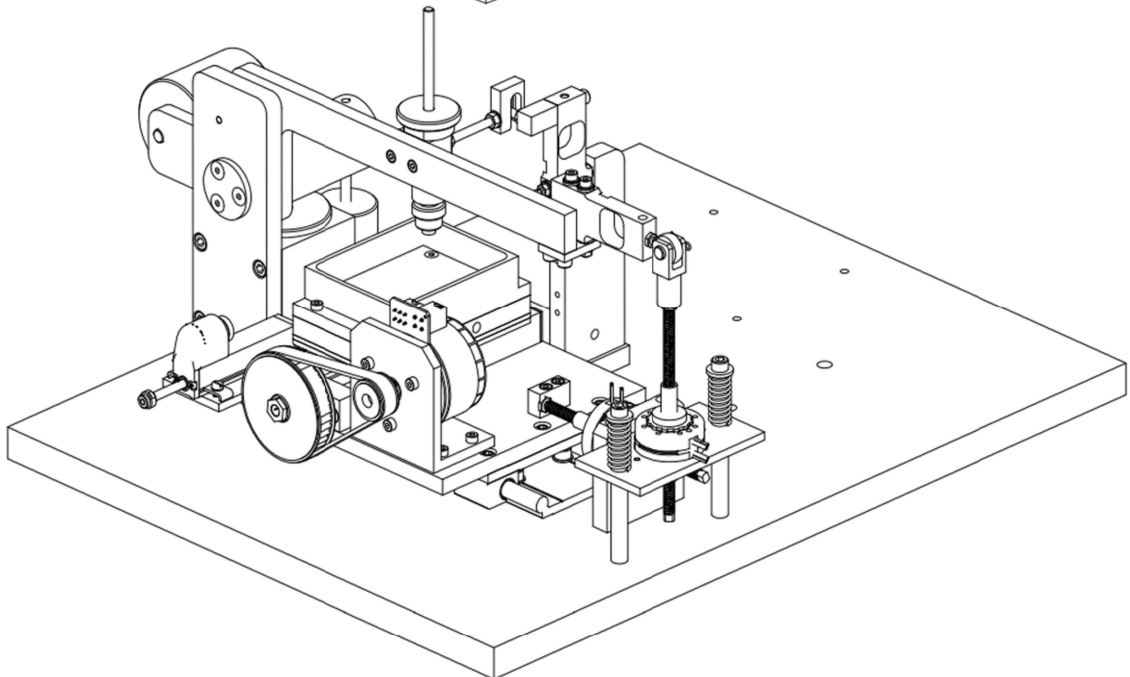
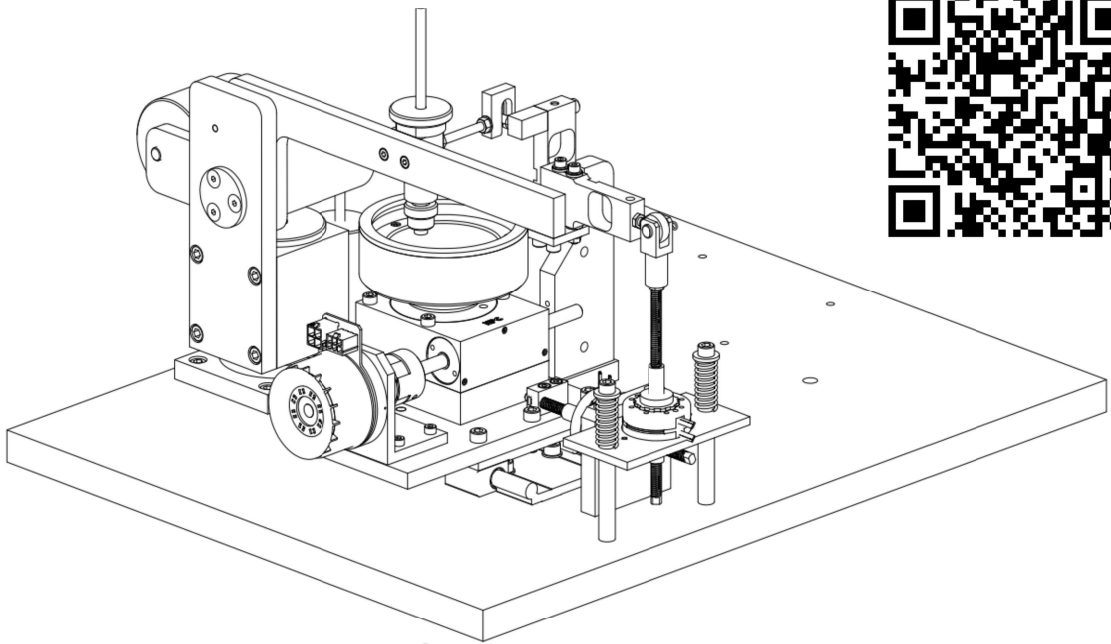
TE 77 IMPACT FRETTING ADAPTER



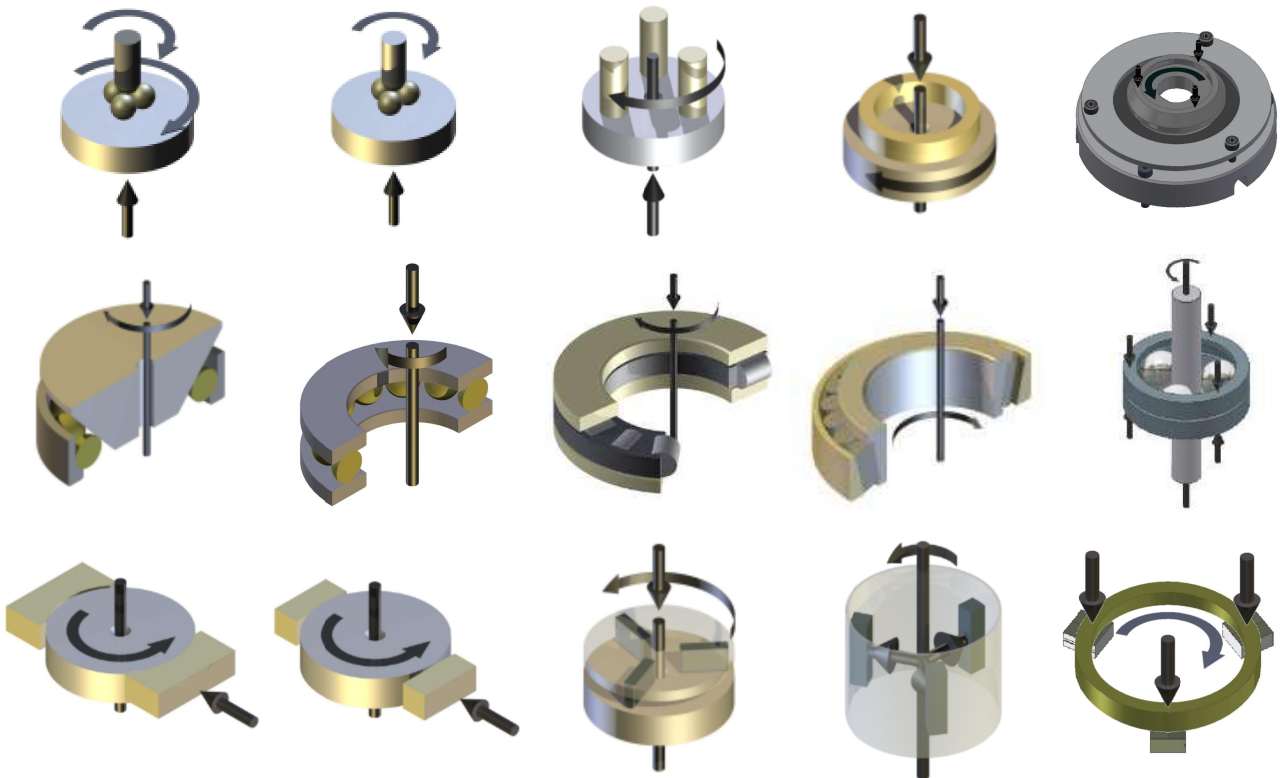
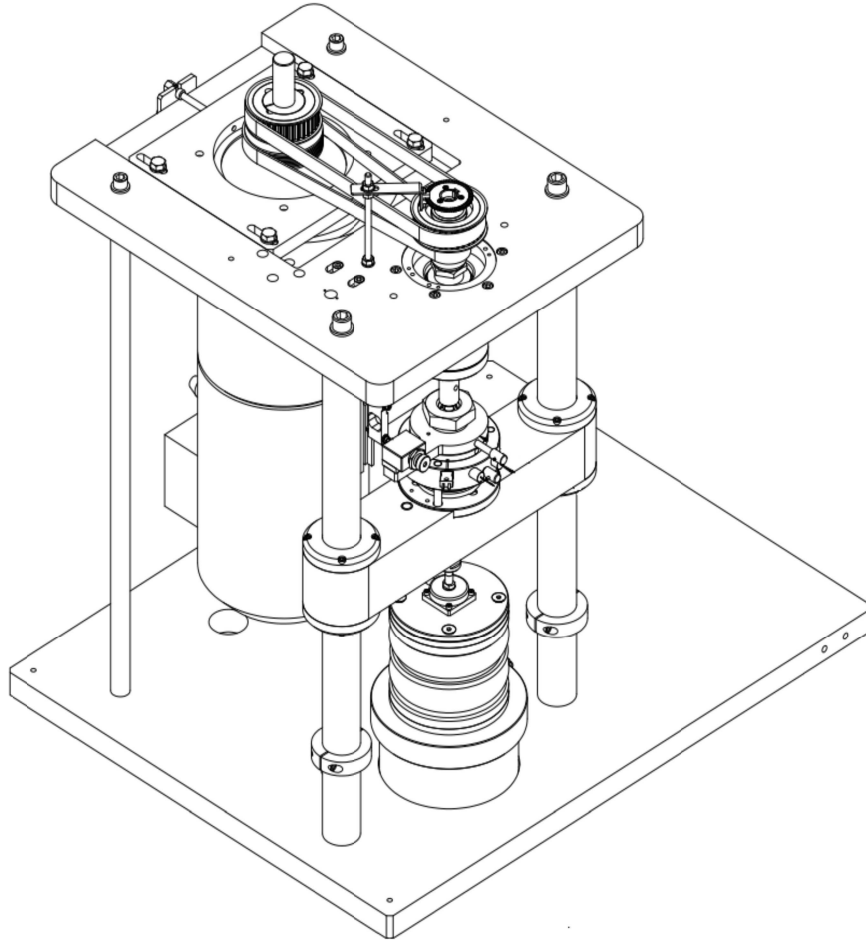
TE 77 PIEZO FRETTING ADAPTER



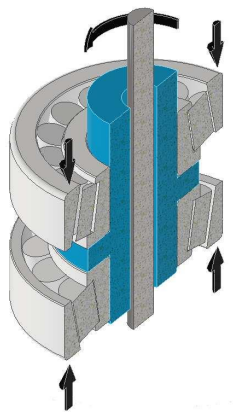
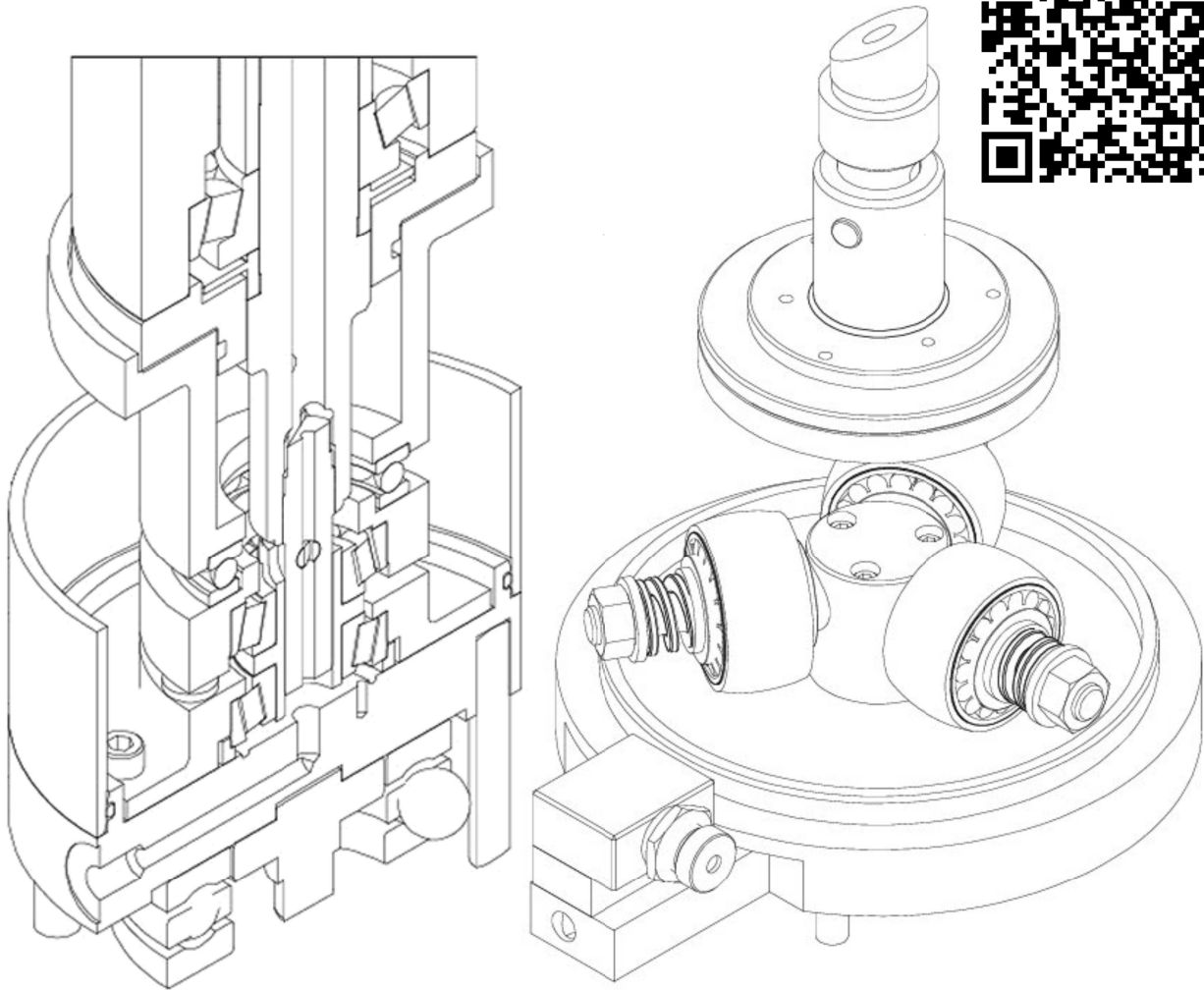
TE 79 MULTI-AXIS TRIBOMETER



TE 92 ROTARY TRIBOMETER

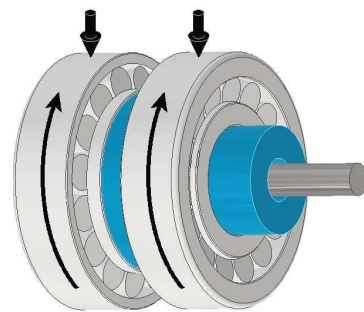


TE 92 BEARING FRICTION ADAPTERS



Patent Application: GB2501479.6

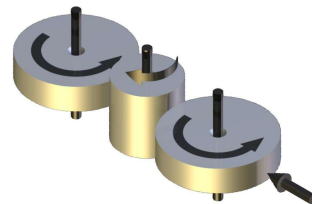
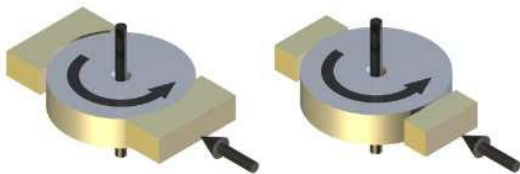
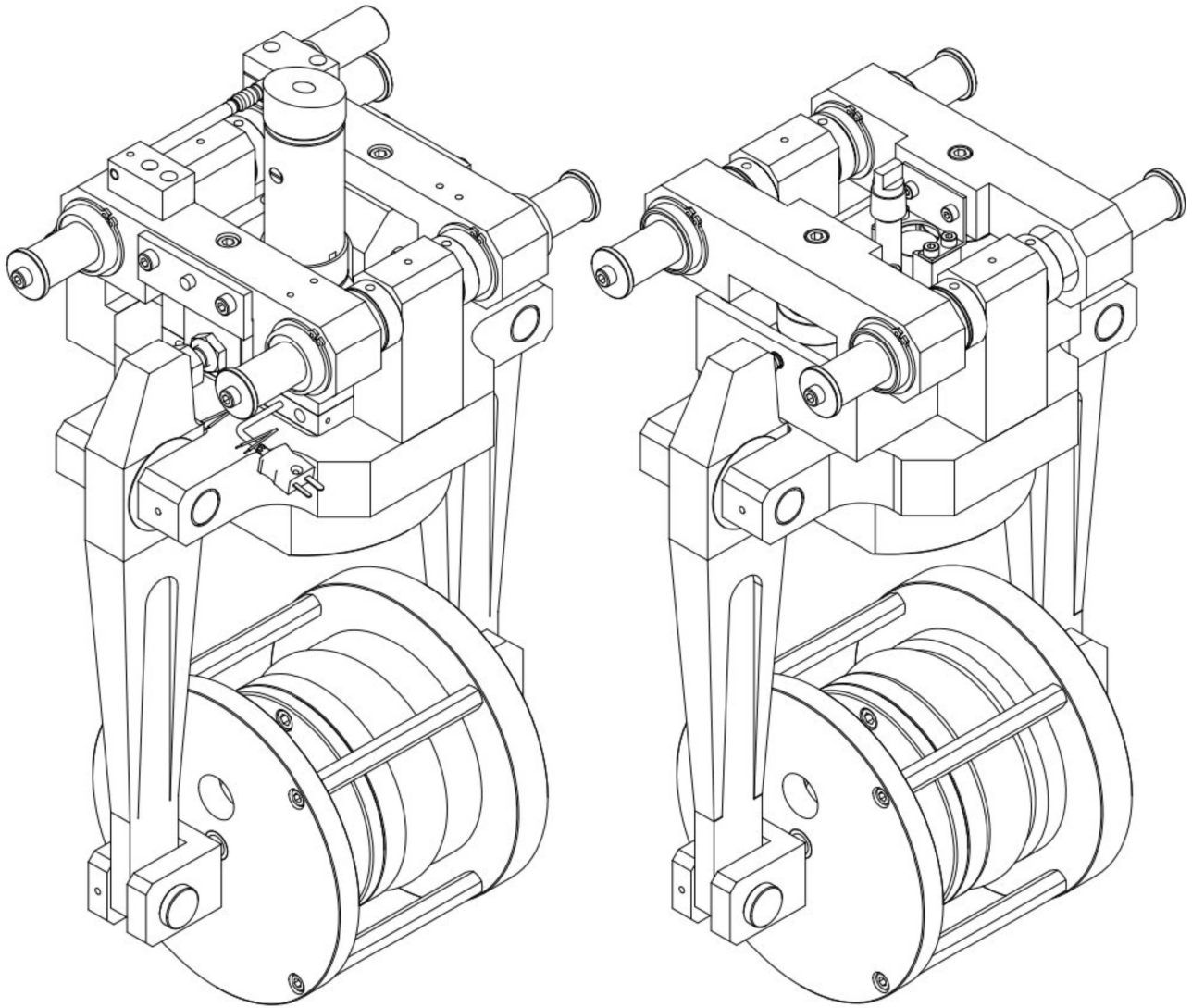
Axially Loaded Bearing Friction Adapter
for use with Rotary Tribometer



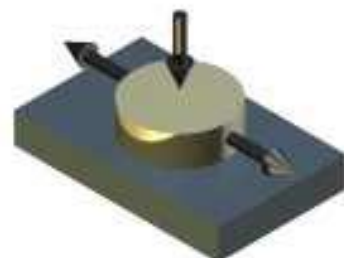
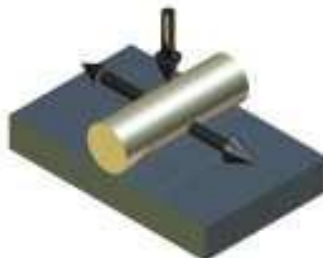
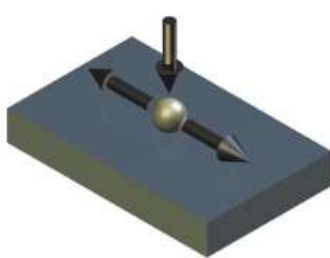
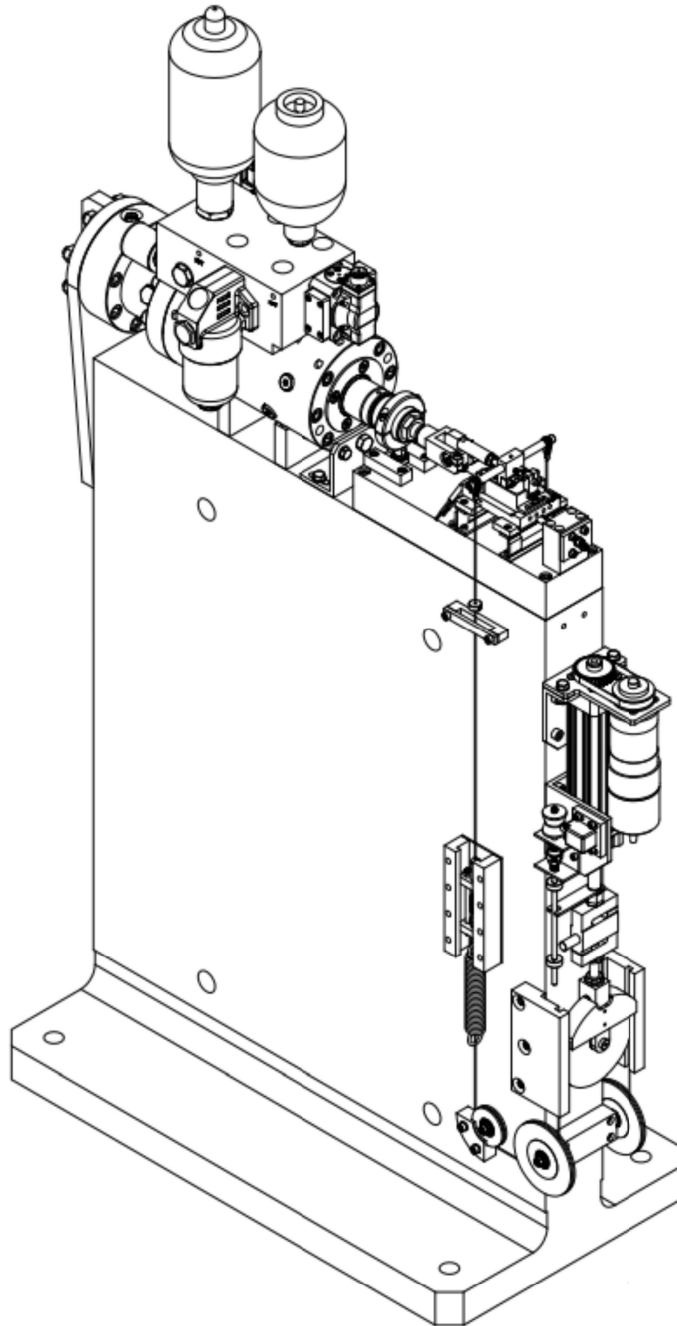
Patent Application: GB2504361.3

Radially Loaded Bearing Friction Adapter
for use with Rotary Tribometer

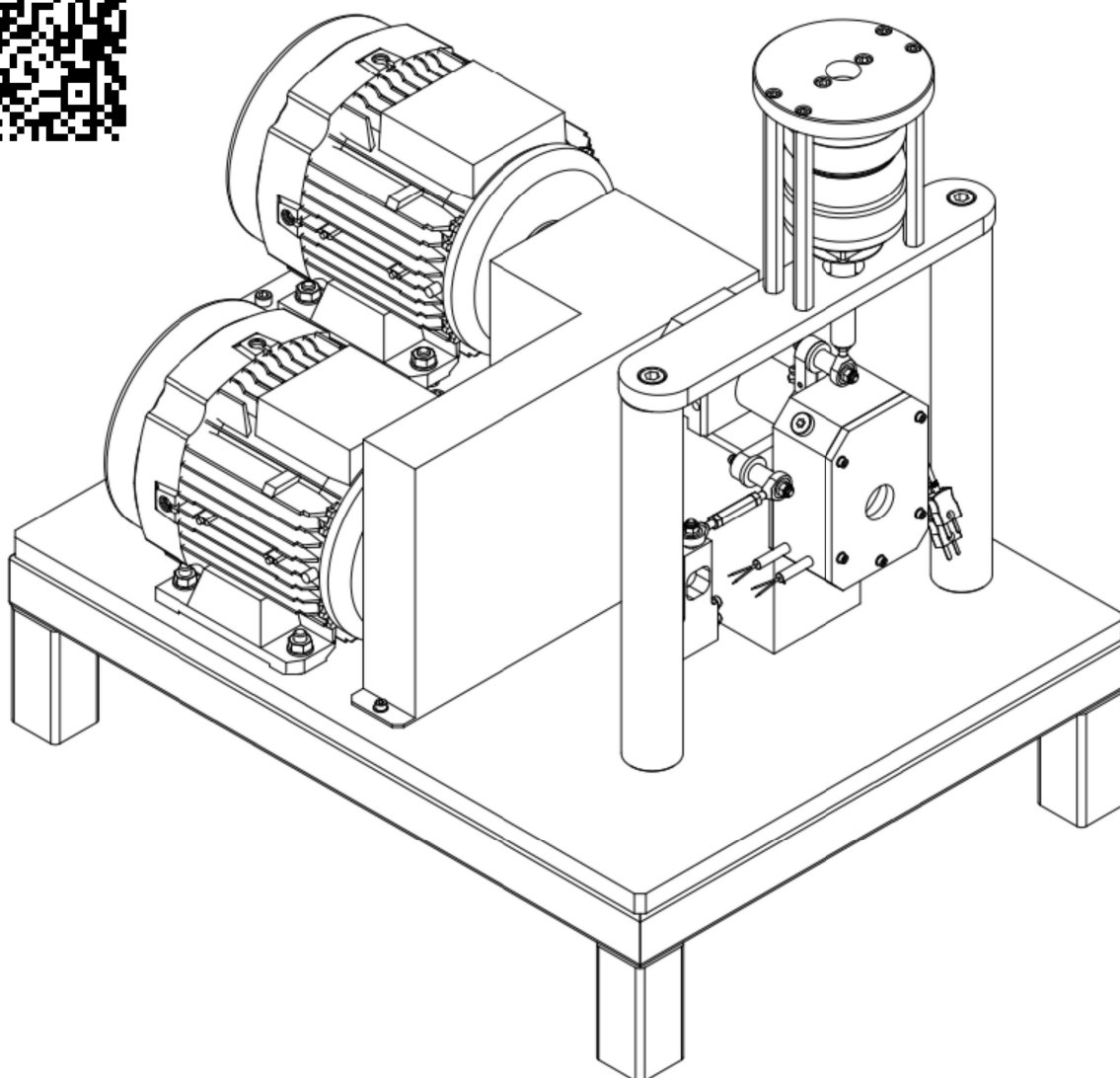
TE 92 PIN ON VEE/ROLLER ON ROLLER ADAPTER



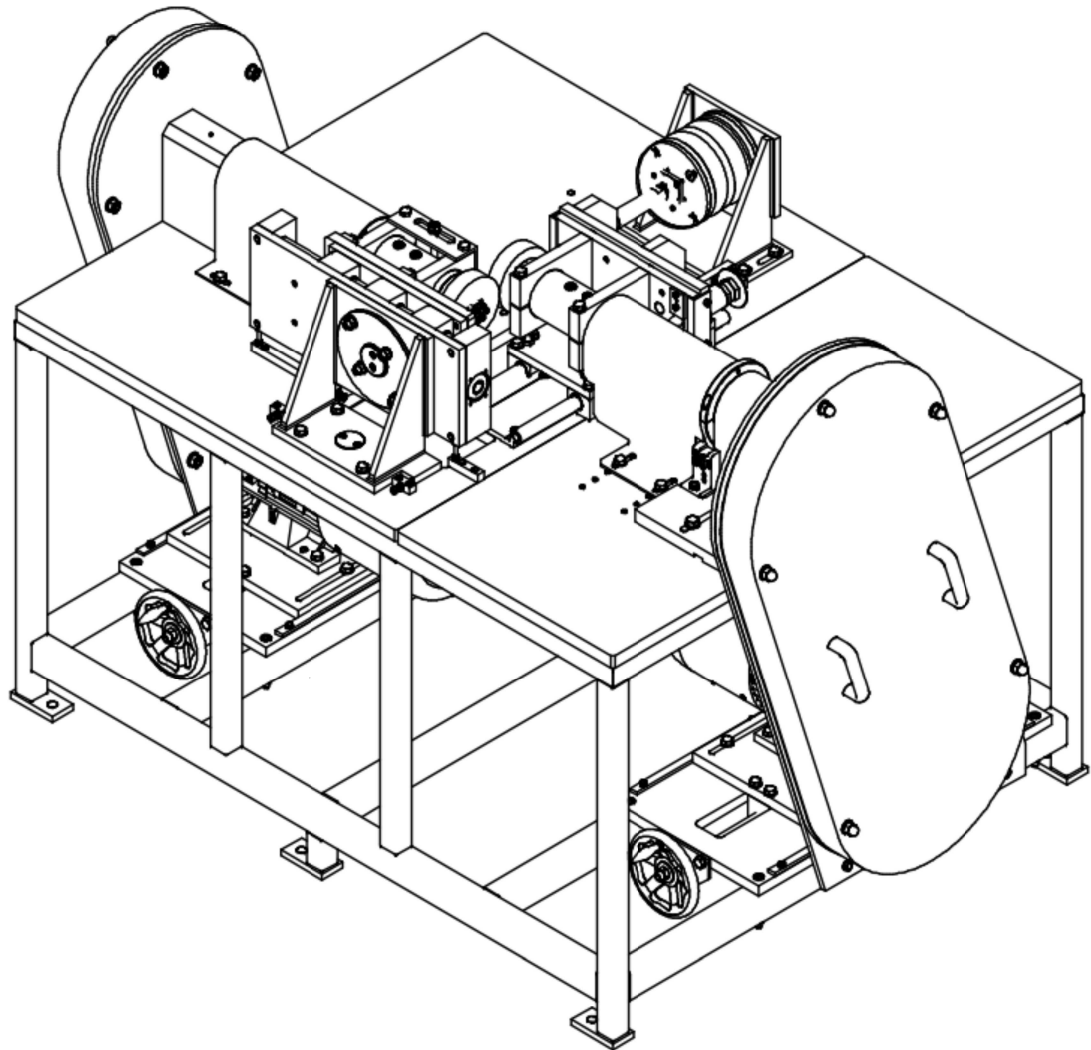
DN 44 DRY/LUBRICATED SLIDING & FRETTING



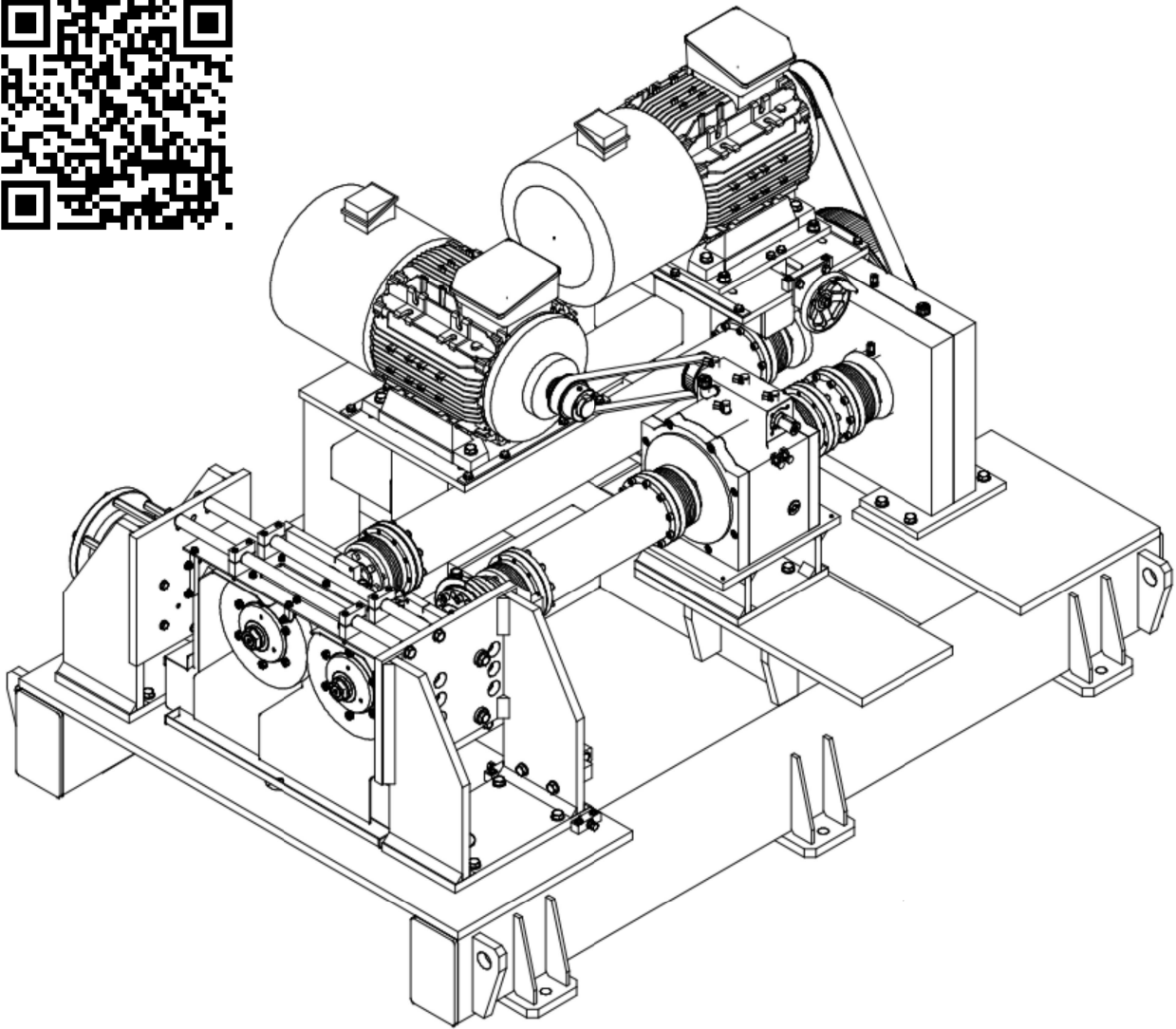
TE 54 MINI TRACTION MACHINE



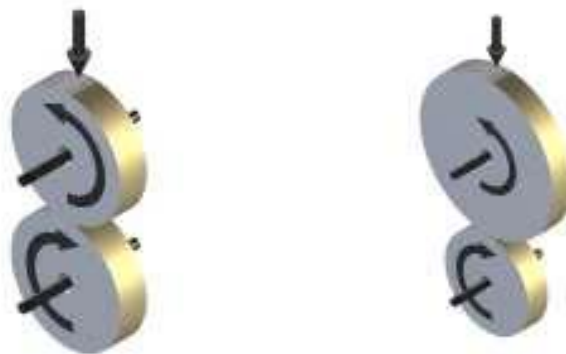
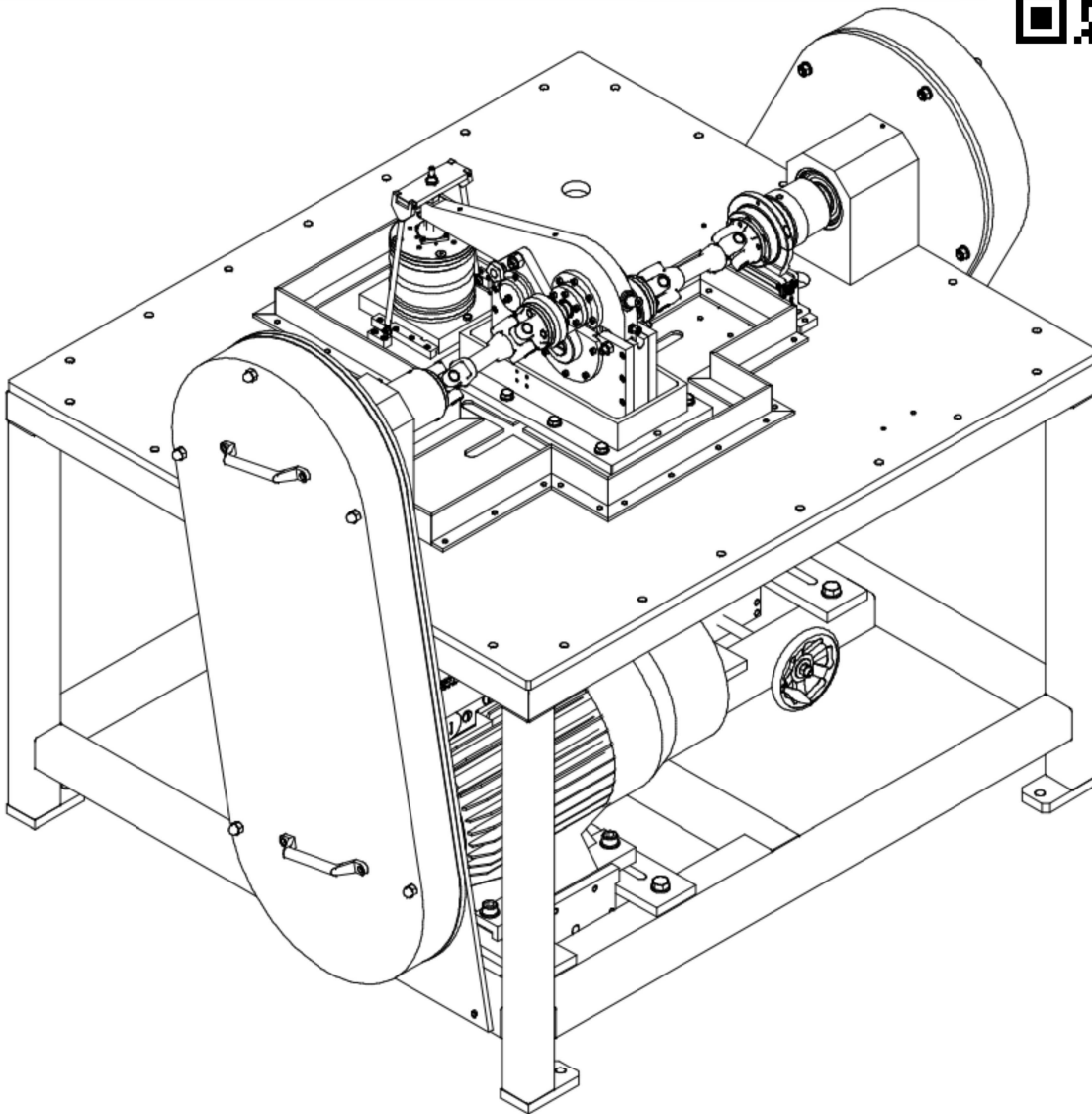
TE 72 TWO ROLLER MACHINE



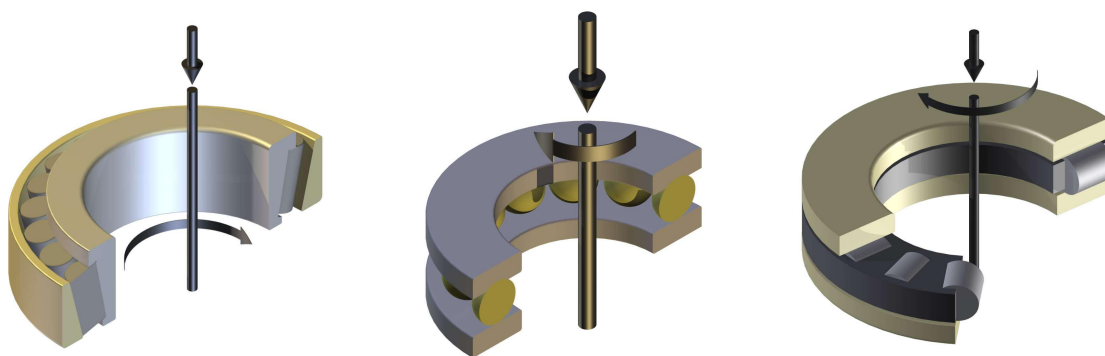
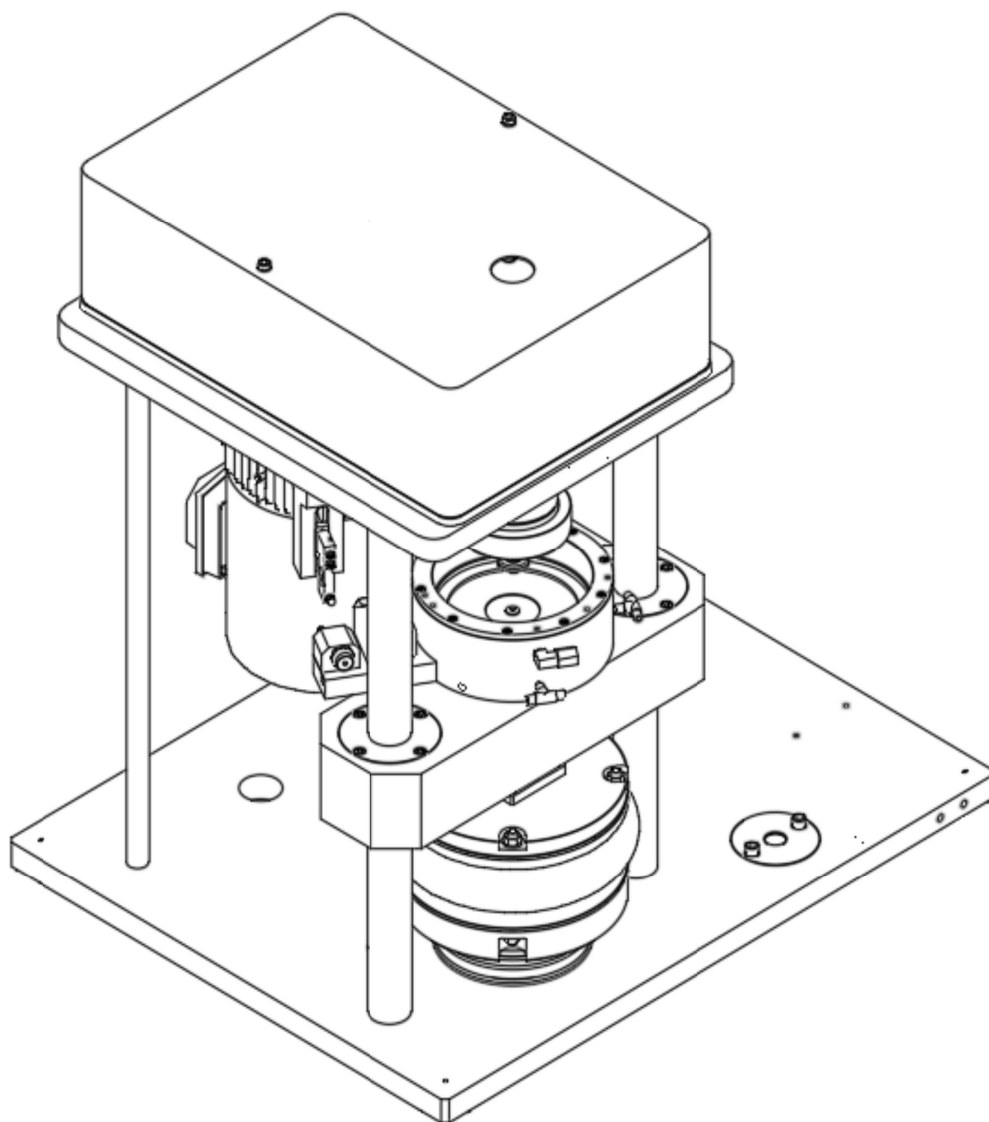
TE 73 TWO ROLLER MACHINE



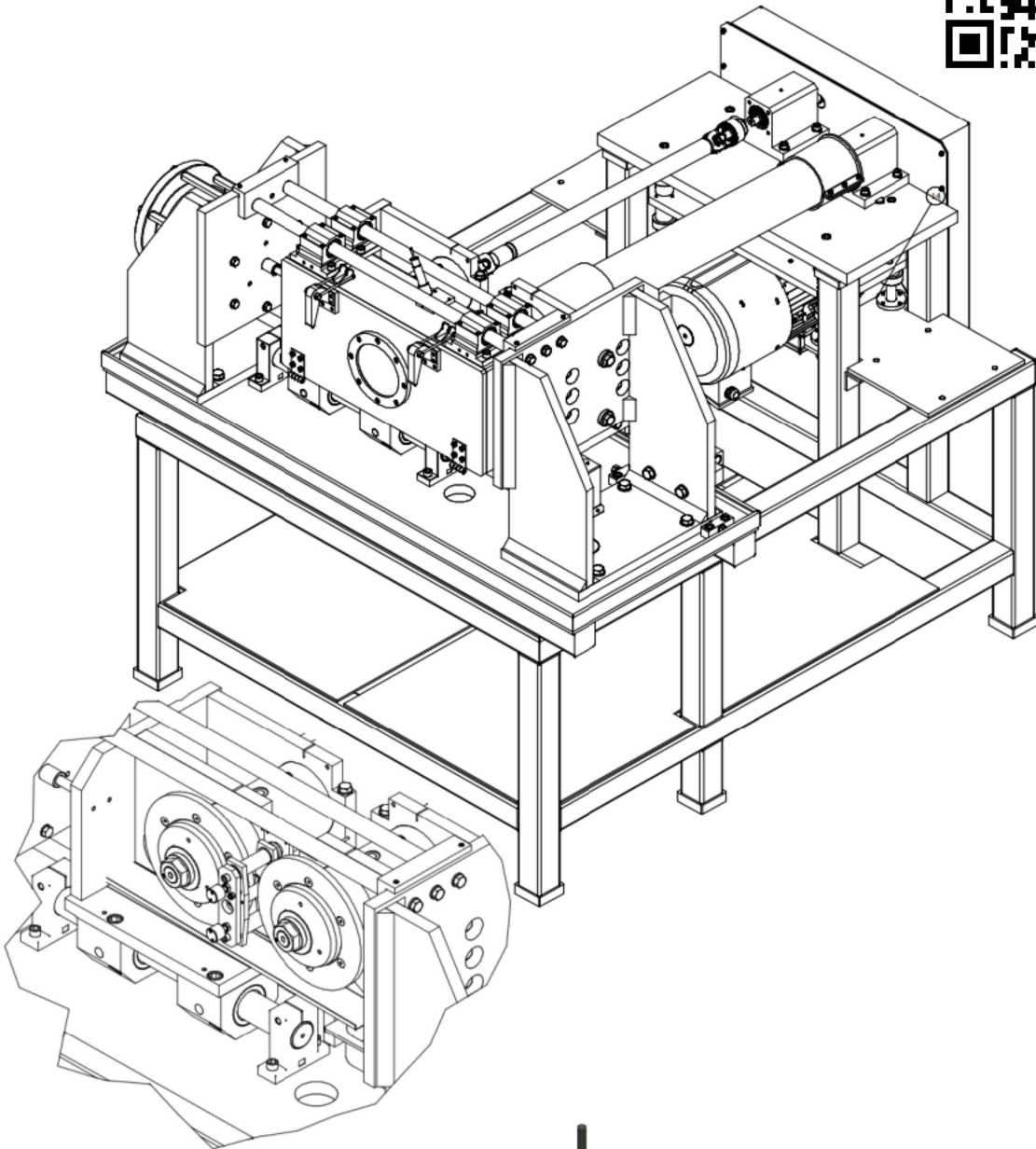
TE 74 TWO ROLLER MACHINE



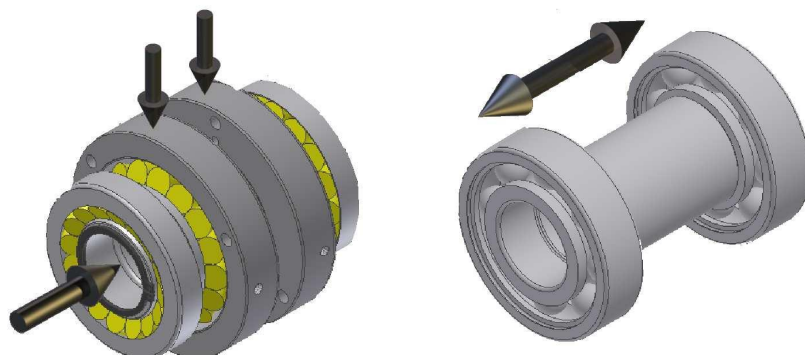
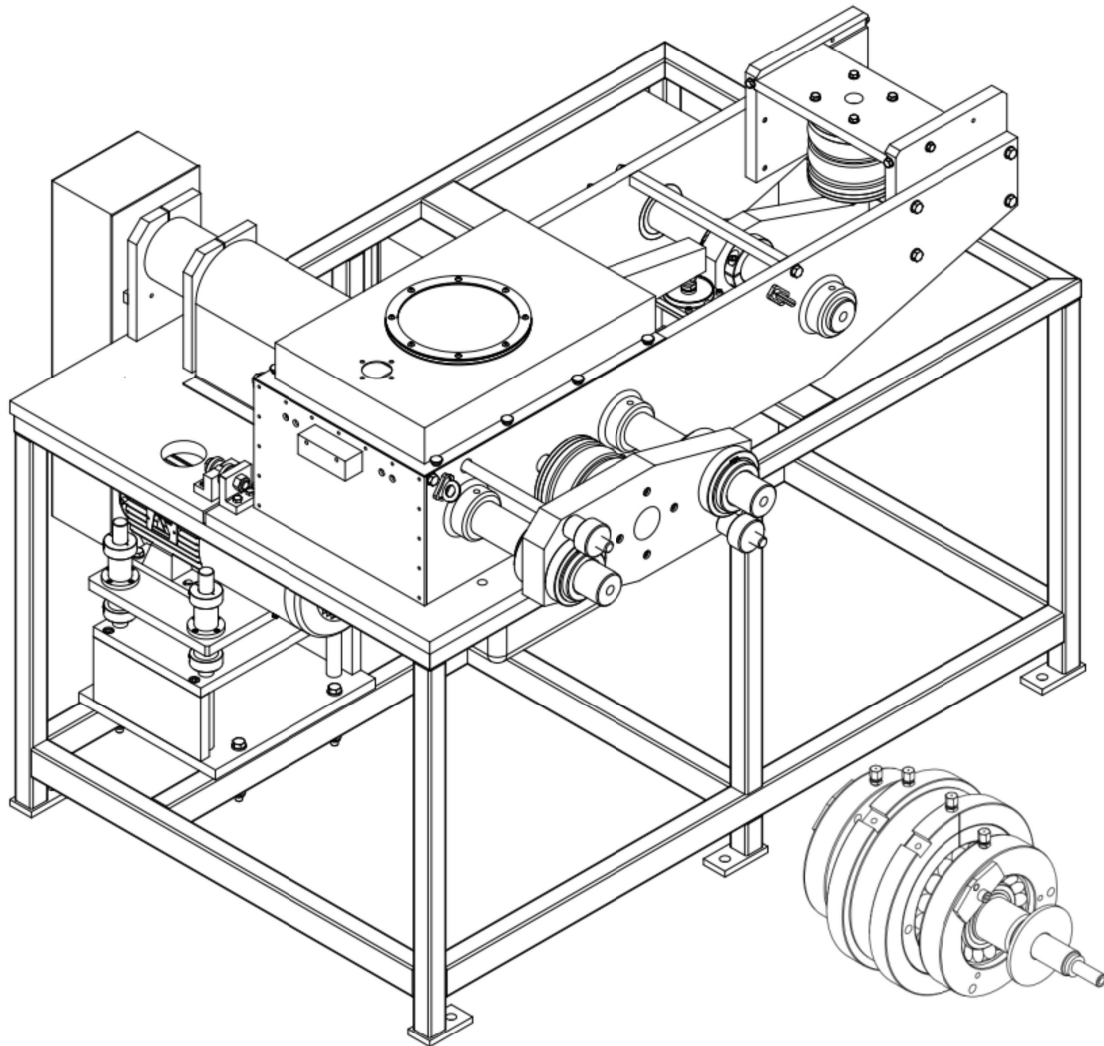
RCF 2 ROLLING BEARING TRIBOMETER



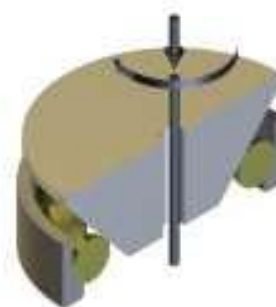
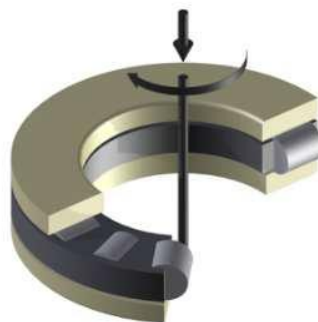
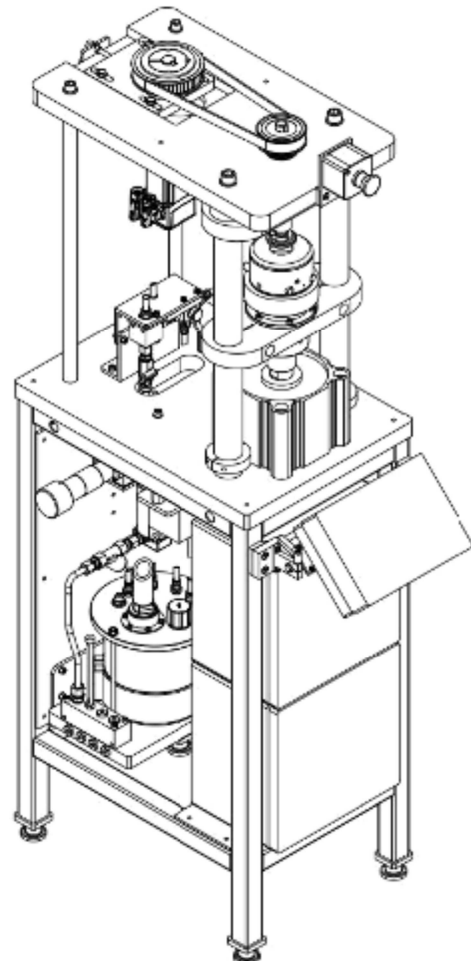
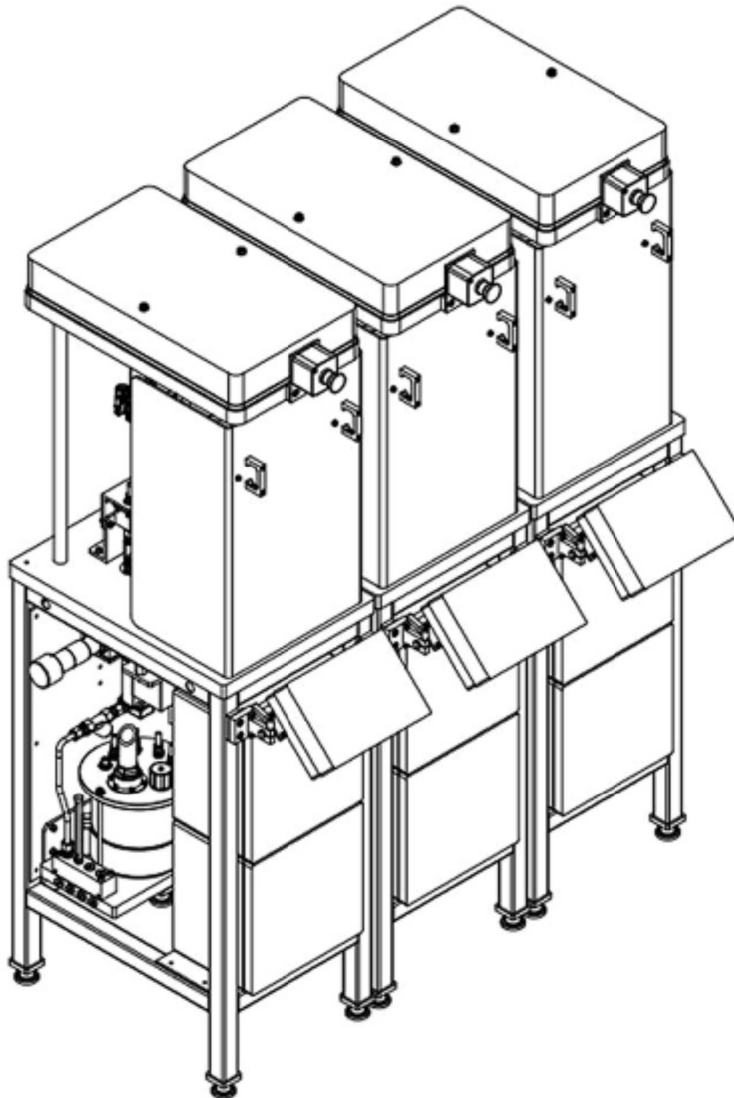
RCF 3 ROLLING CONTACT FATIGUE MACHINE



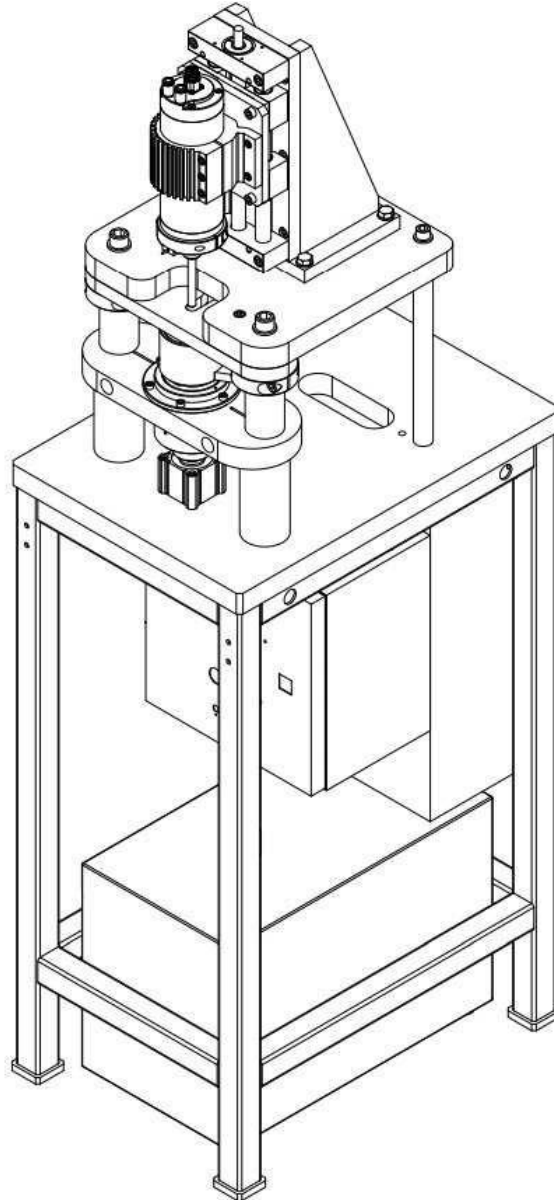
RCF 4 ROLLING CONTACT FATIGUE MACHINE



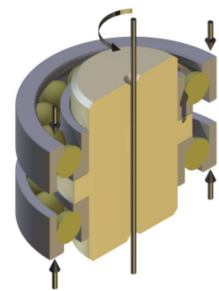
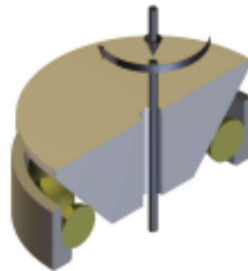
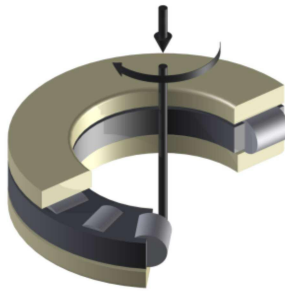
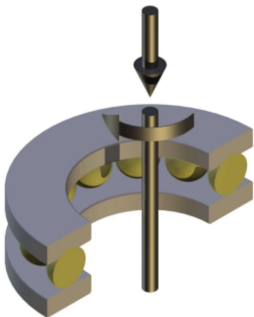
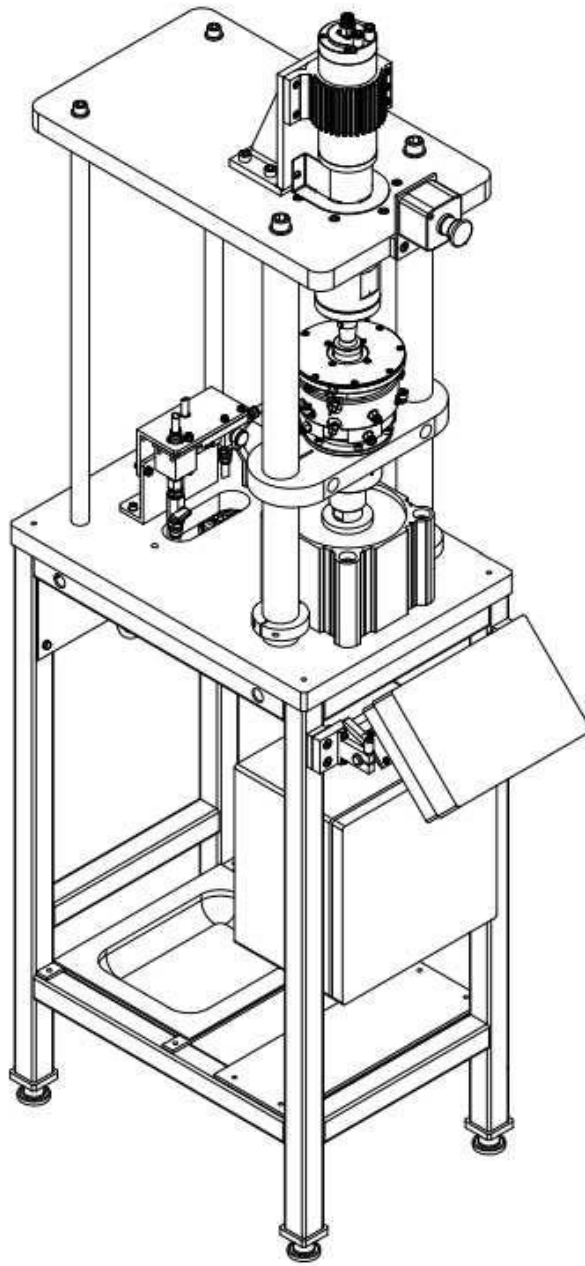
RCF 5 ROLLING CONTACT FATIGUE – 3,000 RPM



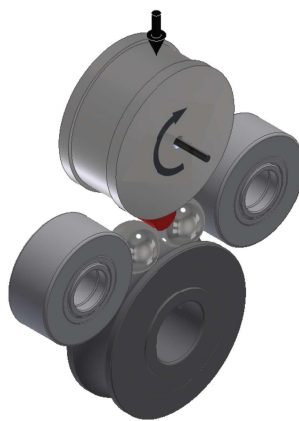
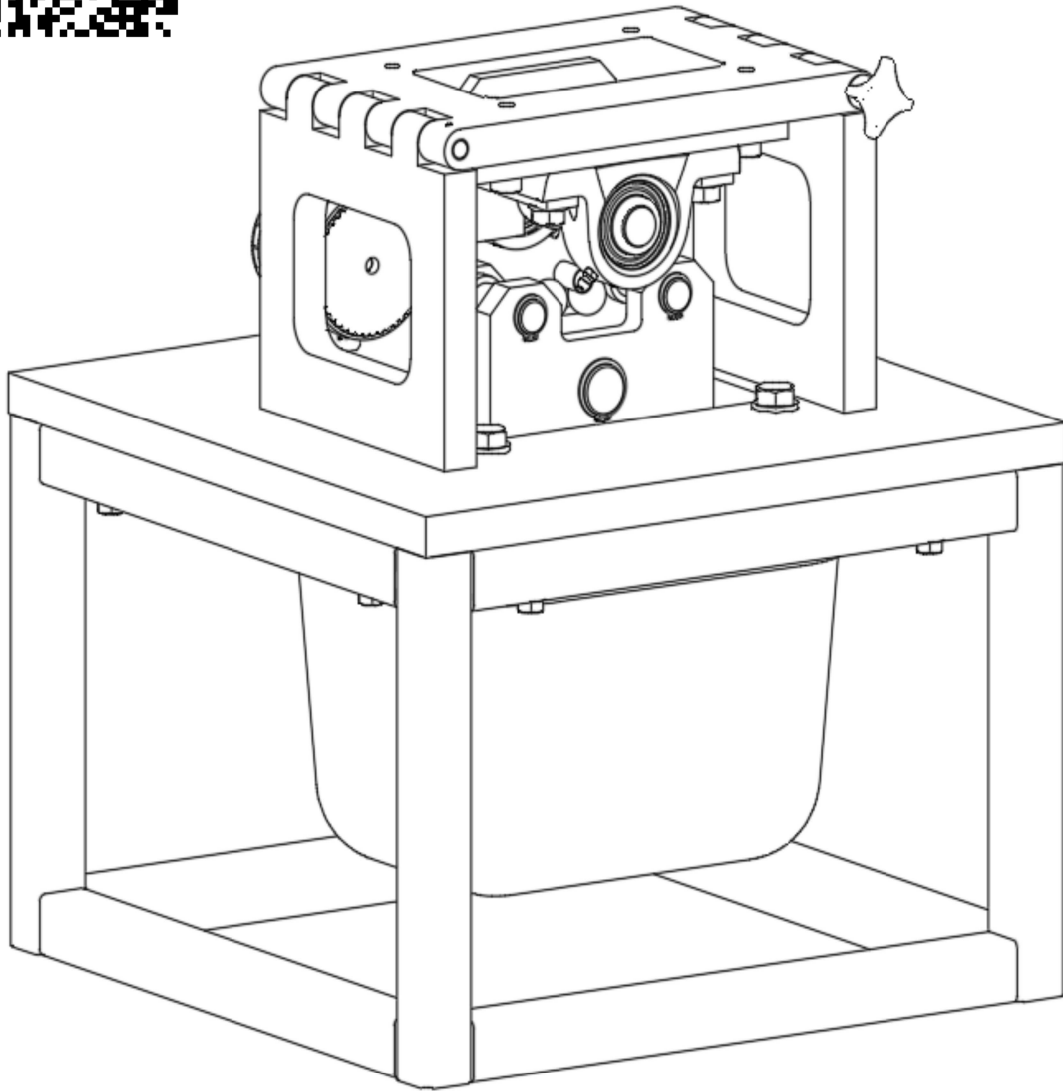
RCF 6 THREE BALL ON ROD – 15,000 RPM



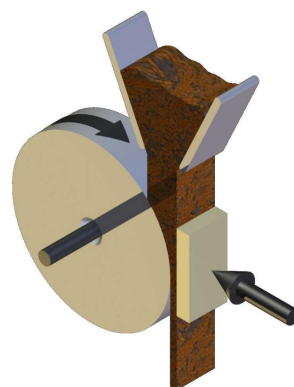
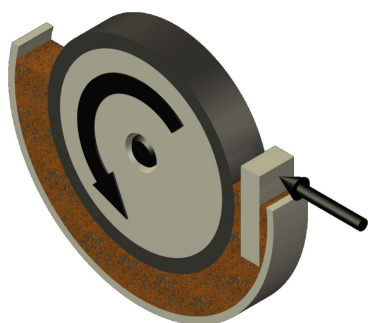
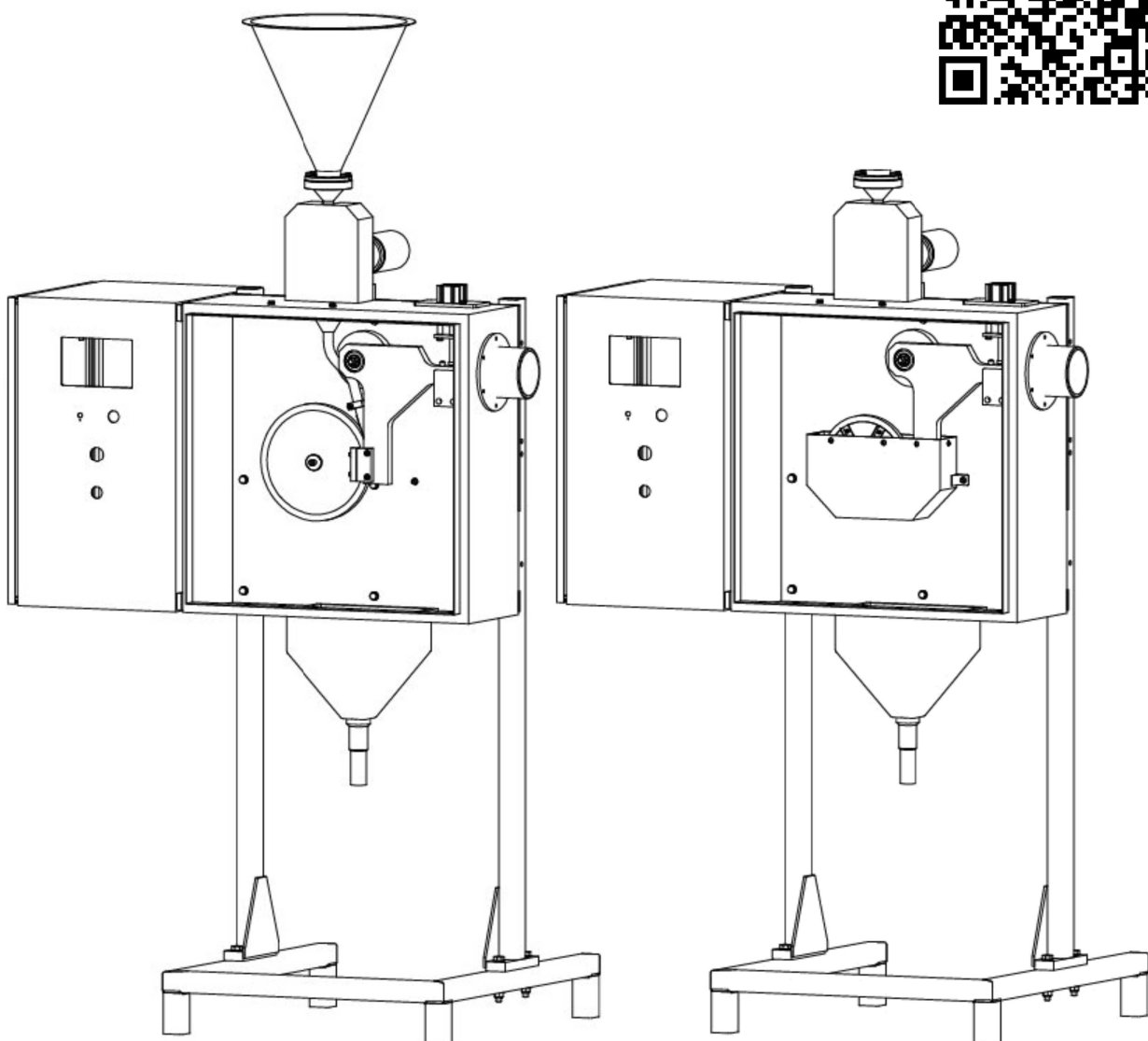
RCF 7 ROLLING CONTACT FATIGUE – 10,000 RPM



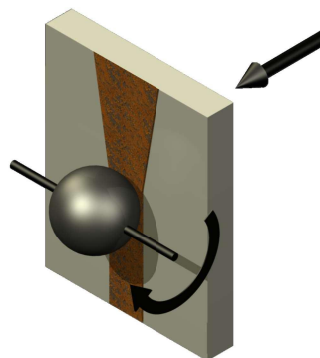
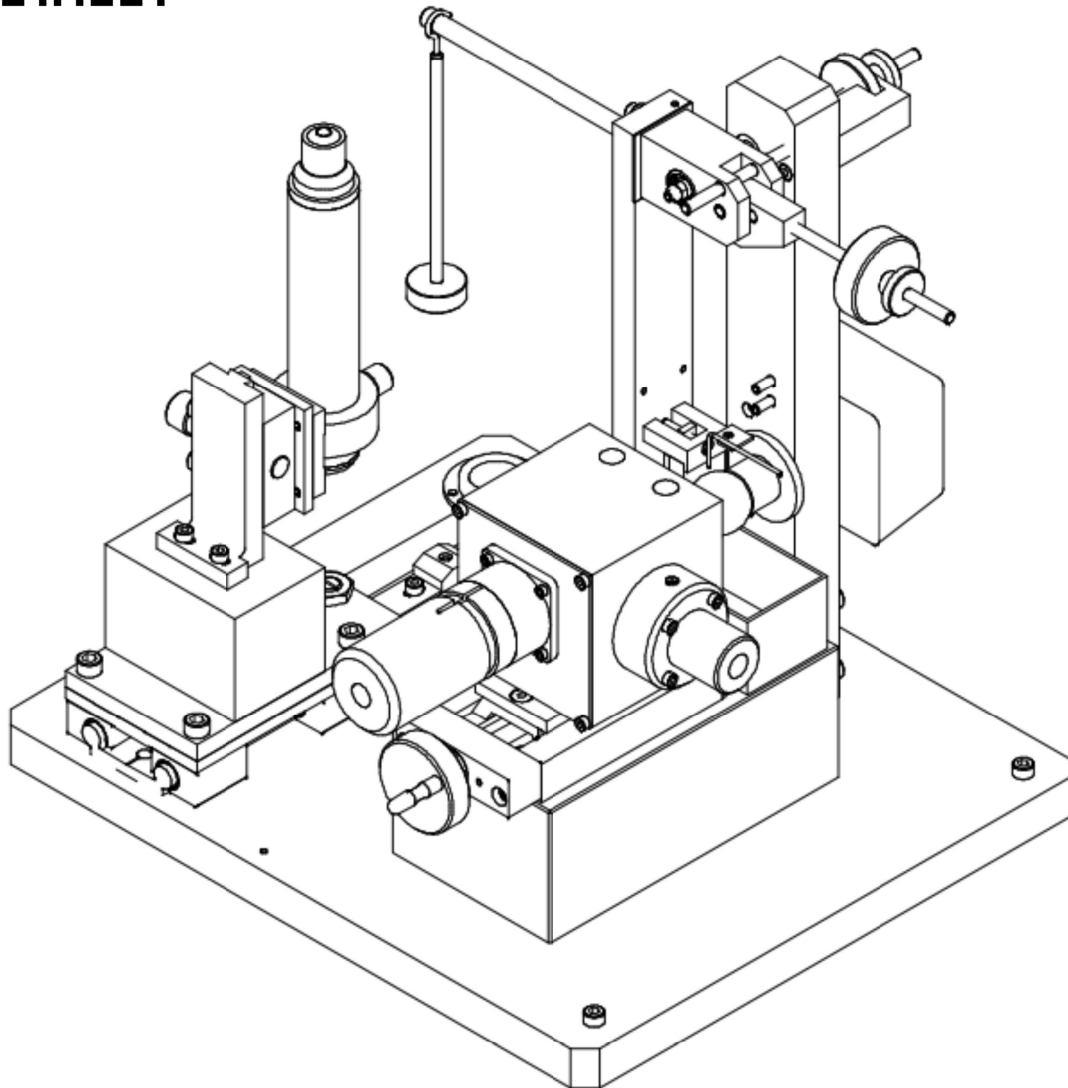
RCF 8 TWO BALL ON ROD ROLLING CONTACT FATIGUE



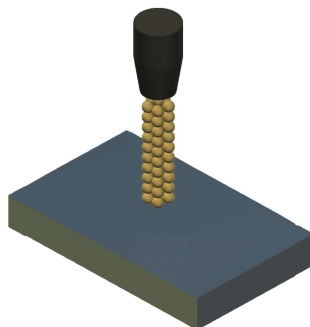
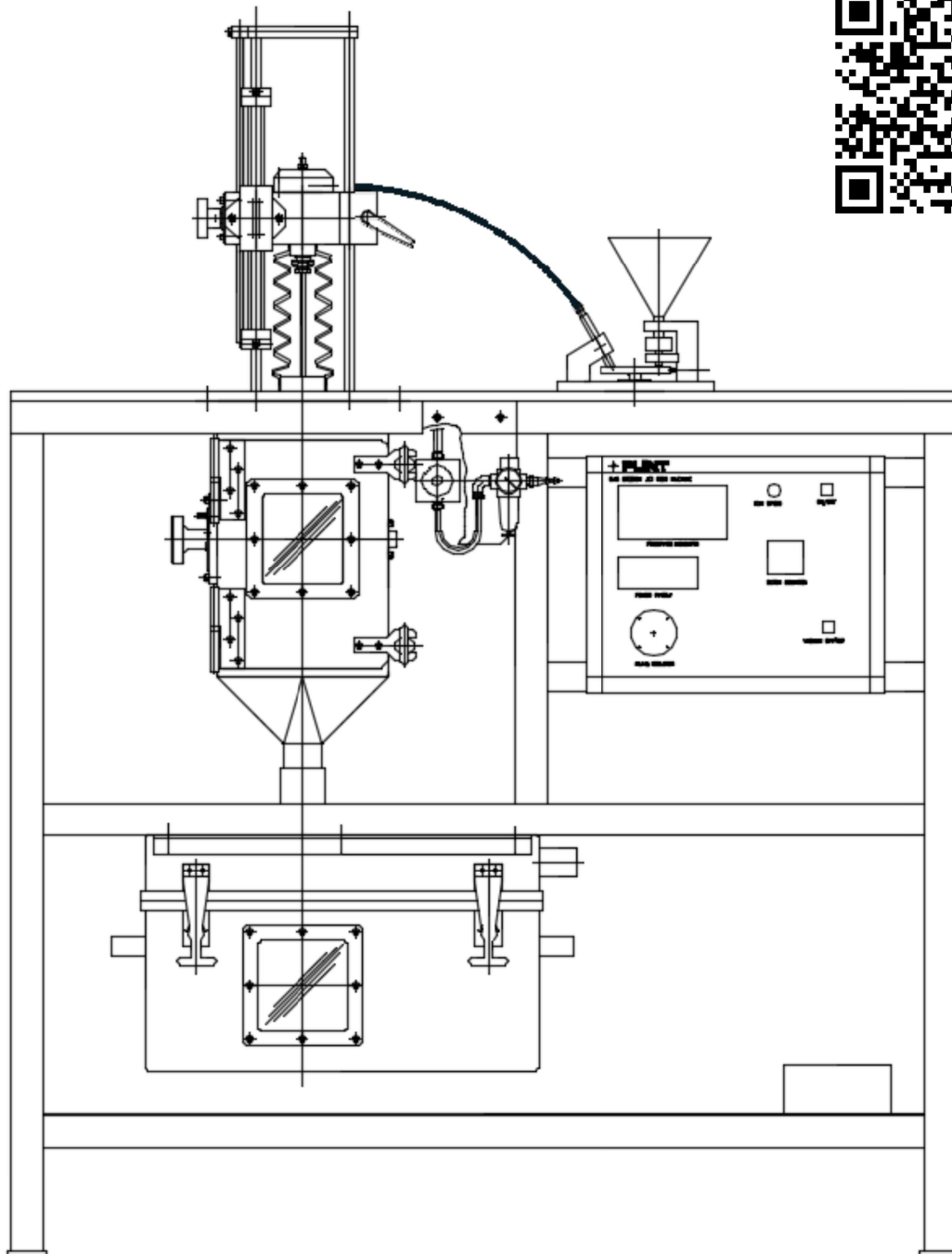
TE 65 MULTIPLEX SAND/WHEEL ABRASION



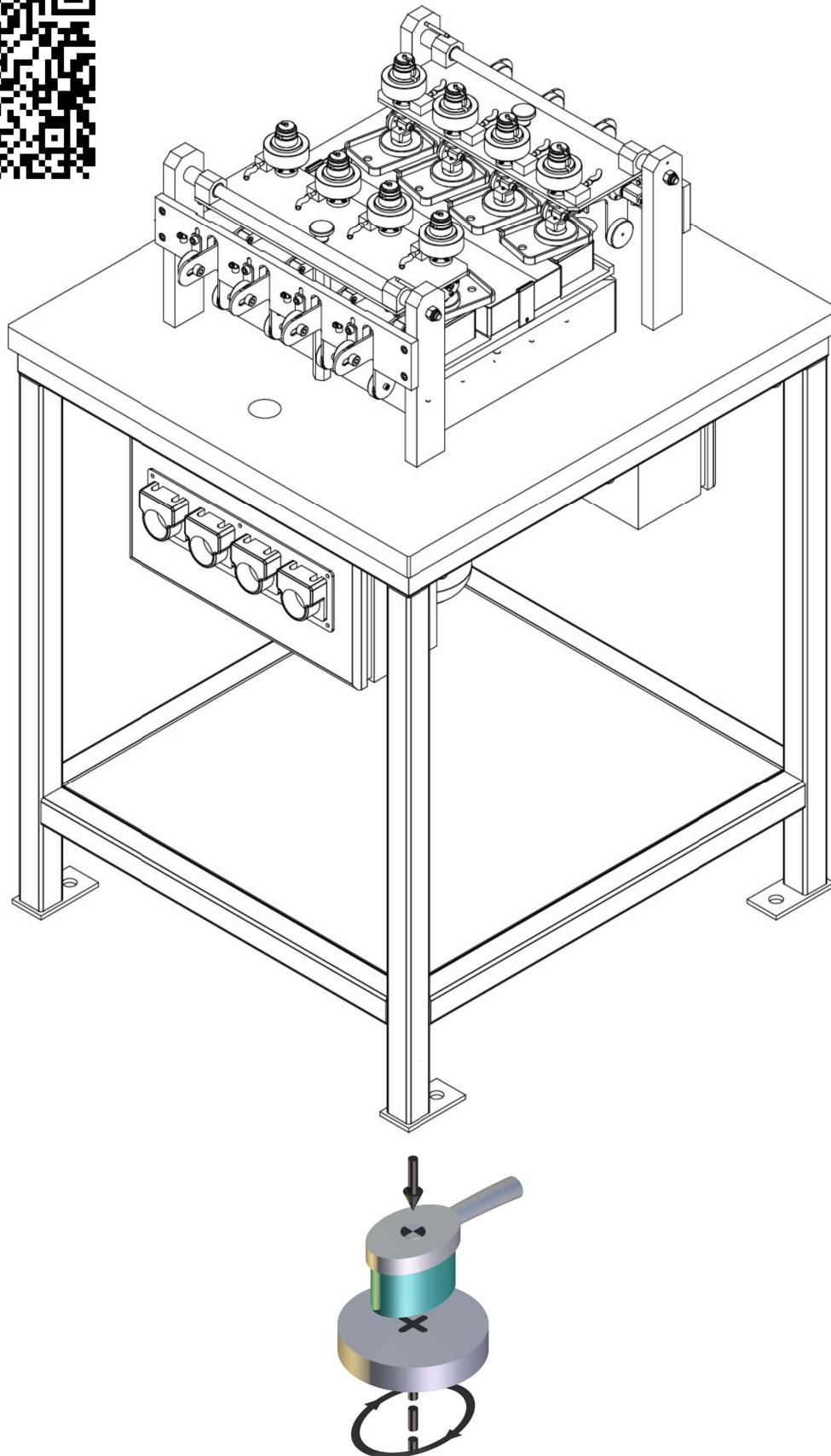
TE 66 MICRO-SCALE ABRASION TESTER



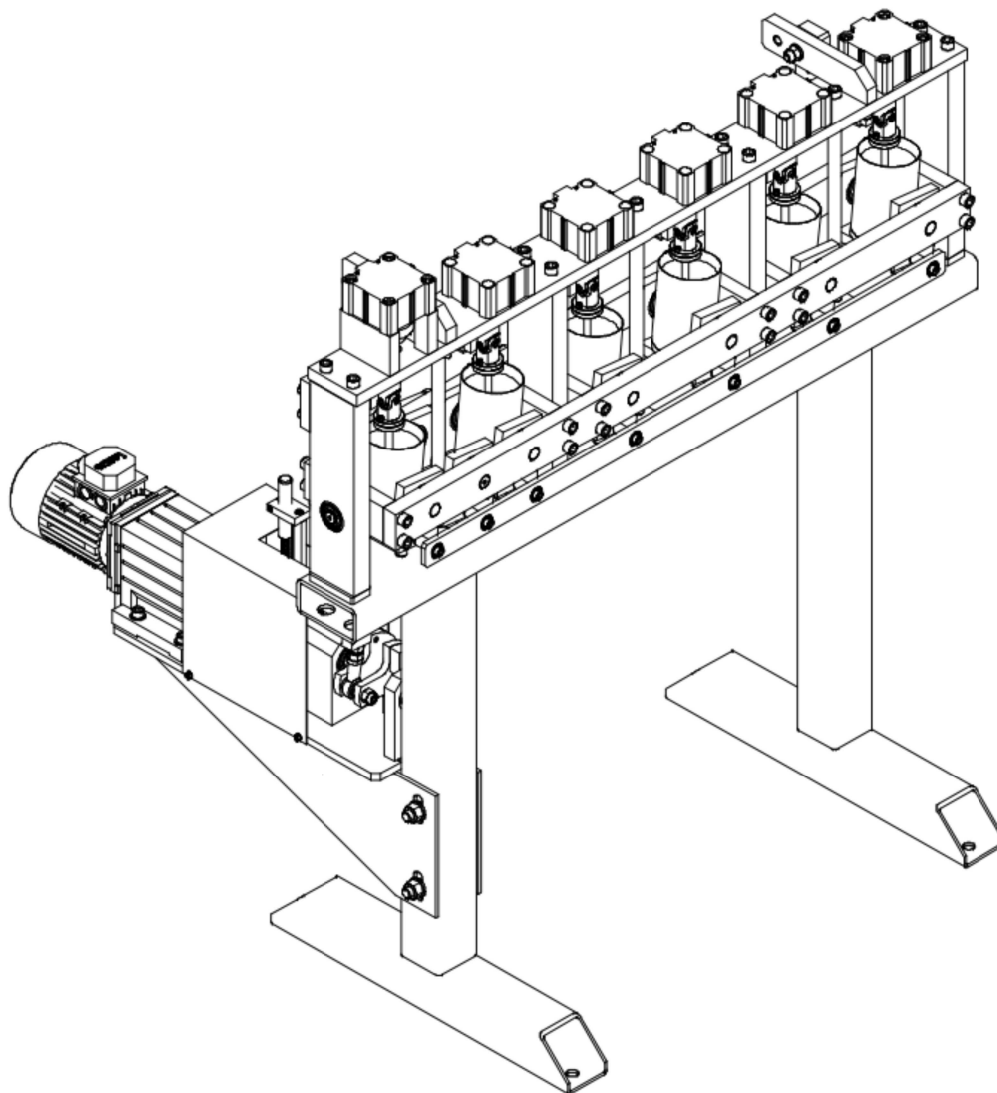
TE 68 GAS JET EROSION RIG



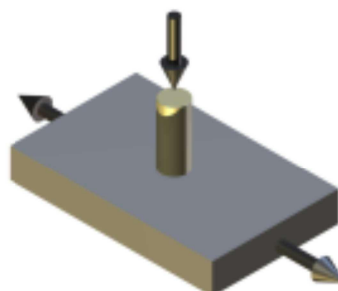
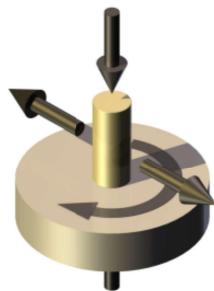
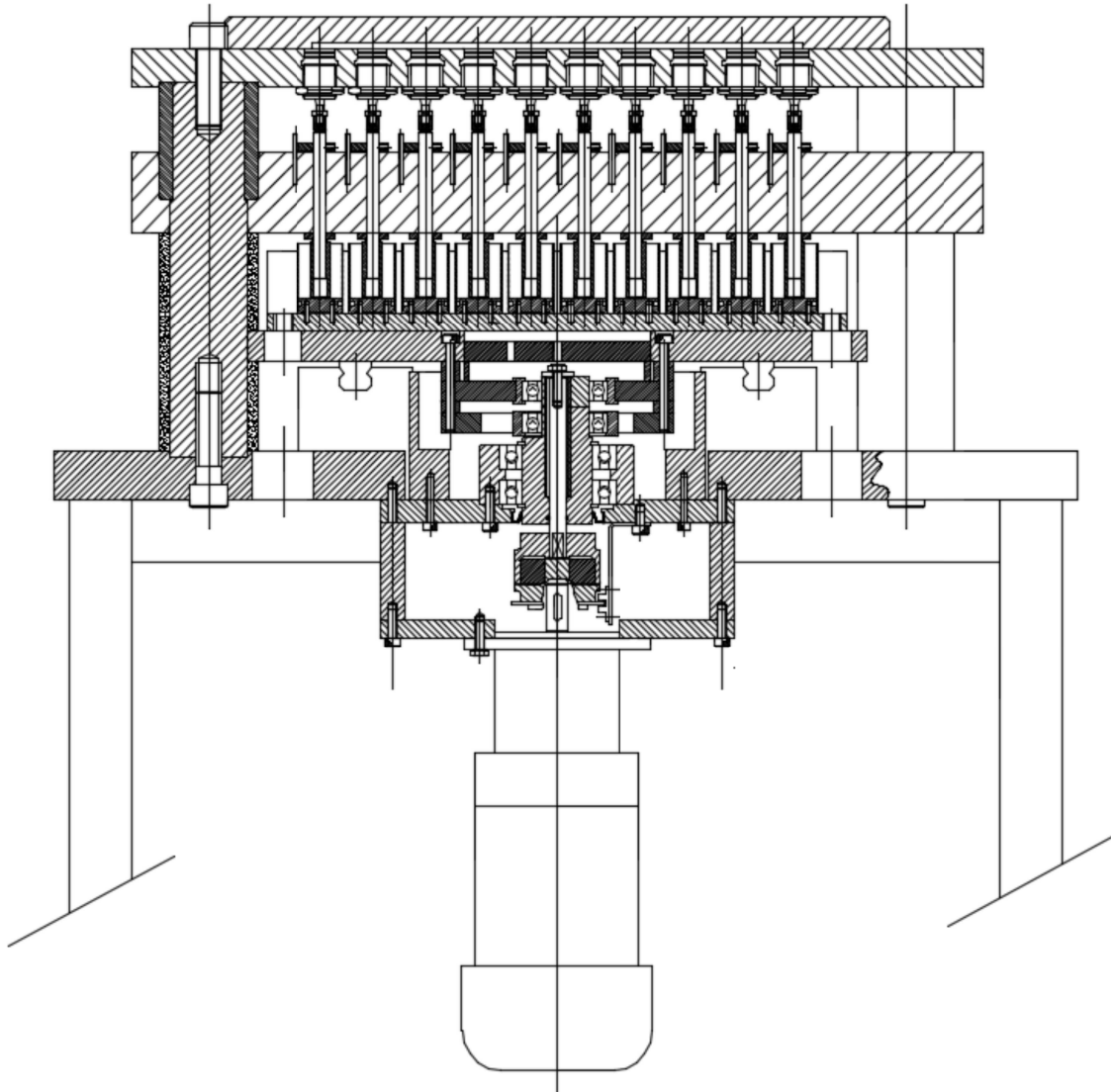
TE 85 ORBITAL TOOTH BRUSHING RIG



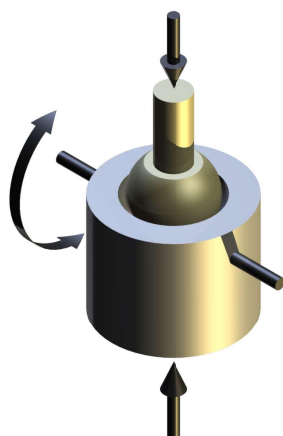
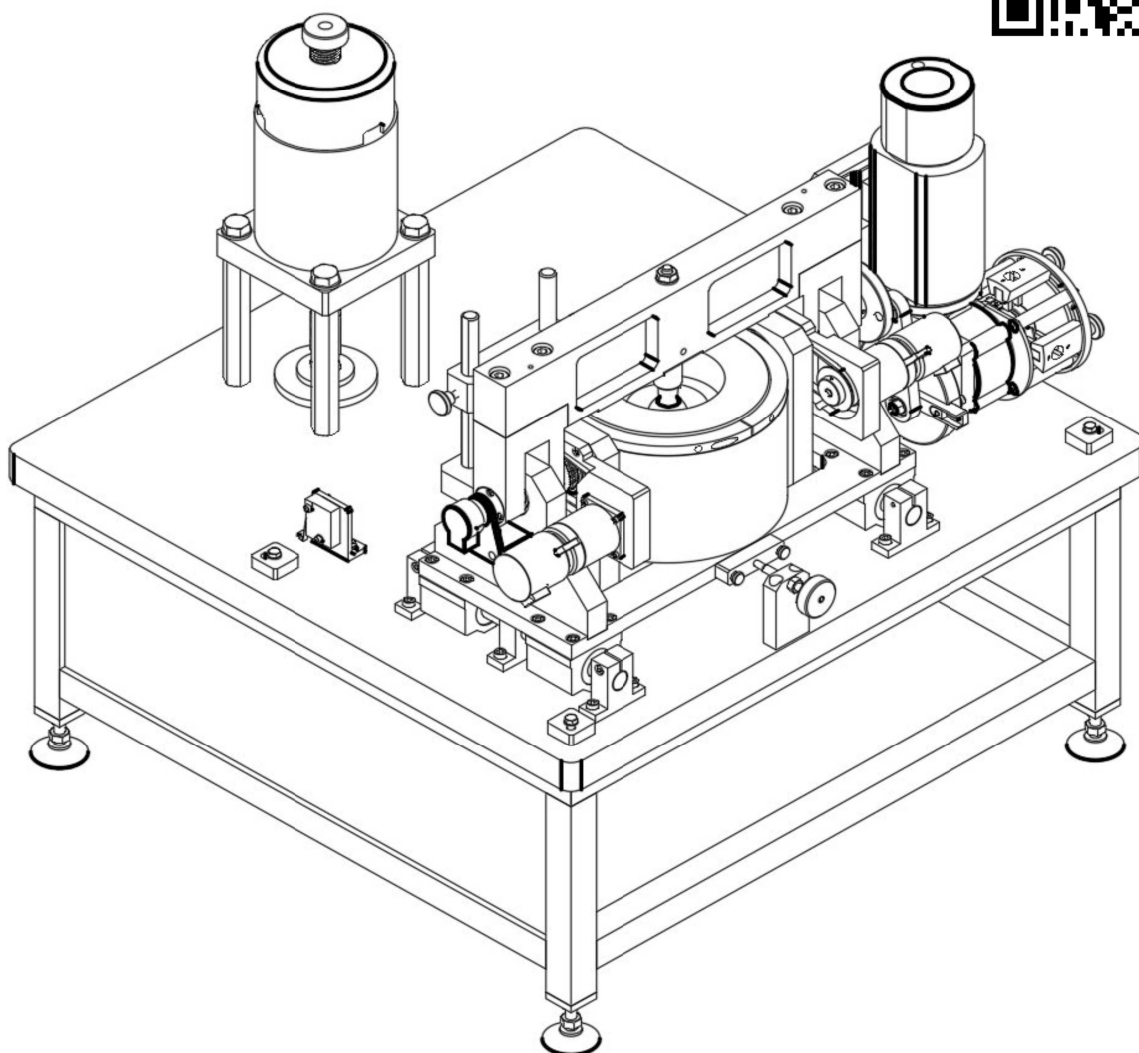
TE 86 MULTI-STATION HIP JOINT SIMULATOR



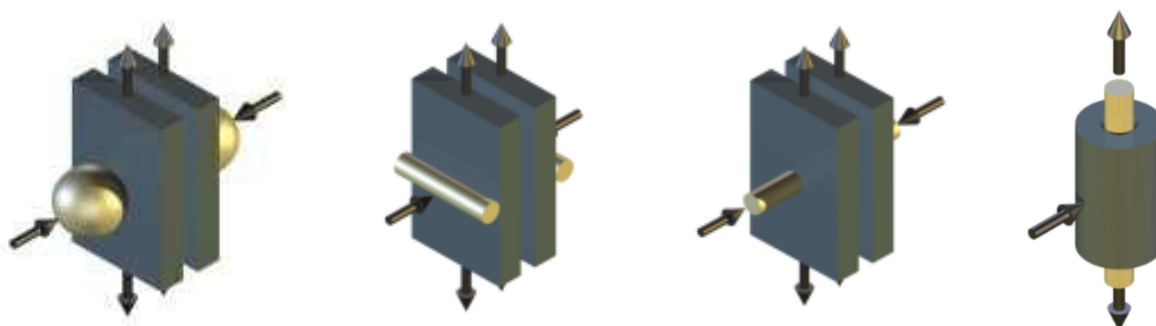
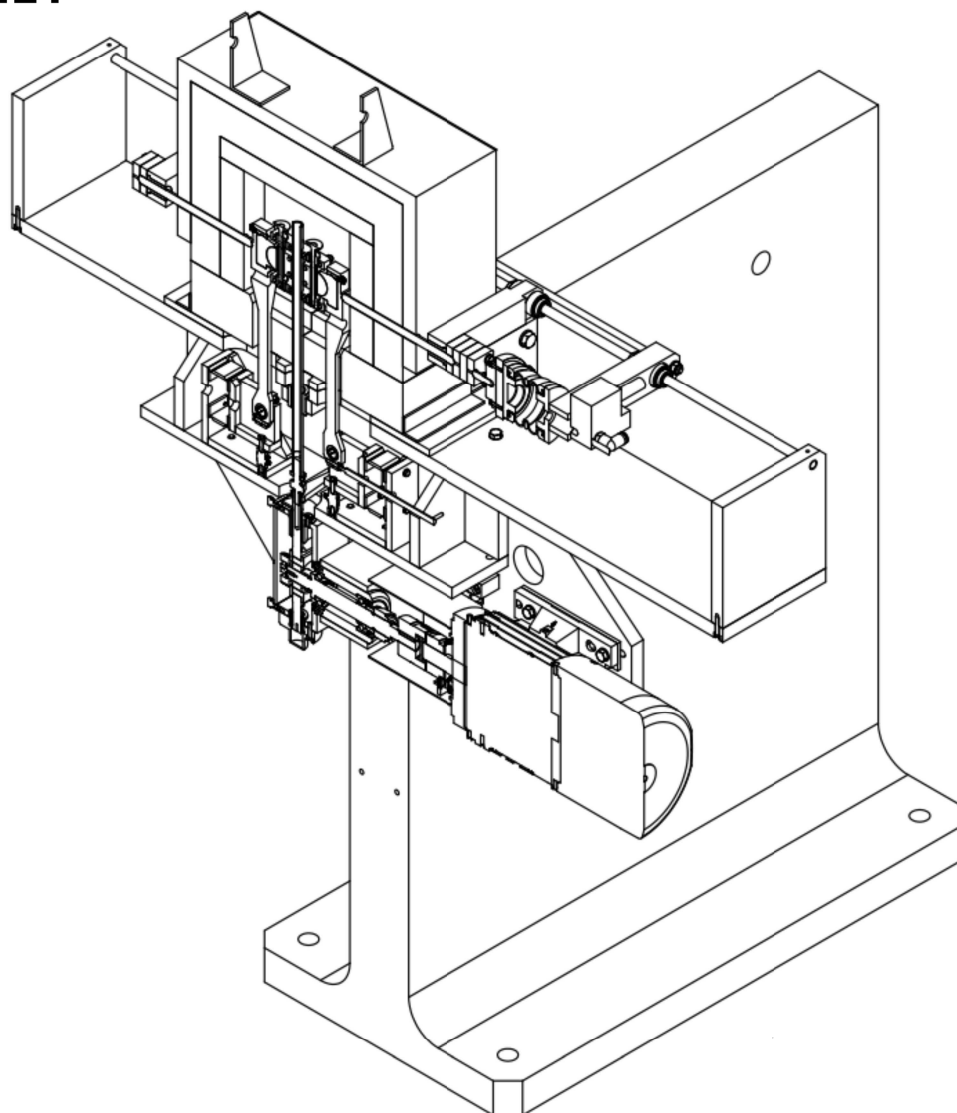
TE 87 CIRCULAR TRANSLATION PIN ON DISC MACHINE



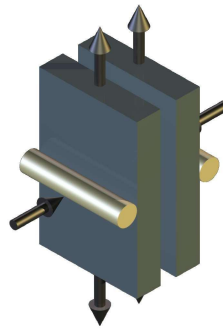
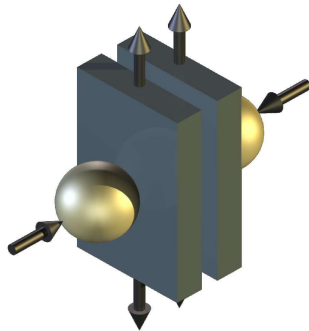
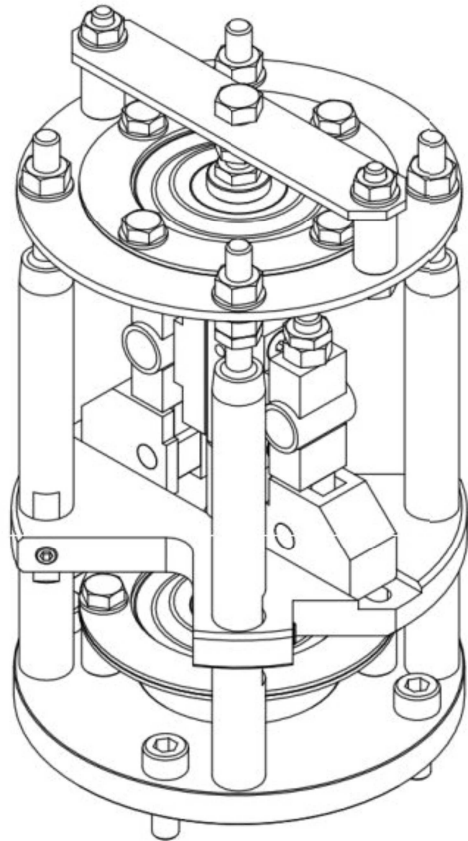
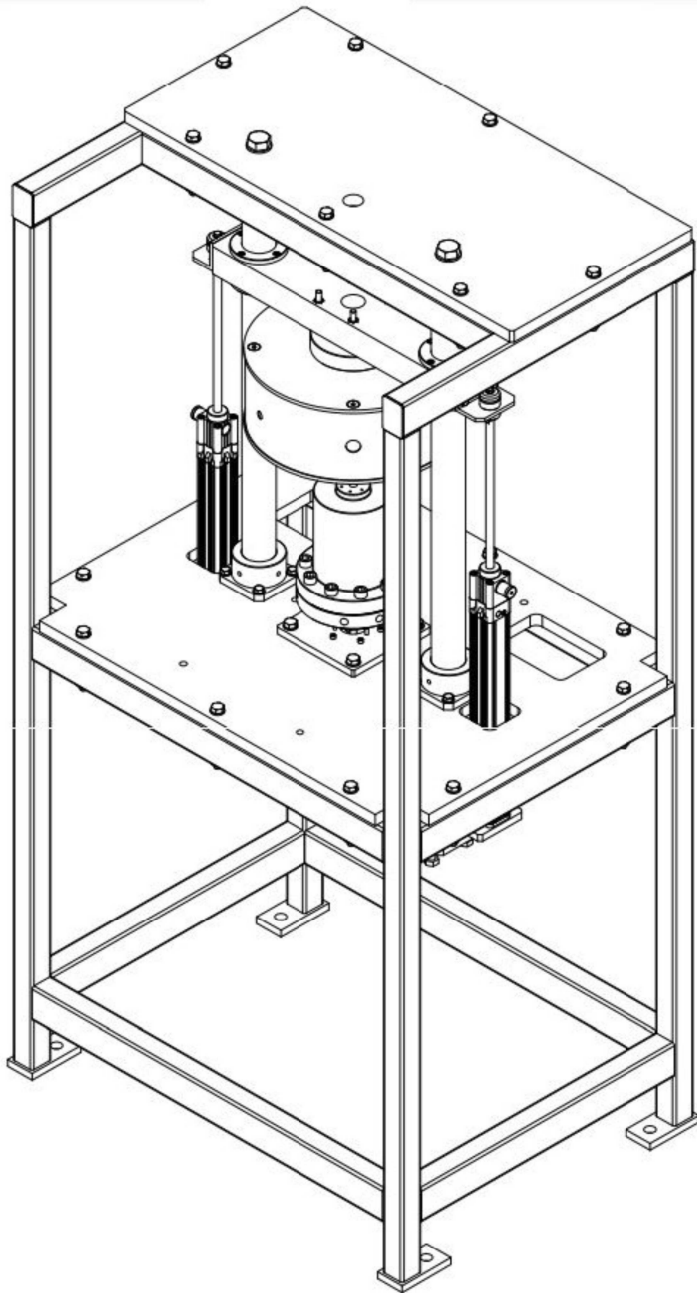
TE 89 HIP & KNEE FRICTION SIMULATOR



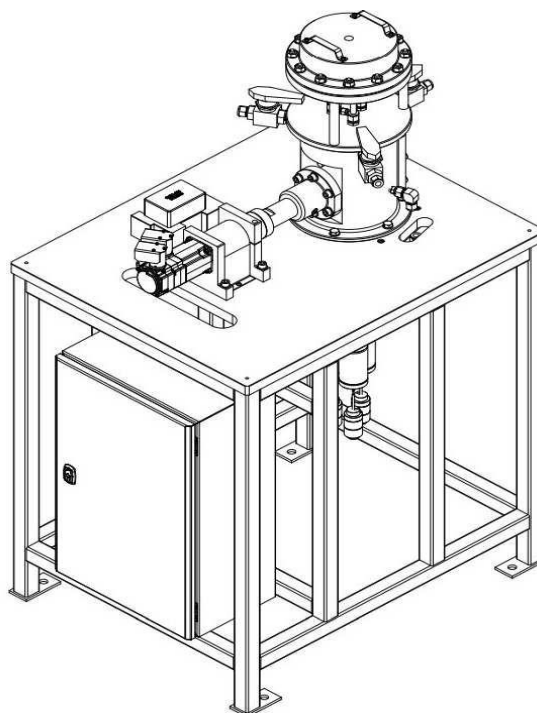
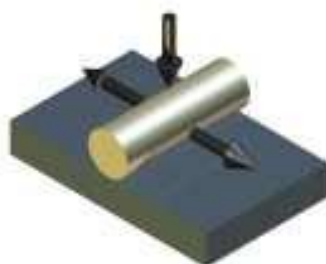
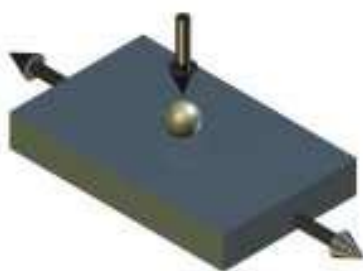
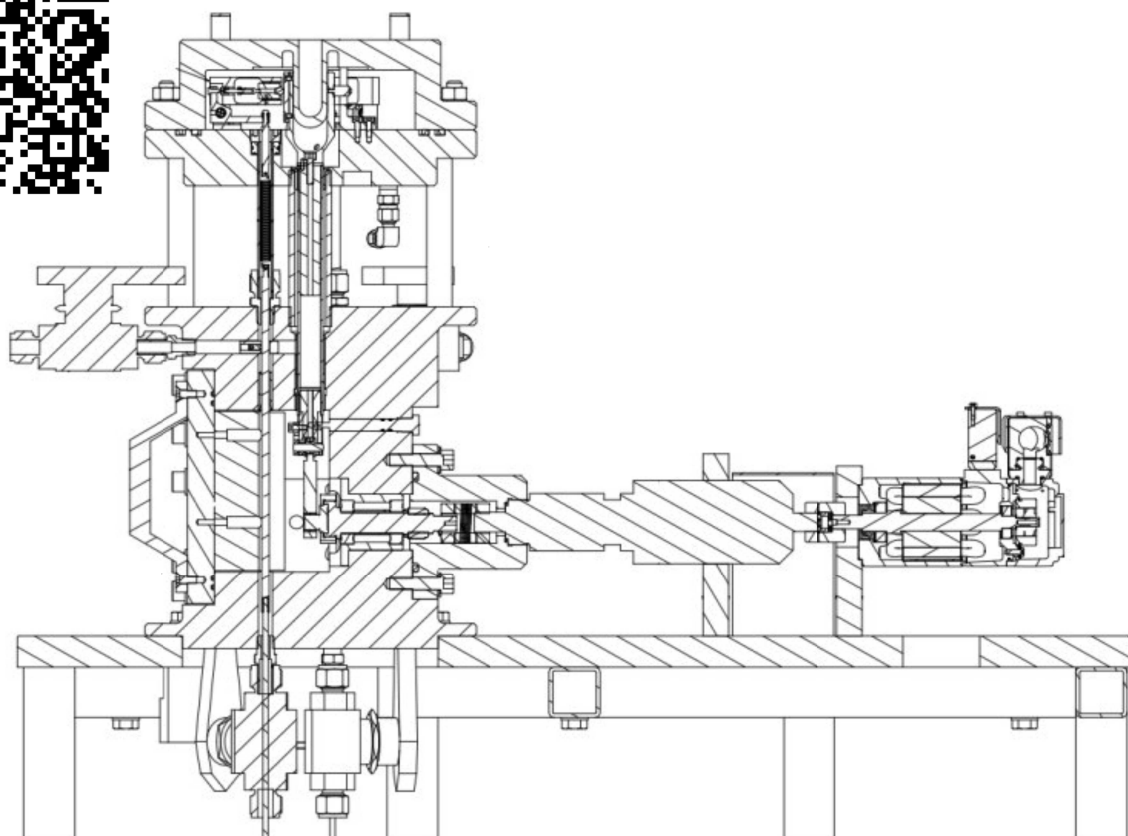
TE 33 RECIPROCATING TRIBOMETER - 1000°C



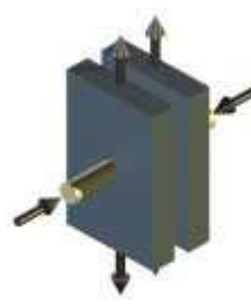
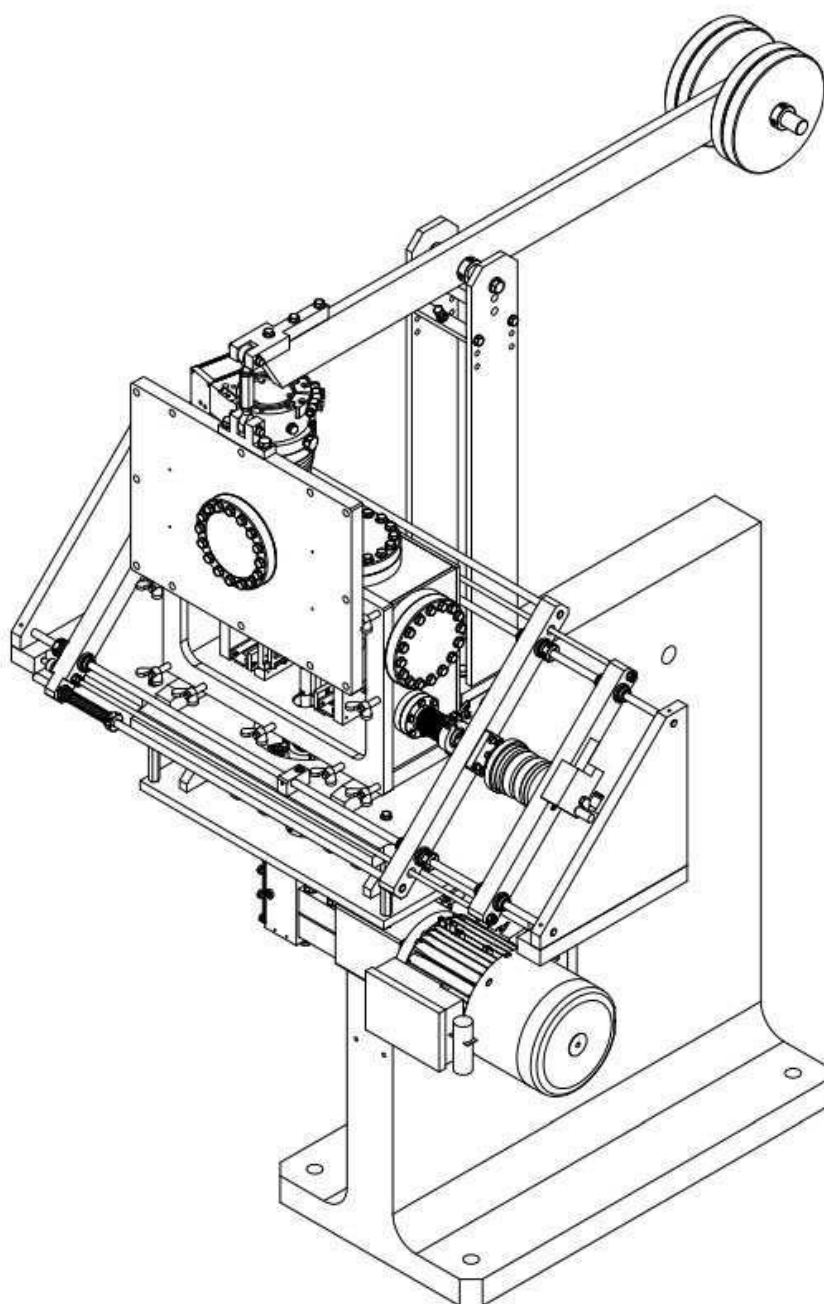
TE 59 AUTOCLAVE FRETTING RIG



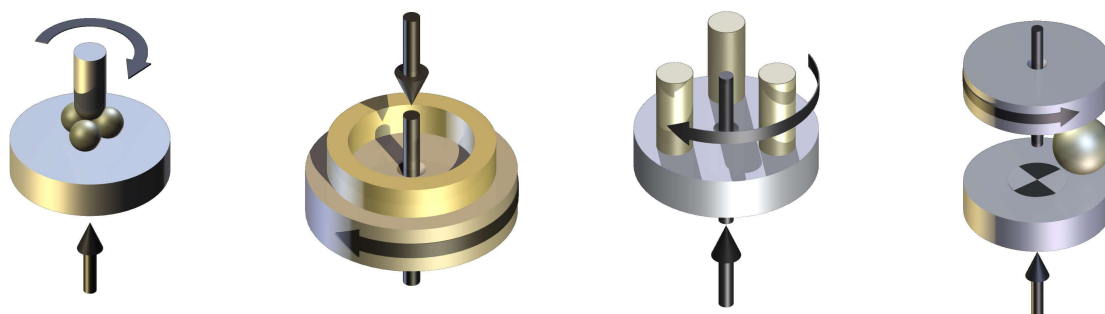
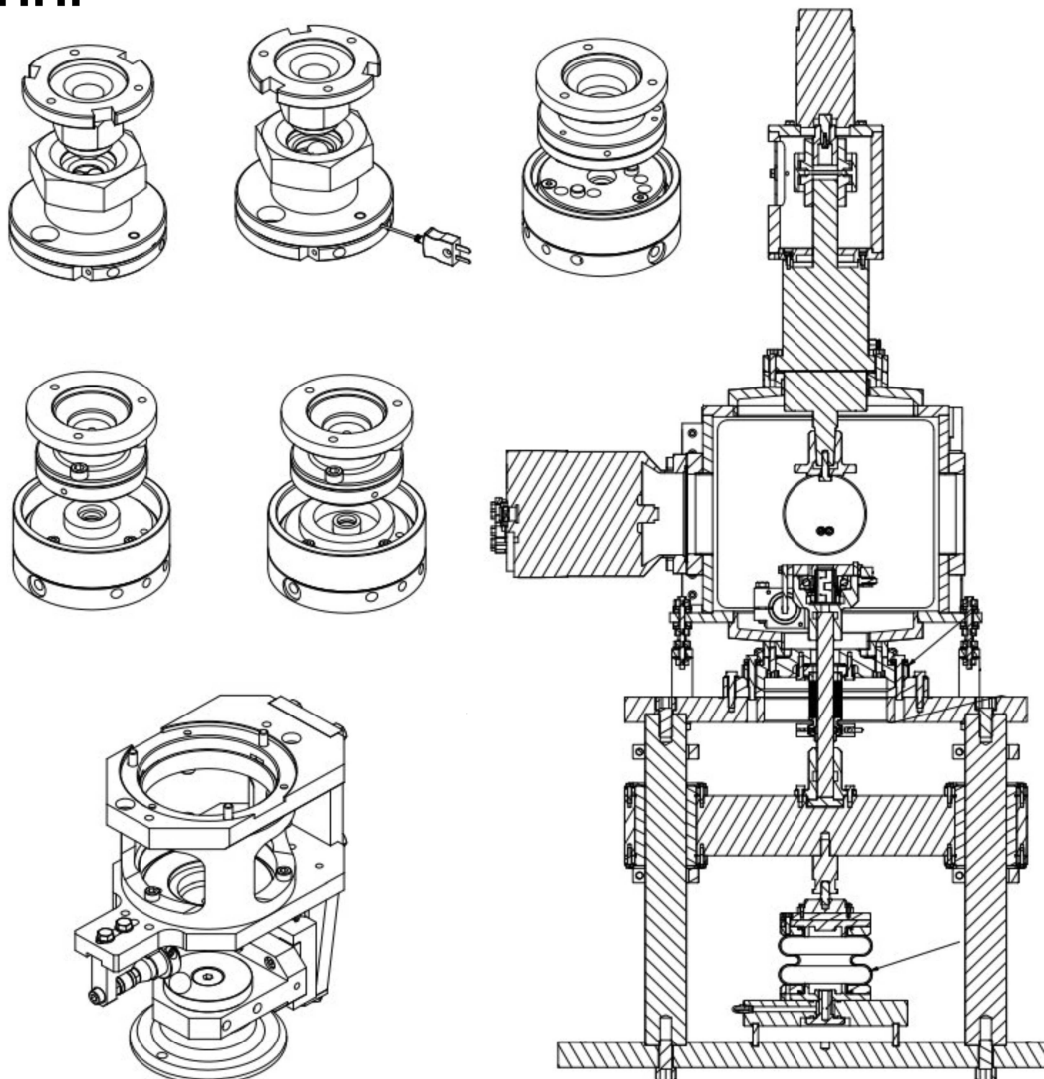
TE 60 HIGH PRESSURE HYDROGEN TRIBOMETER



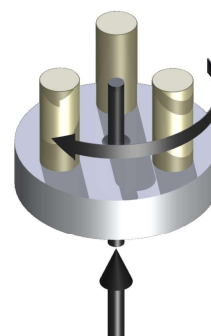
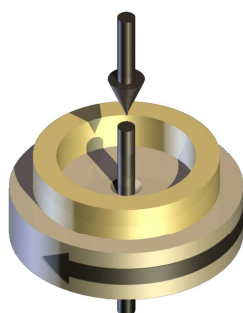
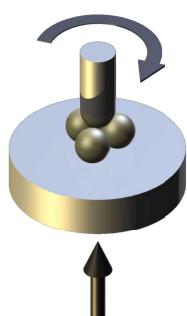
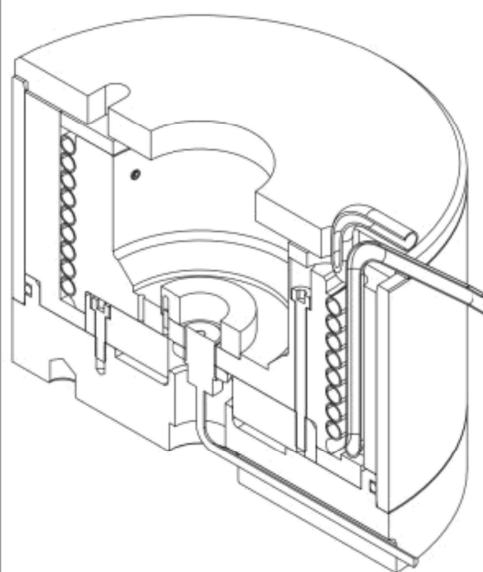
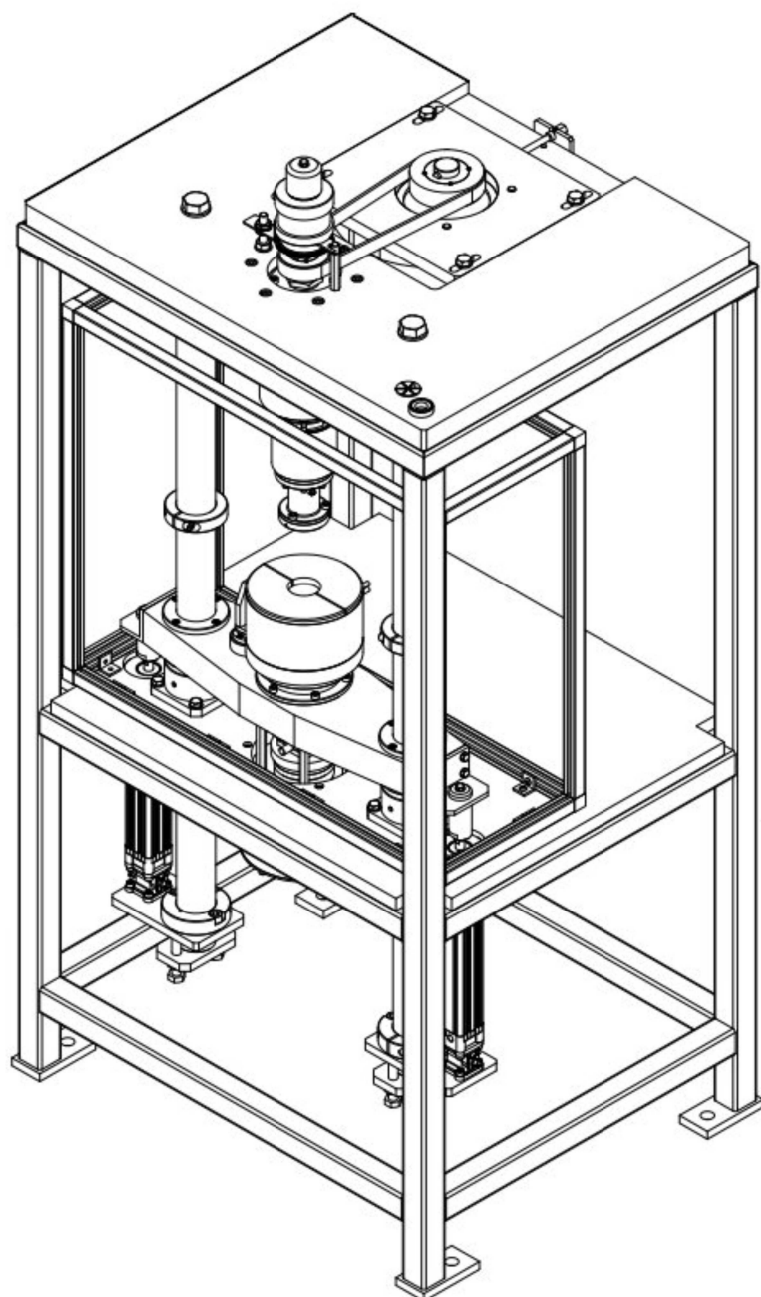
TE 76 RECIPROCATING VACUUM TRIBOMETER



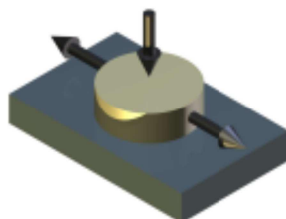
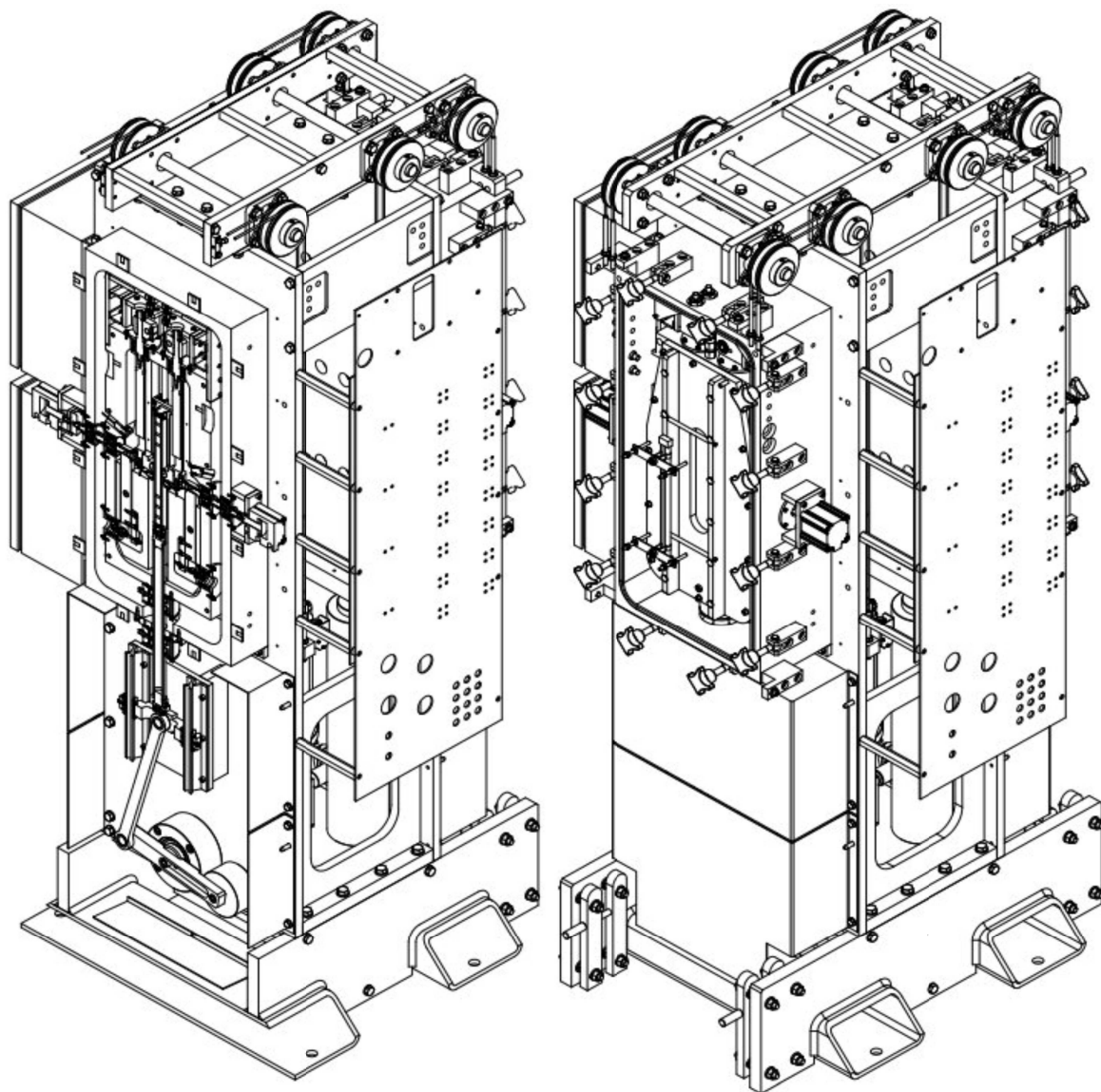
TE 91 ROTARY VACUUM TRIBOMETER



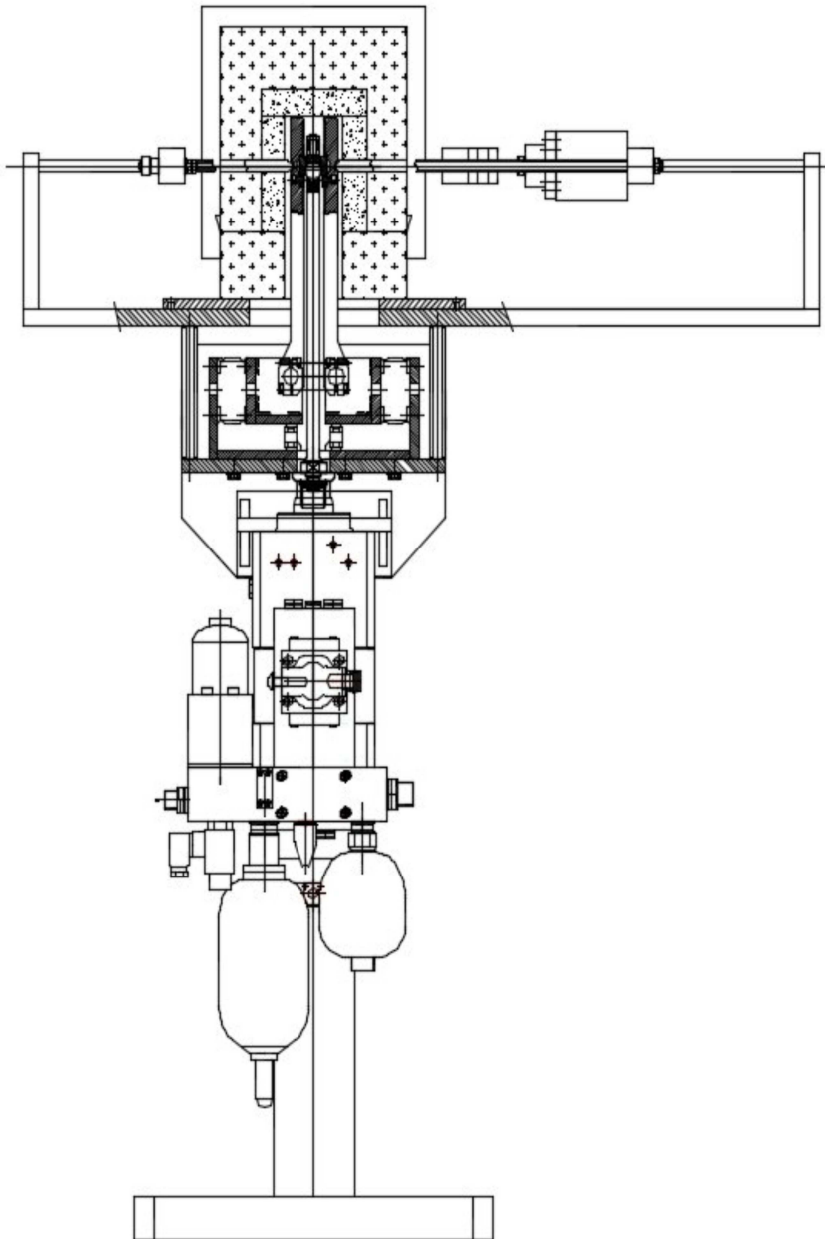
TE 95 PRECISION TRIBOMETER – LOW TEMPERATURE



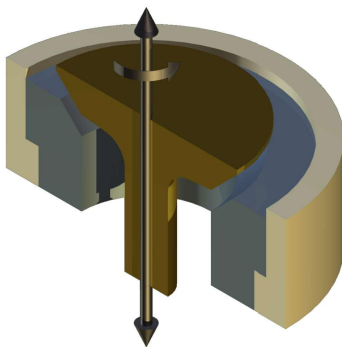
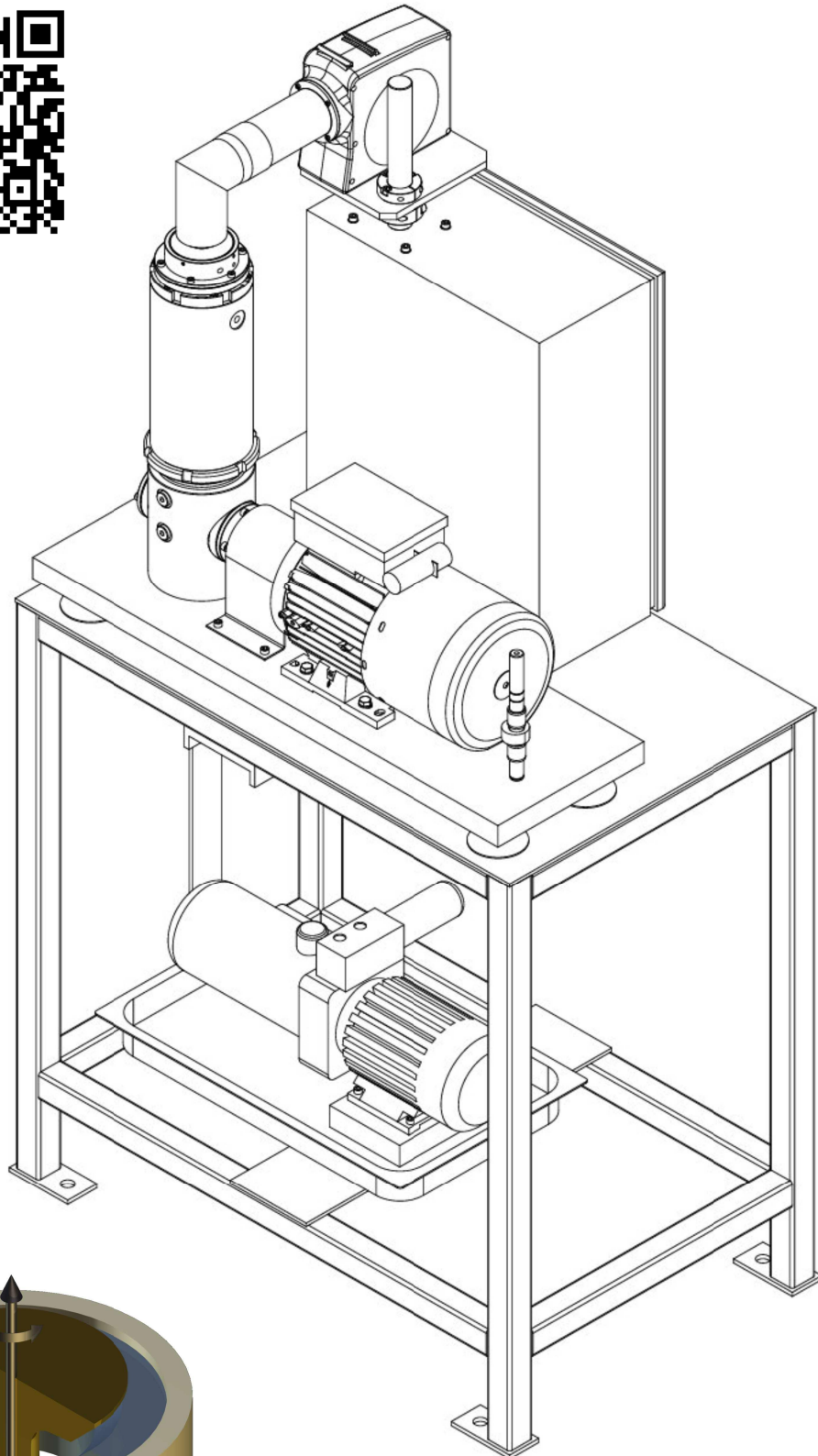
TE 104 HYDROGEN RECIPROCATING TRIBOMETER

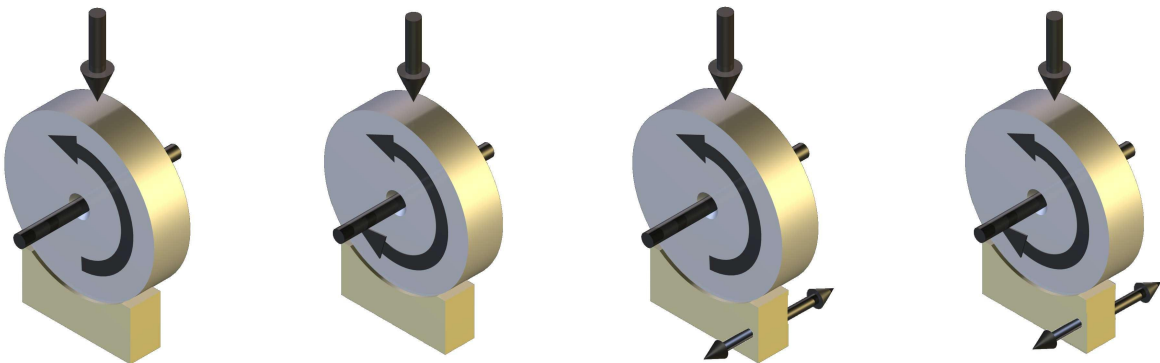
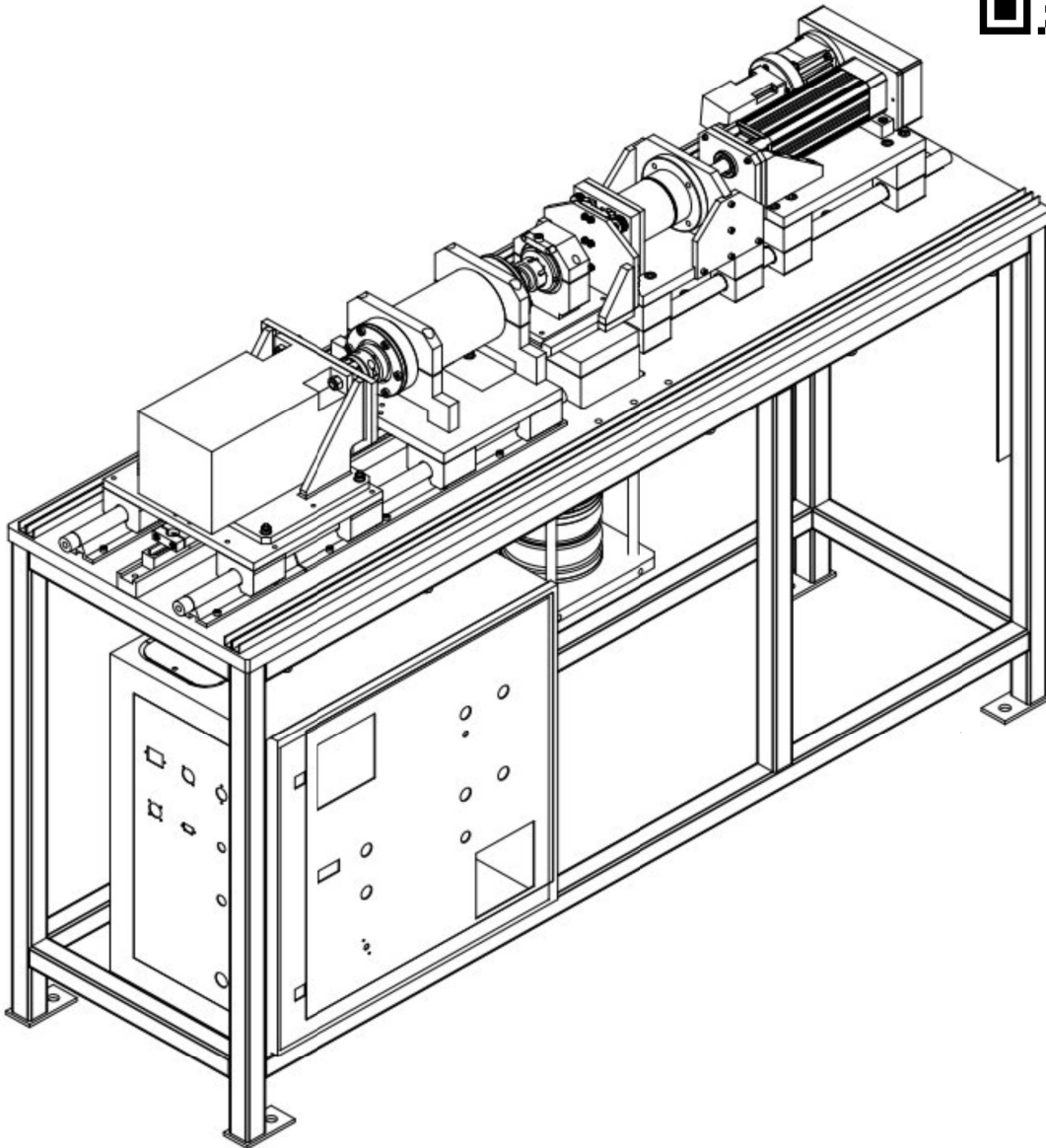


DN 55 DRY SLIDING & FRETTING - 1200°C

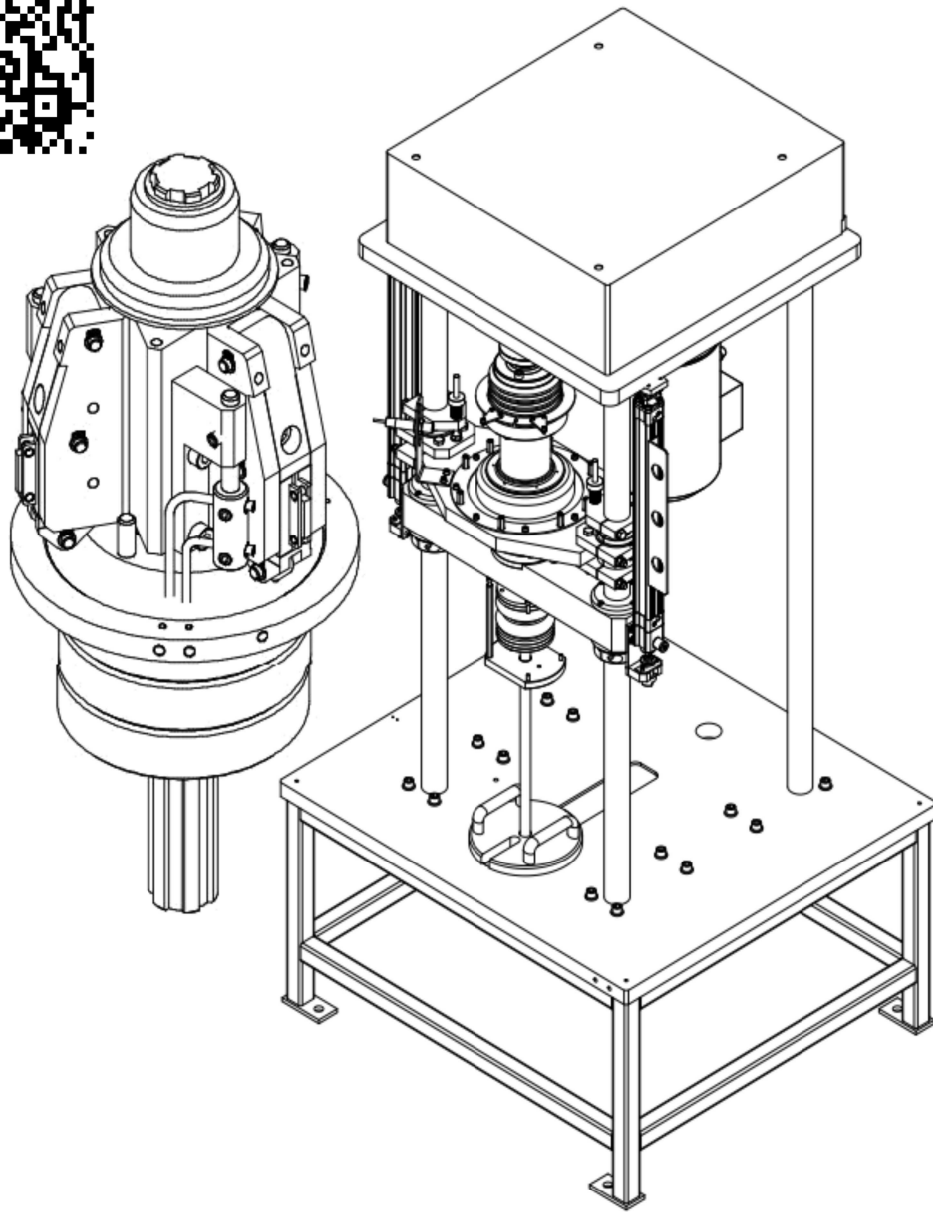


TE 35 VALVE RECESSION RIG

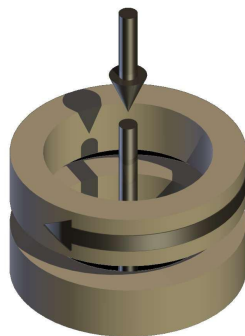
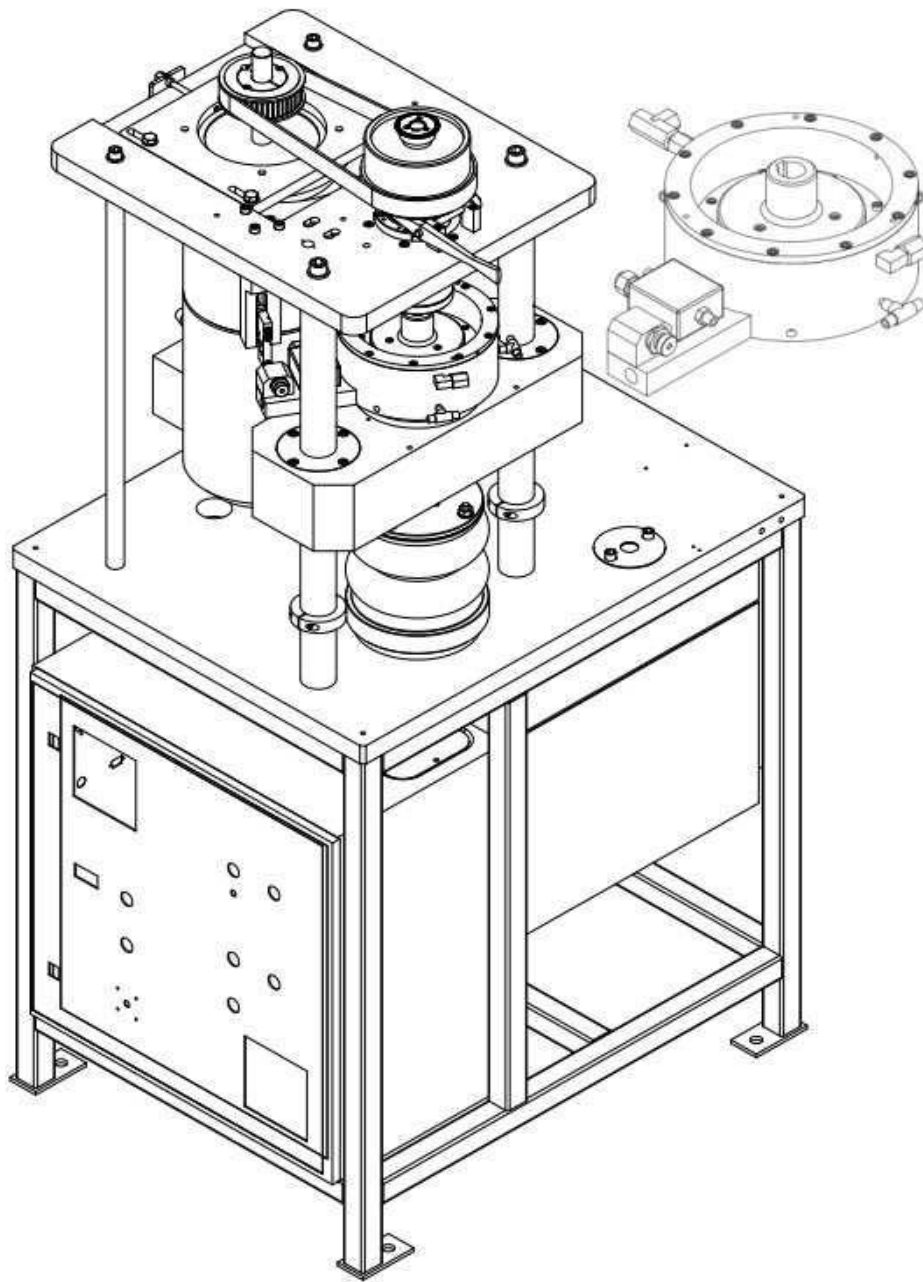




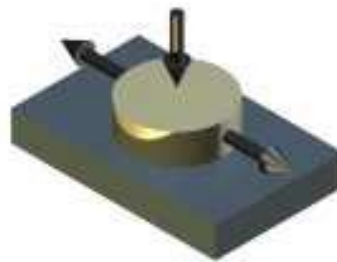
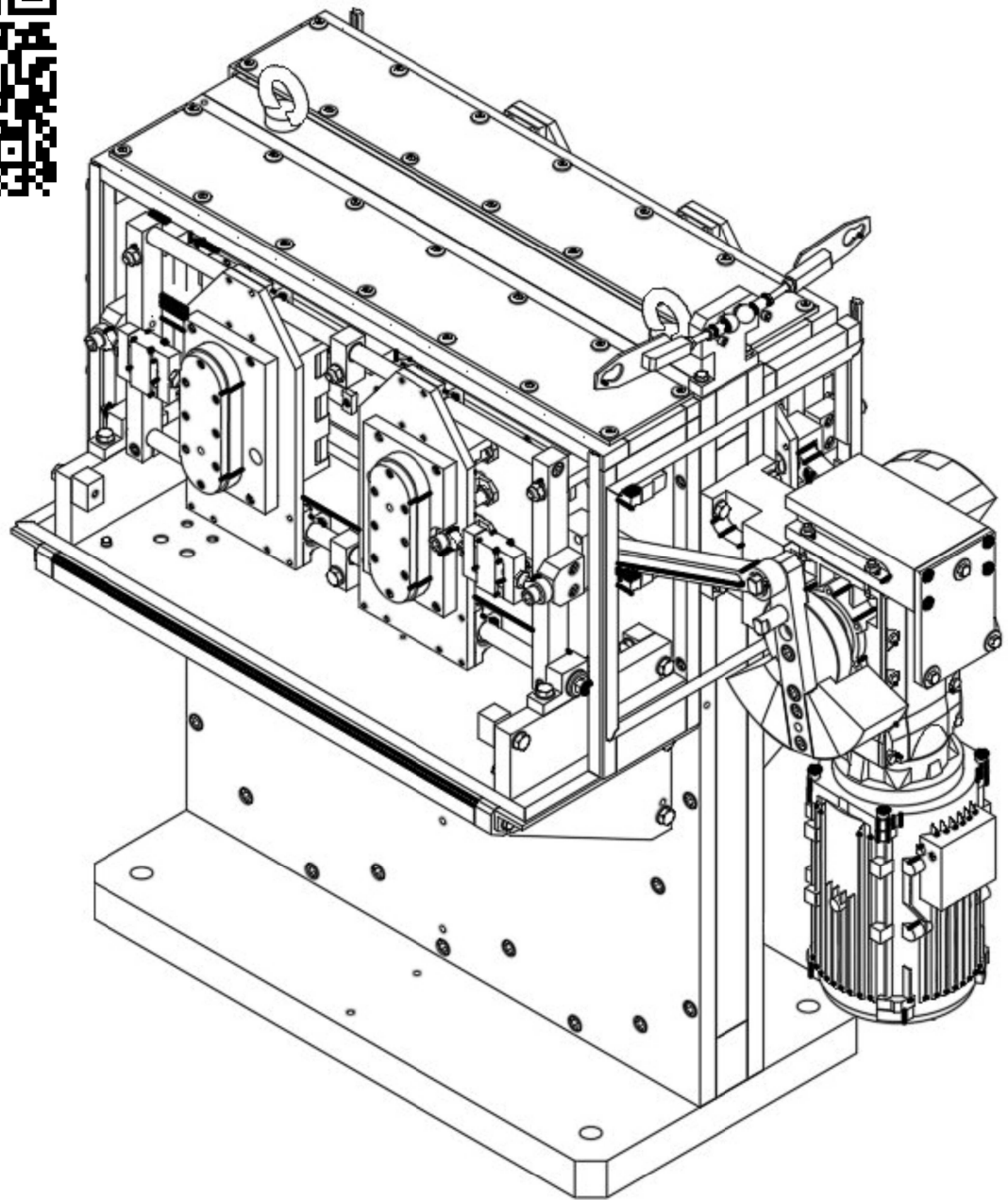
TE 47 THREE STATION RING/LINER TRIBOMETER



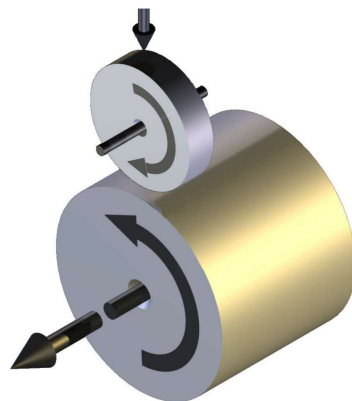
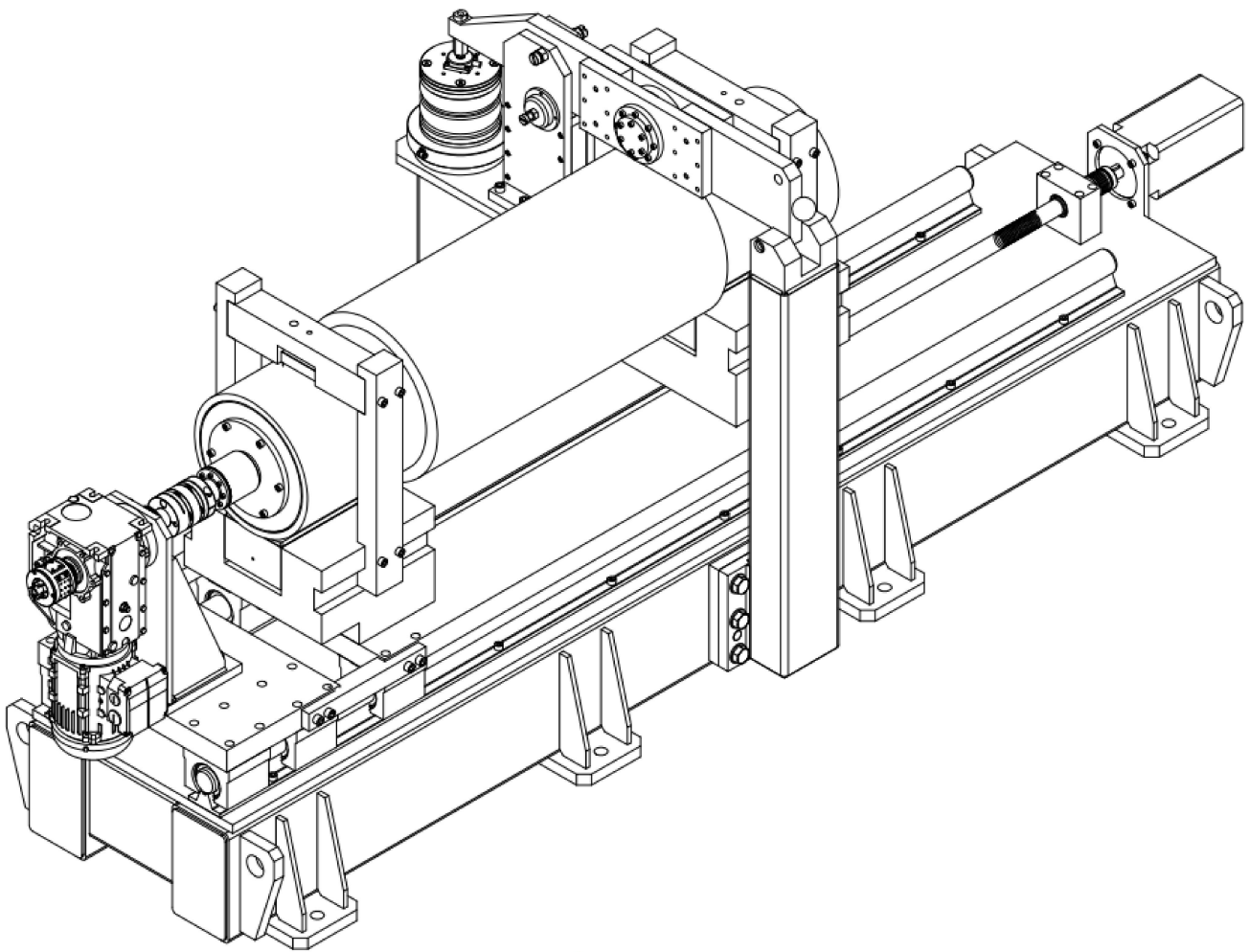
TE 92M AUTOMATED CLUTCH FRICTION TEST



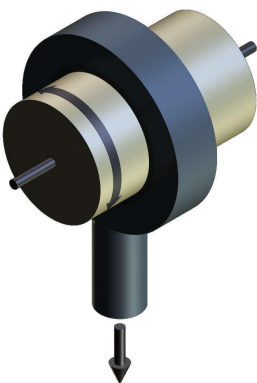
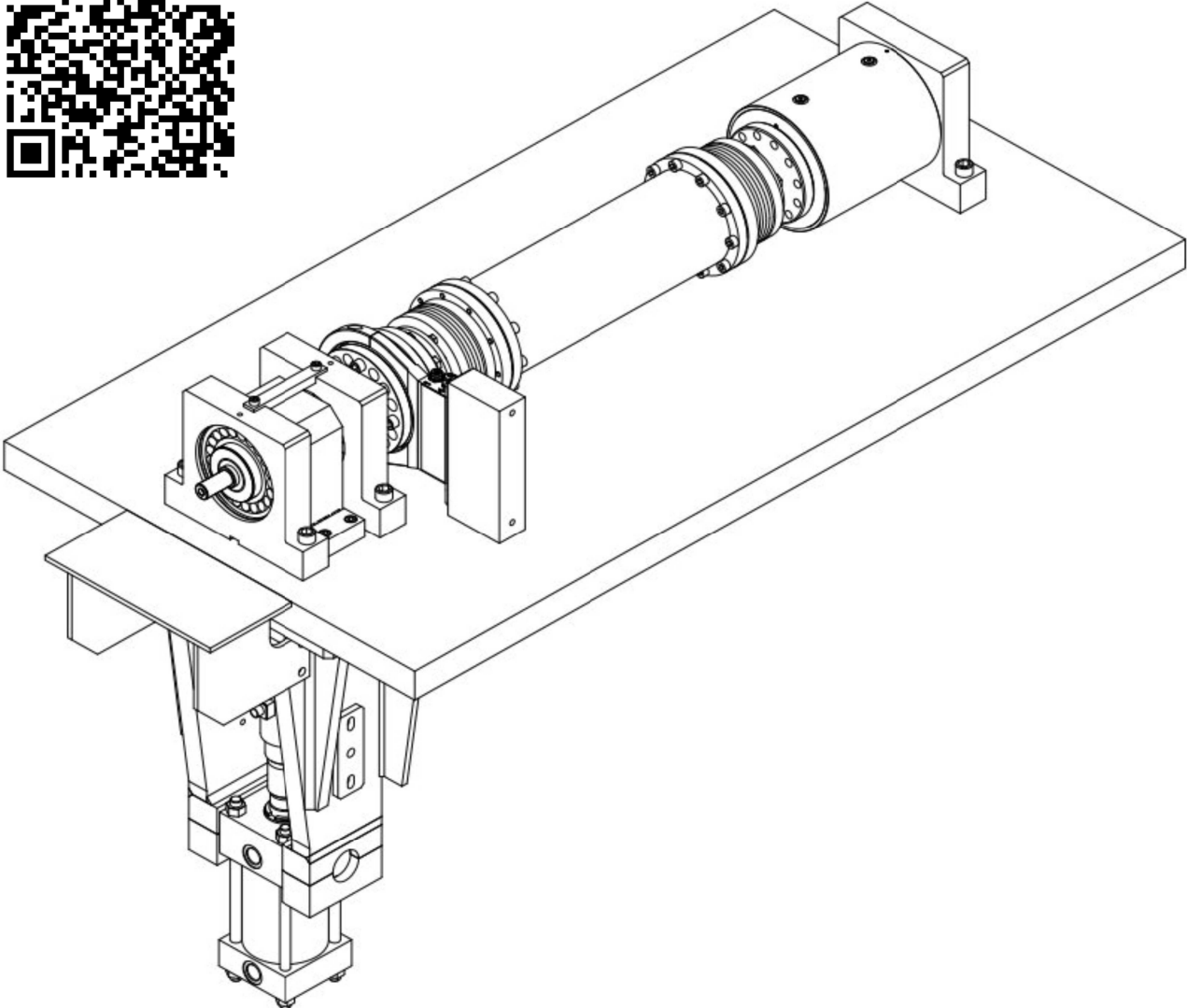
TE 108 POLYMER PRODUCTION TEST



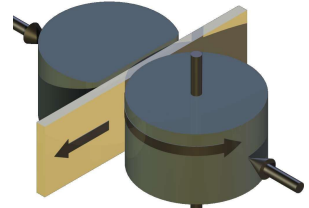
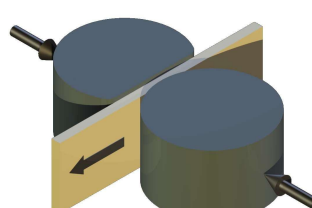
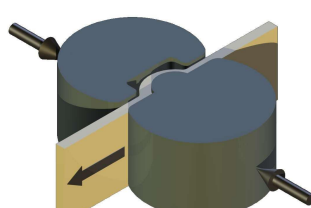
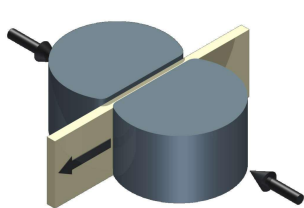
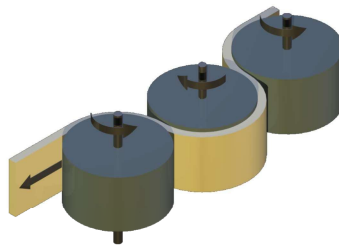
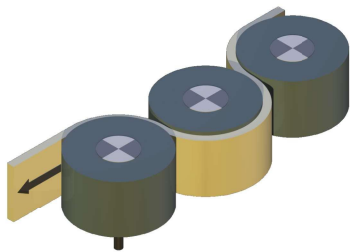
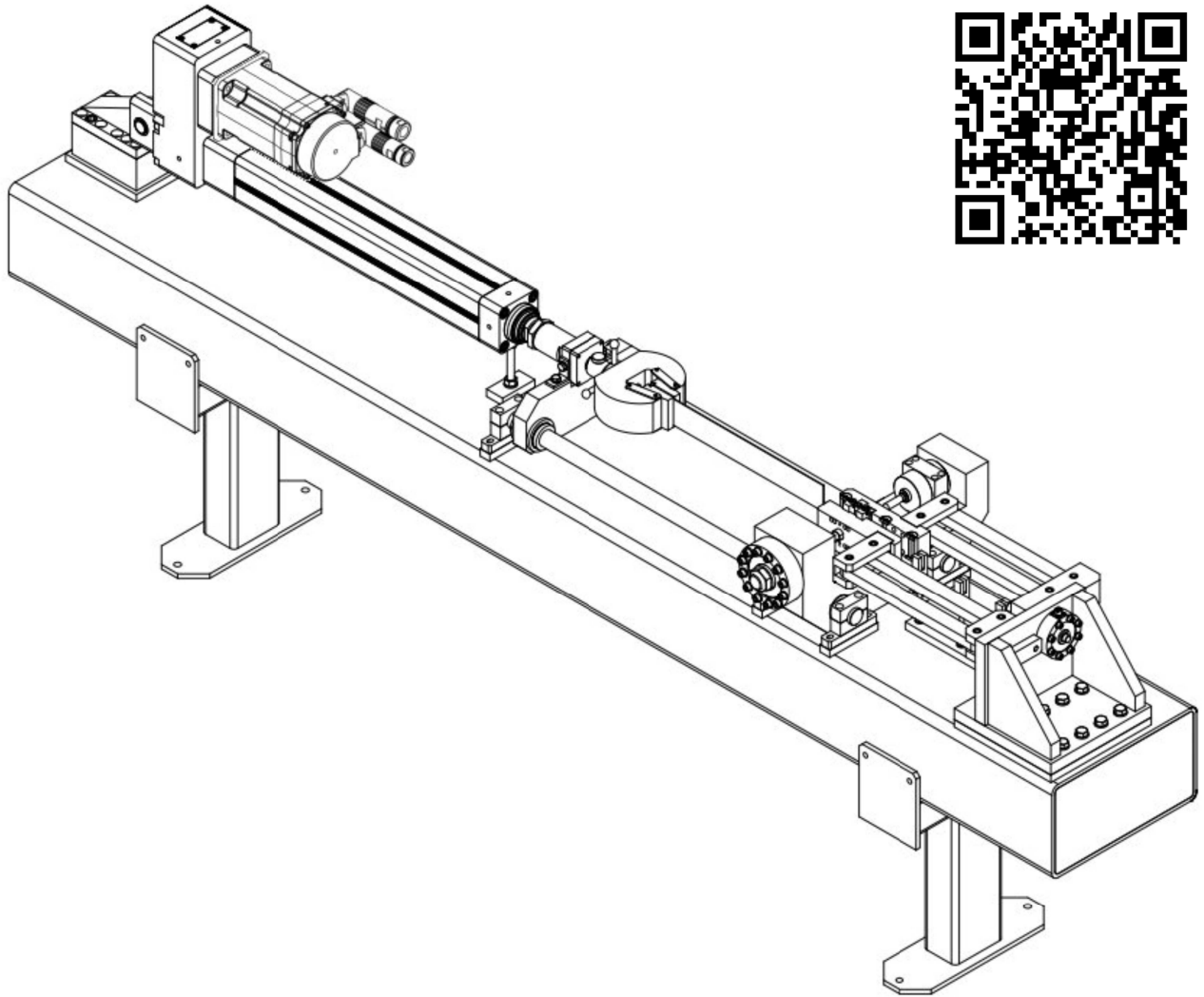
TE 110 INDEXING ROLLER ON DRUM



DN 22 OSCILLATING JOURNAL BEARING FRICTION & WEAR



DN 33 DRAW STRIP/DRAW BEAD TESTER



Tutorials and Guidance Notes

On-line tutorials can be accessed at:



Subjects include:

- Tribology Testing
- Lubricated Wear Testing
- Lubricated Friction Testing
- Engine Tribology
- Abrasion and Erosion Testing
- Machining, Forming and Forging Tests
- Friction Force Measurement in Reciprocating Tribometers
- Wear and Friction in Sliding Point Contact Tests
- Abrasion and Erosion Testing
- Rolling Contact Fatigue Testing
- Effects of Machine Dynamics on Tribological Response

Guidance notes and tutorial slides can be accessed at:



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3. ST-FB FOUR BALL EP & WEAR
4. ST-PR PITTING RIG - THREE DISC ON ROLLER
5. ST-TW THREE PIN ON DISC/THRUST WASHER
6. ST-BA BELT ABRASION
7. ST-TC TWIST COMPRESSION
8. TE 43 IMPACT SLIDING RIG
9. TE 50 PRESSURISED WEAR RIG
10. TE 53 MULTI-PURPOSE FRICTION & WEAR
11. TE 55 MICRO-PITTING/BEARING FRETTING RIG
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22. TE 92 PIN ON VEE/ROLLER ON ROLLER ADAPTER
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Product Development History

Plint and Partners

- 1956 Journal Bearing Test Rig for Glacier Metals
- 1958 High Speed Seal Test Rig for Morgan Crucible
- 1961 Toroidal Transmission Test Rig for Perbury Gears
- 1966 Two Roller Machine for Monsanto
- 1968 High Speed Rolling Four Ball Machine for National Engineering Laboratory
- 1968 Rail Friction Machine for British Railways
- 1969 Wear Testing Machine for Rolls Royce
- 1974 Wear and Friction Machine - with Professor D Dowson, Leeds

Cameron Plint Tribology

- 1982 High Frequency Friction Machine - licence: Professor A Cameron, Imperial
- 1983 High Frequency Friction Machine - Long Stroke
- 1986 Optical Viscometer - licence: Professor A Cameron, Imperial
- 1988 Friction and Wear Tester - licence: National Centre for Tribology

Plint Tribology

- 1988 Microprocessor Controlled Pin on Disc Machine - with Dr T Eyre, Brunel
- 1995 Rubber Research Machine - Dr A Roberts, MRPRA
- 1995 Multi-Axis Tribology Machine
- 1996 Rotary Tribometer
- 1997 Universal Wear Machine - design rights acquired from BICERI Ltd
- 1997 Micro-Scale Abrasion Tester - licence: Professor I Hutchings, Cambridge
- 1997 Multi-Station Friction and Wear Test Machine
- 2000 Air Jet Erosion Rig - licence: Professor I Hutchings, Cambridge
- 2000 High Temperature Dry Sliding & Fretting Machine
- 2001 Line Contact Two Roller Machine

Phoenix Tribology

- 2002 Draw Bead/Draw Strip Tester
- 2003 Multiplex Sand/Wheel Abrasion Tester
- 2006 Mini Traction Machine
- 2007 Twelve-Station Hip Joint Simulator - licence: Dr V Saikko, Aalto
- 2007 Circular Translation Pin on Disc Machine - licence: Dr V Saikko, Aalto
- 2011 Rotary Vacuum Tribometer
- 2012 Reciprocating Vacuum Tribometer
- 2013 Pressurised Rotary Tribometer
- 2014 Wheel/Rail Friction Two Roller Machine
- 2014 Three Station Ring/Liner Rotary Tribometer
- 2015 Eight Station Toothbrush Test Machine
- 2016 Valve Recession Rig
- 2016 High Speed Rolling Contact Fatigue Machines
- 2017 Precision Rotary Tribometer - Low Temperature Enabled
- 2018 Rolling Contact Fatigue & Bearing Friction Rig
- 2020 Pressurised Hydrogen Tribometer
- 2022 Piezo Fretting Test Rig
- 2024 Standard Test Range Launched

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