Details

Service Center Mechanical Workshop (SCMW)

The Service Center Mechanical Workshop (SCMW) supports the research areas of internal and external users in the implementation of projects, the construction of test benches and the manufacture of test components. The SCMW's expertise lies in design consulting, the implementation of complex test benches, and the manufacture of individual components and small series using a wide variety of manufacturing processes such as turning, milling, grinding, and EDM. Due to the qualifications and the high professional competence of the employees of the SCMW, the most different materials can be processed safely. The range of materials for machining extends from plastics to various steels and non-ferrous metals to titanium and nickel-based alloys, as well as hard fine machining. The modern machinery of the SCMW has been continuously expanded and adapted to requirements in recent years, enabling the SCMW to achieve a high level of complete machining of workpieces. Required external manufacturing steps and desired heat treatments are planned and commissioned as a service of SCMW within the scope of contract manufacturing. Through the use of modern CAD-CAM solutions, the use of the planning software IK Office as well as the extensive supplier network, SCMW is able to carry out production orders on time and in high quality.

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Host Institution

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Scientific Domain

Primary Subjects:
- Mechanical and Industrial Engineering

Secondary Subjects:

Category

Mechanical Engineering Facilities

Scientific Services

The employees of SCMW advise, support internal and external users in projects with the focus on the production of complex test benches as well as in the production of individual components and small series by means of various manufacturing processes. For the realization of the different services, the employees have a modern machine park as well as the latest CAD-CAM methods at their disposal. One focus is consulting on the manufacturing strategy and definition of components with regard to the function and boundary conditions in the application. The manufacturing sequence is defined either according to a best-practice approach, taking into account the latest research findings, or according to the customer's requirements profile.

Scientific Equipment

- DMG Mori CTX 410
- DMG Mori CTX Beta 800
- Studer S41
- DMG NEF 400
- VDF Böhringer DUS 560
- GDW LZ 280 VS
- Blohm Planomat HP 620
- Weiler Praktikant GSD
- DMG Mori 80 eVo FD
- DMG HSC 75 Linear
- Mazak VTC-800/30SR
- DMG DMC 104 V Linear
- DMG DMU 50 Ecoline
- Deckel FP2
- Makino U6 H.E.A.T.

Keywords

- Lathe machining
- 3 axis milling
- 5 axis milling
- surface grinding
- Internal and external cylindrical grinding
- Consultation manuf. concept - component
- Consulting for test bench construction
- Manuf. sequence to meet requirements
- Individual customized manuf. sequence
- best practice manuf. sequence

Networks

Users per annum

Internal Users: 350
External Users in total: 80
External Users: 80
External Users in the EU: 0
External Users outside of EU: 0

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