

Óbuda University
Bánki Donát Faculty of Mechanical and Safety Engineering

Képlékenyalakítás számítógépes és fizikai modellezése
Numerical and Physical Modeling of Manufacturing Processes

Technology planning of manufacturing processes, particularly where complex deformations of the involved materials arise due to mechanical, thermal, electromagnetic or combined effects can be difficult. We can provide model experiments and numerical simulation of the process, and detailed analyses of deformation, integrity, and performance. For an accurate numerical analysis, we can determine input material properties by broad mechanical characterization techniques with tensile, compression, shear testing, fatigue, creep, impact, and fracture testing, formability testing and experimental strain analysis. Our research activities cover intensive plastic deformation technique by equal channel angular pressing.

Infrastructure

- Experimental material forming and testing laboratory: hydraulic press, excenter presses, tensile tester, Erichsen testing machine
- Finite element softwares: Qform, LS-Dyna, Abaqus, Marc

Related Projects

- Intensive plastic deformation by Equal channel angular pressing (ECAP)
- Strength of electromagnetically formed joints

Partners

- Budapest University of Economics and Technology, College of Dunaújváros, Bekomold, Jost, Bosch

Contact

Name: Viktor Gonda, PhD

Address: 1081 Budapest, Népszínház u. 8.

Phone: +36 1 666 5310

E-mail: gonda.viktor@bkg.uni-obuda.hu



