INTERNET-BASED EDUCATION TOOLS FOR MECHANICAL ENGINEERING

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Invited Poster Presentations

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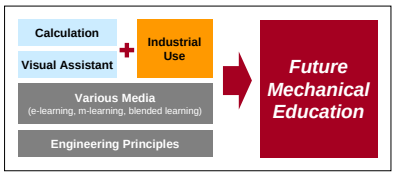
OBJECTIVES



WEB-BASED DESIGN AND MANUFACTURING TOOLS – http://fab.snu.ac.kr/webtools/

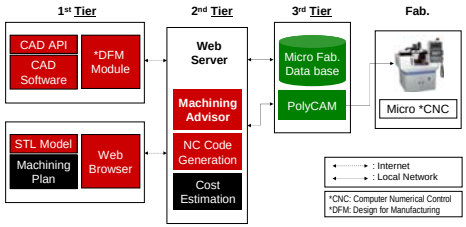
Micro Machining Service (MIMS) | Micro Rocket Design Service (MRDS) | Fused Deposition Modeling (FDMAS) | Light Guide Panel Pattern Generation Service | Springback Compensation Service | Repair Advisory Service (RAS)

WEB-BASED DESIGN AND MANUFACTURING SYSTEM FOR MICRO FABRICATION

http://fab.snu.ac.kr/webtools/smartfab

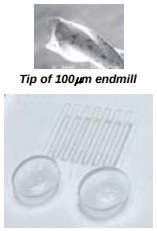
FUNCTIONALITY : Material Selection , Tool Selection, Sketch Validation, Pocket Validation, NC Code Generation, Cost Estimation

System configuration



Tool Selection Dialog

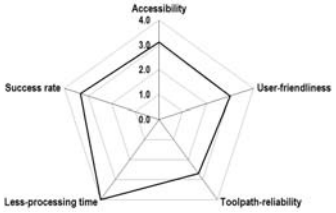
Micro Machining Example



Tip of 100㎛ endmill

Machined on PMMA
(Channel width 200㎛)

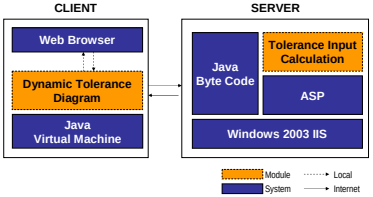
Usability Test Result



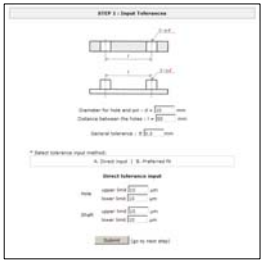
INTERNET-BASED TOLERANCE SERVICE SYSTEM

http://fab.snu.ac.kr/webtools/tolerance

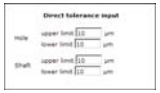
System configuration



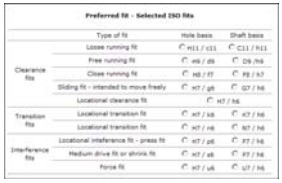
Input Dimensions and Tolerances



Input Environments for Tolerances

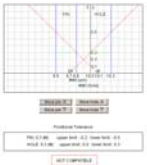


Direct Input Interface



Input Using Preferred Fit

Dynamic Tolerance Diagram



Compatible Tolerance