

CMI

# HASHIMOTO LAB.

## [From Manufacturing Technology to Manufacturing Science]

Collaborative Research Center for Manufacturing Innovation

Ecological Manufacturing Science

Mechanical Engineering Department

<http://www.hashimoto-lab.iis.u-tokyo.ac.jp>

### From Manufacturing Technology to Manufacturing Science

#### Head for Manufacturing Science

Aiming for a rapid progress of manufacturing technology that supports the base of aircraft industry, in which major development is expected hereafter, a project through industry-university-government cooperation has launched on fiscal 2013. At present, the Institute of Industrial Science, the University of Tokyo conduct researches with total of 18 companies including domestic and overseas aircraft makers, machine tool manufacturers, tool manufacturers, material suppliers, cutting oil makers and etc. In addition to the researches of common pain(Generic Project), we are organizing the framework of researches for practical use(Application Study) with CMI industrial members individually and we are aiming for further development.

#### Research Policy

Aim for a rapid progress by enhancing the skill of manufacturing technology to manufacturing science

#### Research Content

1. Rapid and high value manufacturing: High speed, high accuracy processing of difficult-to-cut materials (titanium, CFRP and etc.)
2. Environmentally conscious manufacturing : Minimizing cutting oil(MQL), extending tool life and etc.
3. Manufacturing with the minimum natural resources and less amount of rare metals: Reducing electric power of cutting, reducing chips, and etc.

