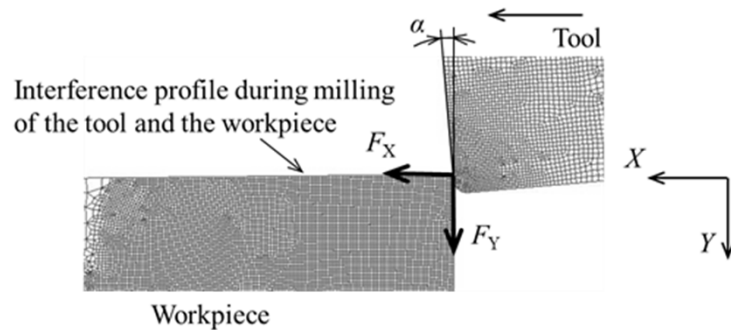
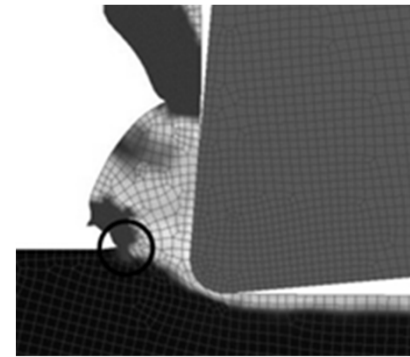


FEM analysis of cutting phenomenon ~ Orthogonal cutting of Titanium alloy* ~

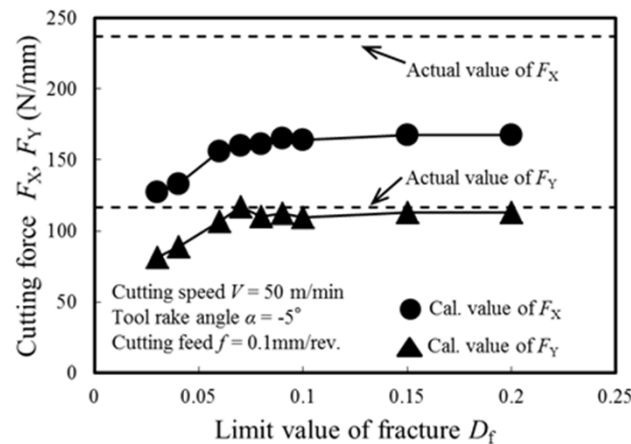
- ▶ FEM simulation for the orthogonal cutting of Ti-6Al-4V alloy in consideration of a ductile fracture condition was investigated.
- ▶ The constants values of flow stress equation and the limit value of ductile fracture condition for the simulation were determined.



(2-D FE model)



(Calculation result of the generation of the saw-tooth type chip)



(Relation between the cutting force and the limit value of fracture in turning process)

* M. Nikawa, et al., Mechanical Engineering Journal, Vol.3, No.2(2016), DOI: 10.1299/mej.15-00536