



# Estimation of Different Machine Tool Errors

Machine Tool Metrology Project- May 2018

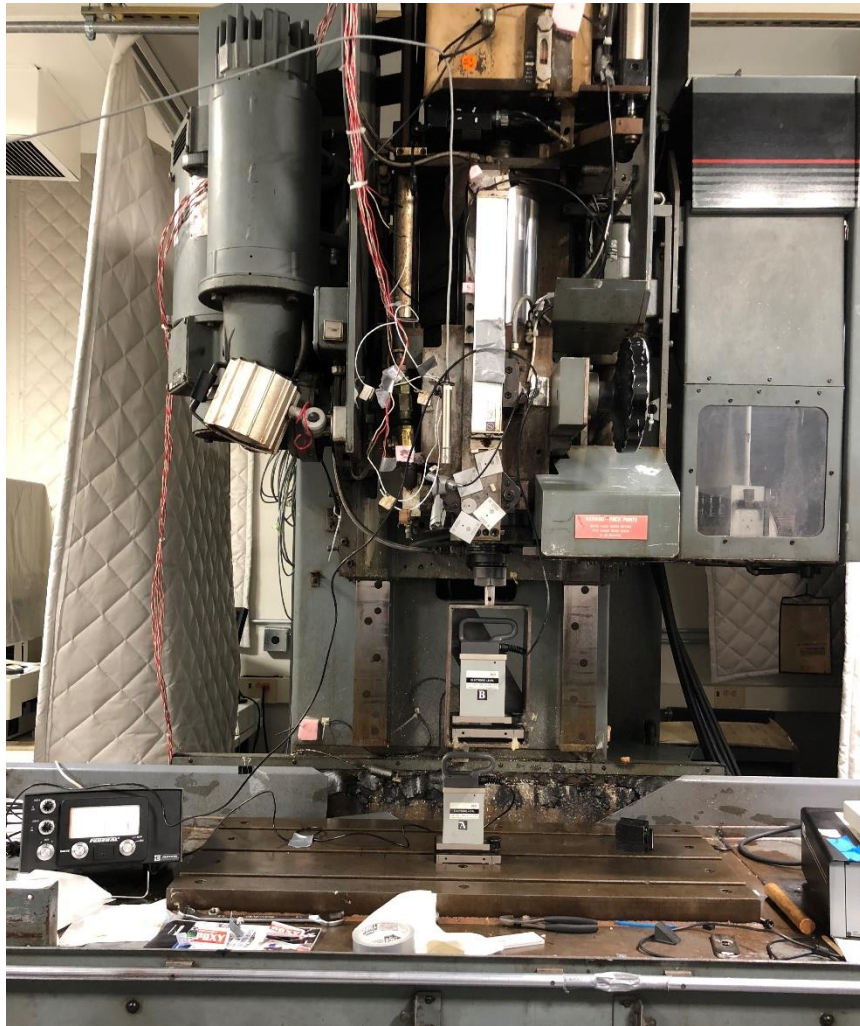
Machine used: Monarch Cortland

Model: VMC 45

Date of Manufacture: 9/27/88



- Roll of Y Carriage





- Estimation of Linear Error



**Linear Displacement Error**

- Estimation of Angular Error



Angular Error (Rotation of csY about zF)

- Estimation of Spindle Error



Spindle Error



- Estimation of Dynamic Error & Contouring



Dynamic Error



Contouring



- Estimation of Straightness



Straightness (eyy)

Optics and Laser used:



