

# 平面モータの校正 - 真直度と直角度の計測

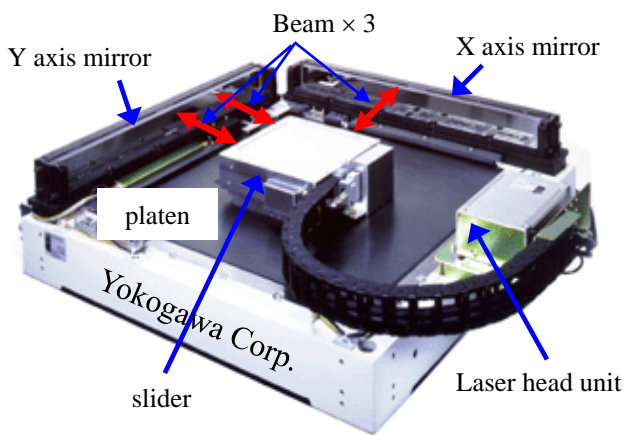
## Study on Calibration of Planar Motor - Straightness and Squareness measurement of plane mirrors

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### Objectives

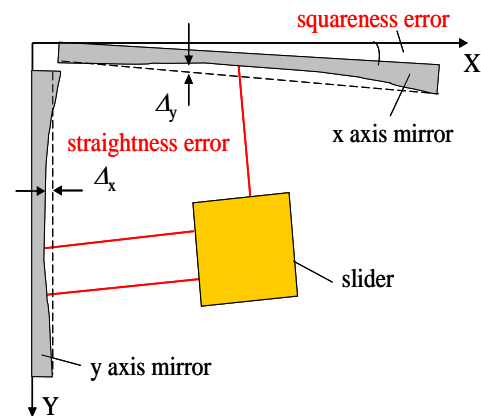
平面モータのための新しい校正手法として、走査法を利用した自己校正手法による真直度と直角度の計測手法を開発した。この方法を利用することで、使用者が現場で平面モータの校正を行うことが可能となる。

### Planar motor

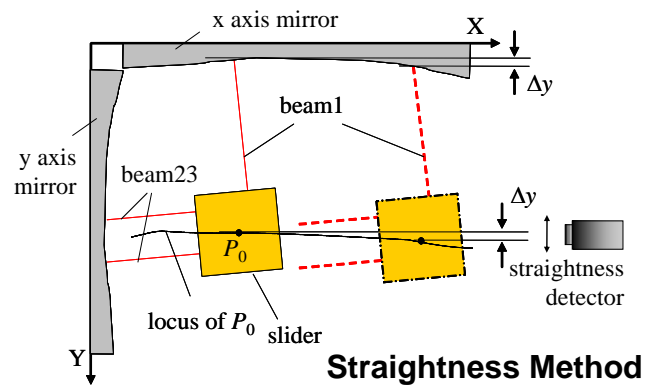
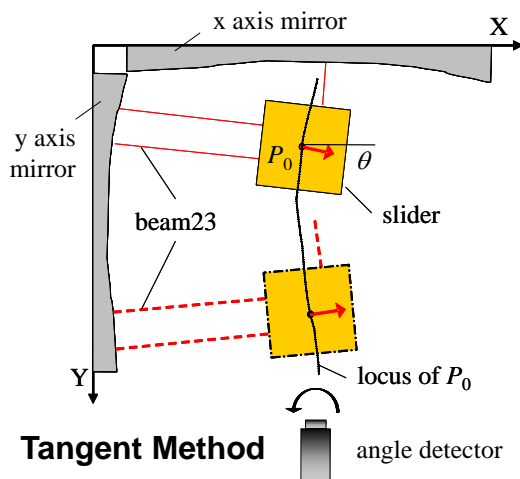


#### ■ Error factors of positioning accuracy

- ▣ Straightness of X and Y axis mirrors
- ▣ Squareness between two mirrors



### Straightness and squareness measurement of two mirrors



#### ■ Straightness measurement of two mirrors

- ▣ Apply tangent method to y-axis mirror
- ▣ Apply straightness method to x-axis mirror
- ▣ No external reference: only a laser interferometer

#### ■ Squareness measurement between two mirrors

- ▣ two error separation technologies are combined
- ▣ No relation with straightness errors of two mirrors
- ▣ No external reference: only a rectangular block and two displacement sensors

