

# NIKON FRANCE S.A.

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 S.A. au capital de 3 820 000 Euros - RCS Créteil B 337554968 - APE 514 S

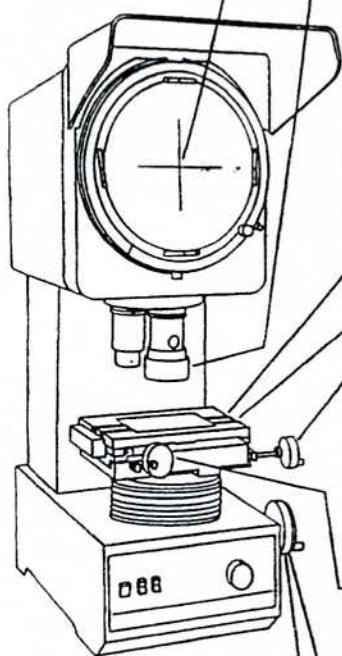
Nikon

## PROCEDURE D'ETALONNAGE

ISO 9001 Certified

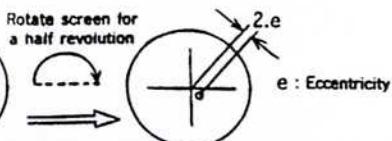


NIKON CORPORATION  
 Instruments Division  
 Yokohama Plant

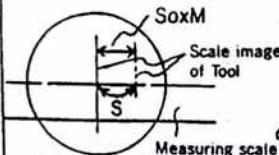


### ② Eccentricity of screen center

A suitable contami-  
nation on stage  
glass



### ① Magnification accuracy of projection lens

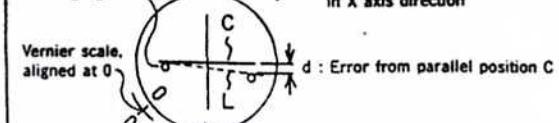


$$\text{Magnification error} = \frac{S - (S_{\text{oxM}})}{S_{\text{oxM}}} (\%)$$

Where  $S_0$  : Nominal scale interval of Tool  
 $M$  : Magnification  
 $S$  : Measuring scale's interval which is  
 read at the scale image of Tool

### ③ Parallel positioning accuracy of stage

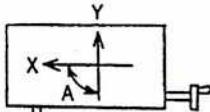
A suitable contamination  
on stage glass



$L$  : Locus of contamination when traveled  
in X axis direction

$d$  : Error from parallel position C

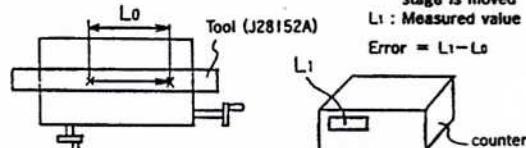
### ④ Squareness of X axis and Y axis



$A$  : Angle between traveling directions of X  
axis and Y axis.  
 "A" should be 90° and can be checked using  
 Tool (J28151).



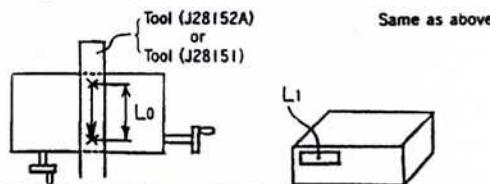
### ⑦ Traveling accuracy in X axis direction



$L_0$  : Scale interval of Tool by which  
stage is moved  
 $L_1$  : Measured value

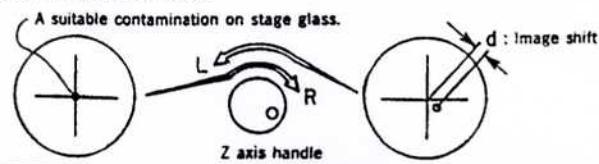
$$\text{Error} = L_1 - L_0$$

### ⑤ Traveling accuracy in Y axis direction



Same as above

### ⑥ Image shift at the focus positions between while rotating Z axis handle in arrow R and L direction



### ⑧ Z axis accuracy

"d" consists of the errors caused by stage glass inclination and  
 Z axis inclination and up-down guide slack.

