CBXFEL Station E

Aerotech parameters setup

Wavefront sensor manipulator X axis

Counts/unit

Encoder = 0.244um resolution => 1 count of encoder = 0.244 * 10^(-3) mm

In Aerotech for mm as unit

Counts/unit = 1/ (0.244* 10^(-3)) = 4098.36065

Counts/rev

1 motor revolution = ? mm

=>4098.36065*? =

Stepper Resolution

2000

Other Parameters (starting point)

Running current = 0.5A

Holding current = 0.2A

Stepper Damping Cut off = 150

Max Speed

axis maximum speed attained ? mm/sec

Error Thresholds

InPositionDistance (the position error threshold below which an axis is considered to be in position) for both axis 10-5 mm

InPositionTime (quantity of time that the position error of the axis must be less than InPositionDistance) = 500 sec

PositionErrorThreshold (maximum allowable position error (the difference between the position command and the position feedback) before a position error fault is generated.)

1mm

Profile Monitor X axis

Counts/rev

1 motor revolution = say 5000 microsteps

Counts/unit

In Aerotech for mm as unit

1 motor revolution = ? mm

=>5000/?

Stepper Resolution

2000

Other Parameters (starting point)

Running current = 0.5A

Holding current = 0.2A

Stepper Damping Cut off = 150

Max Speed

axis maximum speed attained ? mm/sec

Error Thresholds

InPositionDistance (the position error threshold below which an axis is considered to be in position) for both axis 10-5 mm

InPositionTime (quantity of time that the position error of the axis must be less than InPositionDistance) = 0 sec

PositionErrorThreshold (maximum allowable position error (the difference between the position command and the position feedback) before a position error fault is generated.)

1mm