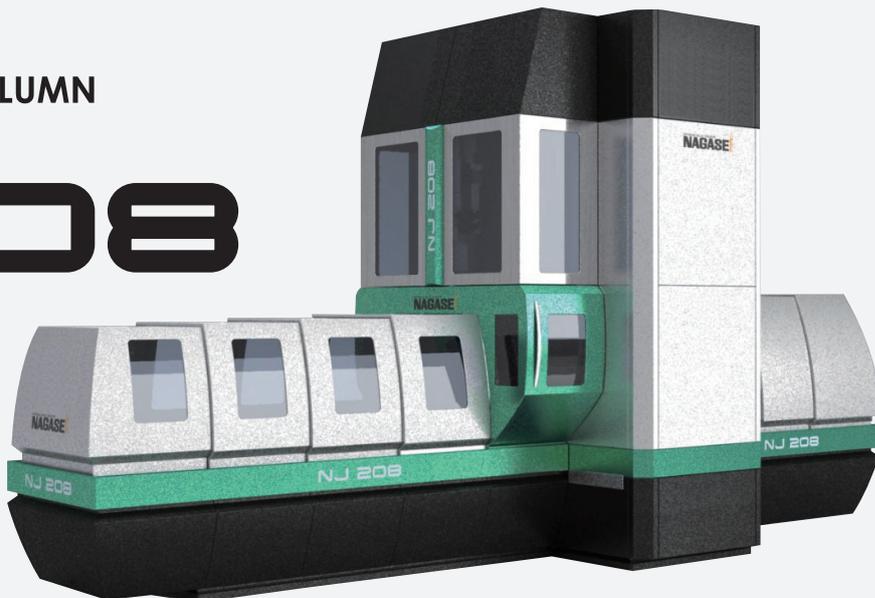


# Realization of High-Precision Jig Grinding with Unprecedented Machining Area!

ULTRA PRECISION DOUBLE COLUMN  
JIG GRINDING MACHINE

# NJ-208



\*The product photo is a CG image and may differ from the product in some areas.

## Features

### ■Large-Size Jig Grinding Machine with Ultimate Collaboration

Capable of grinding jigs up to L2000 X W800 X H500mm in machining area. NAGASE's double column structural machine with submicron absolute motion accuracy and repeatability is equipped with a jig head, and jig grinding with unprecedented precision is now possible.

### ■Unprecedented Machining Area with Higher Machining Accuracy Than Ever Before

Positioning accuracy of 1 μm or less is achieved for all X, Y, and Z axis strokes. Planetary motion drilling holes up to 200 mm, and X- and Y-axis interpolation and C-axis control in the normal direction for larger holes up to φ800 mm. The X and Y axis interpolation accuracy is sub-micron at 50 mm radius and 250 mm/min feed rate, and the deviation due to the direction of rotation is also extremely small, the machine has almost no inflection points, and thus achieves machining of large diameters with almost the same accuracy as that of small diameters.

### ■Motion Accuracy That Can Also Be Used as a Measuring Machine

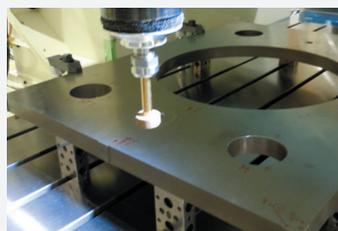
The X (longitudinal)-Y (cross) axis of the main unit table guide surface use NAGASE's unique combination of hydrostatic sliding surfaces and linear motors. Sub-micron X (longitudinal)-Y (cross) axis repeatability and minimum set unit feed accuracy are achieved, and on-machine measurement (OP) with a precision measuring probe is possible without removing the workpiece after machining. Corrective machining becomes easy.

### ■It Is Not Only Accuracy That Is "Out of the Ordinary"

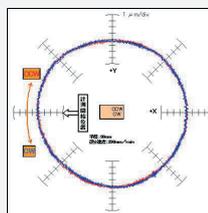
In addition to machining accuracy, this machine has various features that overturn the conventional wisdom of jig grinding machines. For example, the X-Y axis feed rate is 10 m/min. This machine reduces the machining time for large workpieces. Dry and wet machining are possible. High-precision machining is possible.



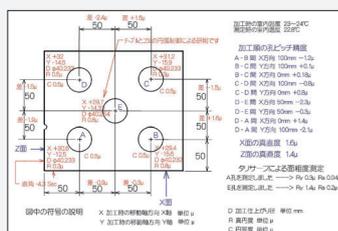
Machining section and jig grinding unit



Simultaneous control of X, Y, and C axis enables jig grinding of unconventional sizes



Secondary axis interpolation accuracy of X and Y axis is less than 1μm (Measurement data at a radius of 50 mm and a feed rate of 250 mm/min)



Hole pitch machining accuracy of 1μm or less by CMM (coordinate measuring machine)