GRIND – X

OKAMOTO PRECISION SYSTEMS

Okamoto

ACC- CA3 Series
Surface Grinders

ACC-CA3 Series

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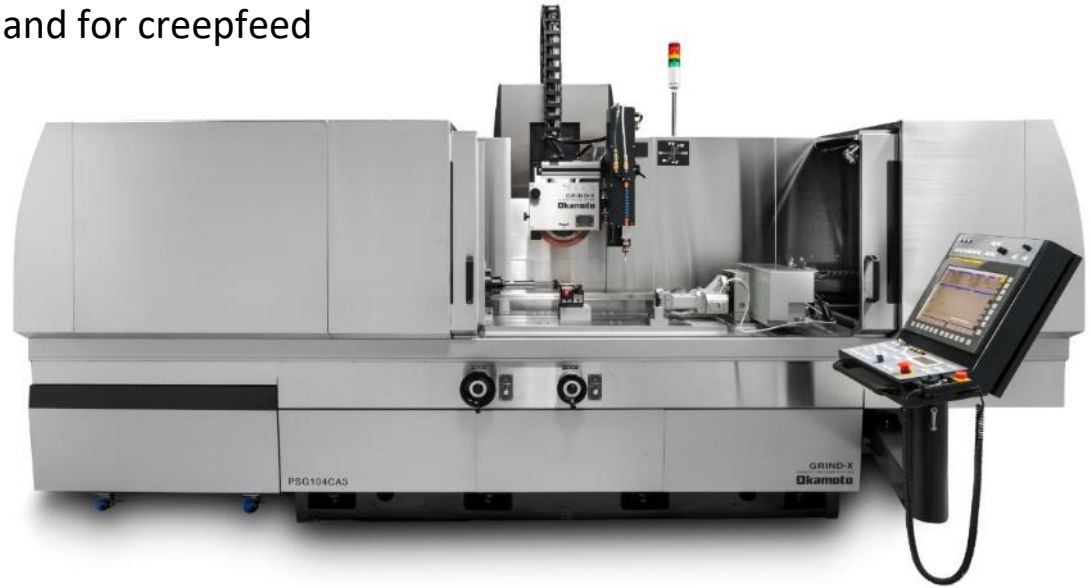
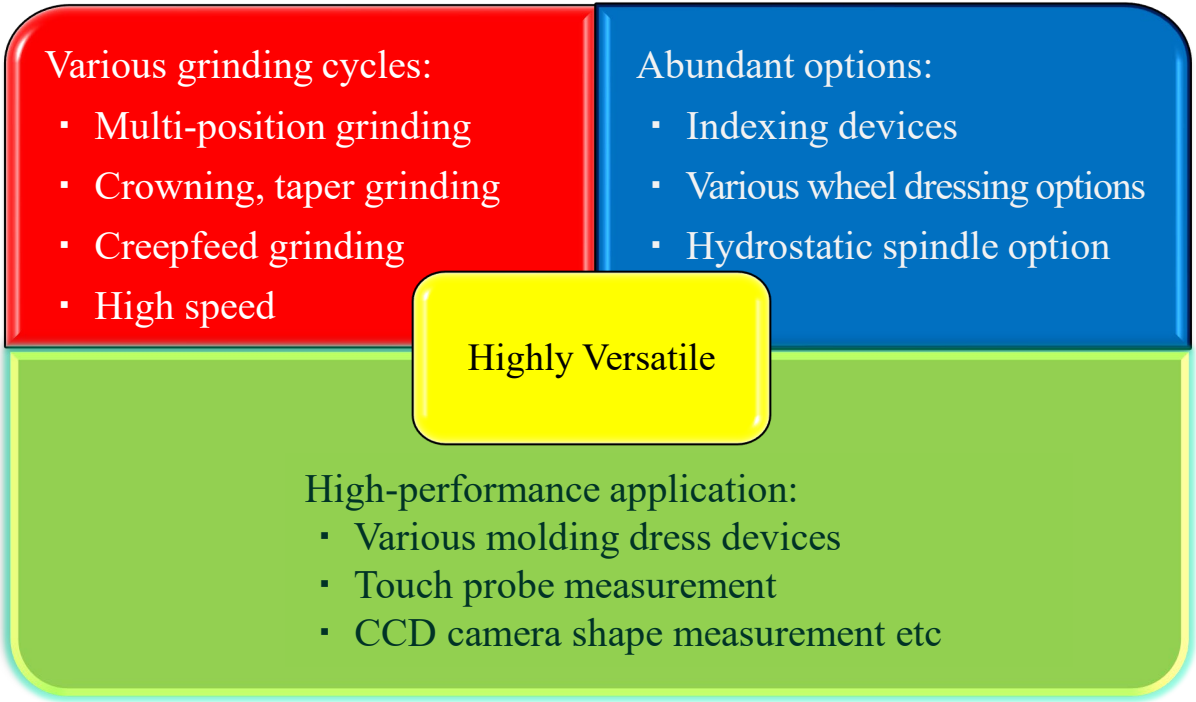
- Fanuc NC Control
- High precision linear guide + ball screw drive is used on the table X axis to enable accurate left and right positioning.
- Stiff and Stable for fast reciprocation and for creepfeed grinding
- 4th axis rotary table index Options
- Option for dressing by swing dresser via extra axis
- Table mounted diamond roll option



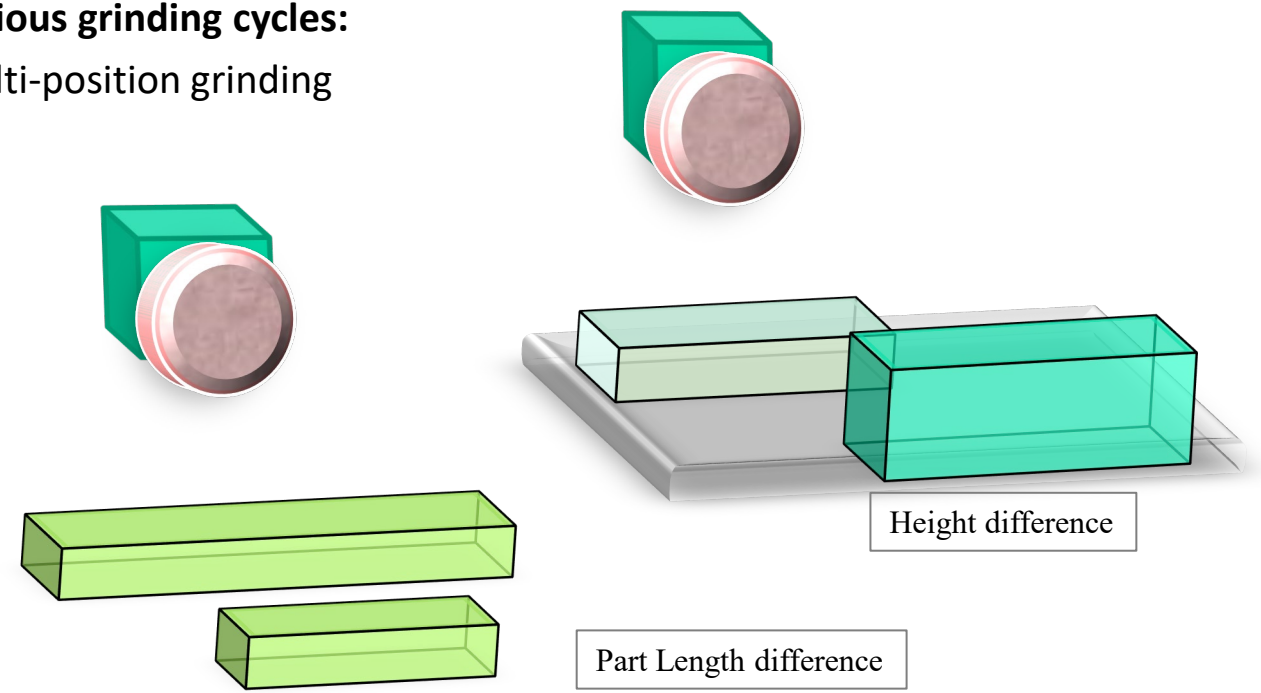
Technology to meet the complex grinding process



Technology to meet the complex grinding process

Various grinding cycles:

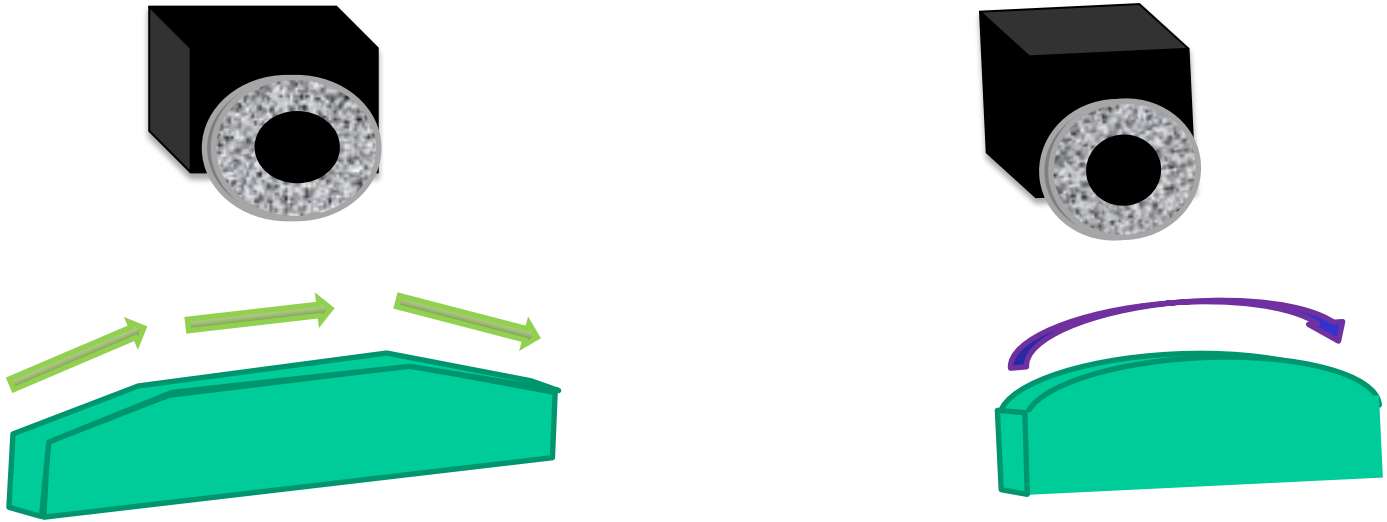
Multi-position grinding



Technology to meet the complex grinding process

Various grinding cycles:

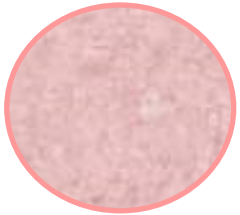
- Crowning grinding & taper surface grinding via 2 axis X and Y synchronisation
- Crowning (free curve) grinding and taper grinding can be performed 。



Technology to meet the complex grinding process

Various grinding cycles:

- High speed & creep grinding
- Achieves a maximum table speed of 40 m / min.



CA3 Design

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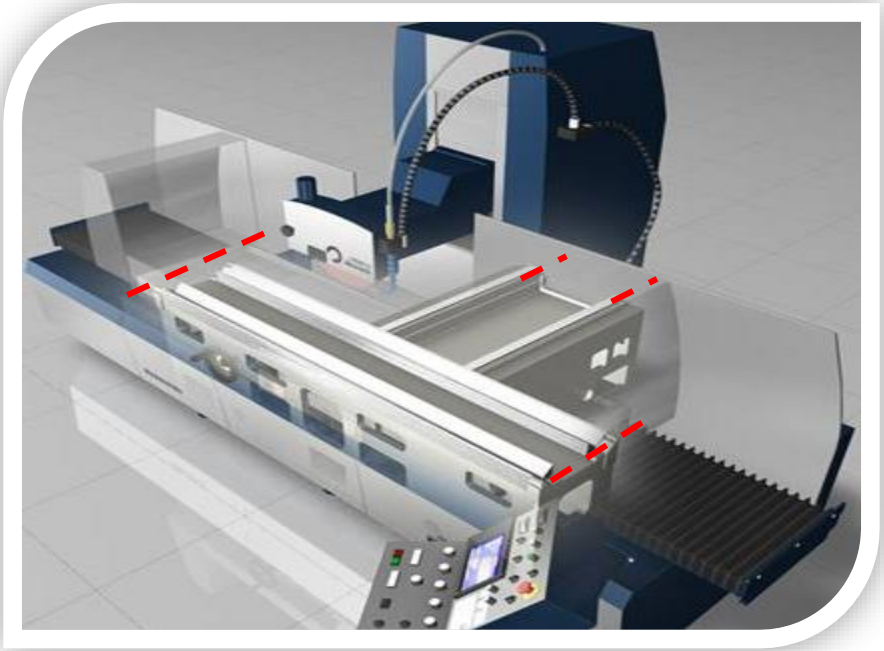
- The T Bed Machine Frame has been extended in both the X and Z directions for minimum overhang and give best stability.

- Table without T slot for maximum strength and to maintain accuracy for long time.



CA3 Design

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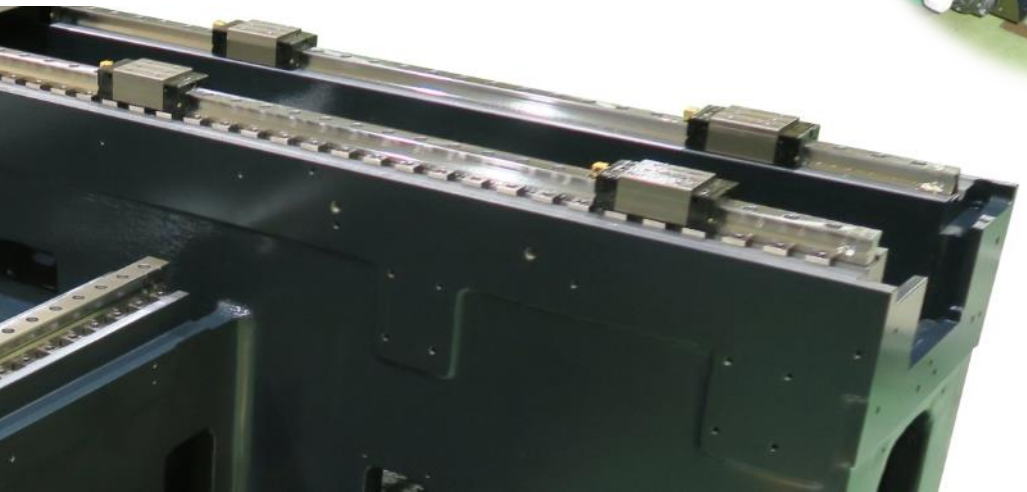
- THK Precision Linear Rail Slideways.
- Heavy Ribbed Cast Iron Construction.
- Massive Wheelhead Casting.
- 40mm NSK Precision Ball Screws.



Options

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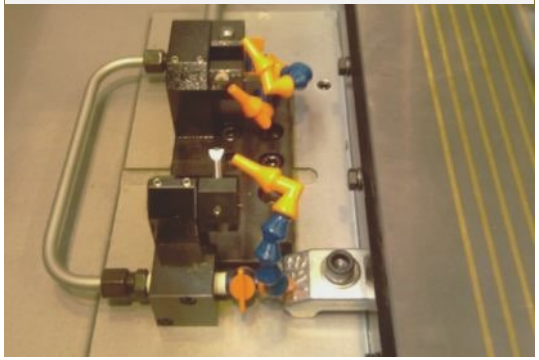
Fixed Diamonds.



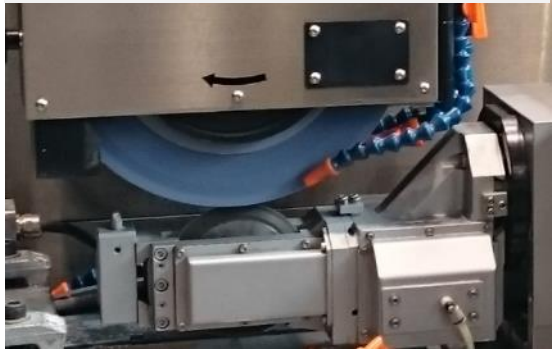
Overhead dresser

Single Point Swing Dresser

Lift up dresser arm .

Rotary Dresser

Rotary Swing Dresser

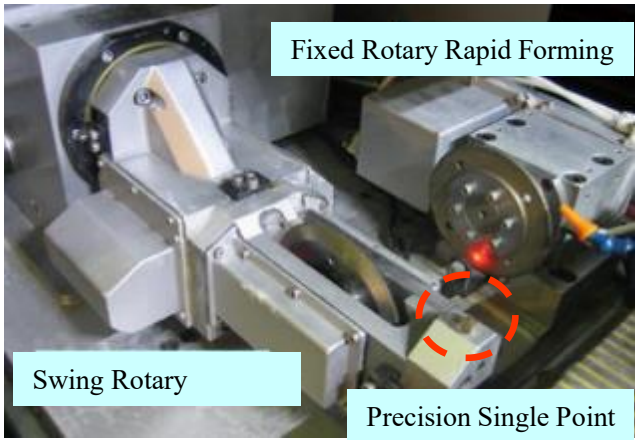


Technology to meet the complex grinding process

Advanced application:

We can propose various combinations of high precision dressing equipment.

Example 1: Rotary Dress + Swing Rotary Dress Combination



Outer circumference, rough dress
⇒ Fixed rotary dresser

From taper forming to R forming
Perform finishing dress with high precision swing dresser

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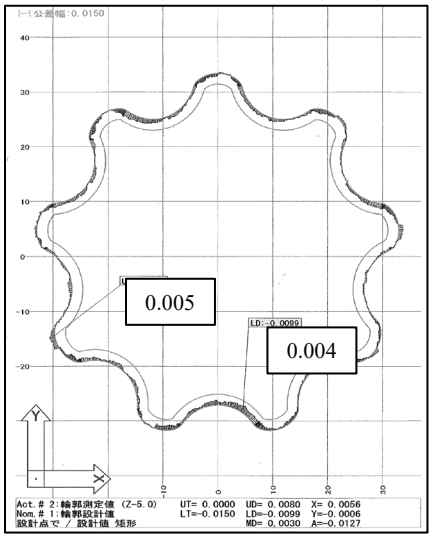
Technology to meet the complex grinding process

Many options:

- Indexing device
- Gear tooth grinding or grooving, etc. can be performed



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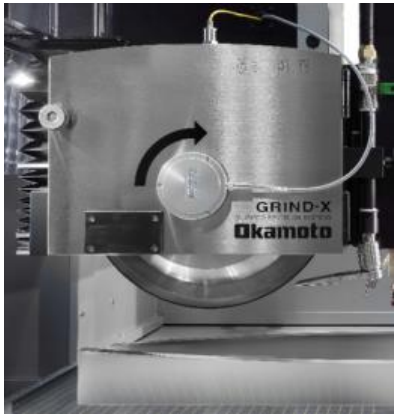
Technology to meet the complex grinding process

Precision Surface Options:

- Mirror grinding specification – Knowhow and options required for mirror grinding exclusively available from Okamoto

Hydrostatic Spindle



Super Fine filtration

Options

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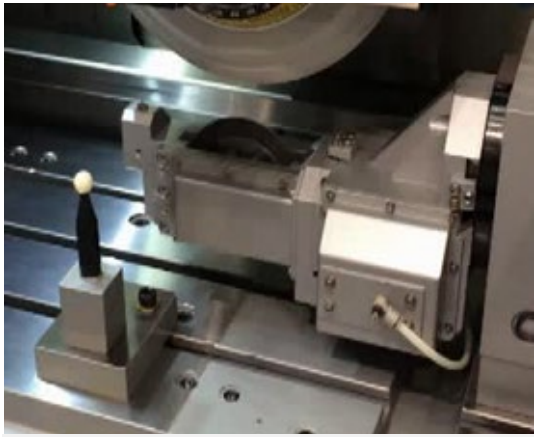
Technology to meet the complex grinding process

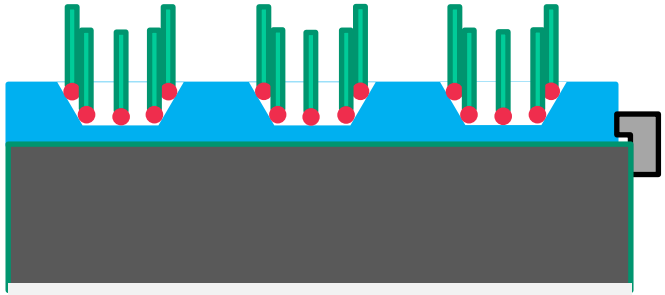
Advanced Measuring Options:

- Touch probe measurement - You can measure parallelism and flatness on machined workpieces
- Grinding - measurement – correction processing

Measure the top surface to start



Reference Sphere to be probed before measuring the workpiece

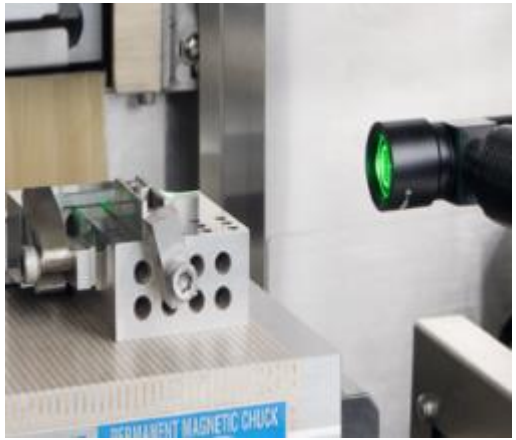


Slot Measuring- width, depth, pitch etc.

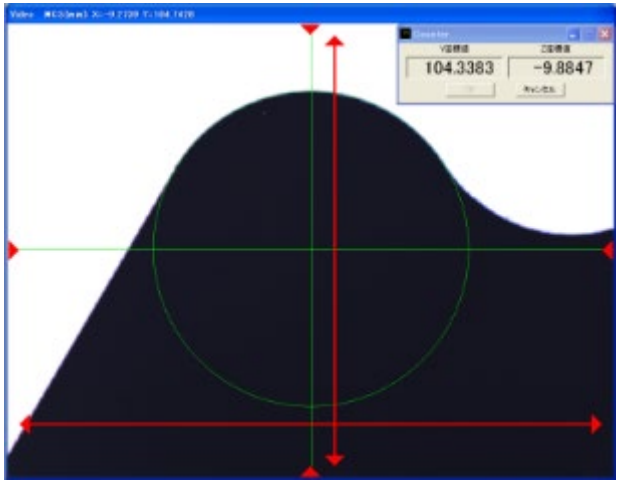
Technology to meet the complex grinding process

Advanced Measuring Options:

- CCD camera measurement
- Perform shape measurement with high resolution CCD camera



Shape measurement



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