

# Electric Cam • Synchronized Motion Controller

This controller operates by the motion pattern data with synchronized multi axes cyclic motion such as servo press and high speed transfer.

## Achievements

- High Speed Insertion : High speed synchronization of Spindle 3000 rpm ( 20 msec cycle)
- High Speed Transfer : Accurate picking and/or alignment
- High Speed Assembly : Several tens of msec cycle for insertion/mounting/forming
- Force and Torque Control : Servo press/ Injection Molding/ Bending

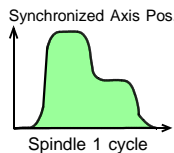
## Merits with TECHNO Electric Cam

- Precise Motion Pattern : provide accurate and elaborate motion
- Easy Definition : specify the motion pattern for each axis by direct setting
- Creating Motion Patterns : create motion patterns by PC software and validate them by the graphical representations
- Changing Motion Patterns : change the operation pattern immediately on a particular condition during the operation
- Optimum Setting : adjust and confirm the Force/Speed/Position by the quantitative analysis.
- Combination with TECHNO code : be compatible with Electric Cam and various motions as a production machine

## TECHNO Electric Cam

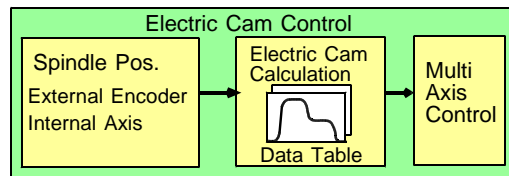
Setting: set the position data ( Electric Cam ) on the table for each axis based on the spindle position  
 Control: control multi axes corresponding to the spindle position by real-time calculation

PC

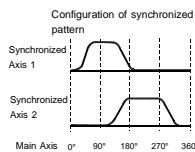


setting

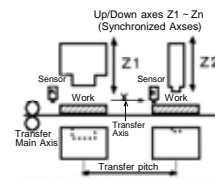
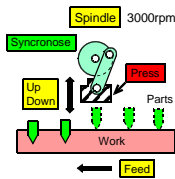
TECHNO OPEN-MC



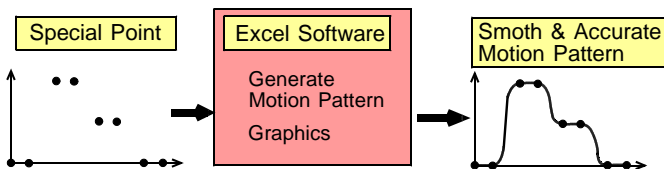
## Electric Cam Table



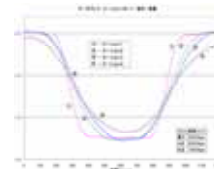
## Image of synchronized machine



## Creation of Motion Pattern by PC software



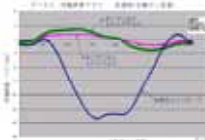
## ex. 3000 rpm synchronization



## NC Technology for High Speed Synchronization

- Small interpolation with accurate continuity
- Multi Axes Synchronization
- The complete synchronization with spindle and the others axes
- The quantitative analysis for motions

## ex. precision analysis



## Open Motion Controller for Electric Cam

### SLM4000

- one board stand alone
- 4 pulse train axes control
- 32 inputs 32 outputs
- RS232 /USB
- PLMC-MIEX
- plc module type
- MECHATROLINK-
- 4/9/16 axes Max 30 axes
- extension by plc other module



### PLMC40

- plc module type
- 4 pulse train axes control
- 16 inputs 16 outputs
- extension by plc other module
- Multi Axes Motion AMP.
- Motion Control
- Servo AMP. Max 7 Axes
- 42 inputs 42 outputs
- ( max 256/256 ) Cable-less

