

# Precise Cutting Motion Controller

Precise Cutting Motion Controller provides the type of operation such as precision cutting and welding as same as a high level NC machine. Also this controller broadens the possibility of the various operations and give opportunity to meet customer's expectations.

## Achievements

precision cutting, laser cutting, welding, lathe, auto lathe, drilling, polisher, marking, EDM, molding, bending, knitting machine, forming press, wiring, dispense

## Tangible merit base on examples

- ◆ double productivity by implementing Precise Cutting Pack. into a general machine
- ◆ 5-axes cutting at high speed DNC on the original CAM
- ◆ lens polishing by 9 axes interpolation
- ◆ precise cutting for minute modeling

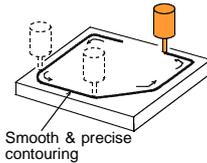
## General and optional functions.

### ◆ small interpolation with precise continuity

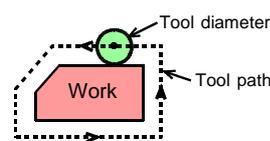
Small interpolation with precise continuity (0.5msec)  
 ◆ Precision  
 ◆ Smooth



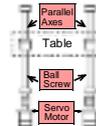
### ◆ accurate contouring



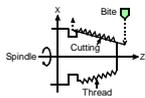
### ◆ tool diameter compensation



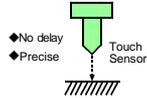
### ◆ parallel axes & Gantry



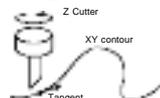
### ◆ lathe & thread-cutting



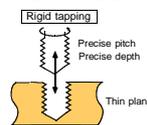
### ◆ tool set



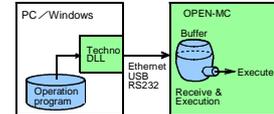
### ◆ tangent-control



### ◆ rigid tapping



### ◆ DNC



### ◆ others

corner override, S-curve acceleration/deceleration, manual pulse generator, spindle control, tool length compensation, pitch error compensation, torque control, macro function, multitask, CAM interface, DFX interface

## Performance like an advance NC.

G code      TECHNO code  
 Multi-axis interpolation (9 axes)  
 Multitask

## High performance and functions beyond a normal NC

Small interpolation with accurate continuity (0.5 msec)  
 Combination of the cutting machine and other type of machine for auto control with various options

## High-precision

High precision contouring  
 Precision analysis (locus, velocity)

## Operation by original application software

Software interface is open so that EXCEL or general software is allowed to operate precise cutting motion controller directly.

## effective customization (over hundreds cases)

- ◆ customized IO control: control for a laser power or a specific type of head for main axis
- ◆ special motions : effectively customize a canned cycle and precise motions

## Precise Cutting Motion Controller

### ◆ SLM4000

one board stand alone  
 4 pulse train axes control  
 32 inputs 32 outputs  
 RS232 /USB



### ◆ PLMC-MIEX

plc module type  
 MECHATROLINK-II  
 4/9/16 axes    Max 30 axes  
 extension by plc other modules



### ◆ PLMC40

plc module type  
 4 pulse train axes control  
 16 inputs 16 outputs  
 extension by plc other modules



### ◆ Multi Axes Motion AMP.

Motion Control  
 Servo AMP. Max 7 Axes  
 42 inputs 42 outputs  
 (max 256/256) Cable-less



## milling



## rigid tapping machine



## Desktop Precise Cutting



## 5-axes CAM



## operation screen



## precision analysis for a perfect circle.

