Application Notes

Much simpler than Air Cylinder

Mechatronics Cylinder will make your system **simpler**
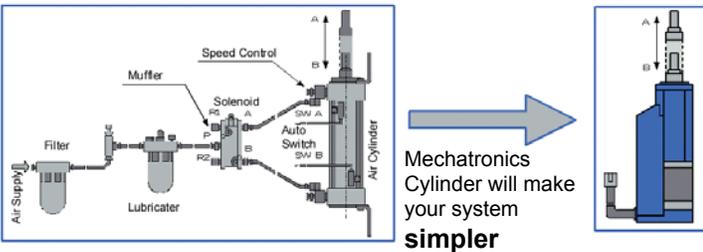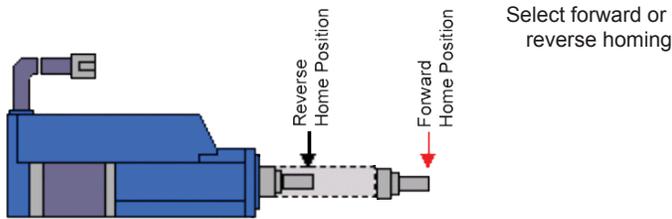
Standard positioning

Positioning can be programmed with speed and acceleration for each position.
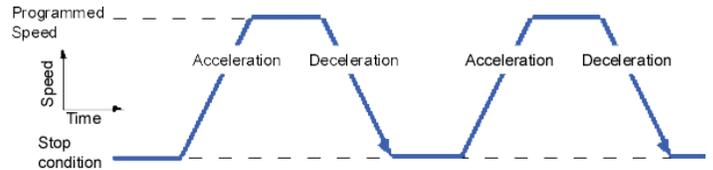
Homing direction change

Select forward or reverse homing

Push force mode

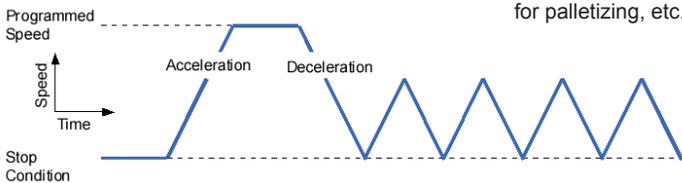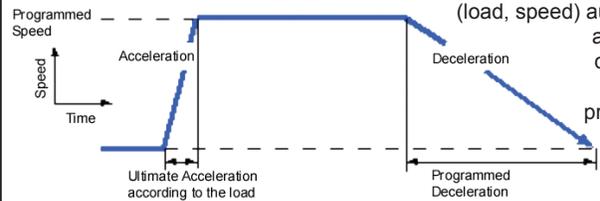Push force mode can be programmed with force data entry (% of max force)
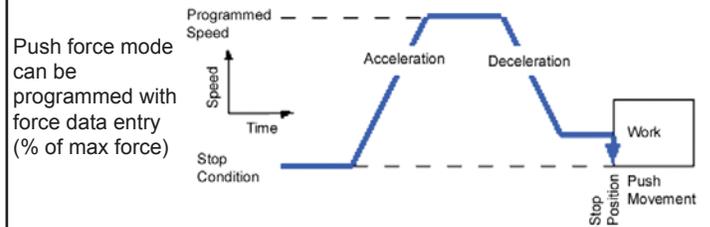
Incremental movement

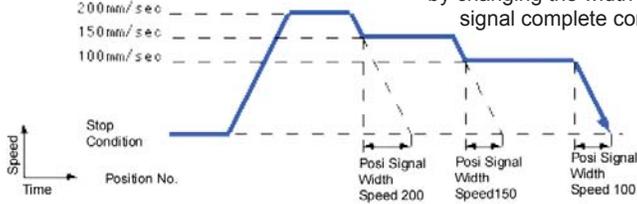Incremental motion can be programmed with pitch data entry for palletizing, etc.

Auto max. acceleration

Ultimate acceleration can be set for the condition (load, speed) automatically and then the deceleration can be programmed.
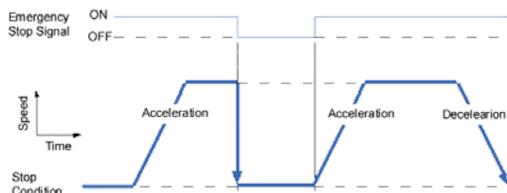

Speed profile

Flexible speed profiles can be programmed by changing the width of the signal complete condition
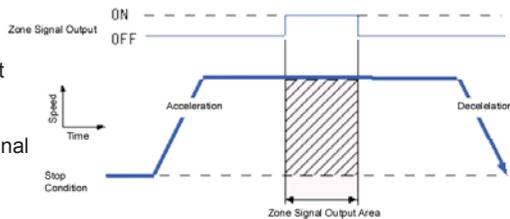

Emergency stop

In case of Emergency stop input, all movement stops, but the program can continue after the Emergency stop is cleared.
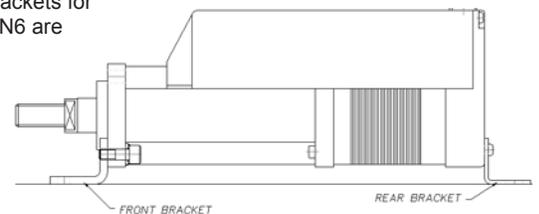

Zone signal output

The Mechatronics Cylinder can be programmed to energize an output when it is in the desired zone. Duration of the signal can be specified.
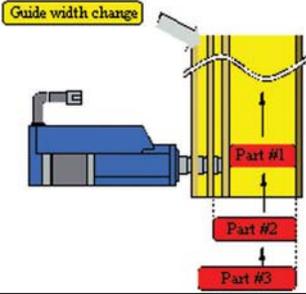

Mounting Brackets

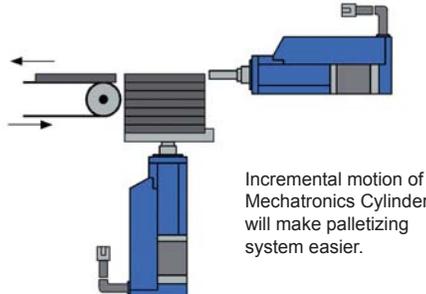Metal angle brackets for SCN4 and SCN6 are available.

Application Examples : By using Mechatronics Cylinder, the flexible system may be built easily without extra cost.
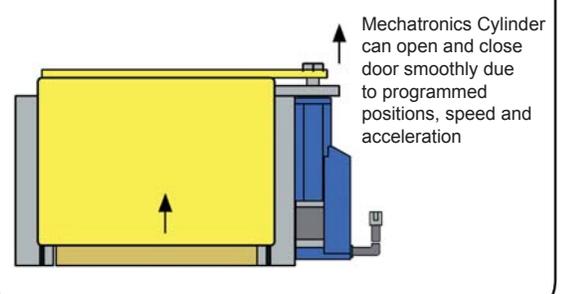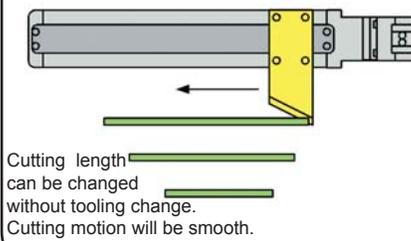
Guide rail width chang

Guide width change

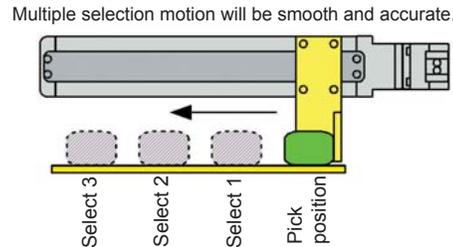Part #1
Part #2
Part #3

Palletizing/De-palletizing

Incremental motion of Mechatronics Cylinder will make palletizing system easier.

Door operation

Mechatronics Cylinder can open and close door smoothly due to programmed positions, speed and acceleration

Cutting tool

Cutting length can be changed without tooling change.
Cutting motion will be smooth.

Selection tool

Multiple selection motion will be smooth and accurate.

Select 3   Select 2   Select 1   Pick position

Sawing tool

Sawing motion is programmable with speed, stroke and push force.
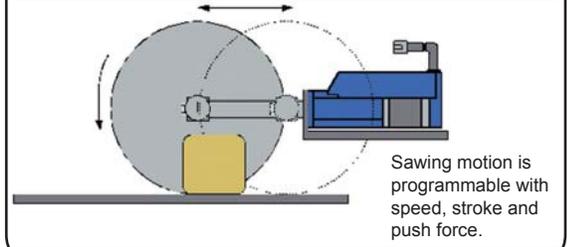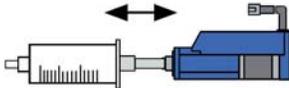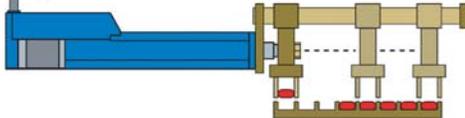
Reciprocating pump

Pumps can be programmed with volume stroke, acceleration for smooth and high speed dispensing
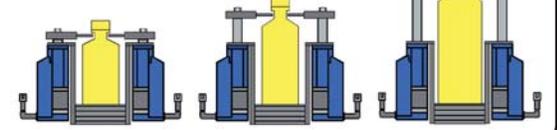
Palletizing P&P

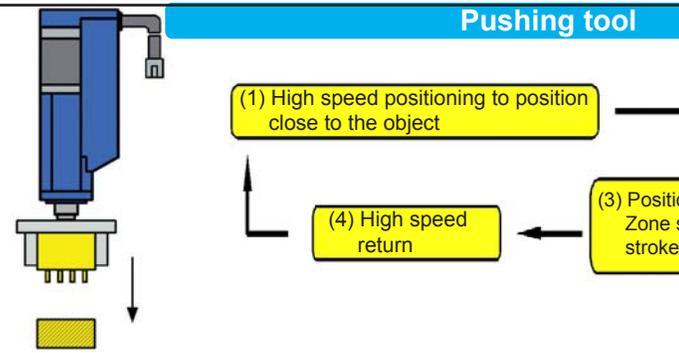Increment function will make palletizing P&P system programming easier.
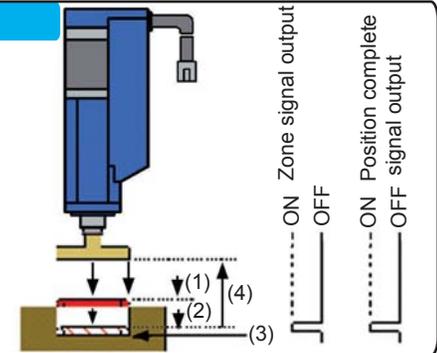
Bottle guide height change

Bottle guide height can be moved to programmed position at low cost.
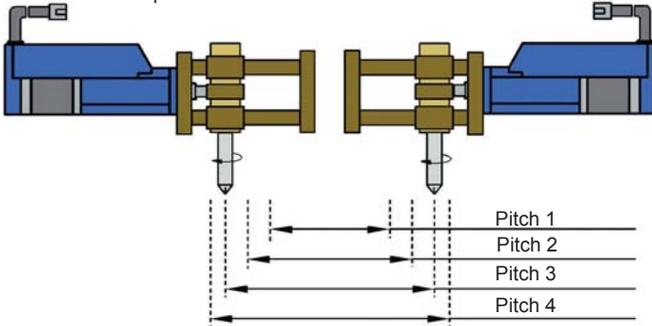
Pushing tool

Push & inspection

(1) High speed positioning to position close to the object

(2) Push object at programmed force

(4) High speed return

(3) Position complete signal output Zone signal output @ programmed stroke area (zone)

Zone signal output
Position complete signal output
ON
OFF
ON
OFF

(1) (4)
(2)
(3)

Screw driver pitch change

Screw pitch can be changed corresponding to the products.

Pitch 1
Pitch 2
Pitch 3
Pitch 4

Zone signal inspection

If Mechatronics Cylinder is programmed with zone signal with parts size tolerance, parts size inspection can be done.

Push force movement

Zone signal: ON=>Good (in Tolerance)

Zone signal: OFF=>NG (out of Tol.)

Tolerance

Part   Part

Zone signal stroke area

Output: ON

Zone signal output

Output: OFF