



I N T E L L I G E N T S O L U T I O N

# OACIS®

## MULTIPLE AXES SERVO CONTROLLER -TOTAL SOLUTION

다축서보제어 통합솔루션

OACIS is the open architecture servo control system.  
It provides one of most intelligent and flexible manufacturing solutions.

OACIS는 개방형 아키텍처 서보 제어 시스템으로서, 서보프레스(OACIS-P), 너트러너(OACIS-T) 등과 연동하여 최적의 생산기술 솔루션을 제공합니다.

SERVO PRESS | NUT RUNNER | DAQ & ANALYSIS | SPC

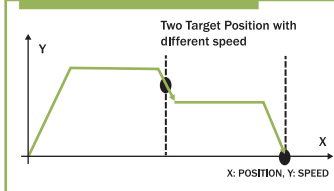


# SPECIAL FEATURES

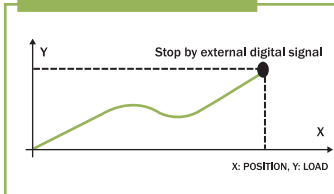
## FUNCTIONS

### MOVE

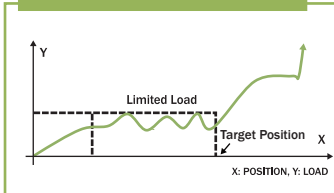
#### Move to Position by Var #2



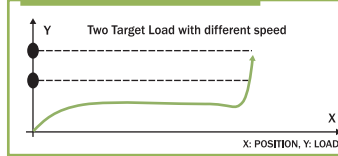
#### Move to DI



#### Move to Position with Limited load



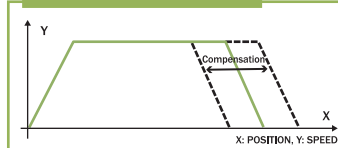
#### Move to Load by Var #2



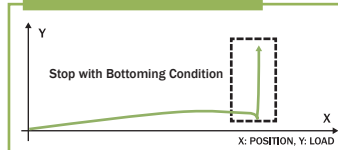
#### Move to AI



#### Dynamic Move to Position

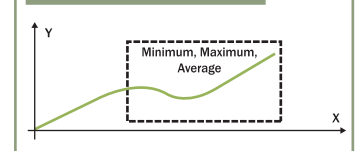


#### Move to Bottom

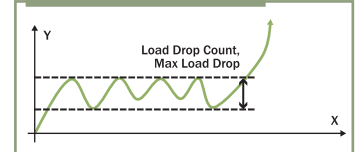


### ANALYSIS

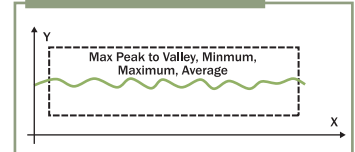
#### Analysis MinMaxAve



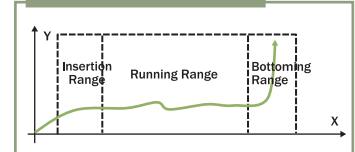
#### Analysis Load Drop



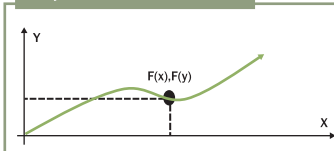
#### Analysis Turning Torque #1



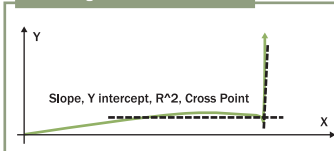
#### Analysis Press #2



#### Analysis Fx

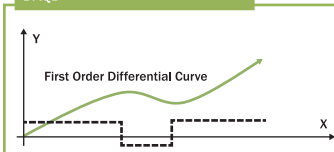


#### Linear Regression #2

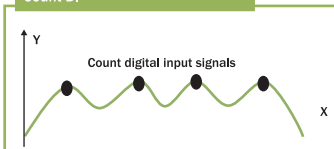


### MEASURE

#### DAQD

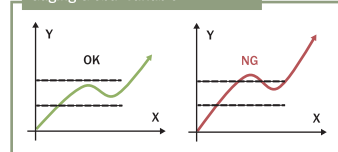


#### Count DI

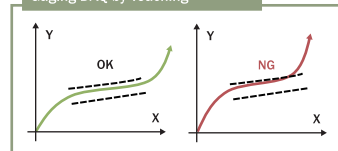


### GAUGE

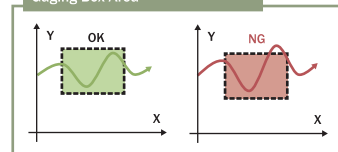
#### Gaging Global Variable



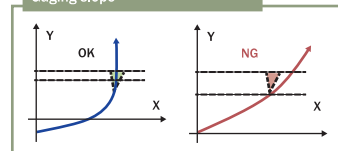
#### Gaging DAQ by Teaching



#### Gaging Box Area

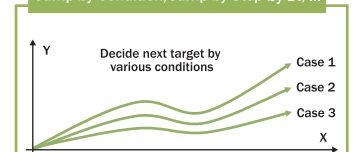


#### Gaging slope

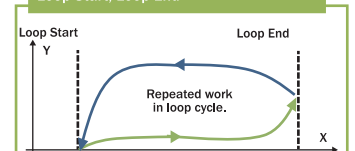


### SEQUENCE

#### Jump by Condition, Jump by Step by DI, ...

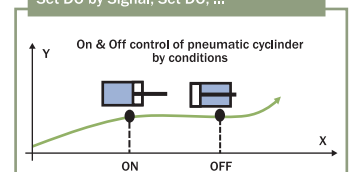


#### Loop Start, Loop End

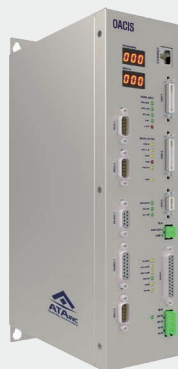


### SIGNAL

#### Set DO by Signal, Set DO, ...



# SERVO CONTROLLERS


**OACIS-2X**
**OACIS-1X**
**OACIS-2XC**
**OACIS-1XC**

## DIGITAL INPUTS & OUTPUTS (PNP or NPN) / 2X&1X: Hardwired / 2XC&1XC:via Industrial Network

|                |        | OACIS-2X                                                | OACIS-1X | OACIS-2XC | OACIS-1XC |
|----------------|--------|---------------------------------------------------------|----------|-----------|-----------|
| AXES QUANTITY  |        | 2                                                       | 1        | 2         | 1         |
| SYSTEM INPUTS  |        | Program Start, Program Stop, Return Home, Reset, E-Stop |          |           |           |
| SYSTEM OUTPUTS |        | Home OK, Program Home OK, Ready, Error, Program End     |          |           |           |
| STATUS BIN     |        | 4 Bit                                                   | 4 Bit    | 5 Bit     | 5 Bit     |
| SET PROGRAM    | In     | 7 Ch                                                    | 7 Ch     | 7 Ch      | 7 Ch      |
|                | Out    | 7 Ch                                                    | 7 Ch     | 7 Ch      | 7 Ch      |
| PROGRAM MABLE  | Input  | 14 Ch                                                   | 6 Ch     | 14 Ch     | 14 Ch     |
|                | Output | 14 Ch                                                   | 5 Ch     | 14 Ch     | 14 Ch     |

## COMMUNICATION PORTS

|          |  |        |        |        |        |
|----------|--|--------|--------|--------|--------|
|          |  | X      | X      | 1 Port | 1 Port |
| ETHERNET |  | 1 Port | 1 Port | 1 Port | 1 Port |
| RS422    |  | 2 Port | X      | X      | X      |
| RS232    |  | 2 Port | 2 Port | 2 Port | 2 Port |

## SIGNAL INPUTS

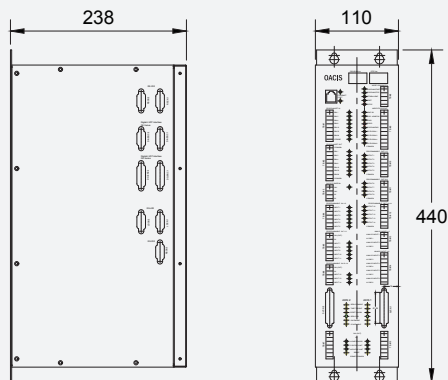
|                |             |      |      |                                          |      |
|----------------|-------------|------|------|------------------------------------------|------|
| ANALOG INPUT   | 4-20mA      | 6 Ch | 2 Ch | 6 Ch<br>(4 Ch: +/-10V, 2 Ch: Selectable) | X    |
|                | +/-10V      |      |      |                                          | 2 Ch |
| ENCODER INPUTS | TTL         | 2 Ch | 1 Ch | X                                        | X    |
|                | Line Driver |      |      | 2 Ch                                     | 1 Ch |

## DATA

|                   |                      |
|-------------------|----------------------|
| PROGRAM STEPS     | Max 700 Steps        |
| PROGRAM QUANTITY  | Max 120 Programs     |
| DATA STORAGE CAPA | Min 1 Million Cycles |

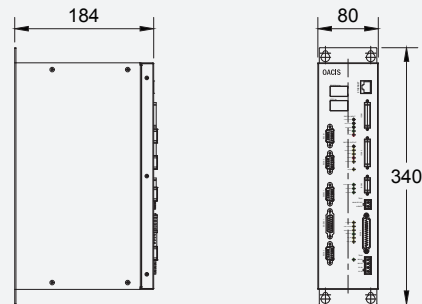
# SERVO CONTROLLERS

OACIS-2X



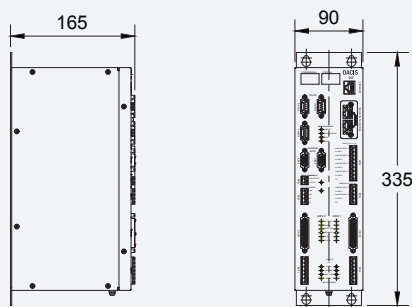
WEIGHT : 6 kg

OACIS-1X



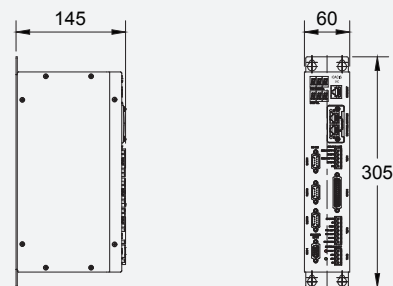
WEIGHT : 3 kg

OACIS-2XC



WEIGHT : 3 kg

OACIS-1XC



WEIGHT : 2 kg

## SPECIAL FEATURES

### ► MOVE

- Move to Press
- Dynamic Move to Position
- Move to Bottom
- Move to AI
- Move to DI
- Move to Position with Limited Load

### ► ANALYSIS

- Analysis Press
- Analysis Turning Torque
- Linear Regression
- Analysis Load Drop
- Find Point

### ► SEQUENCE

- Jump to Step
- Jump by Condition
- Jump by Multi Conditions
- Jump to Step by DI
- Loop Start / End
- Wait to DI

### ► GAGING

- Gaging Global variable
- Gaging AI or Position
- Gaging DAQ by Teaching

### ► MEASURE

- Measure AI Or Position
- DAQ DAQ2, DAQA
- DAQD
- CAPTURE
- Count DI

### ► SIGNAL

- Set Status Binary
- Set Signal Filter
- Set DO by Signal
- Set As Abs Value
- Set AI or Position
- Send Out Data

## OACIS-P

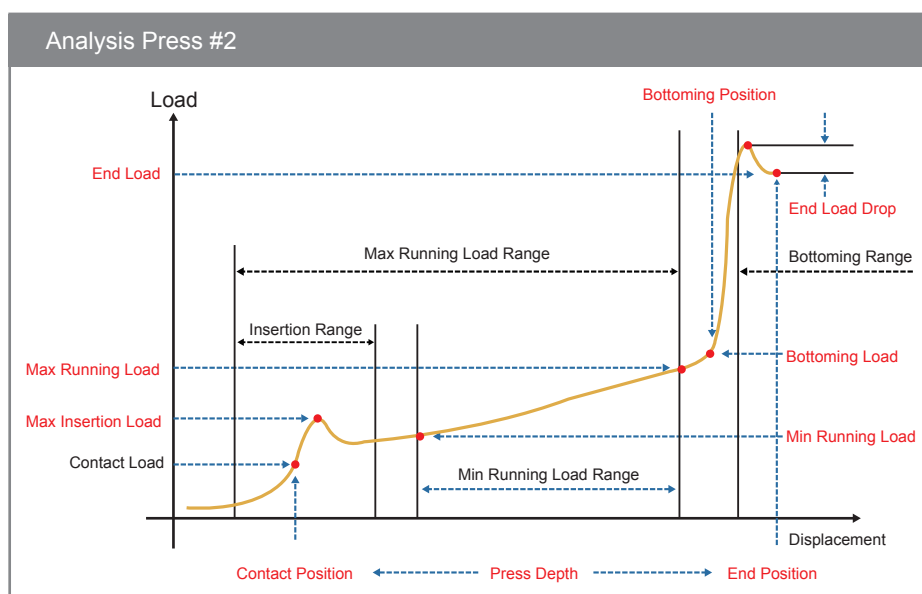


| MODEL              | MAX LOAD | STROKE | MAX SPEED |
|--------------------|----------|--------|-----------|
| OACIS-P001-150-300 | 1 kN     | 150 mm | 300 mm/s  |
| OACIS-P002-150-300 | 2 kN     | 150 mm | 300 mm/s  |
| OACIS-P003-300-235 | 3 kN     | 300 mm | 235 mm/s  |
| OACIS-P005-300-300 | 5 kN     | 300 mm | 300 mm/s  |
| OACIS-P008-300-235 | 8 kN     | 300 mm | 235 mm/s  |
| OACIS-P010-300-200 | 10 kN    | 300 mm | 200 mm/s  |
| OACIS-P015-300-265 | 15 kN    | 300 mm | 265 mm/s  |
| OACIS-P020-300-200 | 20 kN    | 300 mm | 200 mm/s  |
| OACIS-P025-300-200 | 25 kN    | 300 mm | 200 mm/s  |
| OACIS-P030-300-200 | 30 kN    | 300 mm | 200 mm/s  |
| OACIS-P035-300-180 | 35 kN    | 300 mm | 180 mm/s  |
| OACIS-P040-300-180 | 40 kN    | 300 mm | 180 mm/s  |
| OACIS-P050-300-175 | 50 kN    | 300 mm | 175 mm/s  |
| OACIS-P060-300-140 | 60 kN    | 300 mm | 140 mm/s  |
| OACIS-P070-300-140 | 70 kN    | 300 mm | 140 mm/s  |
| OACIS-P080-300-150 | 80 kN    | 300 mm | 150 mm/s  |
| OACIS-P090-300-150 | 90 kN    | 300 mm | 150 mm/s  |
| OACIS-P100-300-150 | 100 kN   | 300 mm | 150 mm/s  |
| OACIS-P150-300-120 | 150 kN   | 300 mm | 120 mm/s  |
| OACIS-P200-400-125 | 200 kN   | 400 mm | 125 mm/s  |
| OACIS-P300-400-095 | 300 kN   | 400 mm | 95 mm/s   |
| OACIS-P400-400-075 | 400 kN   | 400 mm | 75 mm/s   |
| OACIS-P500-400-075 | 500 kN   | 400 mm | 75 mm/s   |

Standard Stroke is 300mm (except for P001, P002)

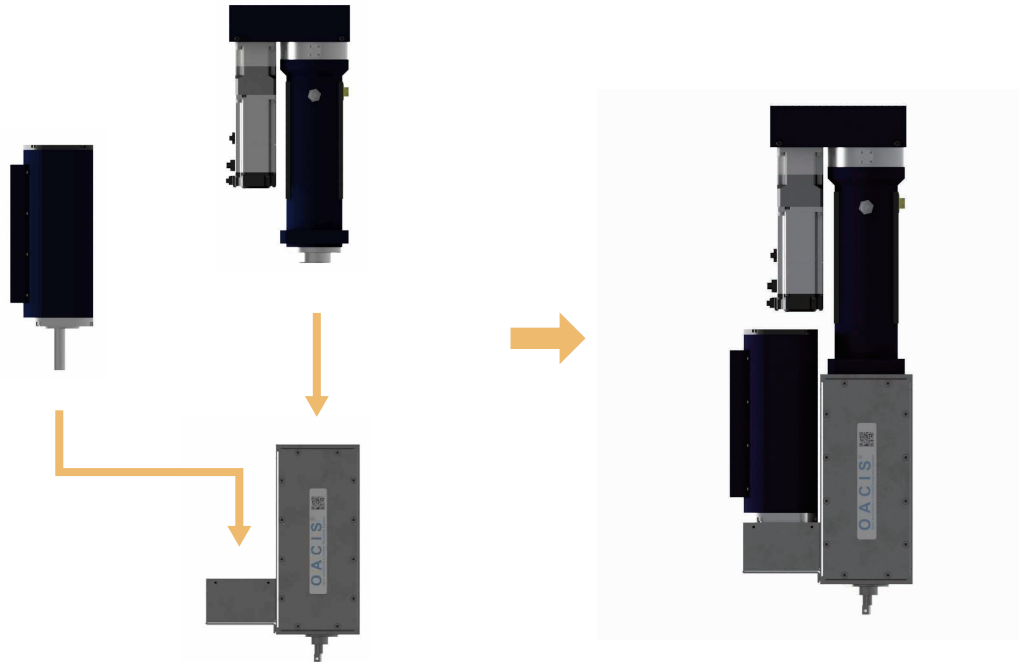
Customer required stroke is available.

※주문사양 협의 가능. (Stroke 300mm이상, P100이상)



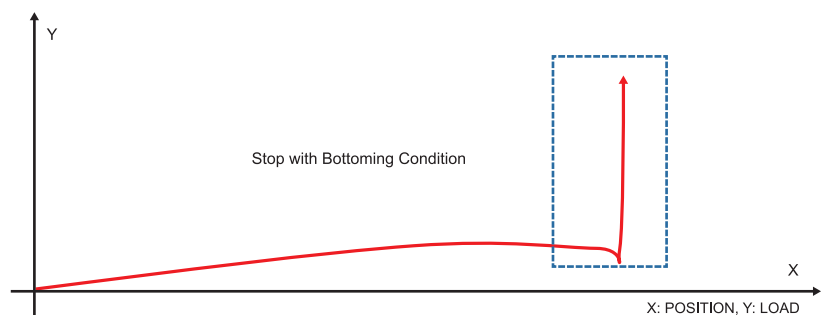
# SERVO PRESS & TORQUE MODULE

## OACIS-PT

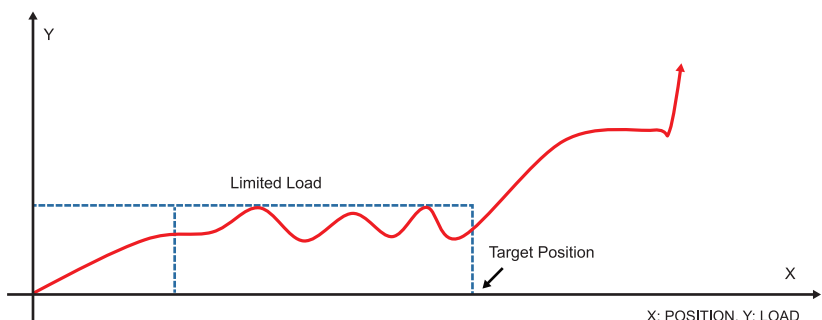


- Combination of Press and Nut Runner
- Axial force and rotational torque are applicable simultaneously
- Ex. OACIS-PT-010-020 : OACIS-P010+OACIS-T020

### Move to Bottom



### Move to Position with Limited load



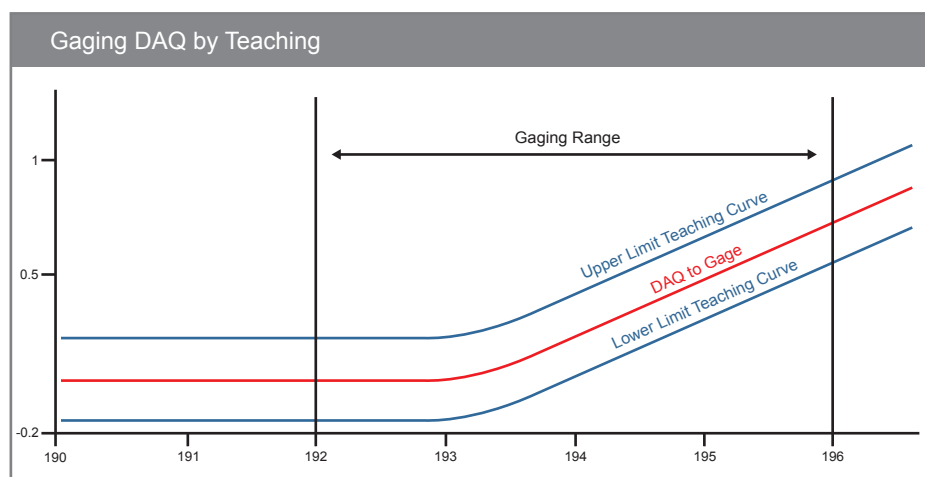
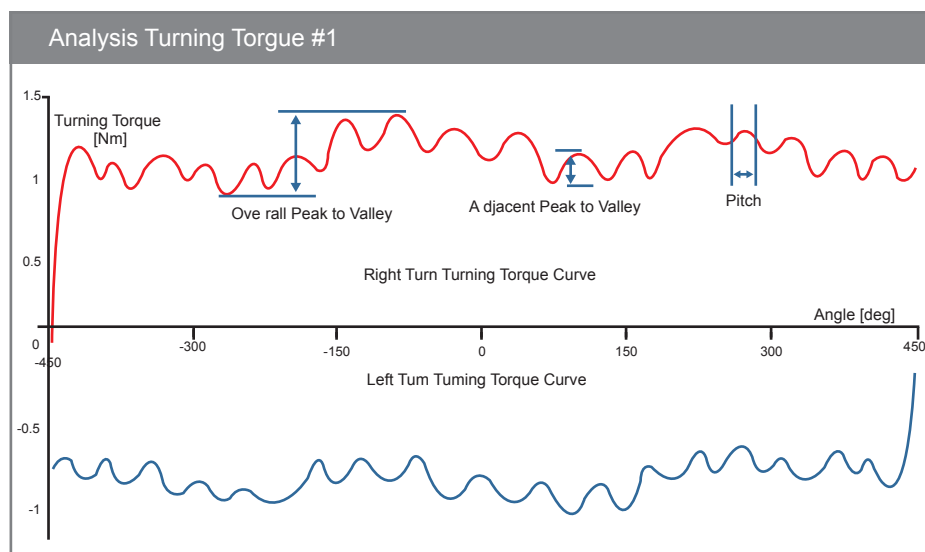


## OACIS-T



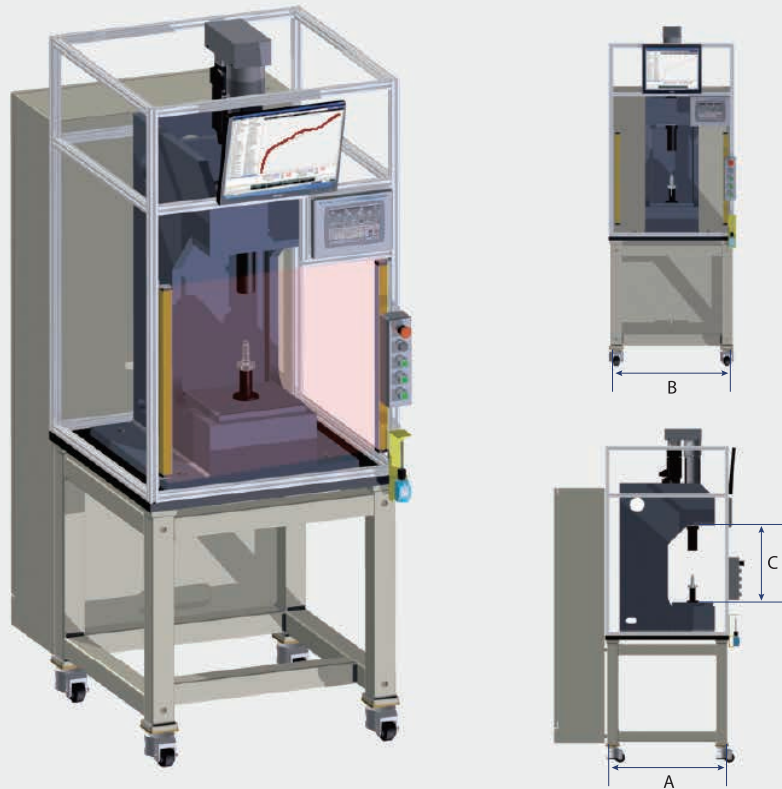
| MODEL           | MAX TORQUE | MAX SPEED   |
|-----------------|------------|-------------|
| OACIS-T005-3600 | 5 Nm       | 3,600 deg/s |
| OACIS-T010-3600 | 10 Nm      | 3,600 deg/s |
| OACIS-T020-3600 | 20 Nm      | 3,600 deg/s |
| OACIS-T030-2250 | 30 Nm      | 2,250 deg/s |
| OACIS-T050-3600 | 50 Nm      | 3,600 deg/s |
| OACIS-T080-1800 | 80 Nm      | 1,800 deg/s |
| OACIS-T100-1800 | 100 Nm     | 1,800 deg/s |

Shaft Type: with Key (default) / without Key (Optional)





# STANDARD PRESS BENCH



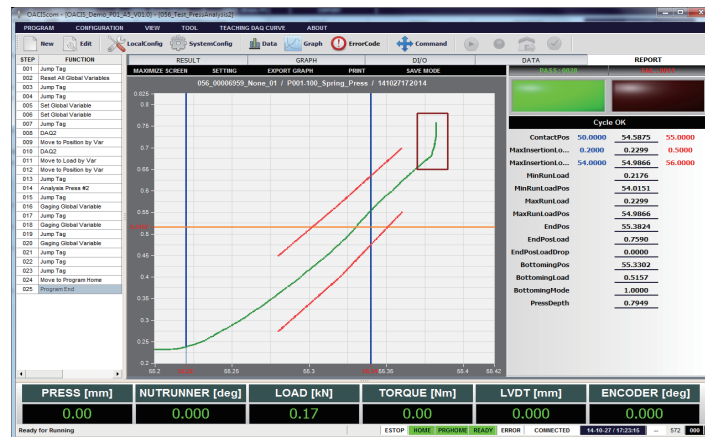
A, B, C : User inputs (mm)

Save time and cost by adding only Jig & Fixture to ATA's Standard Press Bench. You can select various options.

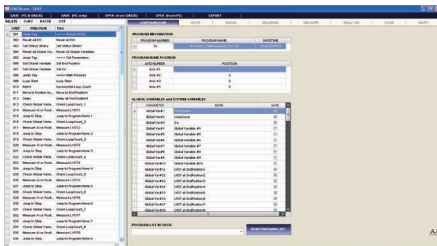
ATA 표준 Press Bench에 필요한 Jig & Fixture만 올리시면, 시간과 비용을 절약할수 있습니다. 다양한 Option을 필요에 맞게 선택하시면 됩니다.

## OPTIONS (User inputs)

- Capacity (kN)
- Part Loading Space
- Controls : PLC or OACIS only
- Safety Circuits : None / Light Curtains / Two Hands Btn.
- Human Interface : HMI or Switch Board
- PC



## MAIN WINDOWS & REPORT



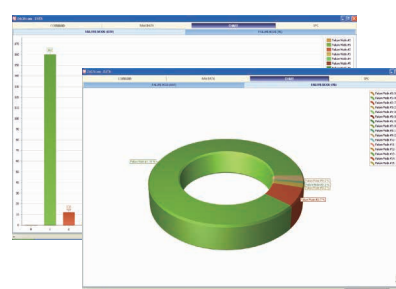
## PROGRAM EDIT



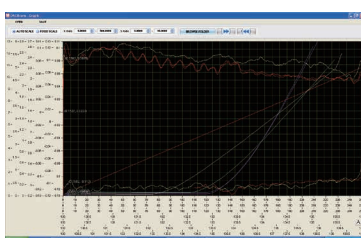
## PC COMMAND

The data viewer window displays a table of data points. The table has columns for 'Variable', 'Value', and 'Unit'. The variables listed include 'ContactPos', 'MaxInsertion', 'MaxInsertionL...', 'MaxInsertionR...', 'EndPos', 'EndPosLoad', 'EndPosLoadDrop', 'BottomingPos', 'BottomingLoad', 'BottomingNode', and 'PressDepth'.

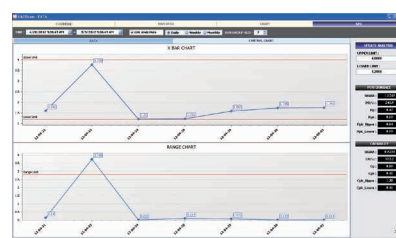
## DATA VIEWER



## CHART

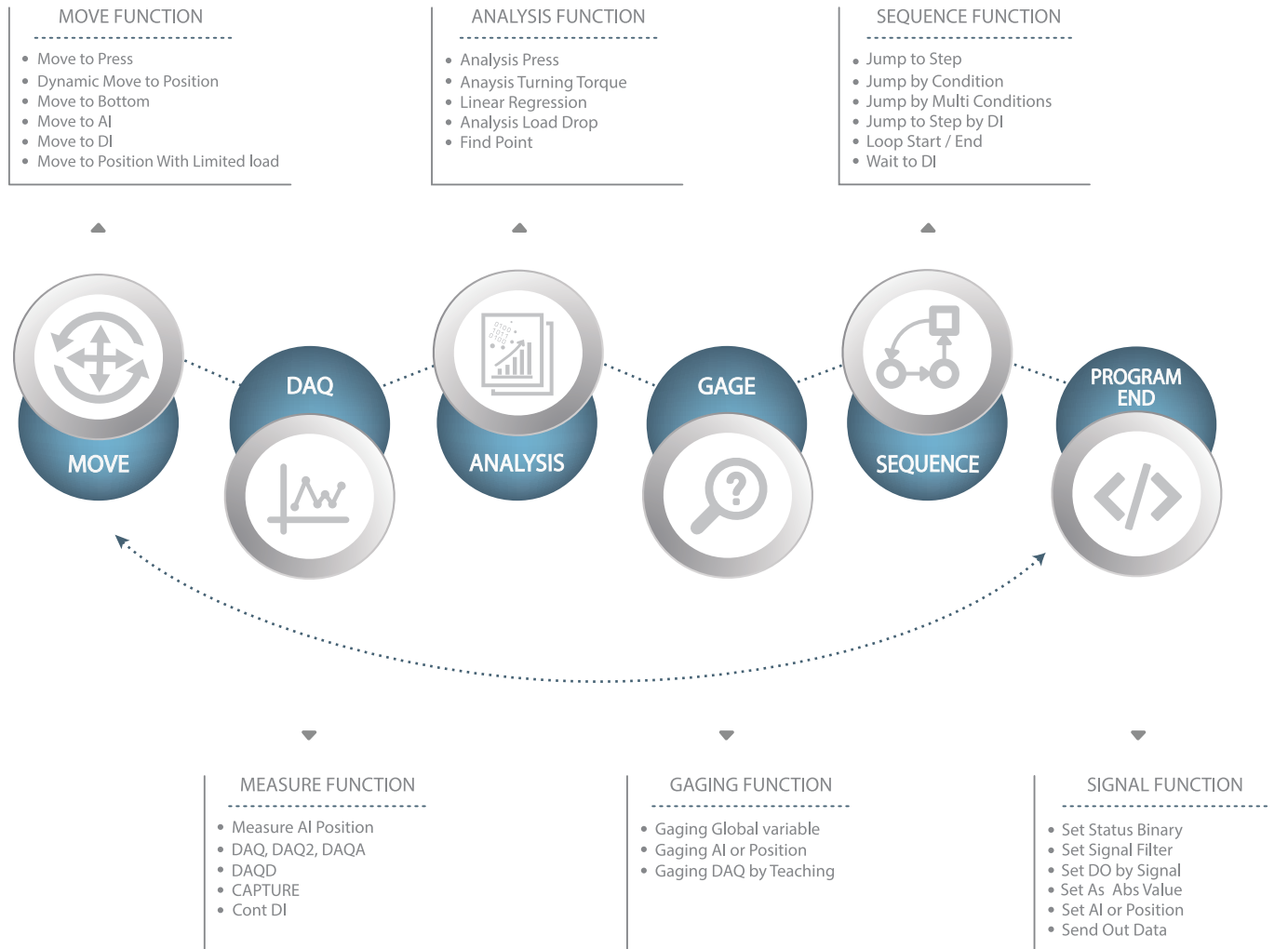


## GRAPH VIEWER

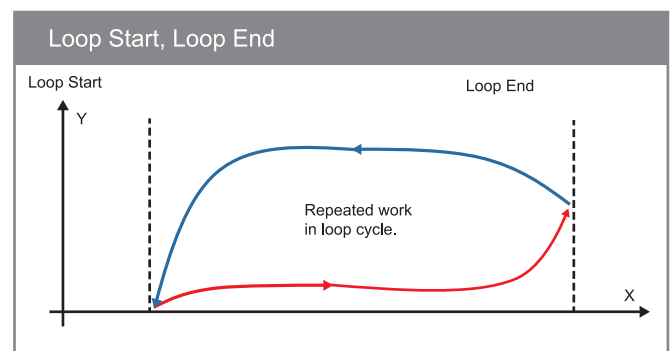
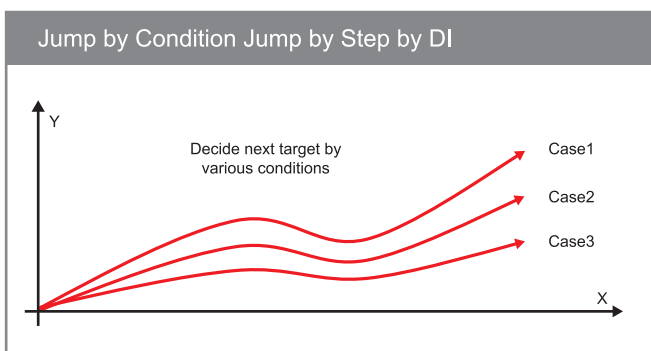


## SPC

## MAIN FUNCTIONS



## SEQUENCE





I N T E L L I G E N T S O L U T I O N



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