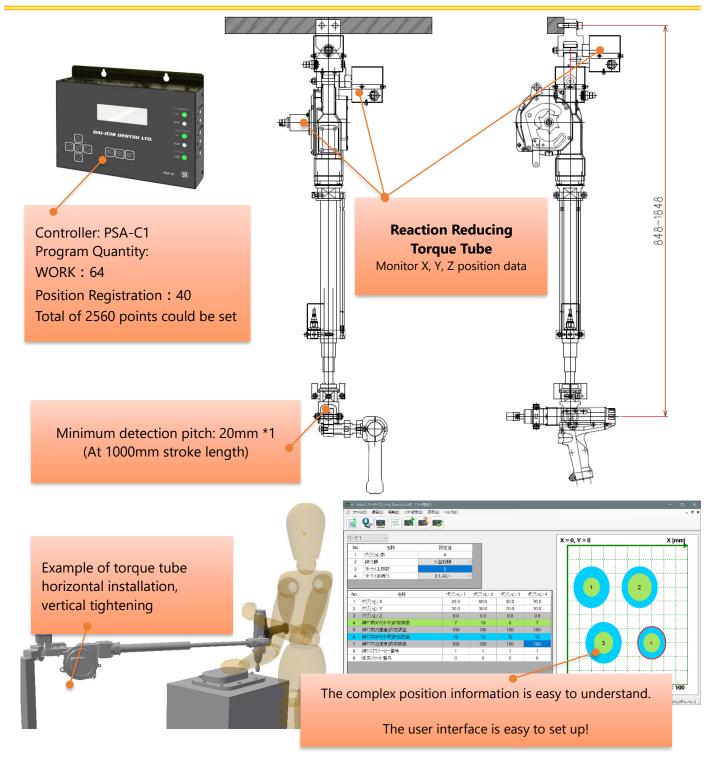


# Torque Tube Positioning System NEW

- Poka-yoke the tightening procedure and its position / Poka-yoke 2 positions of before and during the tightening
- Poka-yoke the cross thread
- Errors in coordinate data could be checked on the user interface



<sup>\*1:</sup> Minimum effective detction is set by taking into account mechanical rattling of tool holders, etc. and repetive positional accuracy.

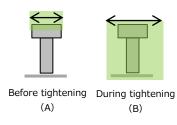


### Poka-yoke 2 positions of before and during the tightening

It is possible to poka-yoke the position to be known before operate and the position detection during tightening to prevent inadvertent work. (Tightening an adjacent bolt before the tightening is completed)

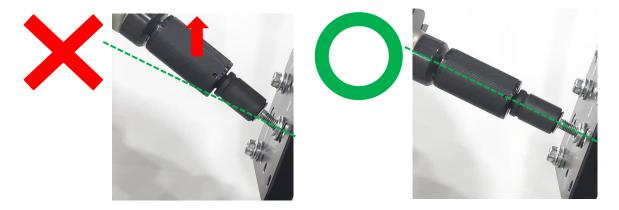
For example, severe position setting (A) for the position before tightening allows for severe position control. Rough positioning during tightening allows for socket runout prior to bolt fitting.

No.	Desctiption	Position 1	Position 2	Position 3	Position 4	Position 5
1	Position X	0.0	0.0	0.0	0.0	0.0
2	Position Y	0.0	0.0	0.0	0.0	0.0
3	Position Z	0.0	0.0	0.0	0.0	0.0
4	XY Allowance Range Before Fastening	10	10	10	10	10
5	Z Allowance Range Before Fastening	100	100	100	100	100
6	XY Allowance Range During Fastening	10	10	10	10	10
7	Z Allowance Range During Fastening	100	100	100	100	100
8	Fastening Parameter Number	1	1	1	1	1



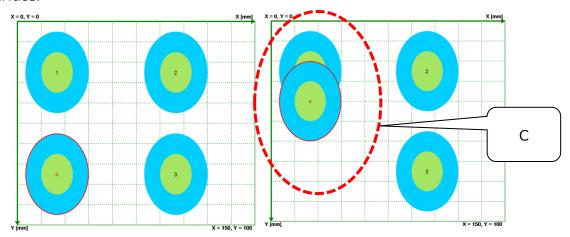
#### Poka-yoke the cross thread

The method of horizontal and vertical tightening of workpieces is a task that requires skilled work. By using the X, Y and Z coordinate data from this positioning system, it is possible to poka-yoke the bolt in an oblique entry position.



## Errors in coordinate data could be confirmed on the user interface

It is possible to confirm the overlap errors (C) in tightening coordinate data (2-axis coordinates) on the user interface.





DATE: 240227

# **Line Up**

Part Number	Max. Torque [Nm]	Stroke Length [mm]	HandWeight [kg]	Weight [kg]
TTR060-4100-02-P-X23001		1,000	0.5~2.0	5.5
TTR060-4100-04-P-X23004	60		2.0~4.0	
TTR060-4100-06-P-X23005			4.0~6.0	
TTR200-4100-05-P-X24001	200	1,000	3.0~5.0	6.0
TTR200-4100-07-P-X24002	200		5.0~7.0	

NOTE) To enable positioning functionality, the torque tube must be fixed type.

Specifications and designs of the products are subject to change without notice due to improvements.



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