



## NEW ROBOT **LA-1800**

Introduction  
September, 2019

1. Panasonic's middle-sized versatile robot
2. Best-in-class load capacity
3. Best-in-class motion speed
4. Material handling mode
5. Welding mode
6. Multi-function mode
7. Comparison table
8. Specifications
9. Dimensions
10. Operating range
11. Notes

## Load Capacity

 Best-in-class: **26kg**

## Max. Speed

 Best-in-class: **370°/s**

## Max. Reach

 Best-in-class: **1,801mm**



## Functions available

### Material handling

- For transfer/assemble/process
- Available to use with welding robot in cooperation

### Welding

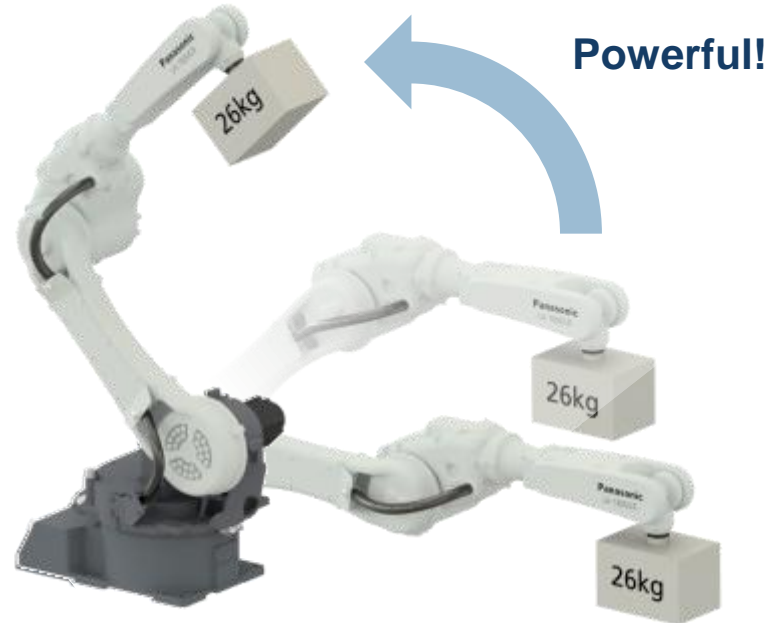
- TAWERS (WG3/WGH3)
- Available to use with external power source

### Multi-function

- Controllable both jig tool and welding torch simultaneously
- Usable with a fixed tool

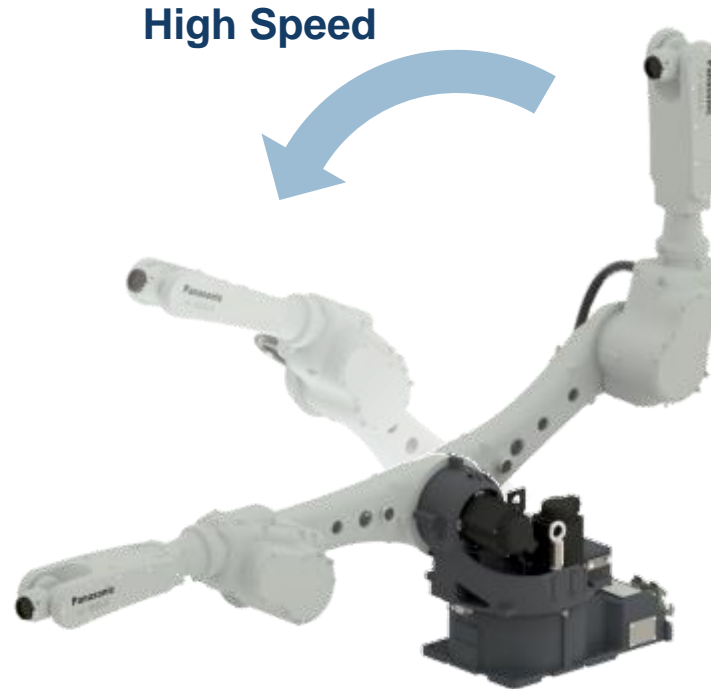
 Max. load capacity: **26kg**

- Large capacity servo motor
- High precision reduction gear



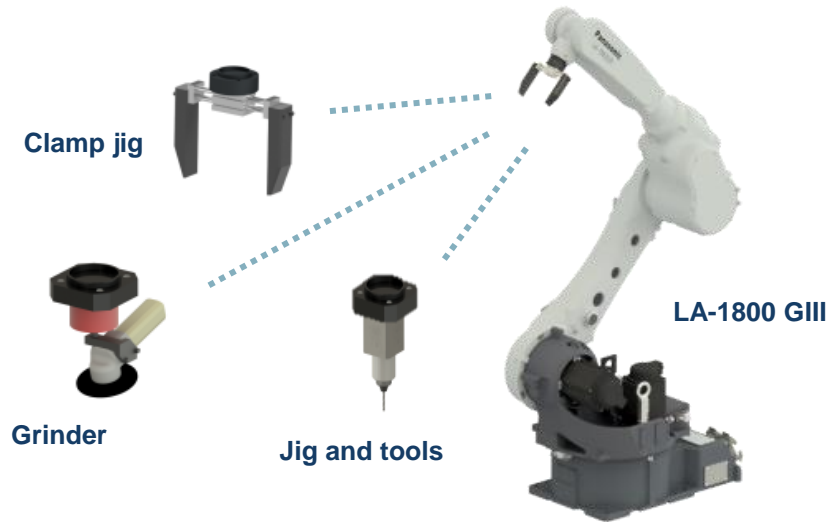
 Max. speed: **370°/s**

- High rigidity arm
- Optimal control available in accordance with the load



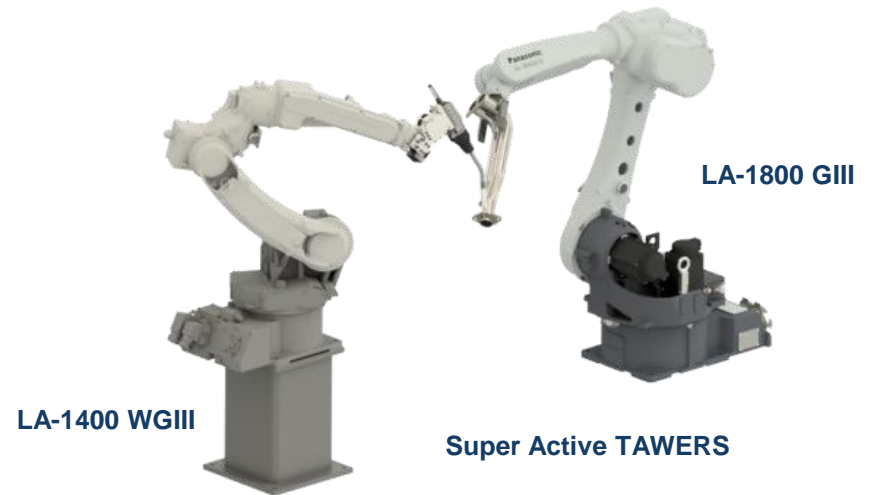
## For transfer / assemble / process

- For processes using jig tools with
- Enable to be applied to multiple processes by using a tool changer



## Operable with welding robot

- Offer optimal welding position in robot cooperative operation
- Enable to be applied to multiple workpieces by changing jigs



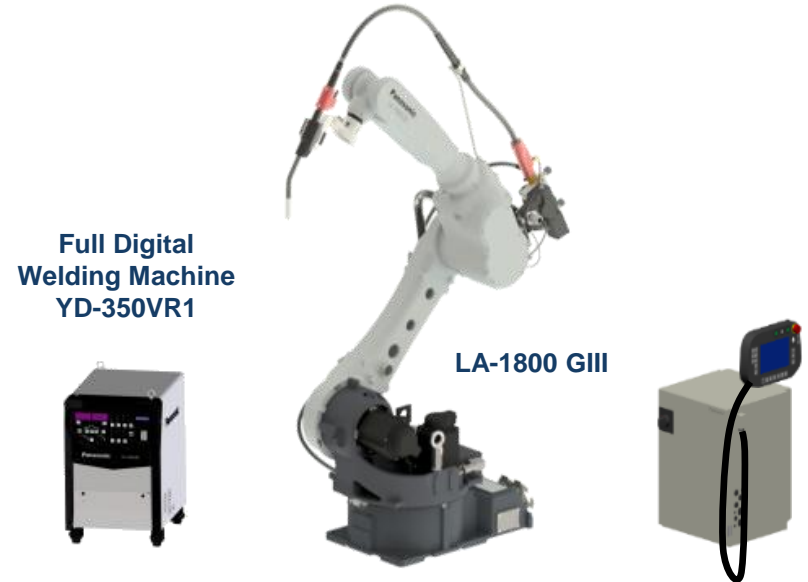
## TAWERS

- Power unit: **WG□ / WGH□**
- Application: **TIG / Super Active**



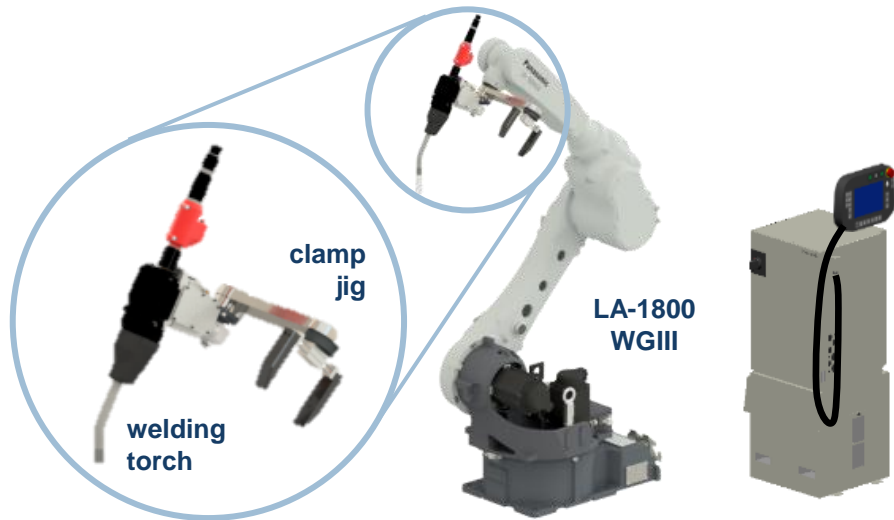
## External welding machine

- Enable to be worked with Panasonic full digital welding machine



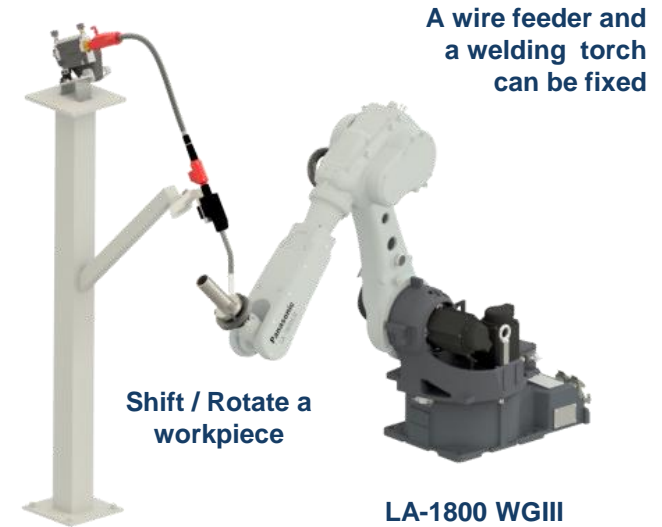
## Using both jig tool and torch

- Enable to apply both material handling and welding processes with a robot
- Enable to save operation space



## Using a fixed tool

- Enable to be worked with Panasonic full digital welding machine





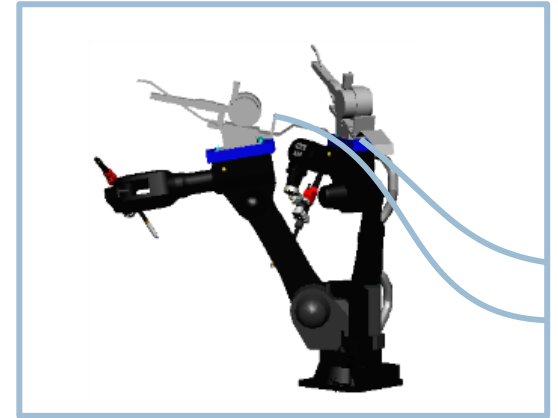
# Hollow Structured Pivot Axis

The RT pivot axis has hollow structure as it can be put cables through.

Large-hollow structured axis:  
hollow diameter 60 mm



Conventional robot



Hollow size of conventional robot (reference)

- TM-1400: D.13mm
- TL-1800: D.17mm

Enable to avoid:

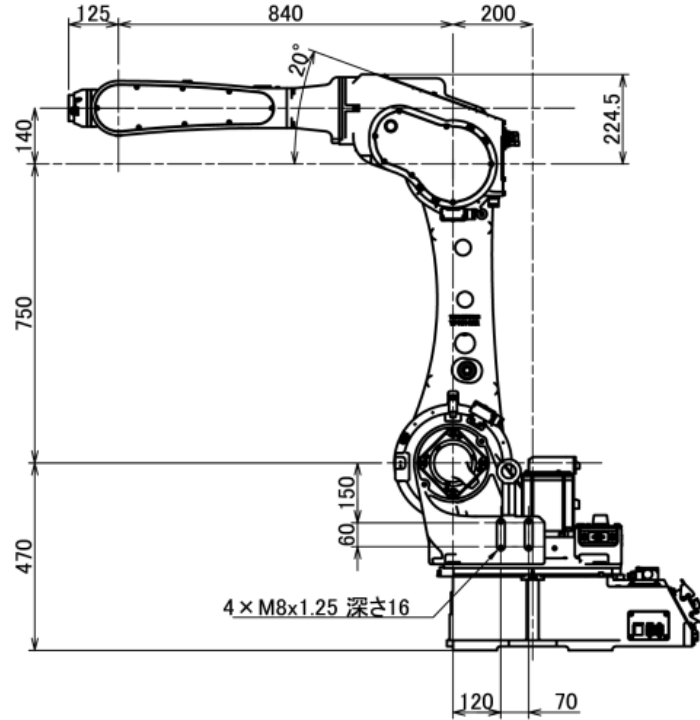
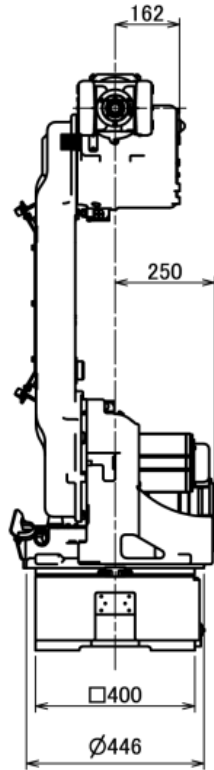
- too many cable broken accidents
- production line down time occurrence
- unnecessary repair costs increase

## LA-1800 | Middle-sized versatile robot

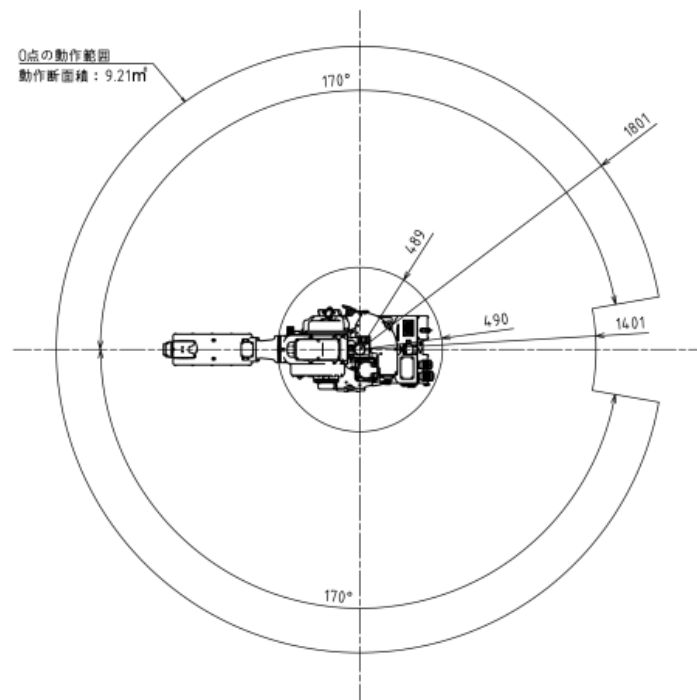
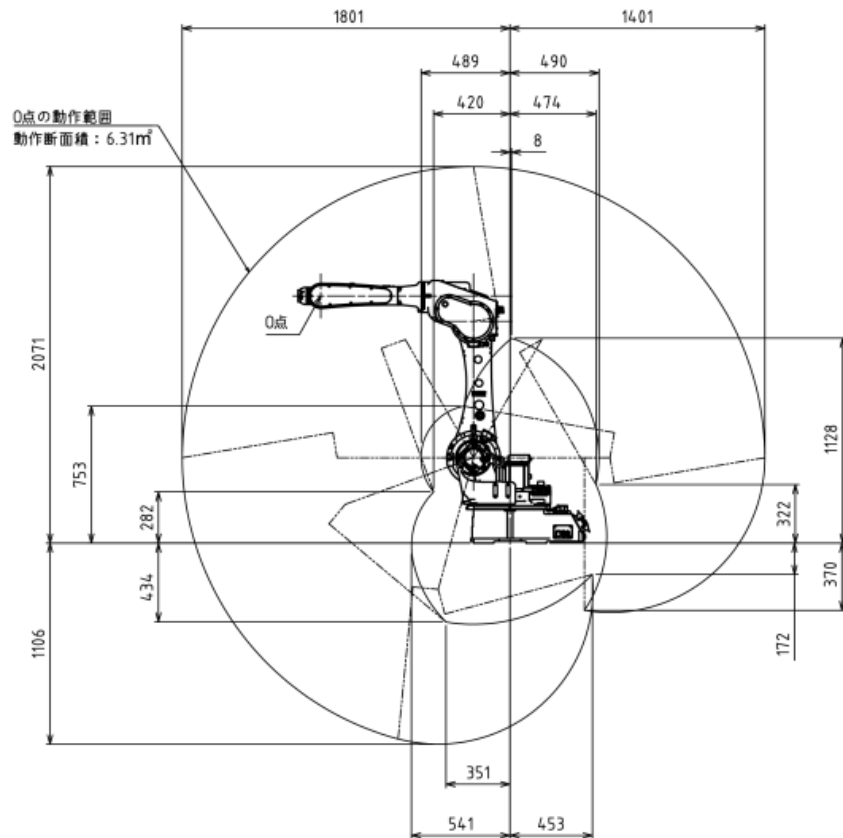
### 6-axis independent articulated structure

Operating range	Maximum reach		1 801 mm
	Minimum reach		489 mm
	Front-back operating range		1 312 mm
Motion speed	Arm	Rotate (RT axis)	201 °/s
		Upper (UA axis)	199 °/s
		Front (FA axis)	218 °/s
	Wrist	Rotate (RW axis)	434 °/s
		Bent (BW axis)	450 °/s
		Twist (TW axis)	720 °/s
Motor	Total drive capacity		6 600 W
	Brake type		All axes have each brake
Repeatability			±0.07 mm
Wrist load capacity			26 kg
Set up position			Floor, ceiling
Body weight			320 kg

# Dimensions

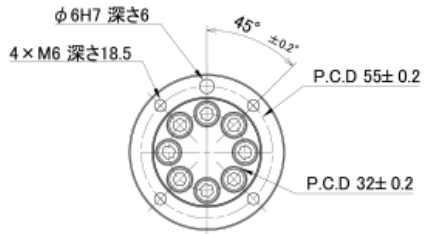


# Operating Range

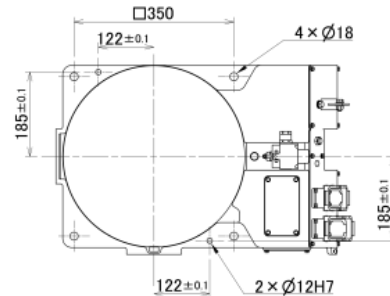


Please be noted that the specifications below are differed from conventional robot series.  
Please be careful when you design robot systems or set up the robot.

## A. Wrist flange size

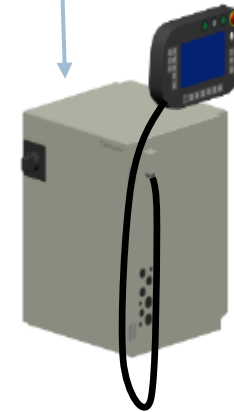


## B. Robot base size



## C. Internal external axis control capacity

- Motor for single use, 2.0 kW or less
- Available up to 4kW in total 3 axes



# Kontakt

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