

# Alignment of LD,PD and Fiber

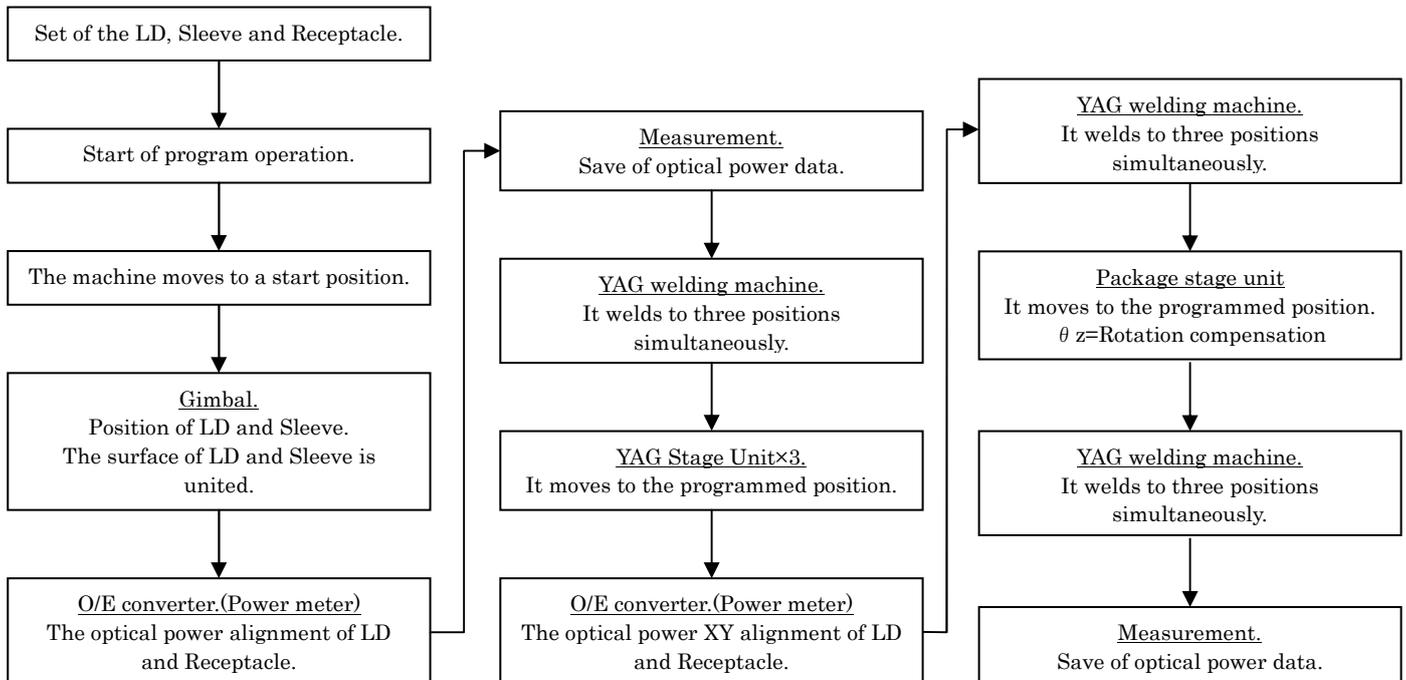


High precision alignment by original high rigidity SUS stage.

High speed alignment by original power meter.

High speed alignment by original multithread software.

The main flows of the alignment system.( LD 3 piece Receptacle type)



The program can be changed freely.

**Focus stage unit**  
Automatic stage = Z,  $\theta_z$   
Holder (Fiber, Receptacle, etc) can be made according to a visitor.

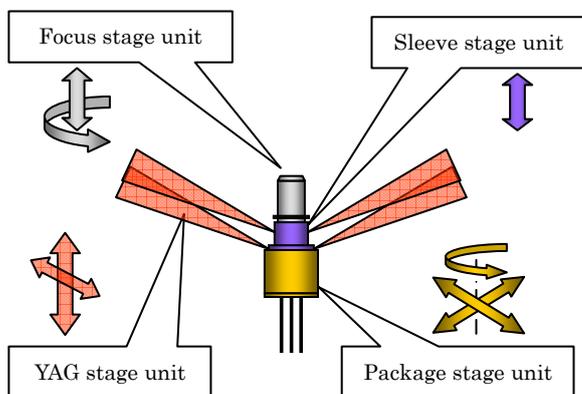


**YAG stage unit ×3**  
Automatic stage = Z, Focus  
YAG welding part observation camera is a standard equipment.  
YAG angle can also be changed. ( 15,25,35,45°)

**Sleeve stage unit**  
Automatic stage = Z  
Sleeve unit evacuation = Air stage Sleeve holder can be made according to a visitor.

**Package stage unit**  
Automatic stage = X,Y, $\theta_z$   
Gimbal.  
Position of LD and Sleeve or Receptacle.  
The surface of LD and Sleeve or Receptacle is united.

Auto Motion Axes (12axes)



The move part of each unit.

	Axis	Working Range	Resolution
Package stage unit	PX	±15mm	0.025 μm
	PY	±15mm	0.025 μm
	P $\theta_z$	±135°	0.00005°
Sleeve stage unit	SZ	±15mm	0.025 μm
	Air stage = Sleeve unit evacuation		
Focus stage unit	FZ	±15mm	0.025 μm
	F $\theta_z$	±150°	0.00005°
YAG stage unit L	LZ	±15mm	0.1 μm
	LF	±10mm	0.1 μm
YAG stage unit C	CZ	±15mm	0.1 μm
	CF	±10mm	0.1 μm
YAG stage unit R	RZ	±15mm	0.1 μm
	RF	±10mm	0.1 μm

The main equipment of KS 200

The main mechanism portions	The main control unit
Automatic Package stage unit. Automatic stage = PX,PY,P $\theta_z$ Gimbal. LD or PL holder	LD Controller O/E converter. Stepper motor driver (12 axis)
Automatic Sleeve stage unit. Automatic stage = SZ, Sleeve holder	Computer Kuge proprietary Cockpit software Stepping motor controller board A/D board I/O board LCD monitor Computer rack
Automatic Focus stage unit. Automatic stage = FZ,F $\theta_z$ Picture automatic alignment camera Fiber holder	
YAG stage unit. ×3 Automatic stage = LZ,LF,CZ,CF,RZ,RF The observation camera and monitor of a welding portion.	
Anti-vibration table and Protection cover.	YAG welding machine Miyachi or Omron (YAG maker can be chosen by a visitor's hope)



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