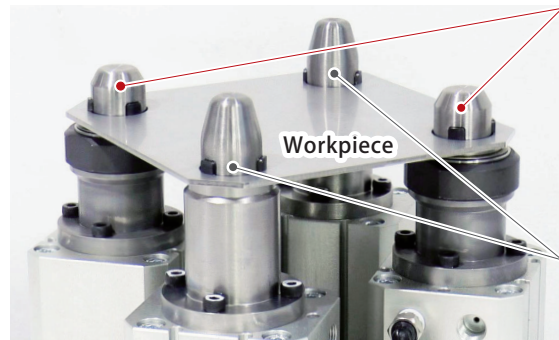KOSMEK
Harmony in Innovation

Locating Pin Clamp

Model SWP

Allows for high-accuracy locating and clamping of thin workpieces. Suitable for automation of clamping of spot welding workpieces. Equipped with air blow function to prevent contamination. Action confirmation with auto switch is possible.

Excellent for Automation, Prevents Machine Stops

◉ Additional Lineup : Floating Model

● In case of locating with locating model and requiring clamping force.

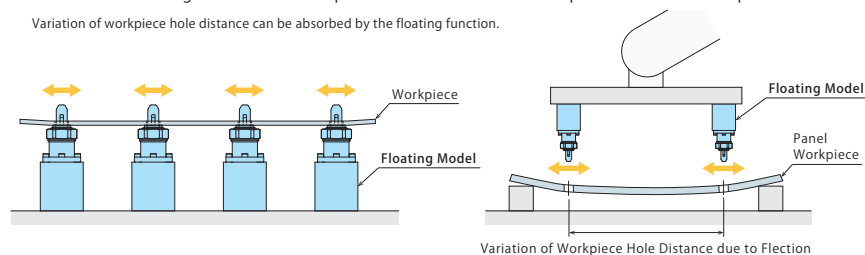The floating model enables additional clamping force without interfering the locating model.

Locating Pin Clamp
Floating Model
Pin Head Floating Amount
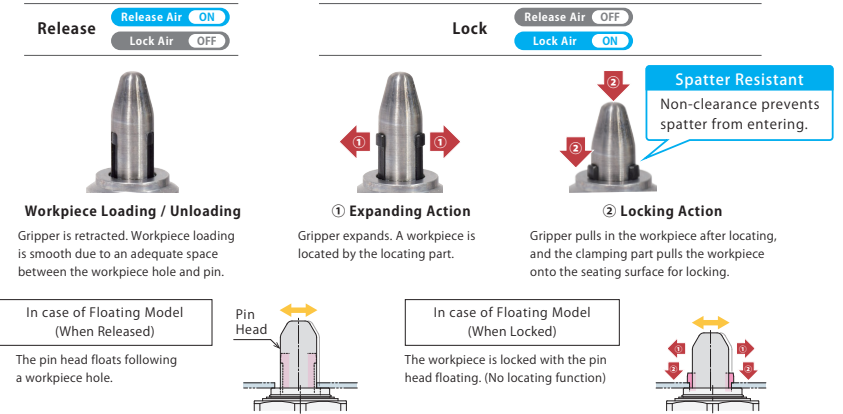SWP0501：±0.6mm
SWP1001：±0.8mm

Workpiece

Locating Pin Clamp
Locating Model
Locating Repeatability：
0.05mm

◉ Application Example of Floating Model

● In case there is a large variation in workpiece hole distance due to warp or flection of a workpiece

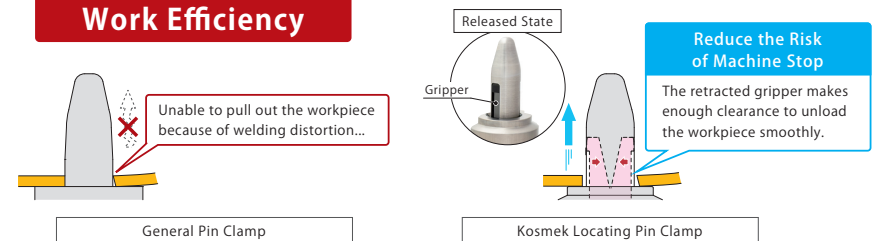Variation of workpiece hole distance can be absorbed by the floating function.

Workpiece
Floating Model

Floating Model
Panel Workpiece

Variation of Workpiece Hole Distance due to Flection

◉ Action Description

Release	Release Air ON		Lock	Release Air OFF
	Lock Air OFF			Lock Air ON

Spatter Resistant
Non-clearance prevents spatter from entering.

Workpiece Loading / Unloading
Gripper is retracted. Workpiece loading is smooth due to an adequate space between the workpiece hole and pin.

① Expanding Action
Gripper expands. A workpiece is located by the locating part.

② Locking Action
Gripper pulls in the workpiece after locating, and the clamping part pulls the workpiece onto the seating surface for locking.

In case of Floating Model (When Released)

Pin Head

The pin head floats following a workpiece hole.

In case of Floating Model (When Locked)

The workpiece is locked with the pin head floating. (No locating function)

◉ Features

Work Efficiency

Unable to pull out the workpiece because of welding distortion...

General Pin Clamp

Released State

Gripper

Reduce the Risk of Machine Stop
The retracted gripper makes enough clearance to unload the workpiece smoothly.

Kosmek Locating Pin Clamp

Stable Clamping

Clearance needs to be large for smooth loading, but large clearance leads to poor locating accuracy...

General Pin Clamp

Locked State

Stable Production
Zero clearance with gripper expansion. High-accuracy locating reduces defects.

Kosmek Locating Pin Clamp

Lower Fixture Cost

Lifting device may be required to pull out the stuck workpiece due to welding distortion...

General Pin Clamp

Simplified Equipment
Smooth loading/unloading enables to lower equipment cost.

Simplified   More

Light
With Locked State Holding Function

Compact

Kosmek Locating Pin Clamp