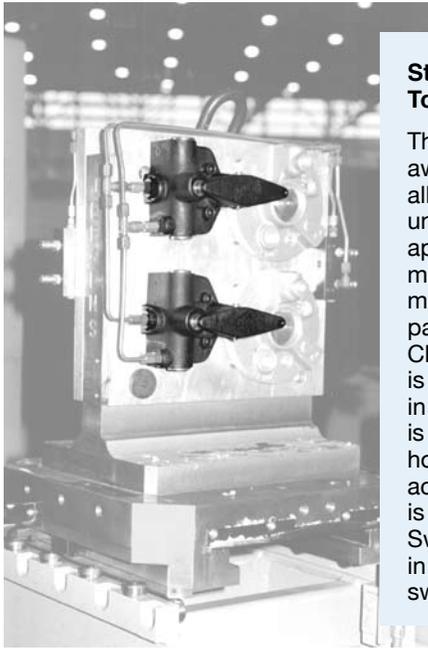


Staylock Clamps

Stays Mechanically Locked— Even When Disconnected from Hydraulic Pressure



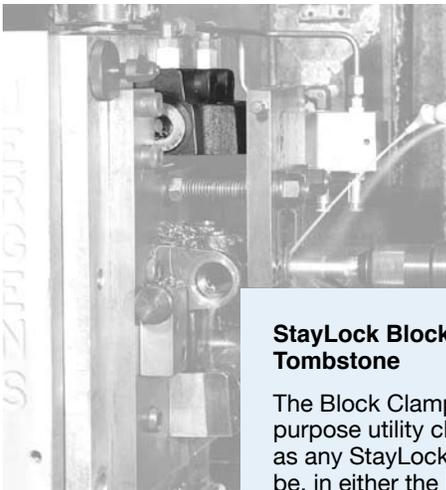
StayLock Swing Clamp on a Tombstone Fixture

The Swing Clamp rotates 80° away from the workpiece, allowing easy loading and unloading of the part. In this application, the tombstone is mounted on a double pallet machining center. When the pallet rotates, the StayLock Clamp remains clamped. There is no need for an accumulator in the hydraulic system. Nor is there a chance of hydraulic hoses getting tangled or accidentally cut while the part is being machined. StayLock Swing Clamps are available in left-hand or right-hand swing styles.

StayLock Clamps ...the Hydraulic clamp with the mechanical advantage! With conventional power clamping, when pressure is put to the clamp, it clamps... take the pressure away (on purpose or not), it unclamps. With the StayLock Clamp's patented internal locking mechanism, hydraulic pressure is needed to clamp...and to unclamp!

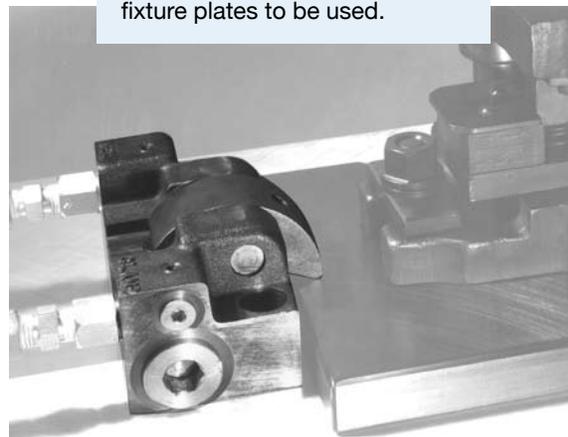
StayLock Rocker Clamp Holding a Die

The Rocker Clamp is ideal for quick change clamping on dies, molds, and fixture plates where a standard height subplate is employed. Because of the unique body design of the Rocker Clamp, it can easily be adapted with a T-slot nut mounted on the bottom. This enables the Rocker Clamp to slide in and out, making part removal easier, plus it allows for various widths of subplates or fixture plates to be used.

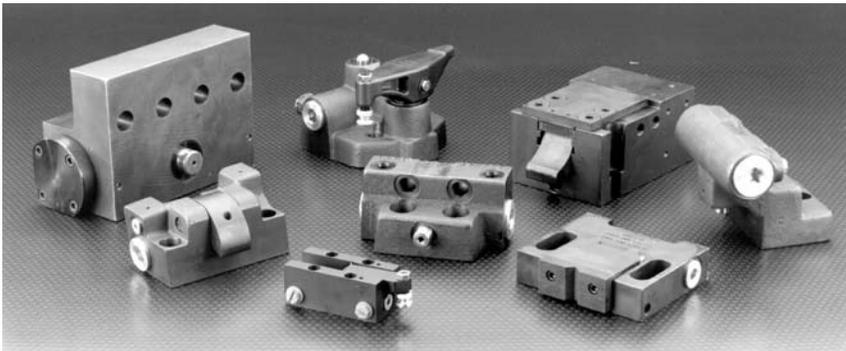


StayLock Block Clamp on a Tombstone

The Block Clamp is a multi-purpose utility clamp, utilized, as any StayLock Clamp can be, in either the horizontal or vertical clamping positions. In this application, the Block Clamp (at the top of the tombstone) is replacing step blocks and tedious manual clamping.



Staylock Clamps



Positive Mechanical Lock

Jergens StayLock Clamps offer a breakthrough in clamping flexibility! These mechanically locked clamps are activated and released by hydraulic pressure. Once activated, the clamps automatically lock and will not release until hydraulic pressure is applied to the release port.

Once clamped, you can:

- disconnect your hydraulic power source
- move the fixture, with the part still clamped, to other machines
- not worry about your part unclamping due to hydraulic power failure, a cut line, or leaks in the hydraulic system

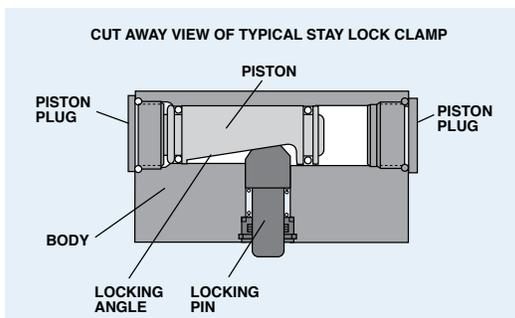
Patented positive mechanical lock minimizes:

- reclamping
- set-up costs
- parts accidentally becoming unclamped

Jergens StayLock Clamps can provide solutions to many clamping problems. They are designed for use on:

- palletized fixtures
- transfer machines
- machining centers
- any power clamping application
- quick change on molds and dies

Use the StayLock Clamps with Jergens Air-Operated Hydraulic Pumps (described on page 3.51-3.52). One Hydraulic Pump can service several machines because there is no need to maintain hydraulic pressure when clamping StayLock Clamps. Once StayLock Clamps are in a clamping position, the hydraulic hoses can be disconnected, and the part will remain clamped indefinitely. Once the machining cycle is completed, applying hydraulic pressure to the release port unclamps the part.



Most Commonly Asked Questions

Q. Does the StayLock Clamp lose pressure?

- A. No, it does not. Because of a patented mechanical lock, a positive locking wedge is activated when pressure is applied to the clamp port. There is no need to maintain hydraulic pressure; therefore, the power source can be disconnected. There is no pressure to lose.

Q. How do I lock StayLock Clamps in place?

- A. Applying hydraulic pressure to the clamp port of a StayLock Clamp drives two internal wedges together. The two wedges form a mechanical lock and will not retract until hydraulic pressure is applied to the release port.

Q. Can these clamps be used with air?

- A. No. Air pressure does not apply enough force to lock or unlock the internal wedge mechanism.

Q. How much hydraulic pressure is needed to activate the clamps?

- A. The minimum pressure required on most of the StayLock Clamps is 500 psi. The minimum and maximum pressure requirements are specified for each clamp on the following pages.

Q. What is needed to set up a hydraulic system using StayLock Clamps?

- A. Typically, a system includes several clamps (depending on individual requirements); a power source; a four-way, three-position, zero-leakage control valve (see page 3.54); and hydraulic hose and fittings. There is no need for an accumulator in the system.

Q. Can an air/oil booster be used with StayLock Clamps?

- A. No. Boosters typically are used with standard hydraulic clamps because pressure is needed to activate and maintain the clamp in the clamping position. With a Booster set-up, there is only one hydraulic line that provides the pressure needed. StayLock Clamps need pressure to clamp and unclamp; therefore, a Booster would not provide the needed pressure to the release port to unclamp the part.

Q. Can I get technical assistance from Jergens when designing a StayLock Clamping system?

- A. Yes. Jergens will assist you by providing a CAD schematic drawing of your system, including all of the part numbers needed to order the system.

For assistance, call 1-800-JERGENS (537-4367).