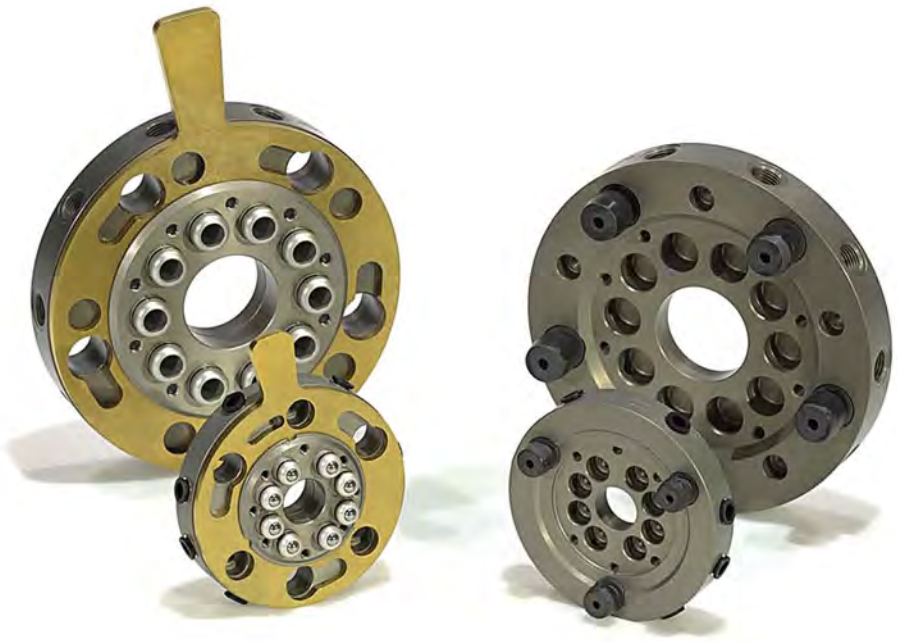
Quick Changer Overview



Quick Changers are composed of two parts or sides, an EOAT side and a robot side. The robot side is permanently attached to the robot arm. An EOAT side is permanently attached to each individual end-of-arm tooling. To mount the EOAT to the robot, the two sides are fitted together and then locked into position. Some styles, such as the SENVEX Quick Changer do not require any tools to lock the two sides together. This style also has integrated fittings which automatically connect air, vacuum and electrical signals. Other styles require the setup person to securely clamp the EOAT to the robot arm. Those styles, such as dovetail types, require air, vacuum, and electric connections to be connected manually.

Quick Changer Advantages

- **Precision** Quick changers assure that the EOAT will be perfectly positioned each time it is mounted to the robot. In addition to helping to prevent damage to the mold or the EOAT, this can also greatly reduce the amount of fine-tuning needed upon set up.
- **Efficiency** The SENVEX Quick Changer automatically connects multiple ports as quickly as it will connect one. This can be especially time saving if the EOAT has multiple air, vacuum or electrical connections.
- **Safety** Using a quick changer that automatically connects air, vacuum and electrical (such as the SENVEX) assures that each time the EOAT is mounted, all of the connections will be correct (i.e. primary vacuum, secondary vacuum, primary air, secondary air etc.).
- **Standardization** Uniform dedication of air and vacuum ports on all quick change applications throughout the plant allow end-of-arm tooling to be mounted quickly wherever it is needed.

Quick Changer Overview

SENVEX® Quick Changers p.6

Closest tolerance, tightest fitting quick changer.

Excellent overall quality.

Two sizes cover EOAT on machines from 50 tons to 2000 tons.

Cannot be connected upside down.

Gimatic® Quick Changers p.10

Fully interchangeable with Senvex quick changers.

Lower cost.

Incorporates a secondary set screw for zero tolerance connections.

Two sizes cover EOAT on machines from 50 tons to 2000 tons.

Electrical Connectors p.14

Uses 15-pin D-sub cables.

Fits standard and large Gimatic and Senvex quick changers.

Excellent electrical contact between male and female connectors.

Quick Changer Adaptors p.24

Simple quick changer adaptor plate.

Pre drilled for use with Gimatic and Senvex quick changers.

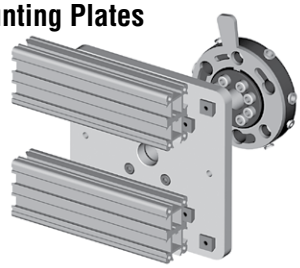
Can be used with all 1-, 2-, and 4- groove profiles using M4 or M5 T-nuts.

Can be used without a quick changer.

6-Axis Robot Adaptor p.20

When Senvex and Gimatic large quick changers are used on 6-axis robots, this allows easy mounting of EOATs and profiles.

Mounting Plates p.16



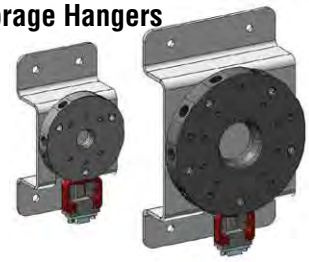
Can be used with all 1-, 2-, and 4-groove profiles using M5 T-nuts.

Pre drilled and counter bored holes for use with Senvex, >ASS<, and 80/20 6-groove profiles.

Pre drilled for mounting to Senvex and Gimatic quick changers.

Can be used without a quick changer.

Storage Hangers p.26



For storing EOATs when not in use.

Use with Gimatic or Senvex quick changers.

Protects gripper-side quick changer locking studs.

>ASS<® Mounting Plate p.28

Dovetail-type EOAT mounting plates.

Five different sizes.

Can work with all profile systems.

Gimatic Mounting Plate p.34

Interchangeable with >S< type mounting plates.

Works with all profile systems.

Popular sizes available.

EOAT Quick Changer

Use this EOAT Quick Change system for Simpler, Faster, and Safer EOAT changes.

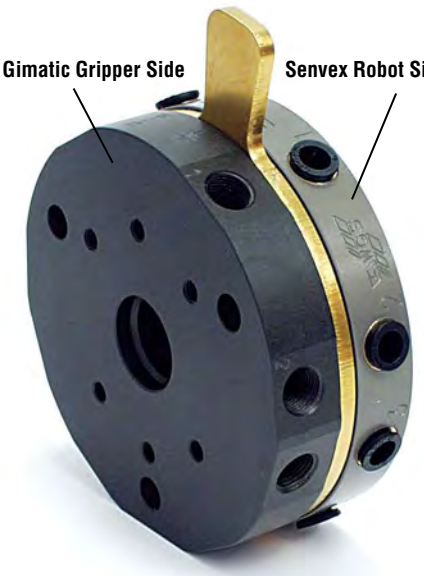
This EOAT Quick Change Adaptor handles end-of-arm toolings for molding machines 50–500 tons. The combined robot part and EOAT part weigh only 1.4 pounds, yet it can handle large-size EOATs. Its light weight allows for fast robot speeds. Its high strength allows it to be used on large machines with large EOATs. (See specifications) Up to eight air lines and 8 or 15 electric signals can be connected. When the EOAT part is connected, the air lines and electrical signals are automatically coupled the same way every time.

By standardizing port 1 to be the primary vacuum circuit, port 2 to be the secondary vacuum, port 3 to be primary gripper circuit, etc., your EOATs can easily be interchangeable on all your machines. Your connections will always be correct, with no chance of crossed vacuum lines or electrical signals. A built-in mechanical sensor ensures that the gripper has been properly fitted.

Senvex® and Gimatic® Quick Changers are Interchangeable

Senvex Assembly

Gimatic Assembly



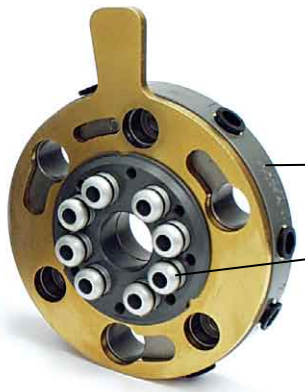
"Zero Tolerance" set screw can be used with both Gimatic and Senvex gripper sides, but is not required for use with either Gimatic or Senvex.

Molded plastic fittings with O-rings.

No integrated push-in fittings. Threaded ports require fittings to be purchased separately. (G1/8" on standard, G1/4" on large quick changers).

Gimatic Robot Side

Senvex Robot Side



No secondary set screw keeps set-up a simple, one-step process; lock the lever and you're done. Very close locking tolerances with locking lever alone.

Machined aluminum fittings with O-rings.

Integrated 6mm push-in fittings on standard quick changer. Threaded G1/4" ports on large quick changer requires fittings to be purchased separately.

Gimatic Gripper Side

Senvex Gripper Side

A close-up view of the tapered, hardened steel set screw shows how it friction locks against the gripper side's locating pins to eliminate any play between the two quick changer sides.

SUMMARY: Without using a set screw, the Senvex WGS quick changer will provide a closer, tighter lock than the Gimatic quick changer (without engaging set screw). However, if you WILL engage the set screw with every tooling change, the Gimatic quick changer will provide a closer, tighter lock.