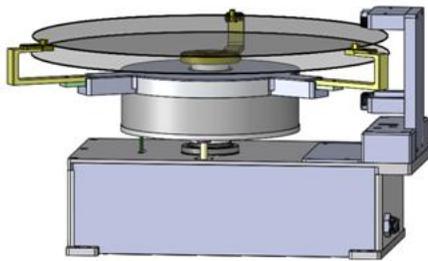


Solution that Improves System Throughput

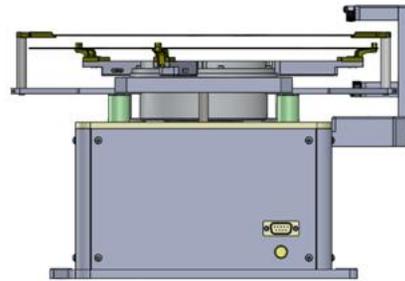
Certain types of wafer PRE-ALIGNERS, such as our DSVC (Dual Slot Vacuum Chuck) 300/200 and DSEG (Dual Slot Edge Grip) 300, have an additional station for buffering wafer. The Advance Wafer Handling takes advantage of this additional buffer station to save wafer handling steps.

The process begins with Robot putting a wafer onto the wafer station of the Aligner. Aligner aligns the wafer and then the process starts. Once the process is complete, the Aligner lifts the processed wafer to buffer station.

While the wafer is being aligned and processed, Robot gets an unprocessed wafer. When process is done and the processed wafer is at the buffer station, Robot puts the unprocessed wafer onto the wafer station and then gets the processed wafer from the buffer station.



DSVC 300



DSEG 300

The Advance Wafer Handling can be retrofitted onto process tools using ASYST EDGE GRIP aligners or PRI/EQUIP PRE VACUUM aligners, such as GSI LUMONICS Wafer Marking Systems.

Our solutions have been proven on the field that system throughputs are increased at least 25%.

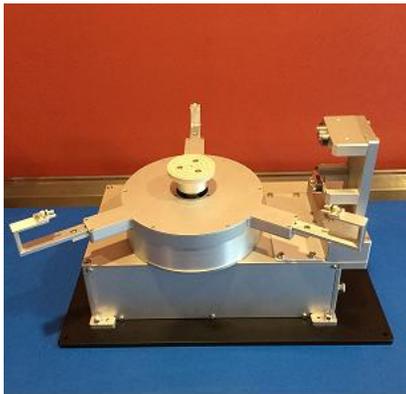
Optionally, we also offer Cognex OCR attached to the Aligners. This further saves wafer handling steps.

DSVC 300/200 ALIGNER

DSVC aligner has double slots, vacuum chuck, and grippers. The vacuum chuck is to spin the wafer. The grippers are to center and lower the wafer from upper slot to the chuck. Robot swaps unprocessed and processed wafers at DSVC aligner to save wafer handling steps and improve system throughputs.

The grippers, with patented soft touch technology, applies constantly monitored force, no stress to the wafer.

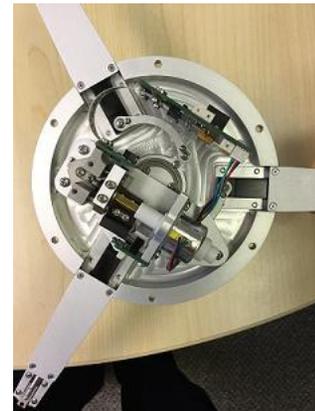
DSVC has similar footprint and height that it can directly replace PRI/EQUIP PRE aligners.



DSVC 300



DSVC 300 w/ Options

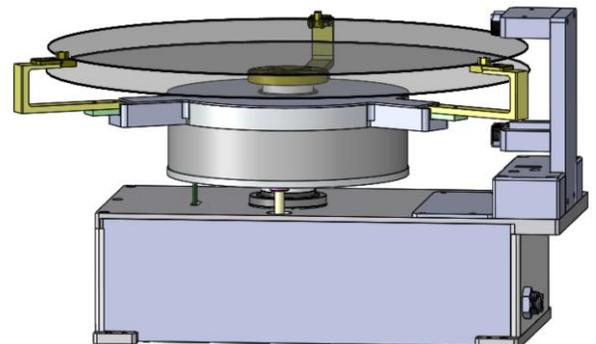


Soft Touch Gripper

DSVC 200 is the 200mm version of the DSVC ALIGNERS. Both DSVC 300 and 200 share same mechanical base. They are interchangeable through a conversion kit.

Specifications:

- 1) Dimensions (mm): 173 x 249 x 159 (h)
- 2) Weight: 6.0kg
- 3) Vacuum, 250 Torr max
- 4) Buffer Station: YES
- 5) Wafer Diameters: 200mm and 300mm
- 6) Wafer Thickness (mm): > 0.2
- 7) Notch Repeatability (degree): 0.01
- 8) Z Repeatability (mm): 0.05
- 9) Typical Align Time (sec): 4.5



DSEG 300

DSEG 300 is a 300mm Edge Grip Aligner. It has double slots, with gripper chuck to spin the wafer and lift pins to raise wafer to upper slot. Robot swaps unprocessed and processed wafers at the DSEG aligner to save wafer handling steps and improve system throughputs.

The gripper chuck, with patented soft touch technology, applies constantly monitored force to prevent wafer from over stress.

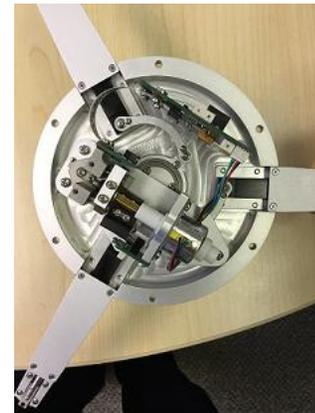
The DSEG 300 has similar footprint, but shorter height. It can replace ASYST EG-300 with adopting plate.



DSEG 300



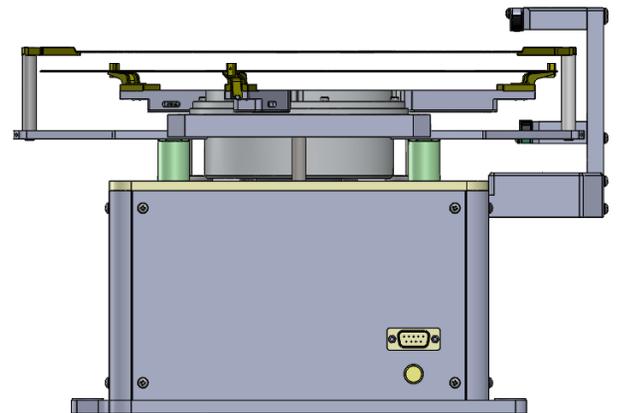
DSEG 300 w/Cognex 1741 OCR



Soft Touch Gripper

Specifications:

- 1) Dimensions (mm): 274 x 256 x 221 (h)
- 2) Weight: 6.0kg
- 3) Buffer Station: YES
- 4) Wafer Diameters: 300mm
- 5) Wafer Thickness (mm): > 0.2
- 6) Notch Repeatability (degree): 0.01
- 7) Z Repeatability (mm): 0.05
- 8) Typical Align Time (sec): 10
- 9) Max Align Time (sec): 12
- 10) Buffer Time (sec): 3
- 11) Un-Buffer Time (sec): 3



OCR on ALIGNERS

Optionally, we offers Cognex Insight 1741/1742 OCR on DSVC 300, DSEG 300, and ASYST EG 300 aligners. The Cognex 1740 series are capable of reading semi font, OCR-A, IBM, T7, BC412, and IBM412.



ASYST EG w/ OCR



DSVC 300 w/ Options



DSEG 300 w/Cognex 1741 OCR

Particle Cleaning Air Blower

A three nozzle air blower can also be attached to the DSVC 300 ALIGNER. The blower helps removing particles from the chamber.

Marking Dot Inspection

DSEG 300 optionally integrates Marking Dot Inspection optics to inspect accuracies of dot positions, dot counts, and residue in the areas between dots.



Marking Dots



DSEG 300 w/Mark Inspection

Contact Us

USA:

Open Vision Technology, LLC.

Email: gen@openvisiontech.com

Tel: +1 339-293-2151

Web: www.openvisiontech.com