

IEG-300

Unique Capabilities

- The IEG 300 features slim design, specifically, for use with FOUP and standard cassette.
- The gripper's **fail safe wafer interlock** mechanism prevents costly losses by holding wafers securely at accelerations exceeding 5G and during power failures.
- Our **soft-touch mechanism** with **programmable gripping force** enables the gripping tips to gently touch (hug) the wafer thus preventing particle generation while maintaining secure hold with constant optimized gripping force, helping you achieve higher throughput.
- The IEG 300 is industry only gripper that comes with a **self-centering feature**, allowing exact placing of the wafer on the stage or chuck, thus minimizing particle creation associated with friction present during wafer shifts and drops.
- Absolutely **no back side contamination**.

Materials

- The gripping tips and pads are manufactured of PEEK (Vespel, optionally) to avoid oxidation and corrosion, insuring tool durability.
- The edge gripper blade and mechanism control box are made of hard anodized Aluminum (Titanium or Carbon Fiber, optionally), making the gripper ideally suited for high temperature applications.



IEG-300

Features

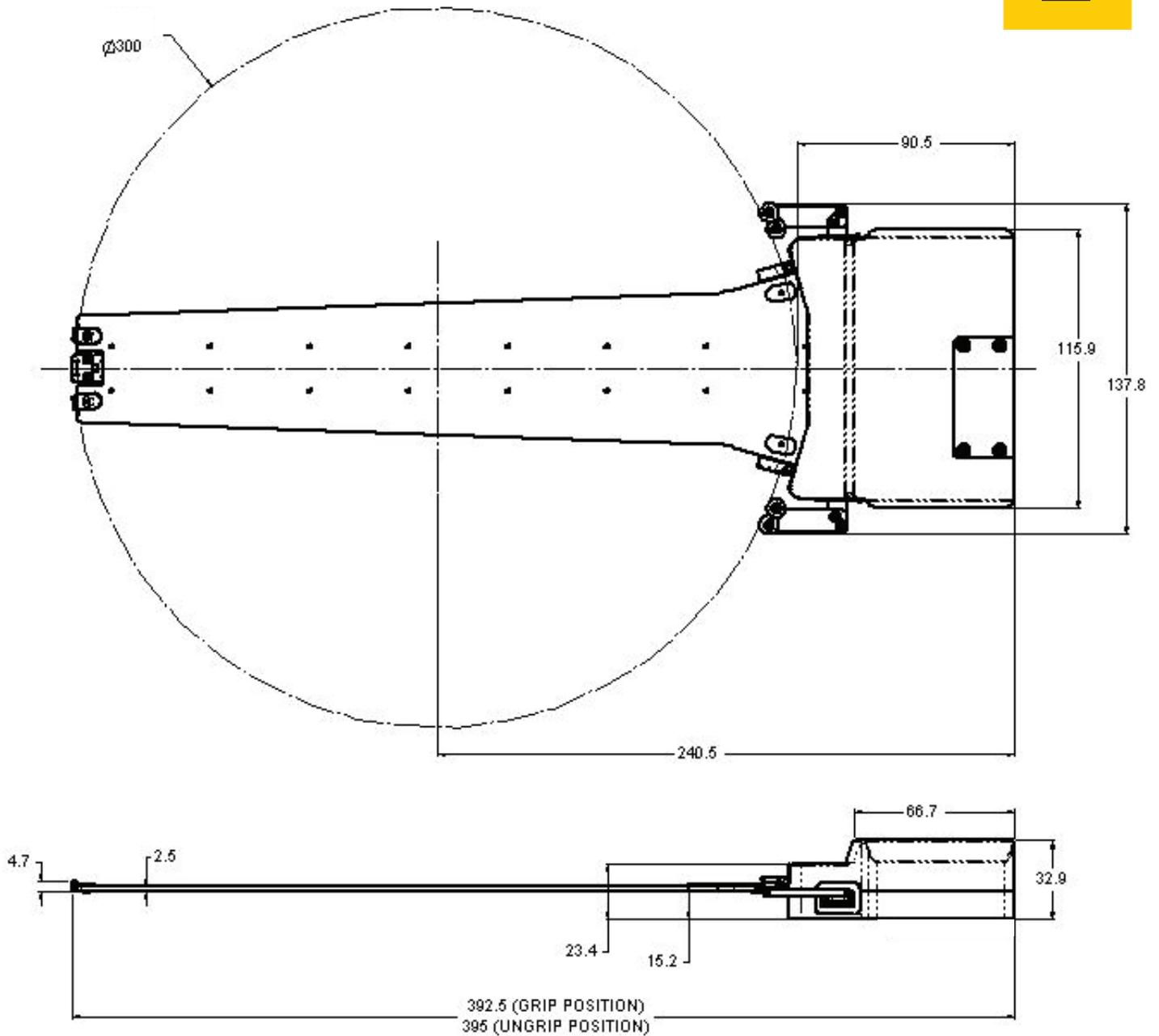
Fail safe interlock	Yes
Programmable gripping force	2-12N
Wafer self-centering	Yes
Wafer placing accuracy	Angular <math><0.1^\circ</math> Linear <math><10\mu\text{m}</math>
Compatible with variable wafer diameters	300mm \pm 2mm
Allowable wafer misalignment	\pm 5mm
Grip / un-grip	0.25sec
Backside contact zone	<math><0.5\text{mm}</math>
Maximum blade height envelop	4.8mm
Minimal wafer cassette pitch	10mm
Particles and contamination	ISO class 1 compliant
Operating environments	Atmosphere, wet, CMP
Power consumption	0.35A/24V DC
Compatible with all robotic interfaces	RS232, RS485, RS422, CAN, I/O
Static discharge (E78 level 1 compliant)	Yes
Cassette compatibility	SEMI E 1.9 - 0699
MTBF	30 million cycles
Gripper mass	490g
Wafer mapping capability (side through-beam)	Optional

300mm Wafer Generic Gripper

IEG-300

IEG-300: Technical Sketch

(All dimensions are in millimeters)



1040 Di Giulio Ave., Suite 200
Santa Clara, CA 95050
Tel: (408) 748-8787
Fax: (408) 748-8687
www.MultiMetrix.com