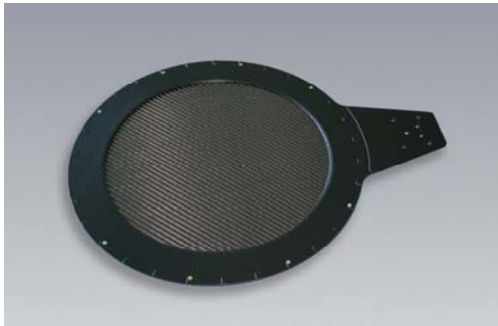


Top Grip End-Effector

mTG Series



Features

- different wafer sizes (6"/8"/12")
- thin and warped wafer handling
- Bernoulli airflow and vacuum (edge)
- chip side handling
- for loading and unloading of several mechatronic components
- automated quick coupling

ASK FOR YOUR CUSTOMIZED SOLUTION!

Functional description

The top grip end-effectors (mTG series) are designed for chip side handling of thin wafers e.g. for handling from a pre-aligner to a process chuck or onto an inspection table.

By using Bernoulli airflow the wafer is only touched at the edge exclusion area at the front side, the process area is safe. They enable direct handling onto a process chuck and do not require lift pins or an aperture for a standard vacuum end-effector.

Loading	Automated
Wafer detection	Vacuum sensing
End-effector detection	Type and size
Centering accuracy (X,Y axis)	n.a.
Automated coupling	Optional
Materials	Stainless steel, anodized aluminum, PEEK, NBR
PEEK coating	Conductive or non conductive
Pneumatic	
Pneumatic media	CDA or N ₂
Supply pressure	2.5 - 4 bar
Optimum Bernoulli pressure	3.5 bar
Supply vacuum	-60 kPa

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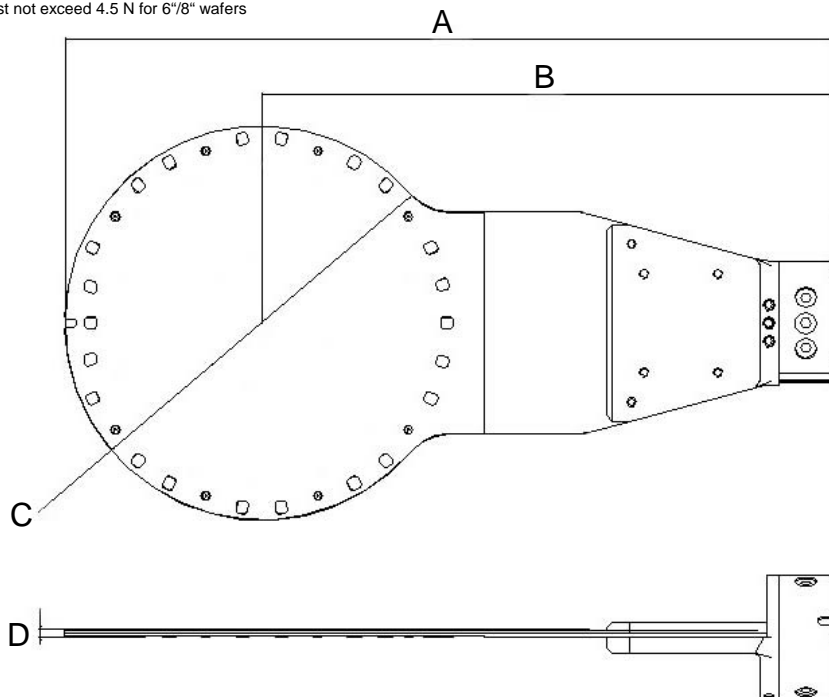
Top Grip End-Effector

mTG Types & wafer sizes

Type	mTG 150	mTG 200	mTG 300
Wafer size	150 mm (6")	200 mm (8")	300 mm (12")
Wafer thickness	> 50 μm (1,97 mil)	> 50 μm (1,97 mil)	> 60 μm (2.36 mil)
Warpage (depends on wafer thickness)	Up to 12 mm*	Up to 12 mm*	Up to 12 mm*
Weight	550 g	600 g	650 g
Mechanical dimensions in mm			
A (length)	310.6	334.5	431.3
B (distance to wafer center)	230.6	230.5	277.3
C (diameter)	160	208	308
D (height)	3	3.1	4.2

Special customized designs available!

*planarization force must not exceed 4.5 N for 6"/8" wafers



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