

# GCA 6300 chucks

## STANDARD CHUCK

Substrate size: 4 inch (and smaller)

S=Substrate thickness: (0.420-0.620)mm

C=Chuck thickness (Bilja): 5.601mm

Thickness (S+C)=(5.601+0.500)mm =6.101mm

TARGET thickness=6.121mm(+/-0.100mm)

Thinner substrates ( $\leq 350\mu\text{m}$ ), use shim 230-260um



## METAL 4" CHUCK

Substrate size: 4 inch (and smaller)

S=Substrate thickness: (0.420-0.620)mm

C=Chuck thickness(Bilja): 5.601mm

Thickness (S+C)=(5.601+0.500)mm=6.101mm

TARGET thickness=6.121mm(+/-0.100mm)

Thinner substrates ( $\leq 350\mu\text{m}$ ), use shim 230-260um



### METAL 3" CHUCK

Substrate size: 3 inch (and smaller)

S=Substrate thickness: (585-785)mm

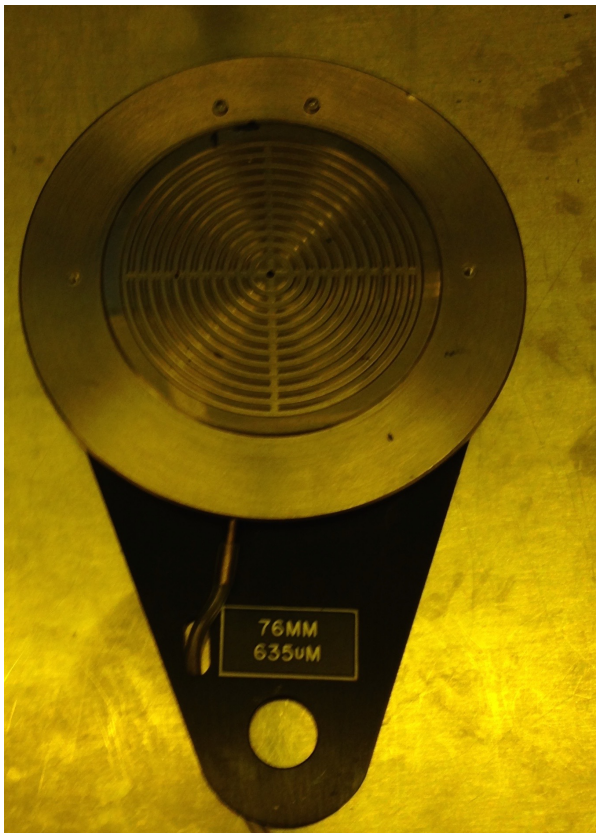
C=Chuck thickness(Bilja): 5.436mm

Thickness (S+C)=(5.436+0.635)mm=6.071mm

TARGET thickness=6.121mm(+/-0.100mm)

Thinner substrates ( $\leq 350\mu\text{m}$ ), use shim 380um,

Substrate $\sim 500\mu\text{m}$  use shim 230um



### SMALL 2" CHUCK

Substrate size: 2 inch (and smaller)

S=Substrate thickness: (0.500-0.700)mm

C=Chuck thickness(Bilja): 5.525mm

Thickness (S+C)=(5.525+0.600)mm=6.125mm

TARGET thickness=6.121mm(+/-0.100mm)

Thinner substrates ( $\leq 350\mu\text{m}$ ), use shim 230-260um



### SMALL ¼ of 2" CHUCK

Substrate size: 1/4 of 2 inch (and smaller)

S=Substrate thickness: (620-820)mm

C=Chuck thickness (Bilja): 5.404mm

C=Chuck thickness with pink shim(Bilja): 5.804mm

Thickness (S+C)=(5.404+0.720)mm=6.124mm

TARGET thickness=6.121mm(+/-0.100mm)















Thinner substrates (≤350um), use pink shim 400um,

Substateres~500um use metal shim~230um



## Pink shim~0.400mm=400um

**Artus Color/Thickness Chart**  
The color tells the thickness

 .0005"–0,01mm Silver	 .00075"–0,02mm Gold	 .001"–0,025mm Amber
 .0015"–0,04mm Purple	 .002"–0,05mm Red	 .003"–0,08mm Green
 .004"–0,1mm Tan	 .005"–0,125mm Blue	 .0075"–0,19mm Transmitte
 .010"–0,25mm Brown	 .0125"–0,31mm Black	 .015"–0,4mm Pink
 .020"–0,5mm Yellow	 .025"–0,6mm White	 .030"–0,75mm Coral

.00025"–0,005mm, .040"–1mm, .050"–1,25mm, .060"–1,5mm  
thicknesses are available in clear plastic.

.001"–0,025mm, .0015"–0,04mm, .007"–0,19mm, .012"–0,30mm  
thicknesses are available in natural aluminum.

.0005"–0,01mm, .00075"–0,02mm  
thicknesses are available in plastic only.

**ARTUS**

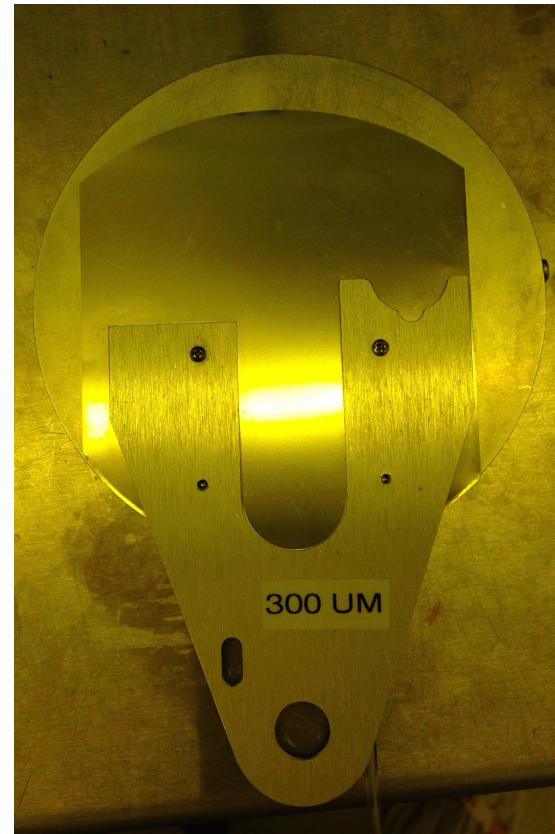
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# Attaching shim to the back side of chuck

**Correct**



**Wrong**



3C- Mat

target thickness  $\sim 6.18\text{mm}$