

SUBSTRATE/CHUCK		LOADING/CHUCK/SHIM	STEPPER	WAFER diameter	TARGET THICKNESS					
Substrate size	CHUCK name	Substrate thickness=S	Pick right chuck	Shim	chuck size	wafer size	Chuck thickness=C	C+S=12.150( +/- 0.1)mm	COMMENT	
1/4 of 2" or less	SMALL 1/4 of 2" chuck-500um (Adam:1/4 2")	350um=0.350mm	1/4of2"/500um+s	130um	142	50.8mm	11.646mm	11.646+0.350+0.130=12.126	OK	≤350um, use shim 130-230um
		400um=0.500mm	1/4of2"/500um+s	130um	142	50.8mm	11.646mm	11.646+0.400+0.130=12.176	OK	(350-500)um, use shim 130-180um
		500um=0.500mm	1/4of2"/500um	no	142	50.8mm	11.646mm	11.646+0.500=12.146mm	OK	
		604um=0.604mm	1/4of2"/500um	no	142	50.8mm	11.646mm	11.646+0.604=12.25mm	OK	limit
1/4 of 2" or less	SMALL 1/4 of 2" chuck-635um (Adam:1/4 2")	350um=0.350mm	1/4of2"/635um+s	180um	142	50.8mm	11.536mm	11.536+0.350+0.180=12.126	OK	≤350um, use shim 180-260um
		500um=0.500mm	1/4of2"/635um+s	130um	142	50.8mm	11.536mm	11.536+0.500+0.130=12.166	OK	
		635um=0.635mm	1/4of2"/635um	no	142	50.8mm	11.536mm	11.536+0.635=12.171mm	OK	
		714um=0.714mm	1/4of2"/635um	no	142	50.8mm	11.536mm	11.536+0.714=12.250mm	OK	limit
2" and smaller	SMALL 2" CHUCK-500um (Adam:2")	350um=0.35mm	2"/500um+shim	130um	2 ( for 2")	50.8mm	11.650mm	11.650+0.350+0.130=12.130	OK	≤350um, use shim 130-230um
		500um=0.500mm	2"/500um	no	2 ( for 2")	50.8mm	11.650mm	11.650+0.500=12.150mm	OK	
		600um=0.600mm	2"/500um	no	2 ( for 2")	50.8mm	11.650mm	11.650+0.600=12.250mm	OK	limit
3" and smaller	3" CHUCK-635um (Adam: 76.2mm)	350um=0.350mm	3"/635um+shim	130um	3( for 3")	76.2mm	11.570mm	11.570+0.350+0.130=12.050	OK	≤350um, use shim 130-260um
		500um=0.500mm	3"/635um	no	3( for 3")	76.2mm	11.570mm	11.570+0.500=12.070mm	OK	
		680um=0.680mm	3"/635um	no	3( for 3")	76.2mm	11.570mm	11.570+0.680=12.250mm	OK	limit
4" and	STANDARD CHUCK-500um (Adam: 100mm)	350um=0.350mm	4"/500um+shim	130um	100 ( for 4	100mm	11.630mm	11.630+0.350+0.130=12.11mm	OK	≤350um, use shim 130-260um
		500um=0.500mm	4"/500um	no	100 ( for 4	100mm	11.630mm	11.630+0.500=12.13mm	OK	
		620um=0.620mm	4"/500um	no	100 ( for 4	100mm	11.630mm	11.630+0.620=12.25mm	OK	limit
4" and	BIG METAL CHUCK ( Adam:Al 100mm)	350um=0.350mm	Al 100mm	130um	100 ( for 4	100mm	11.570mm	11.570+0.350+0.130=12.050	OK	≤350um, use shim 130-260um
		500um=0.500mm	Al 100mm	no	100 ( for 4	100mm	11.570mm	11.570+0.500=12.070mm	OK	
		635um=0.635mm	Al 100mm	no	100 ( for 4	100mm	11.570mm	11.570+0.635=12.205mm	OK	
		680um=0.680mm	Al 100mm	no	100 ( for 4	100mm	11.570mm	11.570+0.680=12.250mm	OK	limit
4" and	BLACK MULTI -720um ( Adam:Black multi)	350um=0.350mm	Black multi+shim	260um	7100	76.2mm	11.440mm	11.440+0.350+0.260=12.05mm	OK	limit
		500um=0.500mm	Black multi+shim	130um	7100	76.2mm	11.440mm	11.440+0.500+0.130=12.07mm	OK	use shim 130-230um
		550um=0.550mm	Black multi+shim	260um	7100	76.2mm	11.440mm	11.440+0.550+0.260=12.25mm	OK	limit
		720um=0.720mm	Black multi	no	7100	76.2mm	11.440mm	11.440+0.720=12.16mm	OK	
		810um=0.810mm	Black multi	no	7100	76.2mm	11.440mm	11.440+0.810=12.25mm	OK	limit
6"	We do have chuck Thinning down form 12.74 to	custom puddles 3C can make them	SHIMS: Shims can be cut from other material (cabinet next to stepper, first drawer. Shim Thickness: 0.01mm to 0.75mm (each color-reperesens different thickness))							

**Shims:**

**1.metal: 130um**

**2.metal :170-180um**

**3.metal: 260um**

**Shims are rectangular shape.**

**Make sure you attach shim to chuck properly.**

**(Numbers for substrate size, and substrate thickenss need to be UP)**

**Material used for cutting shims is in first drawer, bay 6( aytostep 200)**

**Shims: 0.01mm to 0.75mm ( thickness)**