

# NCT Inc.

**Product Brochure 2025** 



## Dri-Stik,

the flagship product of NCT, guarantees reliable adhesion under all conditions.

• Product code : NCT\_Dristik

Description : Bio-inspired dry adhesives

- No chemical for adhesion

- Reusable

- Very low preload for high adhesion

- Easily cleanable

• Application: End effector, Pick and Place equipment, Glass Handling Module, Wafer Transfer system, Substrate Chuck, Household Applications, etc.

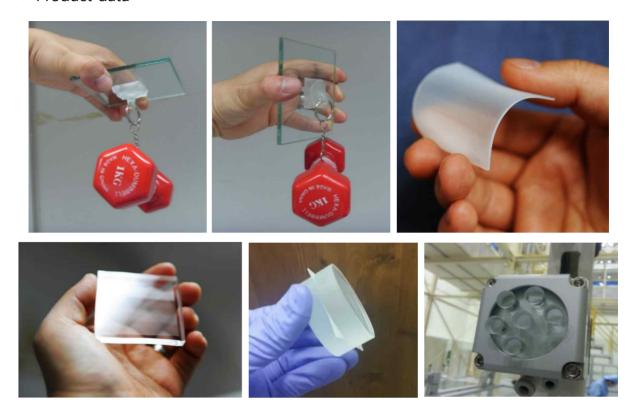
#### Specification

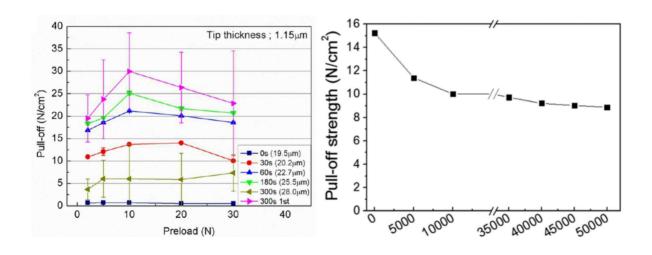
	Value	
Material	Silicon rubber, FKM, FFKM	
Product size*	Max 130 X 130 mm <sup>2</sup>	
Thickness	250 μm ~	
Color	Generally clear, with customizable colors for silicone rubber	
	Black for FKM and FFKM	
Pull-off strength	~ 25 N/cm² for silicon rubber model	
at RT	~ 20 N/cm² for FKM and FFKM model	
Durability	50% adhesion performance after 50,000 cycles	
Operating	150 °C for silicon rubber model	
temperature	200 °C for FKM model	
	280 °C for FFKM model	
Production Capacity	TBD	
Remarks	- Suitable for use on any type of smooth surfaces	
	(glass, metal, painted surface, plastic, etc.)	
	- Detachment is TBD through further consultation	

<sup>\*</sup> Oversize product can be produced. However, seamlines can be found.



### • Product data







## ASP (Anti-Slip Pad),

Precision anti-slip end-effector designed for semiconductor and display process environments

• Product code : NCT\_ASP

• Description : Rubbery anti-slip pad for various substrate

- No chemical for friction

- Reusable

- Almost 0 pull-off strength

- Easily cleanable

- Super long life

 Application: End effector, Coater/Developer Track for Semiconductor Fabrication, Substrate Chuck, CMP, etc.

#### Specification

	Value	
Material	FKM, FFKM or Silicon Rubber	
Product size	Rectangular: ~150 × 150 mm²	
	Circular: ~8-inch diameter	
Thickness	Adjustable (250 μm ~ )	
Color	Generally clear, with customizable colors for silicone rubber	
	Black for FKM and FFKM	
Friction coefficient	Tunable	
Durability	>1,000,000 cycles	
Operating	150 °C for silicon rubber model	
temperature	200 °C for FKM model	
	280 °C for FFKM model	
Production Capacity	TBD	
Remarks	- For better performance, micro/nano structures can be	
	added on the surface.	



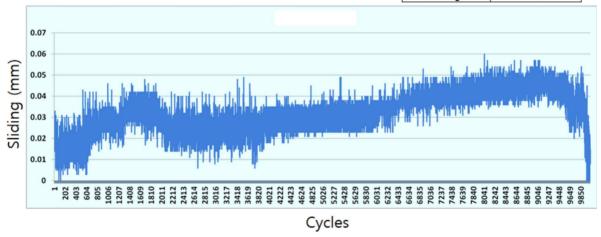
#### • Product data



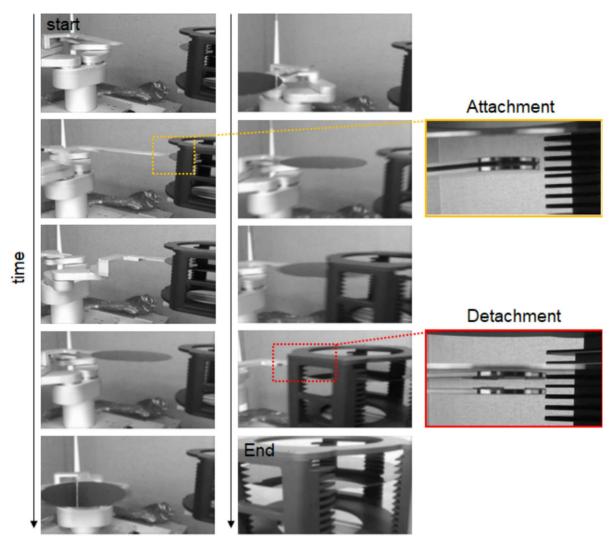


- Required spec < 0.3 mm Our result < 0.06 mm at full robot speed

	Sliding (mm)
MAX	0.06
MIN	0.00
Average	0.0032









## MPP (Micro Patterned Pad),

Frictional and adhesive pads featuring multiscale surface patterns, suitable for extreme conditions

• Product code : NCT\_MPP

• Description : Micro-patterned Pad

- Very stable even in ultra-high vacuum

- Improved contact with the substrate is ensured by macrostructure design

- Pull-off strength can be controlled

- Easily cleanable

- Extended lifespan

#### Specification

	Value
Material	FKM or FFKM for contact part
	SUS or PI bolt for fixation unit
Product size	Rectangular: ~300 × 300 mm <sup>2</sup>
	Circular: ~8-inch diameter
Geometry value	Tunable for macro and micro structure
Color	Black
Surface resistance	$1 \times 10^7 \sim 9 \times 10^8 \Omega$ /sq or tunable
Friction coefficient	1.6 ~ 2.3 or tunable
Pull-off strength	$0 \sim 20 \text{ N/cm}^2$
Durability	>1,000,000 cycles
Production Capacity	TBD
Operating temperature	200 °C for FKM model
	280 °C for FFKM model



#### • Product data

### 1. Bolt type

300 250

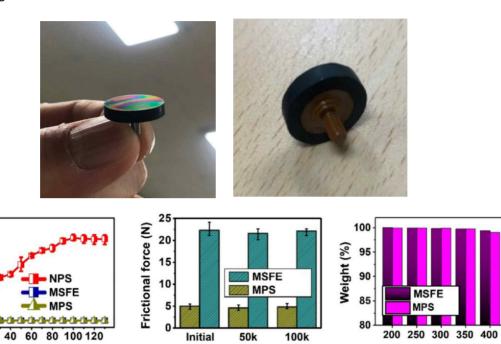
200

150

100

50

Pull-off strength (kPa)



50k Cycles

100k

## 2. Customized type



20 40 60 80 100 120 Preload (kPa)

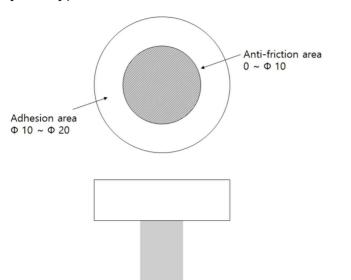


80

Temperature (°C)



## 3. Hybrid type





## 4. Sheet type







#### **Contact**

CEO/Founder

Alex M. Kwak, Ph. D.

+82-53-950-5573

alex@nct.company

http://nct.company

#### Disclaimer

Products offered by NCT Inc. are developed through extensive research and produced under strict quality control. The information provided represents typical values and may not be suitable for all applications or exceptional conditions. NCT Inc. makes no express or implied warranties, including warranties of merchantability or fitness for a particular purpose. Users are responsible for verifying the suitability of the product for their intended use. For further assistance, please contact our technical support team.