

Steel Cutting Rules

Precision Cutting, Defined by Blades.

Established 1970^{in}

HUNG SHUH ENTERPRISES CO., LTD.

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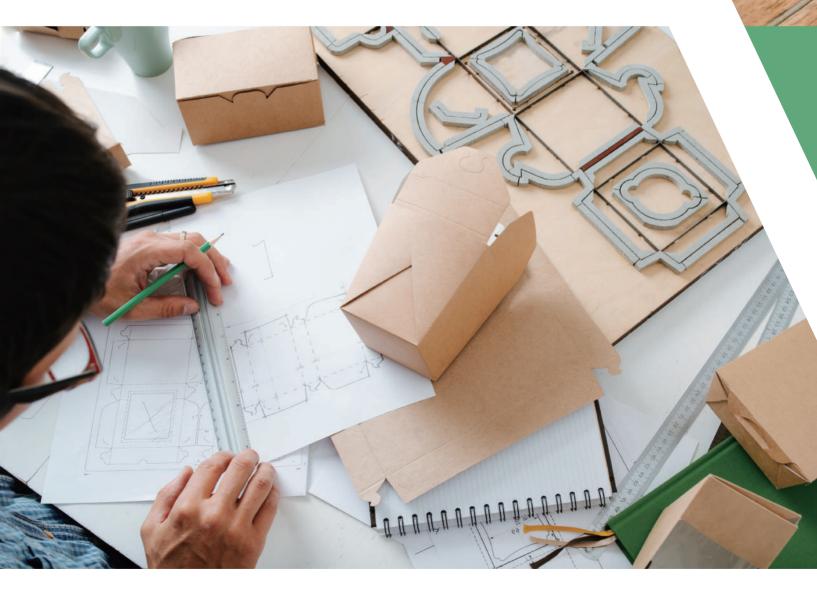
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HUNG SHUH

COMPANY HISTORY -

The HUNH SHUH brand originated in Taiwan and has gained a reputation for producing exceptional Japanese steel products. Looking back 50 years ago, the company's founder, Mr. Chen, and his three brothers dedicated themselves to the industry with a Japanese craftsman's spirit, striving to develop various steel-cutting rules.

Despite facing different obstacles and difficulties, we remained determined. We gained valuable insights from our experiences, ultimately contributing to our global success in selling our products. Moving forward, Hung Shuh remains committed to being a trailblazer in this industry and will continue to strive for excellence.





BRAND STORY

In the heart of Japanese culture, the legacy of ancient warriors inspires enduring artistry, exemplified by the Katana—a masterpiece embodying dignity and skill, meticulously forged from precious Tamahagane steel. At Hung Shuh, we wholeheartedly embrace the spiritual values of craftsmanship, dedicated to preserving tradition as creators of precision steel-cutting rules.

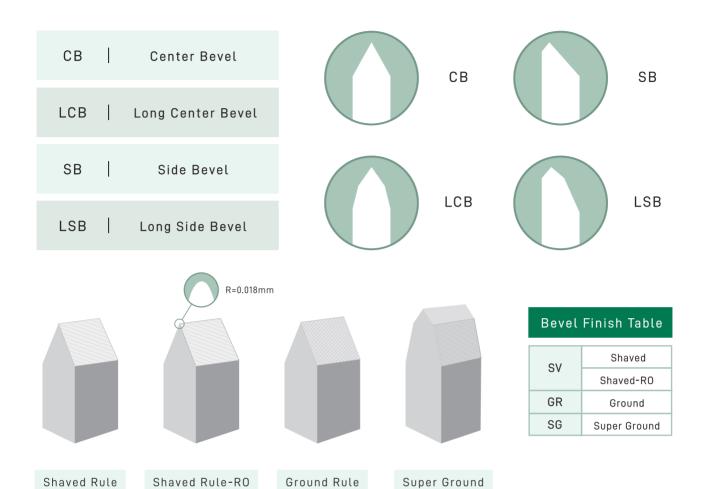
unwavering quality. Rooted in our understanding of diemakers' needs, we tailor cutting rules to perfection, seamlessly marrying tradition and modernity, honoring artisans, harmoniously blends old and new, inviting all to experience its beauty and utility. Hung Shuh beckons you to appreciate the seamless blend of tradition and innovation.

Bevel Profiles



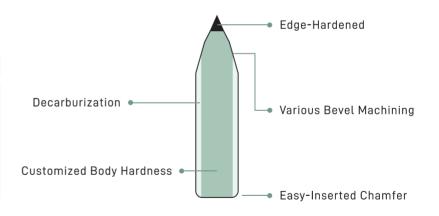
Center Bevel | Long Center Bevel | Side Bevel | Long Side Bevel

Bevel Profiles



Edge Hardness Conversion Table

Code	HS	HRC	HV
F	68	51	530
Α	74	55	600
Н	77	57	640
S	79	58	670
Е	81	60	700

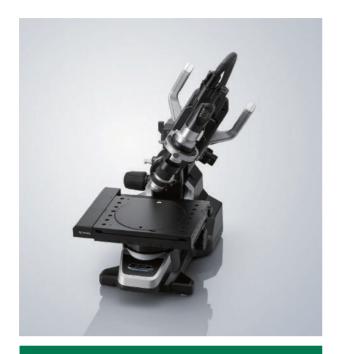


Hardness Conversion Table

Soft ←						→ H	ard						
HS	45	48	50	52	55	60	66	68	74	77	79	81	HS
HRC	32	34	36	38	40	45	50	51	55	57	58	60	HRC
HV	320	340	360	380	400	450	520	530	600	640	670	700	HV



Quality Assuarance



Keyence - Rule Edge Inspection

Through high magnification, optical inspection



Grain Size Inspection

ASTM E112 & ISO 643 : Standard Test Methods for Determining Average Grain Size.



Servo-Crank Blanking Machine (Sakamoto) **Cutting Life Testing**

Introducing a Japanese advanced blanking machine with precise height control and tool durability testing for maximum performance.

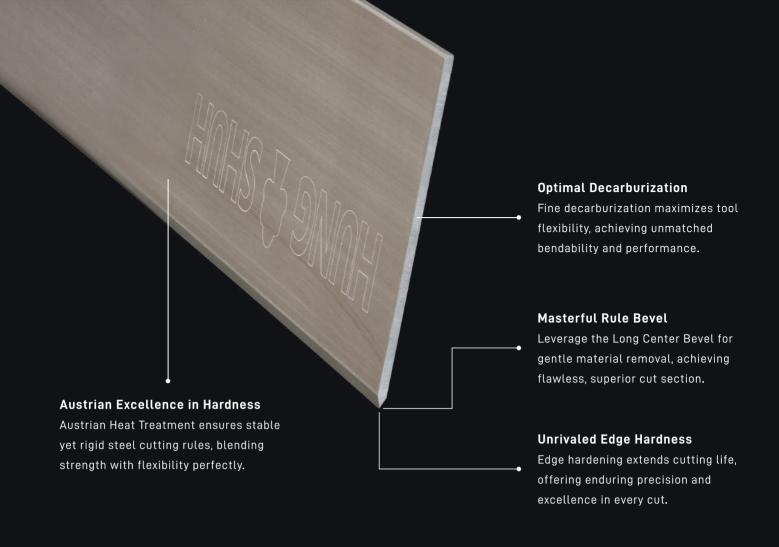


Vickers Hardness Tester - Guarantee Hardness

Our steel cutting rules are rigorously inspected to guarantee precise hardness control in both the edge and body.

TYPE-SG



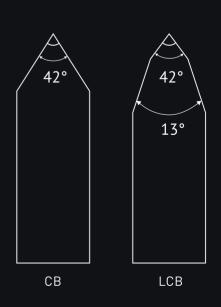


The Super Ground rule has been developed to ensure a precise and smooth cut section. Our high-spec tooling is utilized to grind the rule edge to a mirror-like finish, which reduces cutting friction.

Our Super Ground rule suits diverse industries, including electronics, plastics, paper, leather, and carbon fibers.

Hung Shuh confidently chooses only the finest steel strips from Nippon Steel for superior product stability and durability. This ensures our customers to receive the best possible user experience.

Super Ground					
Bevel Profiles	СВ	LCB			
Thickness	0.53mm ~ 1.42mm				
Height	22.8mm ~ 23.8mm				
Angle	42°, 52°				
Body Hardness	HS45 , HS48 , HS	52 , HS55 , HS60			
Edge Hardness	HS68 ~ HS81				



Super Ground TYPE-SG / INFORMATION



Super Ground

TYPE-SG

- 1/Cutting precision is heightened by sharpness.
- 2 / Minimal edge roughness facilitates smoother operations.
- 3 / Enhanced functionality through superior bendability.

Applications: Plastics (PE, PET, PVC, PP), Diverse Blisters, Laminated Papers, Composite Materials, Films, Synthetic Rubbers, Leathers, Thin Wooden Boards, Flexible Print Circuits, and Carbon-Fiber Fabrics.

	SG-45	SG-38	SG-32
Advantages	High durability Ideal for challenging and robust materials	General standard Highly dependable for universal application	High flexibility Well-suited for complicate forms and tight curves
Applications	Plastics (PE, PET, PVC, PP), Diverse Blisters, Laminated Papers, Composite Materials, Films, Synthetic Rubbers, Leathers, Thin Wooden Boards, and Carbon-Fiber Fabrics.	Laminated Papers, Flexible Print Circuits, Stickers and EVA Forms.	Stickers and Flexible Print Circuits.



Sharp



Clean Cutting Faces



Less Dust



Long Run

Thickness (mm)	Model No.	Hardne	ss (HV)	Hoight (mm)	Angle	
Thickness (mm)	Model No.	Body	Edge	Height (mm)	Angte	
0.53	SG-52H	380	640	23.6 / 23.8	42°	
	SG-45F	320	530			
	SG-48H	340	640			
	SG-52A	380	600			
	SG-52H	380	640			
0.71	SG-52S	380	670	23.6 / 23.8	42°/ 52°	
S.II .	SG-52E	380	700			
	SG-55S	400	670			
	SG-55E	400	700			
	SG-60S	450	670			
	SG-60E	450	700			
	SG-48A	340	600			
	SG-48H	340	640			
1.06	SG-48E	340	700	23.6 / 23.8	42°/ 52°	
	SG-52A	380	600			
	SG-55E	400	700			

Material After Cutting



Laminated Cardboards — GR



Laminated Cardboards — SG



Laminated Cardboards — SV



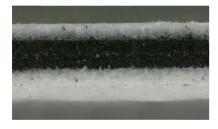
PET — GR



PET — SG



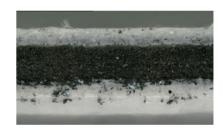
PET — SV



Carbon-Fiber Fabrics — GR



Carbon-Fiber Fabrics — SG



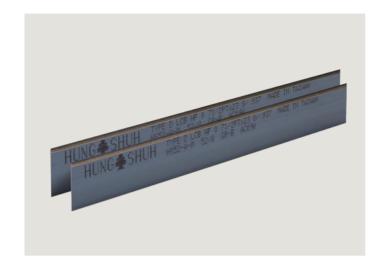
Carbon-Fiber Fabrics — SV

Cutting Curve (0.5 mm PET film)



We offer various customization options to meet your needs, including special profiles, sizes, and materials.

Ground Rule TYPE-GR / INFORMATION



Ground Rule					
Bevel Profiles	СВ	LCB			
Thickness	0.45mm ~ 1.42mm				
Height	22.8mm ~ 23.8mm				
Angle	42°,	52°			
Body Hardness	HS48 , HS52 , HS55 , HS60				
Edge Hardness	HS74 ~ HS81				







Cost Efficiency

Sharp

Less Dust

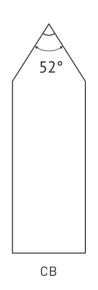
Ground Rule

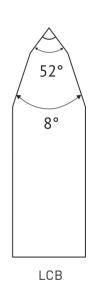
TYPE-GR

- 1 / A precise cut is achieved with minimal cutting force.
- 2 / The implementation of vertical grinding lines results in a reduction of friction.
- 3 / A sharp cutting edge with superfine ground bevel minimizes dusting.

Applications:

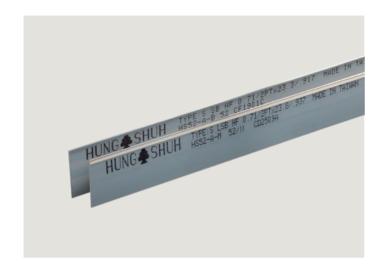
Plastics, Laminated Papers, and Leathers.





Thickness (mm)	Madal Na	Hardne	ess (HV)	lloight (mana)	Angle	
Thickness (mm)	Model No.	Body	Edge	Height (mm)		
0.45	GR-52A	380	600	23.6 / 23.8	42°	
0.53	GR-52A	380	600	23.6 / 23.8	42°	
	GR-45A	320	600		42°/ 52°	
	GR-48A	340	600	23.6 / 23.8		
0.71	GR-52A	380	600			
	GR-52E	380	700			
	GR-55A	400	600			
	GR-48A	340	600			
1.06	GR-48S	340	670	23.6 / 23.8	42°/ 52°	
	GR-52A	380	600			
1.42	GR-48A	340	600	23.6 / 23.8	52°	

Side Bevel Rule TYPE-S / INFORMATION



Side Bevel Rule

TYPE-S

- 1 / Straight cutting surface and precise cutting point.
- 2 / Suitable for thick materials.

Applications: Sticky Notes, Leathers, EVA, EPE, Puzzles and Facial Masks.

Side Bevel Rule

Bevel Profiles	SB	LSB			
Thickness	0.71mm ~ 1.42mm				
Height	22.8mm ~ 23.8mm				
Angle	42°, 51°, 52°				
Body Hardness	HS48 , HS52 , HS55 , HS60				
Edge Hardness	HS74 ~ HS81				



Sharp



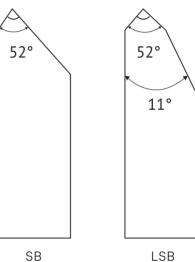




Faces

Clean Cutting Precise Cutting **Point**

Less Dust

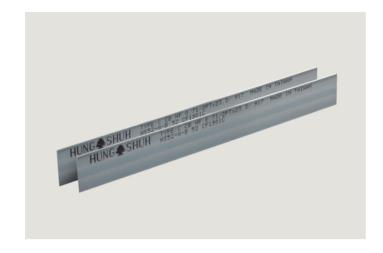


LSB

Thickness (mm)	Model No.	Hardness (HV)		Height (mm)	Anglo
mickness (mm)	Model No.	Body	Edge	neight (IIIII)	Angle
0.71	S-52A	380	600	23.6 / 23.8	42°/ 52°
0.71	S-55A	400	600		42 / 52
	S-48A	340	600		
1.06	S-52A	380	600	23.6 / 23.8	42°/ 52°
1.00	S-52E	380	700	23.0 / 23.0	42 / 32
	S-55A	400	600		
1.42	S-48A	340	600	23.6 / 23.8	52°

We offer various customization options to meet your needs, including special profiles, sizes, and materials.

Center Bevel Rule TYPE-C / INFORMATION



Center Bevel Rule

Bevel Profiles	СВ
Thickness	0.45mm ~ 1.42mm
Height	22.8mm ~ 23.8mm
Angle	42°, 52°
Body Hardness	HS48 , HS52 , HS55 , HS60
Edge Hardness	HS74 ~ HS81







High Durability



Superb Flexibility

Center Bevel Rule

TYPE-C

- 1 / A reliable product with enduring and robust characteristics.
- 2 / Thick primary bevel edges enhance durability, ensuring long-lasting performance.
- 3 / Reducing the frequency of changing rules and improving productivity.
- 4 / Superb flexibility enables easy manipulation of small-angle objects.
- 5 / A durable blade edge ensures extended cutting life for maximum efficiency and performance.

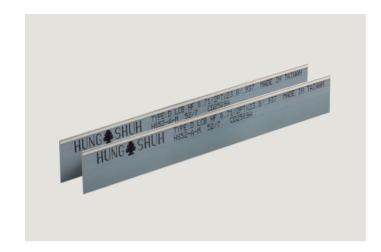
Applications: Corrugated Boxes, Cardboards, Stickers, and Paper Boxes.



СВ

-		•				
Thickness (mm)	Model No.	Hardne	ess (HV)	Height (mm)	A = =1 =	
mickness (mm)	Model No.	Body	Edge	neight (min)	Angle	
0.45	C-52A	380	600	23.6 / 23.8	42°	
0.53	C-52A	380	600	23.6 / 23.8	42°/ 52°	
	C-45H	320	640			
	C-45S	320	670		42°/ 52°	
	C-48A	340	600			
	C-48S	340	670			
0.71	C-48E	340	700	23.6 / 23.8		
	C-52A	380	600			
	C-52H	380	640			
	C-52S	380	670			
	C-52E	380	700			
	C-48A	340	600			
1.06	C-48S	340	670	23.6 / 23.8	42°/ 52°	
	C-52A	380	600			
1.42	C-48A	340	600	23.6 / 23.8	42°/ 52°	

Long Center Bevel Rule TYPE-D / INFORMATION



Long Center Bevel Rule

TYPE-D

- 1 / Commonly used and widely adopted.
- 2 / The innovative Long Center Bevel design minimizes cutting friction.
- 3 / Precise processing provides consistent height, minimizing the patch-up time.
- 4 / Edge hardening ensures long cutting life.

Applications: Corrugated Boxes, Cardboards, Stickers, Sponges, and Paper Boxes.

Long Center Bevel Rule

Bevel Profiles	LCB			
Thickness	0.53mm ~ 1.42mm			
Height	22.8mm ~ 23.8mm			
Angle	42°, 52°			
Body Hardness	HS48 , HS52 , HS55 , HS60			
Edge Hardness	HS74 ~ HS81			



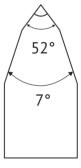




Efficiency

High Durability

Flexibility



LCB

Thickness (mm)	Model No.	Hardne	ess (HV)	Height (mm)	Anglo
mickness (min)	Model No.	Body	Edge	neight (mm)	Angle
0.53	D-52A	380	600	23.6 / 23.8	52°
	D-48A	340	600		
	D-48S	340	670		
0.71	D-52A	380	600	23.6 / 23.8	42°/ 52°
	D-55A	400	600		
	D-60A	450	600		
	D-48A	340	600		
	D-48S	340	670		
1.06	D-52A	380	600	23.6 / 23.8	42°/ 52°
	D-55A	400	600		
	D-55E	400	700		
1.42	D-48A	340	600	23.6 / 23.8	42°/ 52°



 $We offer various \ customization \ options \ to \ meet \ your \ needs, including \ special \ profiles, \ sizes, \ and \ materials.$

Creasing Rule TYPE-E / INFORMATION



Creasing Rule

TYPE-E

- 1 / Excellent radius profile.
- 2 / Very smooth creasing head.
- 3 / Minimum height tolerance.

Applications: Packaging Containers,
Plastic Boxes and Blisters.

Creasing Rule							
Bevel Profiles SR DR SF							
Thickness	0.53mm ~ 1.42mm						
Height	22.	0mm ~ 24.35	mm				
Body Hardness	HS38 , HS45 HS48 , HS52 , HS55 , HS60						



High Durability



Long Run



Precise Cutting Point

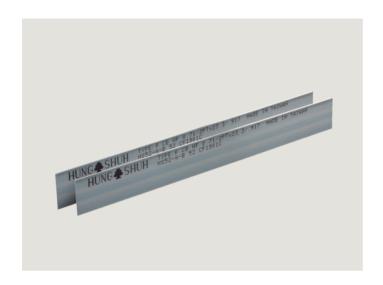


Precise Height

DR	SR	SF

Thickness (mm)	Model No.	Body Hardness (HV)	Bevel Profiles	Height (mm)	Angle
	E-48	340			
0.71	E-52	380	SR / DR / SF	22.0 / 22.1	_
0.71	E-55	400	3K / DK / 3F	22.8 / 23.1	
	E-60	450			
1.06	E-48	340	SR / DR / SF	22.8 / 23.1	
1.00	E-52	380	3K / DK / 3F	22.0 / 23.1	_
	E-40	270			
1.42	E-45	320	SR / DR / SF	22.8 / 23.1	-
	E-48	340			

Infinity Cut TYPE-F / INFORMATION



Infinity Cut

TYPE-F

- 1 / Round edge (R = 0.018mm) provides consistent sharpness.
- 2 / A unique round edge reduces angel hair.
- 3 / The cutting lifespan can be extended beyond 2 million cuts by significantly decreasing die-cutting stress damage.

Applications: Medicine Boxes,
Cigarette Boxes and Makeup Boxes.

Infinity Cut						
Bevel Profiles	СВ	LCB				
Thickness	0.71mm ~ 1.06mm					
Height	22.8mm ~ 23.8mm					
Angle	42°,	52°				
Body Hardness	HS48 , HS52 ,	HS55 , HS60				
Edge Hardness	HS74 ~	- HS81				







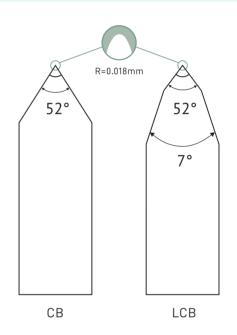
High Durability



Superb Flexibility



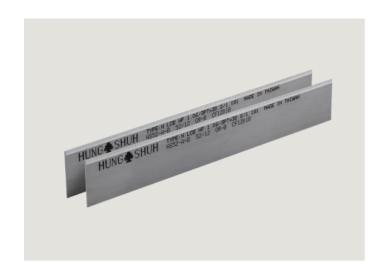
Long Run



Thickness (mm)	Model No.	Hardne	ss (HV)	Height (mm)	Angle	
	Model No.	Body	Edge	rieigiit (iiiiii)	Aligie	
	F-48A	340	600		42°/ 52°	
	F-52A	380	600			
0.71	F-52H	380	640	23.6 / 23.8		
	F-52S	380	670			
	F-55H	400	640			
	F-45H	320	640			
1.06	F-48H	340	640	23.6 / 23.8	42°/ 52°	
	F-52H	380	640			

We offer various customization options to meet your needs, including special profiles, sizes, and materials.

High Rule TYPE-H / INFORMATION



High Rule

TYPE-H

- 1 / Our high rule can cut a diverse range of materials, particularly those that are thicker in nature.
- 2 / The implementation of vertical grinding lines results in a reduction of friction.

Applications:

EVA, Sponges, and Cushion Packagings

High Rule					
Bevel Profiles	СВ	LCB			
Thickness	0.71mm ~ 1.42mm				
Height	30mm ~ 50mm				
Angle	42°,	52°			
Body Hardness	HS48 , HS52 , HS55 , HS60				
Edge Hardness	HS74 -	- HS81			



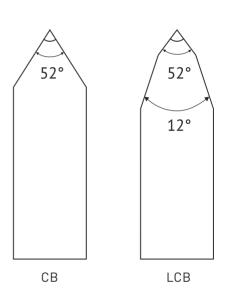




Sharp Clea

Clean Cutting Faces

Thick Materials



Thickness (mm)	Model No.	Hardne	ess (HV)	Height (mm)	A == =1 =
IIIICKIIESS (IIIIII)	Model No.	Body	Edge	Height (IIIII)	Angle
0.71	H-52A	380	600	30 / 32 /35	42°/ 52°
0.71	H-60E	450	700	/ 40 / 50	42 / 52
	H-48A	340	600	30 / 32 / 35 / 40 / 50	42°/ 52°
	H-48S	340	670		
	H-52A	380	600		
1.06	H-55A	400	600		
	H-55S	400	670		
	H-55E	400	700		
	H-60E	450	700		
1.42	H-48A	340	600	30 / 32 / 35 / 40 / 50	42°/ 52°

Features of Rules							
TYPE	С	D	F	GR	S	Н	SG
Long Cutting Lifetime	•	•	•				•
Clean Cut					•		•
Excellent Bendability	•	•	•	•			•
Less Angel Hair and Dusting			•	•	•	•	•
Great Cost Efficiency	•	•	•				

Summary of Cutting Materials							
TYPE	С	D	F	GR	S	Н	SG
Cardboards	•	•		•	•	•	•
Corrugated Boxes	•	•		•	•	•	
Cigarette Boxes			•	•	•		•
Laminated Papers				•	•		•
Leathers				•	•	•	•
Gaskets					•		•
Blisters				•	•	•	•
Films							•
Medical / Makeup Boxes				•	•		•
Paper Containers				•	•	•	•
Sponges	•	•		•	•	•	•
Conductive / Insulation Fabrics							•
Soft Magnets							•
Screen Protectors							•
Wool Blankets							•
Cushion Packagings				•		•	•
Flexible Printed Circuit							•
Puzzles				•	•		•
Panel-related							•
Honeycomb Boards						•	•
Sticky Notes					•	•	•
Cards	•	•	•	•	•		•
Coasters				•	•	•	•
Semiconductor Related Materials							•

Packaging / INFORMATION

Standard Height Rule (23.6/23.8mm)								
Thicknes	s(mm/pt)	Height(mm)	1m Length (M)	Weight(kg)	Coil(M)	Weight(kg)		
0.45mm	1.27pt		150	12.51	100	8.34		
0.53mm	1.5pt		130	12.76	100	9.82		
0.71mm	2pt	23.6 / 23.8	100	13.15	100	13.15		
1.06mm	3pt		70	13.75	70	13.75		
1.42mm	4pt		50	13.15	50	13.15		

High Rule						
Thicknes	s(mm/pt)	Height(mm)	1m Length (M)	Weight(kg)	Coil(M)	Weight(kg)
0.71mm	2pt		70	11.70~19.51	50	8.36~13.93
1.06mm	3pt	30.0~50.0	50	12.48~20.80	50	12.48~20.80
1.42mm	4pt		35	11.70~19.51	30	10.03~16.72

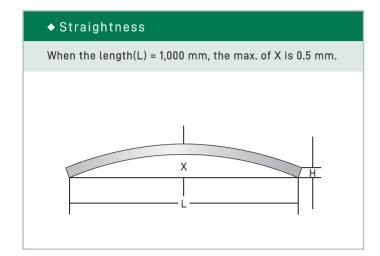
Coil Diameter				
Thicknes	s(mm/pt)	Coil(M)	Inside Diameter(ID)	Outside Diameter(OD)
0.71mm	2pt	100	360mm	470mm
1.06mm	3pt	70	360mm	450mm

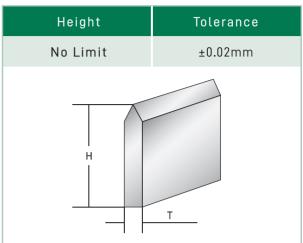






Tolerance / INFORMATION

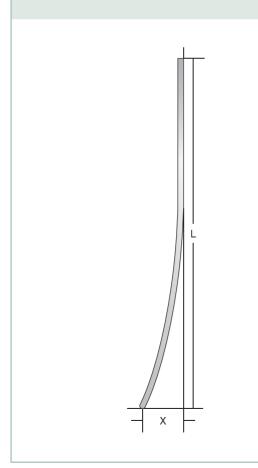




◆ Coilset

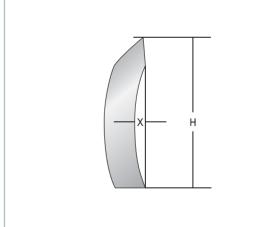
Measured a straight rule at the freely suspended condition. When the length(L) = 1,000 mm, the maximum of the X is 10 mm.

PS: Cut lengths only.



◆ Flatness

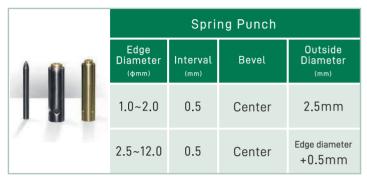
The maximum of $X = Height(H) \times 0.001 mm$. Ex : A height 23.8 mm rule, the maximum flatness tolerance is 0.024 mm (23.8 mm \times 0.001 mm = apx. 0.024 mm).

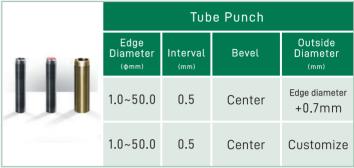


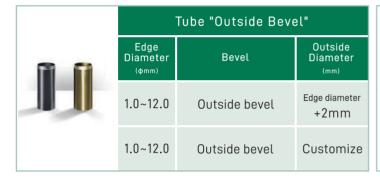
Thickness	Tolerance
0.45mm / 1.27pt	±0.015mm
0.53mm / 1.5pt	±0.015mm
0.71mm / 2pt	±0.015mm
1.06mm / 3pt	±0.020mm
1.42mm / 4pt	±0.025mm

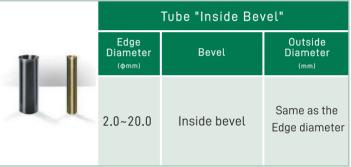
Tube Punch / Engraving Punch / INFORMATION

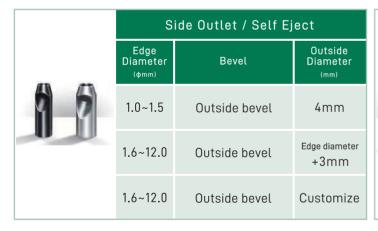
Tube Punch















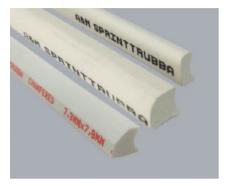


Engraving Punch

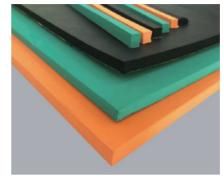
- Made by CNC with special stainless steel.
- Cut size: Regular size or any fancy design
- · Outside diameter: Upon requirements

Ejection Sponge / INFORMATION

Ejection Sponge



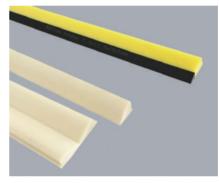
Profiled Rubber		
Hardness	color	
70°	White	



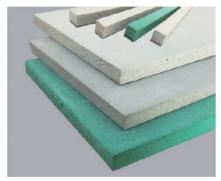
Ejection Rubber		
Hardness	color	
35° 45°	Green Orange	



Cell Polyurethane Vulkollan®		
color		
White Yellow		



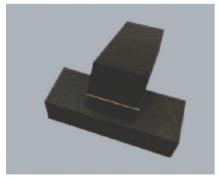
Cushion Crease		
Hardness	color	
55° 70°	Black White	



Open Cell Sponge		
Hardness	color	
35° 45° 55°	Grey Dark grey Green	



Narrow Seam Rubber Vulkollan®		
Hardness	color	
50° 55° 65°	White Yellow	



Cell Rubber EPDM		
Hardness	color	
20°	Black	



PU Sponge		
Hardness	color	
55°	White	

Cut Material / INFORMATION Non-Woven Fabric | Felt •-PET | PP | PVC | PE | OPS Corrugated Box Flexible Printed Circuits • PTP | CFF

Founded in 1970, we are a professional steel manufacturer based in Taiwan with more than 50 years of experience. Our unwavering commitment to speed, customization, and high-quality products has earned us a prominent position in the Taiwanese steel industry. We devote significant resources to research and development, resulting

in the accumulation of numerous leading technologies and products. By importing steel materials directly from the factory, we are able to provide our customers with a diverse selection of standardized and customized products at the most competitive prices and with the fastest possible turnaround times.

The content of the catalogue and specifications of listed products may be subject to change without prior notice. (2023.Aug) The second of the catalogue and specifications of listed products may be subject to change without evailably and specification. The second rewriten about not and misability and specification that he compared rewriten consign or support the specification of the formated instruction or product and misability and specification.