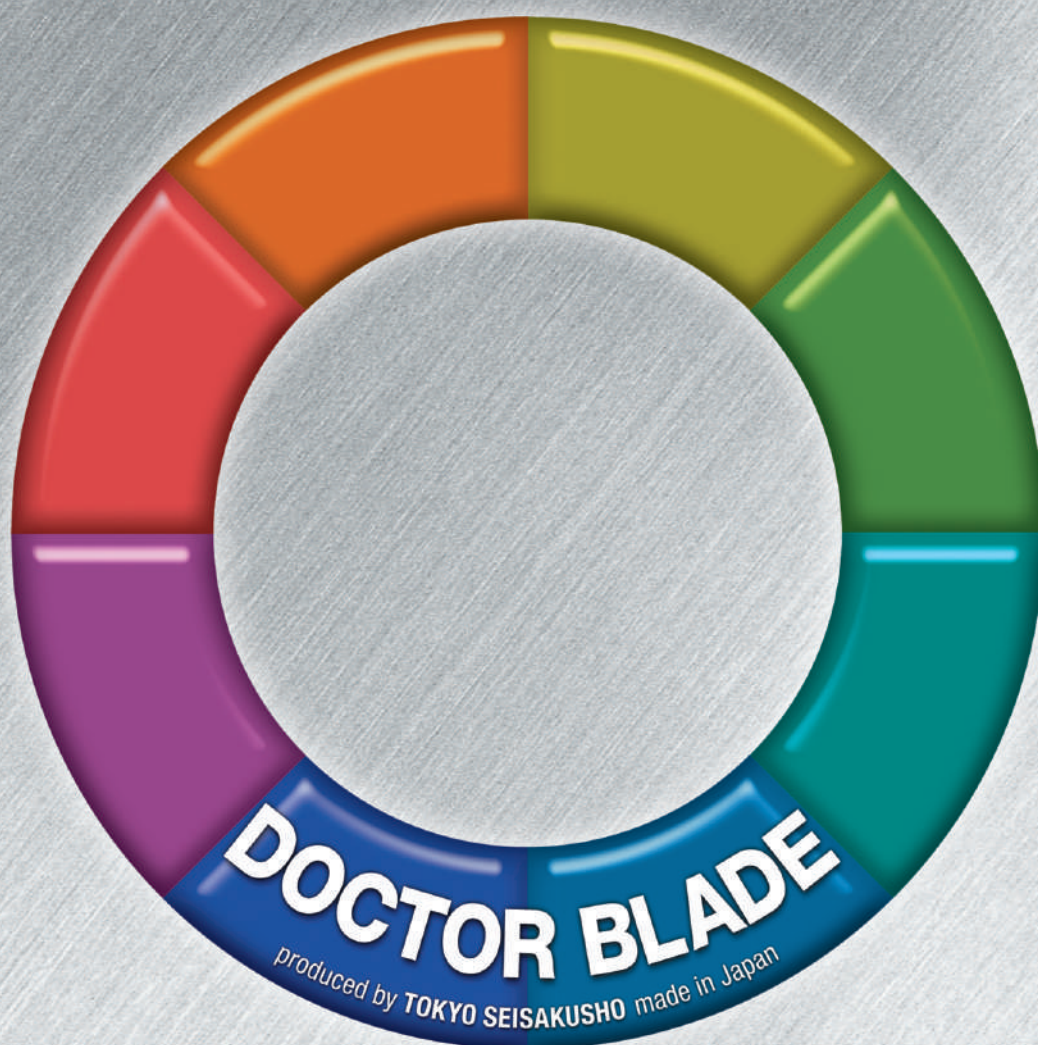


TS

DOCTOR BLADE



TOKYO SEISAKUSHO CO., LTD.

TS Doctor Blade

老舗

Since 1977, Tokyo Seisakusho has promoted many researches and developments as well as production as pioneers of DOCTOR BLADES in Japan.

We have been highly evaluated by many customers, owing to our high quality products and consulting services.

We will continue to make efforts and promise to serve you with reliance.

Now, please try using our DOCTOR BLADES.





We are Parts Manufacturer

Partner

Advice

Revolution

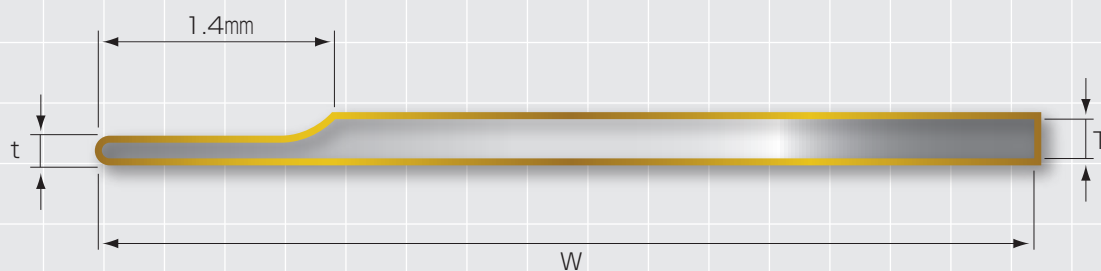
Technology

Service

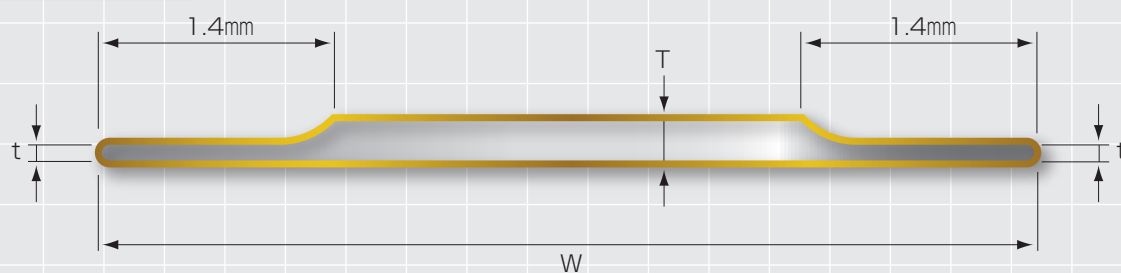
TS Doctor Blade (Plating Type)

Material Thickness	0.15mm ・ 0.2mm
Width	40mm ・ 50mm ・ 60mm
Edge Thickness	50 μ m ・ 60 μ m ・ 70 μ m ・ 80 μ m ・ 90 μ m
Shape	Lamella (single) ・ Lamella (double) ・ Bevel
Plating Thickness	10 μ m ・ 5 μ m ・ 15 μ m
Surface Treatment Hardness	SiC(Excellent Durable Products) Hardness Hv900 Hv700
	PTFE(Contains Fluorine) Hardness Hv900
	Ni-P(High Durable Products) Hardness Hv900

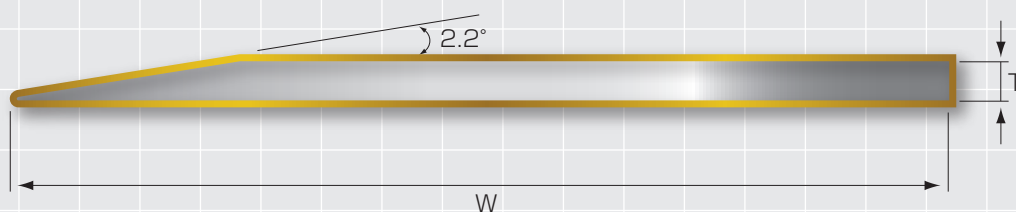
Lamella (single)



Lamella (double)

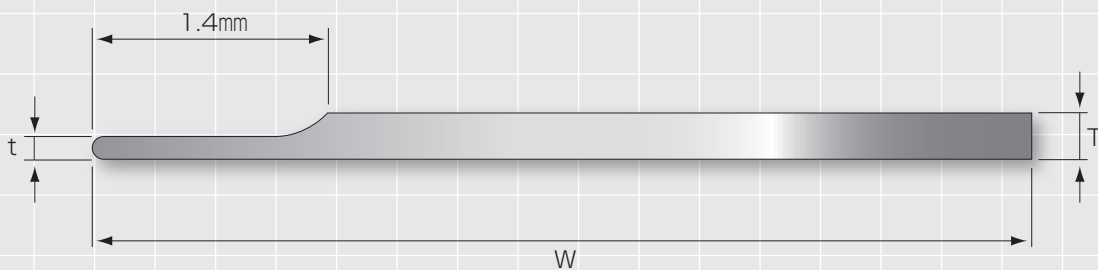


Bevel



TS Doctor Blade (Steel Type)

Material Thickness	0.15mm ・ 0.2mm
Width	40mm ・ 50mm ・ 60mm
Edge Thickness	40 μ m ・ 50 μ m ・ 60 μ m ・ 70 μ m ・ 85 μ m ・ 100 μ m ・ 150 μ m
Shape	Lamella (single) ・ Lamella (double) ・ Bevel
Hardness	Hv 620



TS Doctor Blade (QROWT)

Different from steel, the material itself has hardness so durability is excellent. It is widely used for white and pearl type ink.

Material Thickness x Edge Thickness x Width		Hardness
Q160—70	0.15mm x 70 μ m x 60mm	Hv 650
Q250—70	0.2mm x 70 μ m x 50mm	Hv 750 (Edge)
Q250—100	0.2mm x 100 μ m x 50mm	

TS Doctor Blade (sus)

Provides more anti-rust protection than steel type.

Material Thickness x Edge Thickness x Width		Hardness
S150—70	0.15mm x 70 μ m x 50mm	Hv 565
S160—70	0.15mm x 70 μ m x 60mm	
S250—70	0.2mm x 70 μ m x 50mm	

★We have plastic material type doctor blades also.

TS Doctor Blade Process Operation

Material

To manufacture high-accurate parts, we import high quality materials from Sweden and Germany.



Processing

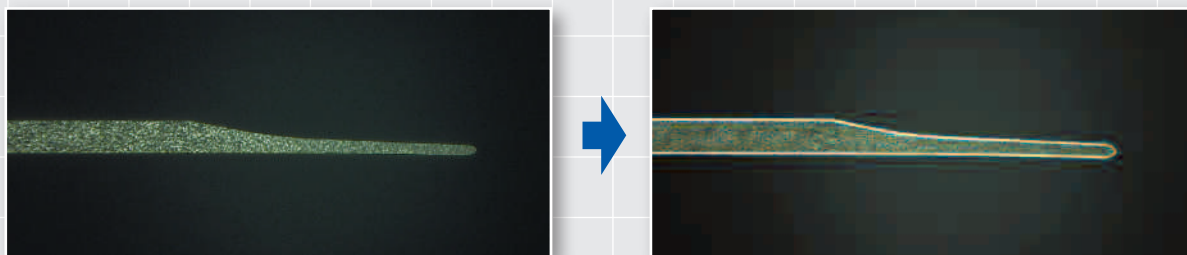
We manufacture with our original endless grinding machine. We also use our original finishing machine to manufacture smooth edges.



Plating

We do all the series of production from steel grinding to finish plating by ourselves.

During electroless plating process, we add and disperse suitable amount of small particles (SiC etc.) and fix it together with the coating film.



TS Doctor Blade Process Operation

Inspection

We inspect all the finished parts.
We promise you delivering stable parts.



Shipping

After inspecting, we put them in a special box for TS Doctor Blades and ship out.

We collect these boxes back and reuse after cleaning.

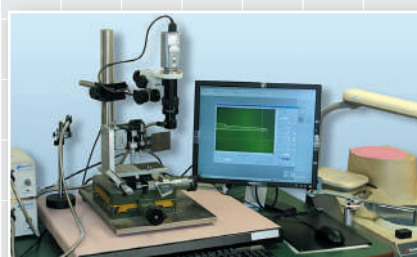
★We can cut and deliver the length you need.



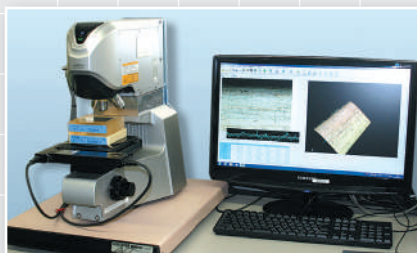
Measuring equipment



Microscope



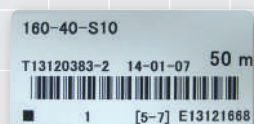
Microscope(cross-sectional shape)



Laser microscope for measuring shapes



Tester for measuring micro hardness



We control the parts thoroughly with lot numbers to keep quality and process control.

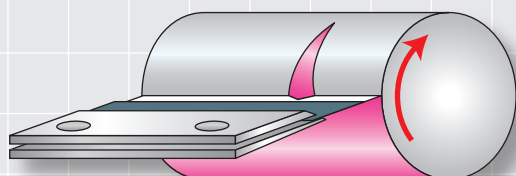
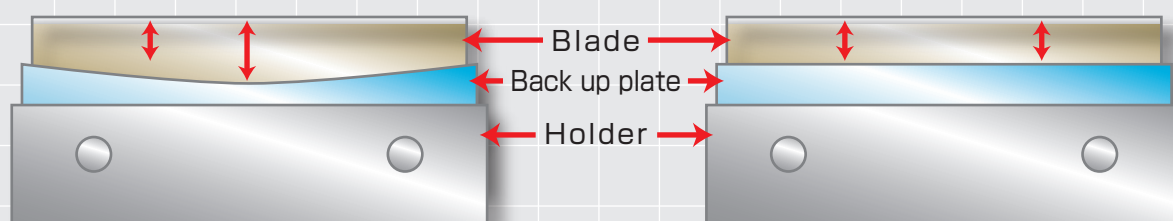
TS Back Up Plate

Please use our excellent doctor blades with our high-accuracy back up plates.

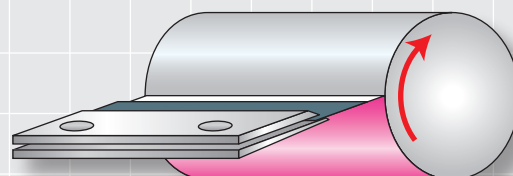
Straightness

Parallelism

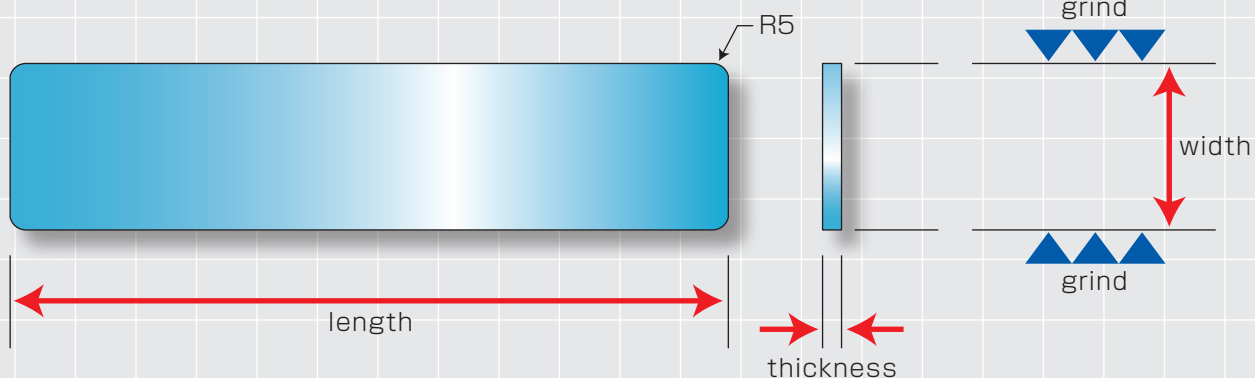
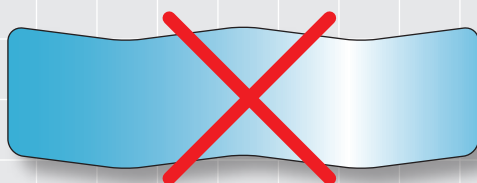
Safety



If you use back up plates with warps and bends, the blades will not be pressured equally, so it will cause blades to break.

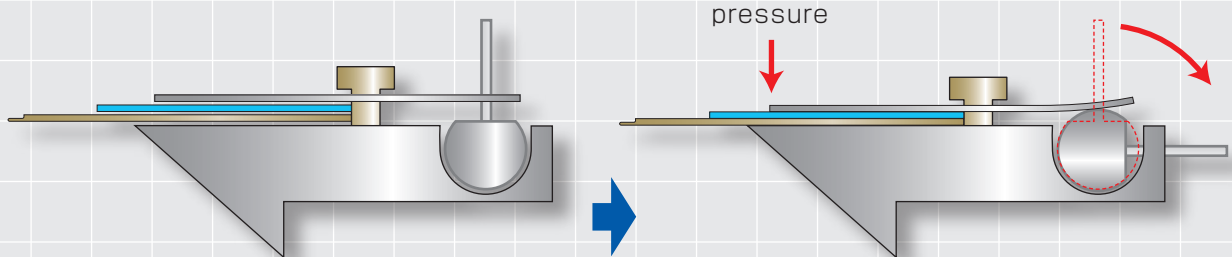
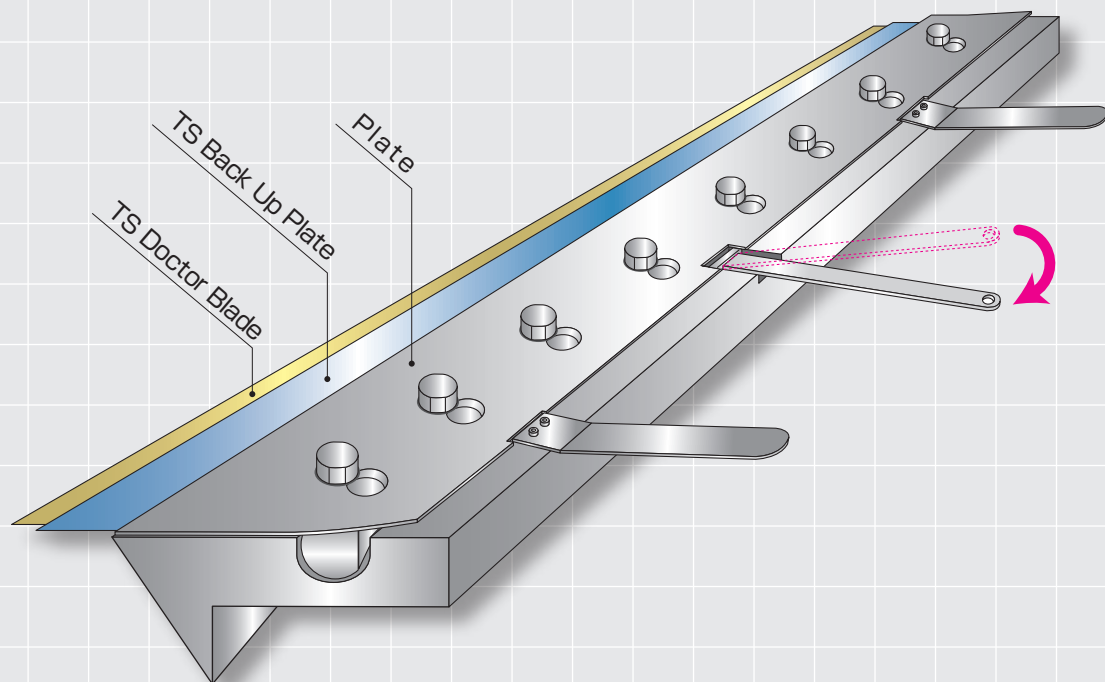


If you use our back up plates, setting the doctor blade will be easy, and doctor pressure will be even.



TS One Touch Doctor Holder

There is no need of various bolting, getting on and off is done in a single lever. No need to measure doctor blades and adjusting back up plates. The shape is simplified so you can reduce cleaning time. We can customize as your request to meet your environment.



Set the doctor blade and back up plate.
There is a positioning pin
so you do not need adjusting.

If you half-rotate the lever,
doctor blade and back up plate
will be fixed.

TS Doctor Cutman

Doctor Cutman

(Cutter for doctor blades)

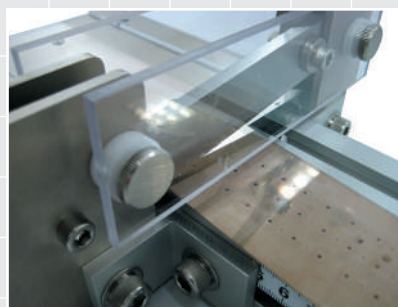
- Everyone can cut easily.
- Burr will not occur because it is very sharp.
- Durability is outstanding.
- Easy to set up the length by stopper and scale.
- We can customize as your request.

Ex: Combined unit type, protection cover, supply box and etc.

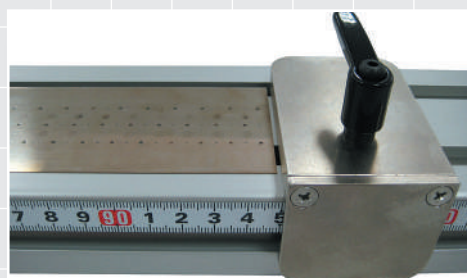
Easy

Cuts well

No burrs



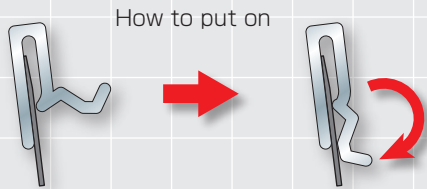
Safty Cover



Scale

Blade Protection Cover

- Protects the cover firmly and does not damage the blades.
- Improves safety when installing to the prepared doctor holders.
- We can easily cut it to fit with your using blades.
- Easy desorption



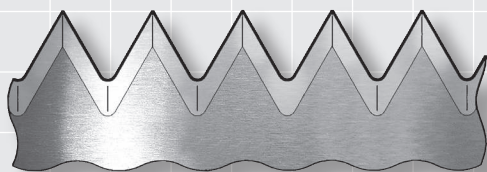
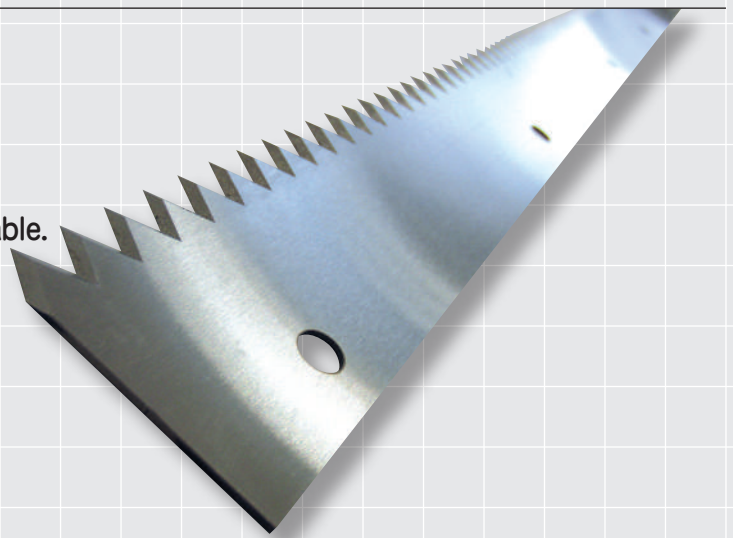
①Put the protection cover on the blade.

②Cover will be fixed when you put down the lock claw.



Knife

We can respond to customer's needs about the materials, fine pitches, surface treatments, shape of edges and one piece production. Maximum-length up to 2,000mm is available.



Round process (Bottom section)

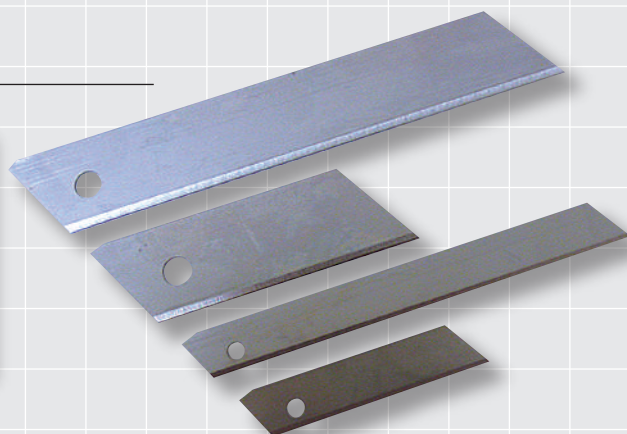


Fine Pitches

Secondary Materials for Printing

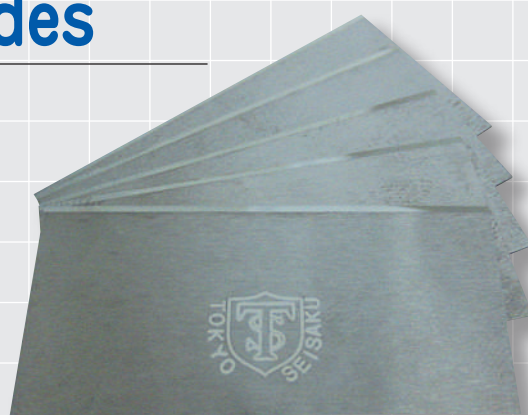
Non Fold Cutters

S Cutter	0.4mm × 9mm × 80mm
S Cutter Half	0.4mm × 9mm × 40mm
L Cutter	0.5mm × 18mm × 100mm
L Cutter Half	0.5mm × 18mm × 50mm



Slitter Replacement Blades

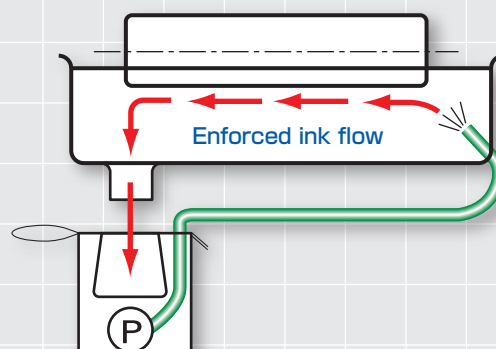
Material	Size
Steel	0.25mm × 18.7mm × 38mm
Carbide Blade (thin type)	0.25mm × 20mm × 40mm
Carbide Blade (thick type)	0.5mm × 15mm × 35mm



Non-Filtered Ink Filter Filter Holder

Troubles of doctor blades are mainly caused by mixing foreign substances, so it is important to filter thoroughly the remaining inks forcibly.

#120 mesh / 25.4mm	rough ↑ ↓ small
#150 mesh / 25.4mm	
#180 mesh / 25.4mm	
#200 mesh / 25.4mm	
#250 mesh / 25.4mm	



Convenient Doctor Holder Racks

A rack to keep doctor holders, impression cylinder rolls, finisher rolls, etc.



Customize Example

Other Exclusive Parts

We can manufacture exclusive parts you need like ink pans and printing plate covers.



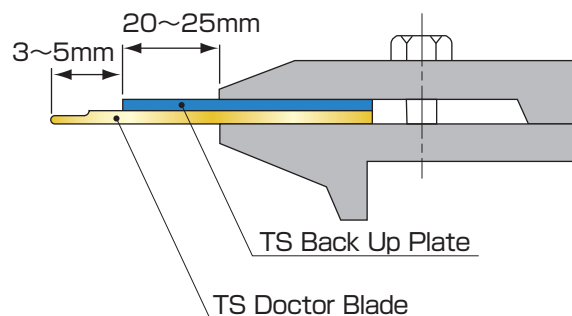
Ink Pan



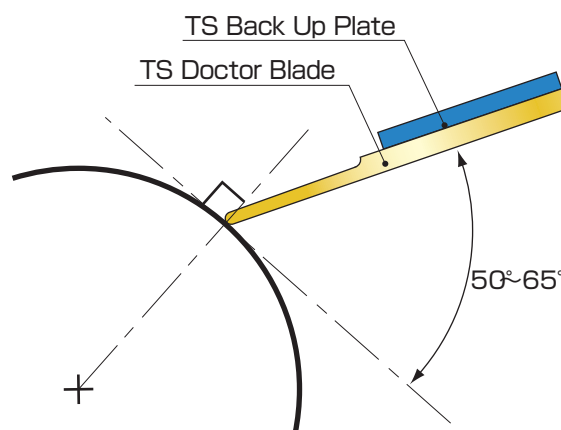
Cutter for Soft Packing Material

■ Standard Set-Up for TS Doctor Blade

Standard Size of Blade Edge Margin Part



Standard Installation Angle



If the margin part of the edge is too short, it will be easily damaged and moreover lifetime will be short. Also, if it is too long, it will cause fogging.



Handling Precautions

- ★Doctor Blade's most important part is the edge. Please be careful of handling and storage place.
- ★Precision of the Doctor Blade is very important also.
- ★Please use back up plates which both edges are grinded, without warps and bends.
- ◆Blade edge after use will become very sharp, so please be very careful when exchanging.

- 1956 Founded Tokyo Seisakusho Co., Ltd.
- 1969 Established the main factory.
- 1977 Succeeded domestic production for Doctor Blades with edges for gravure printing and started marketing.
- 2006 Rebuilt a new factory for Marketing Division 1.
- 2010 Established Kawaguchi Factory.
- 2010 Established metal plating factory for Doctor Blade.
- 2012 Established a new processing factory for Doctor Blade. Moved facilities, and increased new machines besides.
- 2014 Established TS Corporation(Asia)co.,LTD. In Thailand as base in Asia region.

MEMO





Please contact us

TOKYO SEISAKUSHO Co.,Ltd

<http://www.tokyoseisakusho.co.jp>

3-25-10 Kamiya, Kita-ku, Tokyo, Japan

TEL. +81-3-3902-1316 FAX. +81-3-3903-2913

KAWAGUCHI Factory

5-15-16 Higashiryoke, Kawaguchi, Saitama, Japan

KAWAGUCHI Plating Factory

5-14-7 Higashiryoke, Kawaguchi, Saitama, Japan

KOMAGANE Factory

292-21 Shimohira, Komagane, Nagano, Japan

Associate Companies

TAKADASEIKI Co., LTD.

TS Corporation (Asia) Co., LTD (Thailand)

上海京弘商貿有限公司 (China)