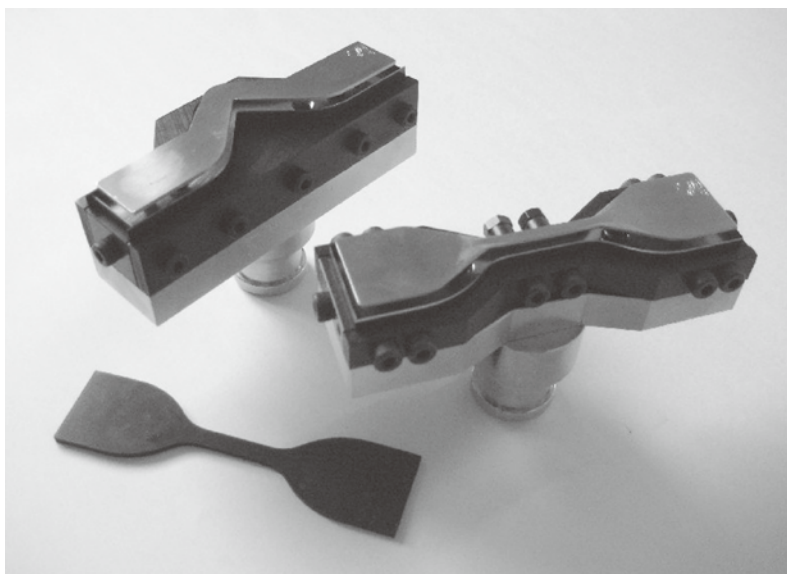


Patented in U.S.A. (US Pat. No. 5176061)  
Patented in Canada, Korea, Japan



**DUMBBELL CO., LTD.**

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Super Dumbbell Cutter    Model: SDK-300 according to JIS K6251-3 (Right)  
 Model: SDMBK-1000 according to JIS K6252 type Angle without Nick (Left)

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Making a stable and accurate standard specimen is the fundamental idea of physical test. And to obtain reliable, stable and accurate data is largely related to the improvement of test accuracy.

DUMBBELL CO.,LTD. was established in 1978 as the specialized company to realize such a stable and accurate specimen utilizing unique idea and advanced technology. Since then, we have developed not only Super Dumbbell® but also many original products for our customers both in Japan and all over the world. We have many patents concerning Super Dumbbell®, Specimen Mold, Cutting Machine and Special Jig, both in Japan and oversea countries.

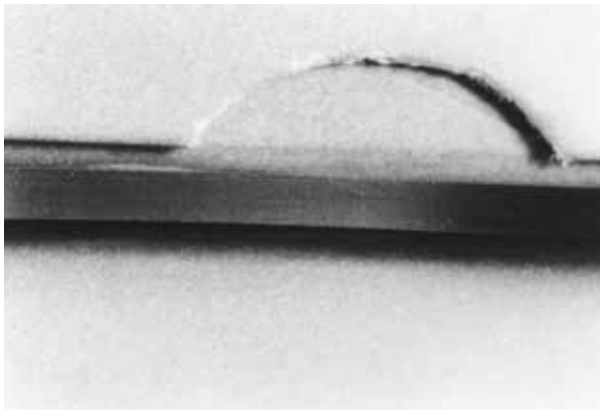
This catalogue shows just only a part of our whole products line. Please feel free to contact us when you need custom made or special technical products of this field.

## What is Super Dumbbell® ?

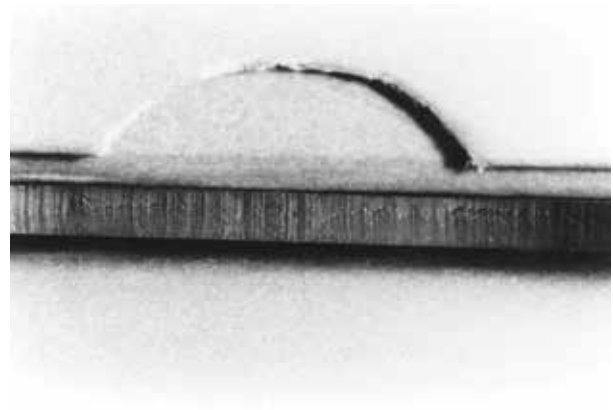
Super Dumbbell® is the registered trademark owned by DUMBBELL CO.,LTD. and is the generic name of Super Dumbbell Cutter, Super Straight Cutter and Super Round-Shaped Cutter.

Comparison of cut shape between Super Dumbbell® and a conventional cutter (Forged Hollow Die) in magnified photos.  
(Magnification x 5, General Rubber Sheets, t=2 mm)

Super Dumbbell®



Conventional Cutter /Forged Hollow Die



### General Feature

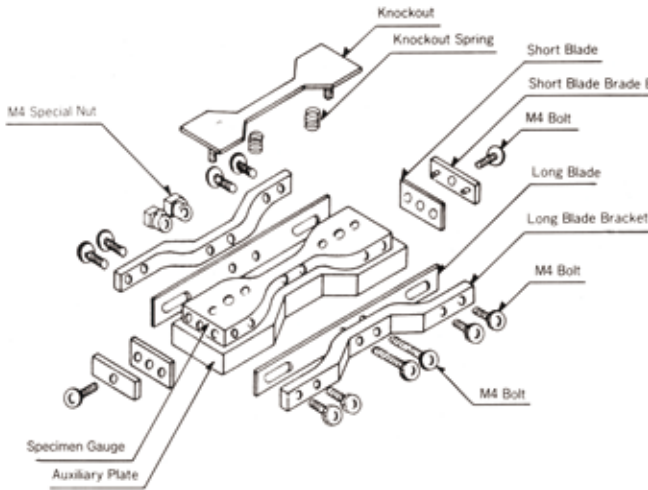
Super Dumbbell® is a replaceable blade cutter system which is developed as an ideal cutter to punch out a test piece of high polymer materials, such as, rubber, plastic, etc. They are covering almost all standards in practical use, for example, JIS, ISO, ASTM, DIN, IEC, etc.

### Special Features

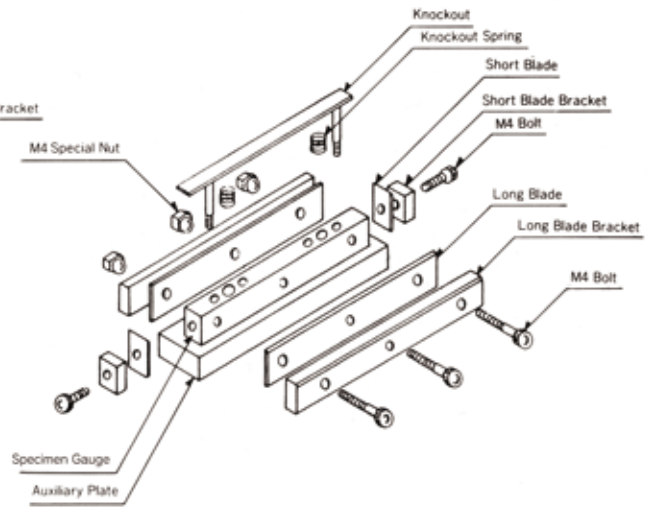
- ◆ The structure of Super Dumbbell® is completely different from a conventional cutter as is seen in the following drawing. You can replace cutter blades by new sharp ones very easily when they become dull or damaged, and you can keep the best cutting conditions. The Super Dumbbell® system itself can be used semi permanently.
- ◆ The Super Dumbbell® blade is made with ultra hardened carbon steel and sharpened by special polishing technique under strict quality control. That is why it can guarantee you extremely sharp and stable cutting minimizing every undesirable effects such as clack, burrs, etc.
- ◆ The specimen gauge of Super Dumbbell® (refer to schematic drawing of mechanism in page3) is the most important unit in the whole mechanism of the cutter. Particularly for the unit, extremely severe control standard is set up to the accuracy of finishing process. Meanwhile, the width of parallel part, bench mark of the specimen gauge is precisely machined to finish equally to a tolerance of within  $\pm 2/100\text{mm}$ .
- ◆ As the Super Dumbbell® is particularly designed taking into account the safety, the projection of blade edge is minimized only necessary to cut the specimen.
- ◆ The Super Dumbbell® has a spring type ejector, excluding custom made products, that ejects cut specimen very easily and instantly. This ejector, called "Knockout Mechanism". As the knockout plate is protruded from blade, worker's hand/fingers will not easily be contacted to the blade edge.
- ◆ Thanks to the splendid sharpness of blade, the Super Dumbbell® requires very little cutting force for easy operation.
- ◆ The Super Dumbbell® blades are supplied with reasonable price since they are produced with modern mechanical mass production, under strict quality control.
- ◆ Thanks to all these features, all the test data recorded by specimens that are prepared by the Super Dumbbell® are steady and accurate very much. Therefore we have been receiving good reputation and gratitude from both Japanese and overseas customers all over the world.

### Structure of Super Dumbbell®

Super Dumbbell Cutter (SDK series)



Super Straight Cutter (SSK series)

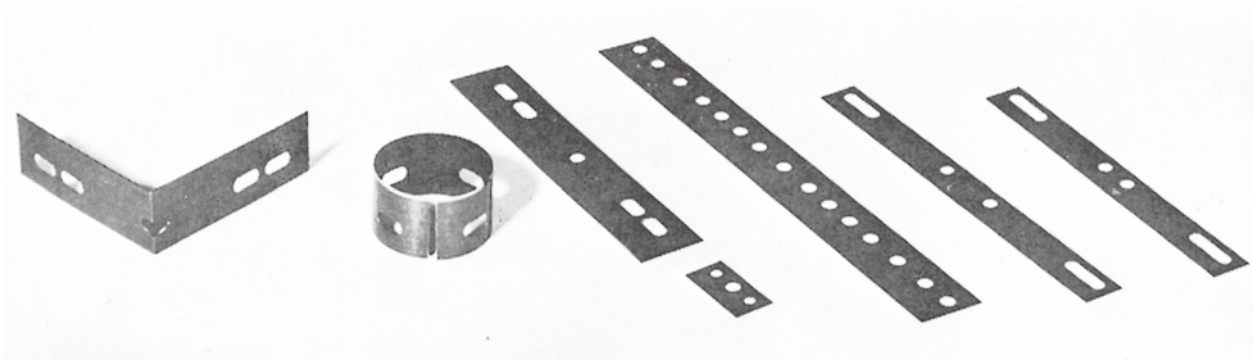


◆ A set of following parts is attached to the Super Dumbbell® as a standard accessory:  
5 sets of spare blades, Standard Tools and Spare Bolts and Nuts.

### Examples of Standard Spare Blades

Blade shapes of Super Dumbbell Cutter and Super Round-Shaped Cutter are all straight when they are not installed to the cutter, except products for special purpose. When it is installed to specimen gauge blades are bended accurately according to the gauge.

The maximum size of Super Straight Cutter blade is 1000mm. This is big enough not only for specimen cutting but also for production line and cutting of sample products.



Be careful not to buy imitations of the Super Dumbbell®.

### How to order Spare Blades

When you place order spare blades, please let us have the serial number\* of the Super Dumbbell® to choose the right blades. The minimum selling unit of spare blade is one box that includes 10 set of blades except for the special designed ones.

\*All the Super Dumbbell® have individual serial number that you can find out on the Super Dumbbell® body, the inspection certificate, spare blade box and package label.

Because of the continuous development policy of DUMBELL CO.,LTD., specifications are subject to change without notice.



# Explanation of Super Dumbbell® Model Name & Symbols

## 1. Initial Letters: Initial Letters classify the Shape of Super Dumbbell®.

SDx-xxx-x:	Super Dumbbell Cutter (Dumbbell-Shaped)
SSx-xxxx-x:	Super Straight Cutter (Rectangular, square or single straight blade)
SDRx-xxxx-x:	Super Round-Shaped Cutter (Round-Shaped)
SDRRx-xxxx-x:	Super Ring-Shaped Cutter (Ring-Shaped)

## 2. Subsequent Letter(s): Subsequent Letter(s) stand(s) for a Type of Sample Ejector.

(\*\* Please refer to schematic drawing in Page 3.)

xxK-xxx-x:	K: Spring type (Brand name / Knockout Mechanism) (Inner side)
xxKK-xxx-x:	KK: Spring type (Brand name / Knockout Mechanism) (Inner and outer side)
xxP-xxx-x:	P: Pin type by manual
xxPK-xxx-x:	PK: Combination of spring type and pin type by manual

### ■ Features and purpose of spring type sample ejector (Brand name / Knockout Mechanism)

1. Safety: As the knockout plate is protruded from blade edge, worker's hand/fingers will not easily be contacted to the blade edge.
2. Workability: Sample, remained inside the cutter, can be at once and easily taken out after cutting.
3. Hold of sample: Stretching crease and flexure, sample can be cut by holding it flat.
4. Protection of blade edge

## 3. Number in Center: Number in Center stands for Detailed Specifications. (Examples)

xxx-1000-x:	Standard blade
xxx-2500-x:	25(H) mm blade
xxx-3200-x:	32(H) mm blade
xxx-1003-x:	3 pieces multiple cutter with standard blade (End figure shows number of multiple cutter.)
xxx-1000P2-x:	Standard blade cutter with two-punch

## 4. End Letter(s): End Letter(s) stand(s) for the Shape of Mounting Boss to Cutting Machine.

xxx-xxxx-D:	To be connected to manual cutting machine of DUMBELL CO., LTD.	Cylindrical boss $\phi$ 24.8mm
xxx-xxxx-Du:	To be connected to pneumatic-type cutting machine of DUMBELL CO., LTD.	T-type joint
xxx-xxxx-T:	To be connected to cutting machine of TOYO SEIKI SEISAKUSHO, LTD.	Cylindrical boss $\phi$ 23.8mm
xxx-xxxx-U:	To be connected to cutting machine of UESHIMA SEISAKUSHO CO., LTD.	Cylindrical boss $\phi$ 24.8mm
xxx-xxxx-S:	To be connected to cutting machine of SHIMADZU CORPORATION.	Box-type mounting boss
xxx-xxxx-F:	Not to be connected to cutting machine. (Deliver with a flat plate attached at the upper face of cutter)	
xxx-xxxx-N:	Not to be connected to cutting machine. (No mounting boss)	

## How to Order Underlay (Cardboard and PP Underlay)

When test specimen is cut, the selection of underlay is largely related to the durability of blade edge, and effect to test specimen.

We are providing various kinds of underlays suitable for our Super Dumbbell®. Please feel free to contact us when needed.

■ Example of underlay	Cardboard	160×200×3(t) mm	【For domestic sales unit : 100 pcs. / For export sales unit : 150 pcs.】
	PP underlay	160×200×2(t) mm	【For domestic sales unit : 50 pcs. / For export sales unit : 100 pcs.】

## Super Dumbbell Cutter

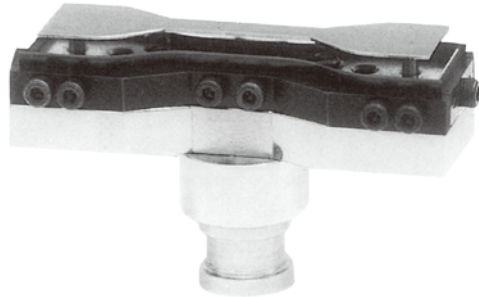
### SDK-100

For vulcanized rubber tensile test piece  
JISK-6251-1 JISK-6301-1



### SDK-200

For vulcanized rubber tensile test piece  
JISK-6251-2 JISK-6301-2



### SDK-300

For vulcanized rubber tensile test piece  
JISK-6251-3 JISK-6301-3 ISO-37-1A



### SDK-400

For vulcanized rubber tensile test piece  
JISK-6251-4 JISK-6301-4



### SDK-500

For vulcanized rubber tensile test piece  
JISK-6251-5 JISK-7113-2(plastics)  
JISK-7127 type 5 (plastic film) ISO-37-1



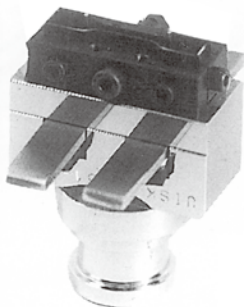
### SDMK-1000

For vulcanized rubber tensile test piece  
JISK-6251-6 BS-6746 ISO-37-2



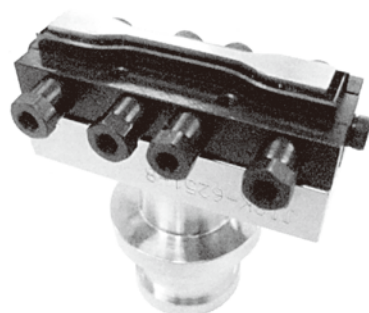
### SDMP-1000

For vulcanized rubber tensile test piece  
JISK-6251-7 ISO-37-4



### SDMK-1000

For vulcanized rubber tensile test piece  
JISK-6251-8 ISO-37-3



\* The JIS K6301 standard was abolished in August 1998.



**SDMK-1000**

For tensile test piece of hard plastics  
JISK-7113-1 JISK-7161-2-1B ISO-527-2 type 1B



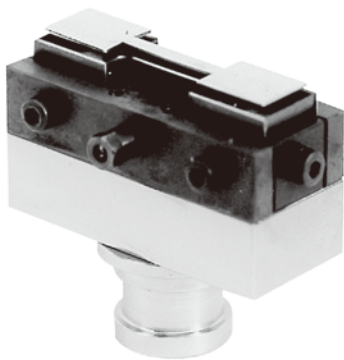
**SDMK-1000**

For tensile test piece of soft urethane form for clothing  
JISK-6402



**SDMK-1000**

For FEP tensile characteristics test piece  
ASTMD-2116



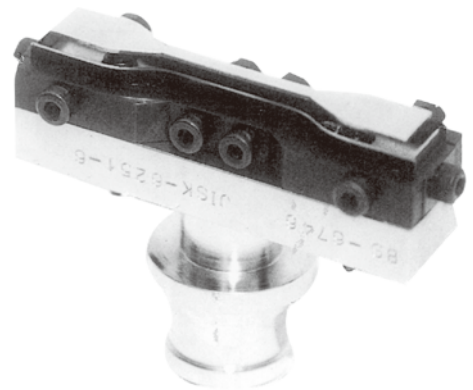
**SDMK-1000**

For plastic tensile test piece  
ASTMD-1457 ASTMD-1708  
ASTMD-4894 ASTMD-4895



**SDMK-1000**

For tensile test piece  
BS-6746 IEC-540(L) DIN-53504-S2



**SDMK-100S**

For tensile impact test piece  
ASTMD-1822-S



**SDMK-100L**

For tensile impact test piece  
ASTMD-1822-L



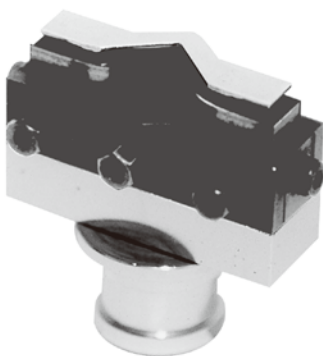
**SDK-600**

For polyethylene film tensile test piece  
JISK-6783 K-6781 JISZ-1702



**SDMK-1000 (Special micro cutter)**

JISK-6252 type angle 1/2(reduced shape)  
JISK-6301-B 1/2(reduced shape)



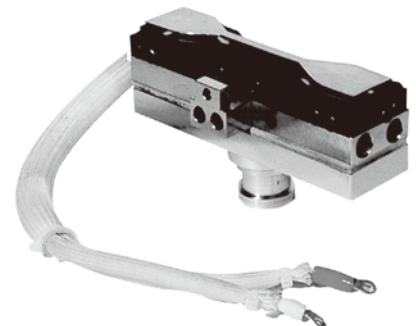
**SDMK-1000**

Low deforming application of vulcanized rubber  
ASTMD-1329 JISK-6254



**SDK-500H**

Heating system by a heater  
Dumbbell shaped cutter AC-100V 200W



\* The JIS K6301 standard was abolished in August 1998.



## Super Dumbbell Cutter

### SDMBK-1000

For vulcanized rubber  
JISK-6252 type angle ISO-34-1 type angle

### SDBK-1000

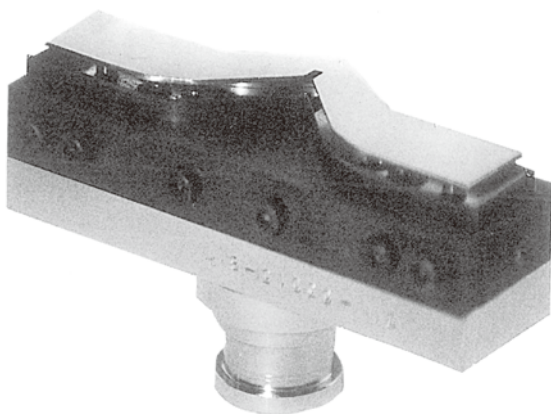
For vulcanized rubber and plastic sheet film tear test piece  
JISK-6301-B K-7128-3 (For right angled tear test piece)

SDMK-1000C ASTMD-624-C



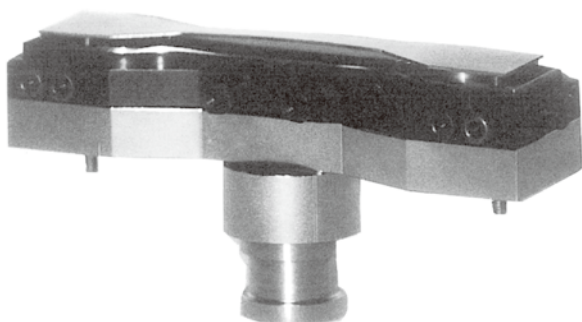
### SDMBK-1000N

For vulcanized rubber tear test piece  
JISK-6252 type angle (with nick)  
ISO-34-1 type angle (with nick)



### SDMK-100F

For vulcanized rubber tensile characteristics test piece  
ASTMD-412-F



### SDMK-1000

For plastic tensile test piece  
ASTMD-638-3



### SDMAK-1000

For vulcanized rubber tear test piece

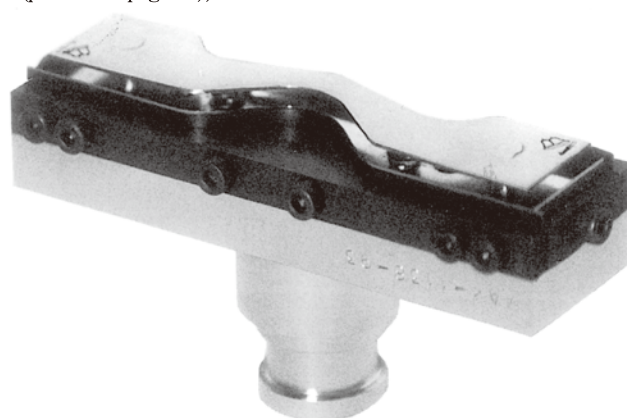
JISK-6252 type crescent ISO-34-1 type crescent

### SDAK-1000

For vulcanized rubber tear test piece  
JISK-6301-A

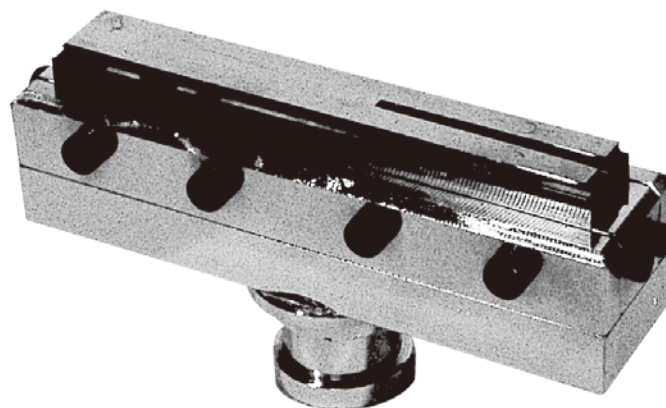
### SDMK-1000B

ASTMD-624-B  
(After cut by this cutter, an exclusive notch slitting jig is necessary.  
(please see page 12))



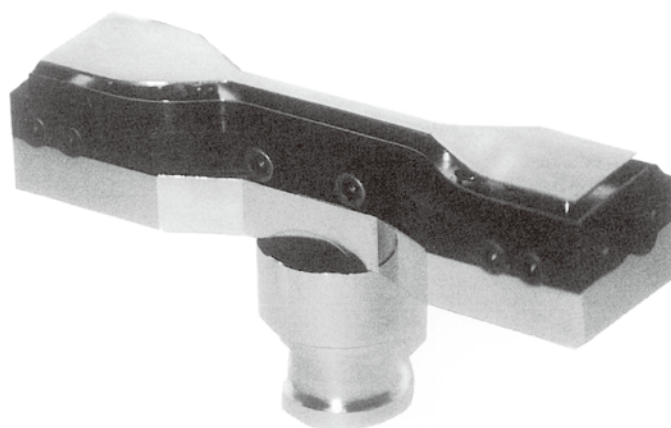
### SSK-1000N

For vulcanized rubber tear test piece  
JISK-6252 type trouser ISO-34-1 type trouser  
15×100mm N=40mm



### SDMK-100C

For vulcanized rubber tensile characteristics test piece  
ASTMD-412-C UL-62-C  
DIN-53504-S1



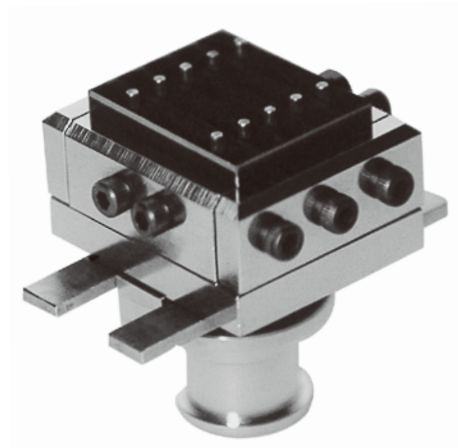
\* The JIS K6301 standard was abolished in August 1998.





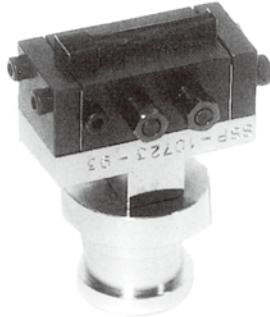
**SSP-105**

For low-temperature impact frailty test piece  
 JISK-6261-A 6×26~40mm cavity:5  
 JISK-6301 6.3±0.3×32mm~ cavity:5



**SSP-1000B**

For low-temperature impact frailty test piece  
 JISK-6261-B ASTM-746(Fig 3)  
 ISO-667-1981



**SSK-1000**

For low deform tensile test piece  
 JISK-6254-2 K-6301-2  
 10×60mm



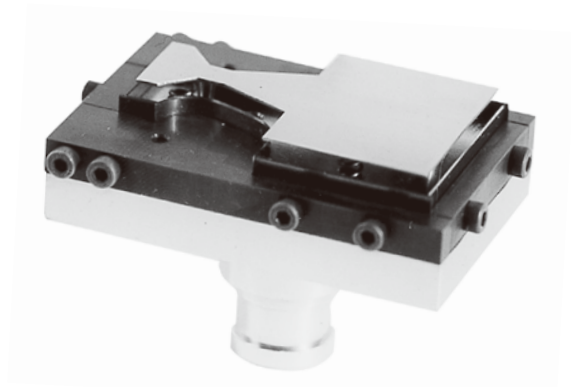
**SDRK-1000N**

For Elmendorf tear test piece  
 JISK-7128-2 Constant radius ASTMD-1922



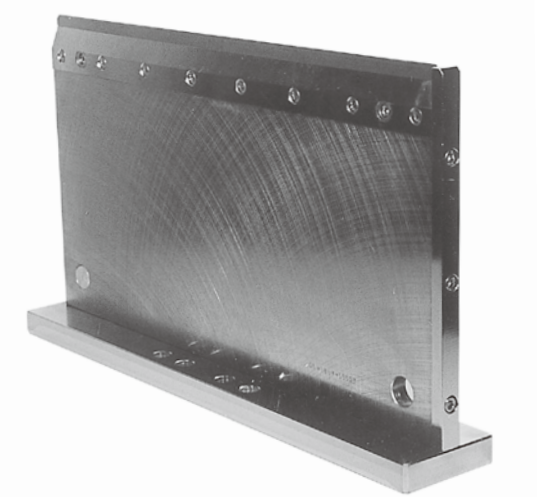
**SDMK-1000**

For flexural fatigue of rigid plastics by plane bending  
 JISK-7119-3  
 ASTMD-671-A



**SS-4500G-500**

For cutting unvulcanized rubber material  
 Guillotine cutter for bale cutting  
 Overall length of blade edge L=500mm  
 Cutting thickness t=250mm(max)  
 The guillotine cutter is to be exclusively combined with  
 compressed air sample cutter Model:SDAP-1200FBGK.



**SSK-3200S**

Super single straight cutter  
 Single blade system straight cutter  
 Usage example: Combine SDL-200ST-T, etc.  
 Overall length of blade edge L=70~250mm

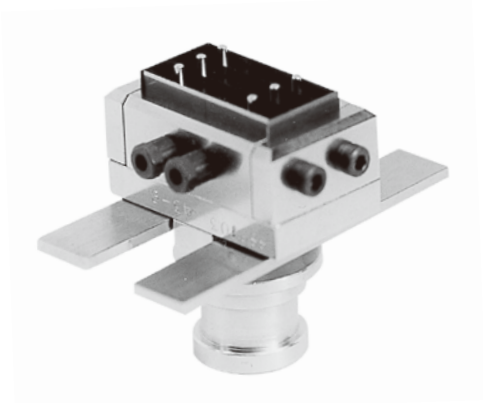


\* The JIS K6301 standard was abolished in August 1998.



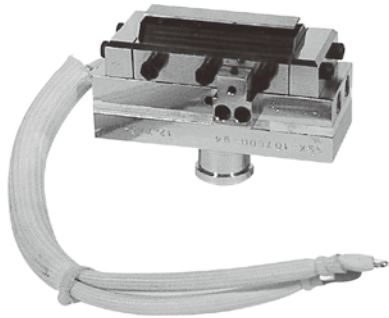
**SSP-203**

For low temperature resistance  
 For low-temperature impact frailty test piece  
 JISK-6723 JISK-7216-A  
 $6 \pm 0.4 \times 38 \pm 2$ mm cavity : 3



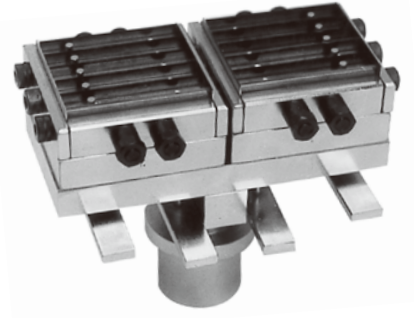
**SSK-1000H**

For heat plasticity resin  
 Heater heating system super straight cutter  
 Minimum cutting size: more than 10×80mm



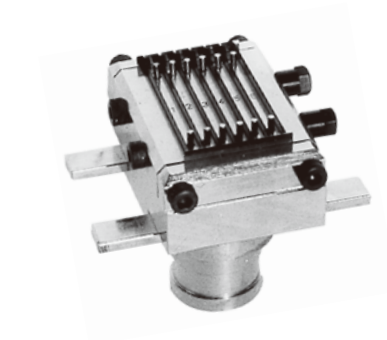
**SSP-110**

For low-temperature impact frailty test piece  
 JISK-6261-A  $6 \times 26 \sim 40$ mm cavity : 10  
 JISK-6301  $6 \pm 0.3 \times 32$ mm~ cavity : 10



**SSP-506**

For low-temperature twisting test piece  
 (For Gehman's Torsion tests)  
 JISK-6261  $3 \pm 0.2 \times 40 \pm 2.5$ mm cavity : 6  
 JISK-6301  $3 \pm 0.2 \times 38 \pm 2.5$ mm cavity : 6



**SSK-1000**

Super straight cutter (special)



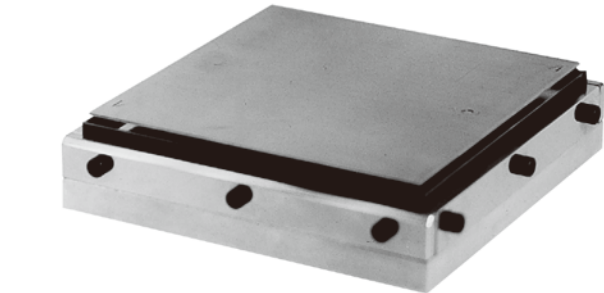
**SSK-1003**

SSK-multi-cutter 3-gang  
 15×100mm cavity : 3



**SSK-1000**

Super square cutter  
 100×100mm



**SSK-1003**

SSK-multi-cutter 3-gang  
 25×25mm cavity : 3



\* The JIS K6301 standard was abolished in August 1998.



**SSK-1000**  
20×200mm



**SSK-1000**  
10×100mm



**SSK-1002**  
SSK-multi-cutter 2-gang  
20×20mm cavity:2



**SSK-1000**  
For Izod Charpy impact test piece  
12.7×64mm JISK-7110-2



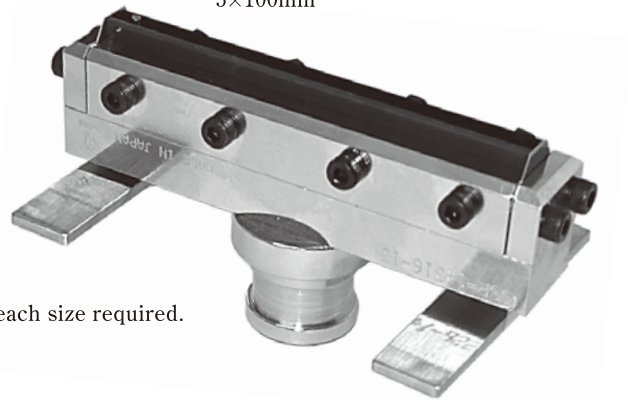
**SSK-1000**  
For Izod Charpy impact test piece  
10×80mm JISK-7110-1 K-7111-1



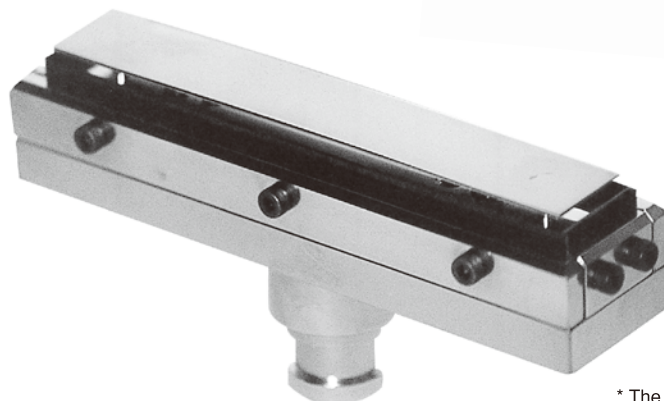
**SSK-1000N**  
For trouser tear test piece  
15×100mm N=40mm  
ISO-34-1 JISK-6252 type trouser



**SSP-1000**  
For low deform tensile test piece  
JISK-6254-1 K-6301-1 (Low stretch stress)  
5×100mm



**SSK-1000**  
For general long strip Specify each size required.



\* The JIS K6301 standard was abolished in August 1998.



## Super Round-Shaped Cutter

### SDRK-1000

Super Round-Shaped Cutter  
 $\phi 112.8\text{mm}$  (100cm<sup>2</sup>)



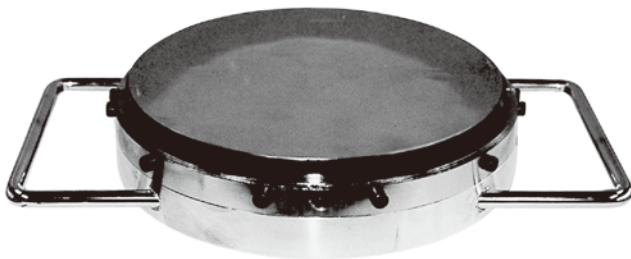
### SDRK-1000

Super Round-Shaped Cutter  
 $\phi 18\text{mm}$



### SDRK-1000

Super Round-Shaped Cutter  
 $\phi 80\text{mm}$   
Handles (Option)



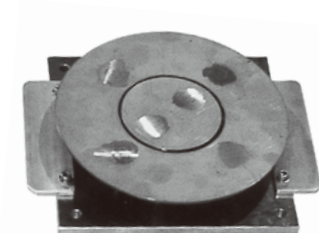
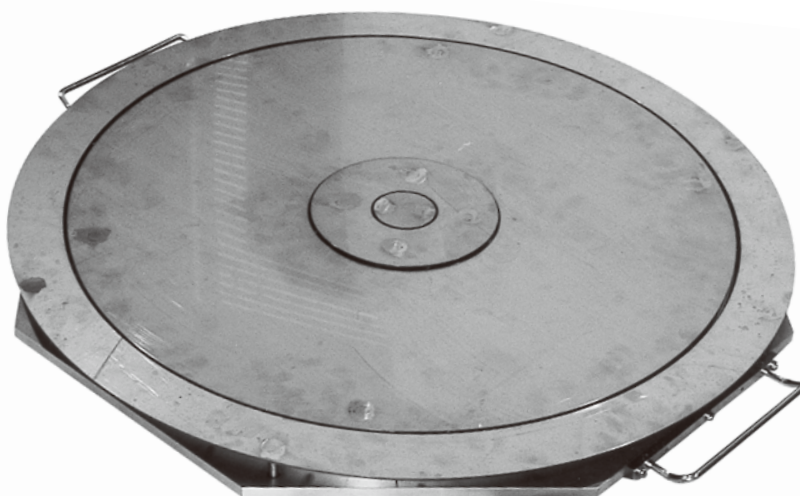
### SDRK-1000

Super Round-Shaped Cutter  
For penetration test piece of plastics, film & gas  
 $\phi 65\text{mm}$



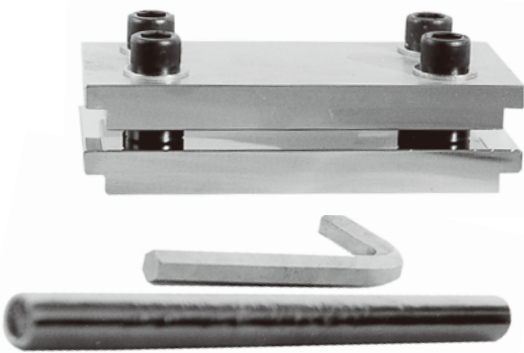
### SDRRK-2500

Large ring shaped super circular cutter  
For discharging shaking architecture laminating rubber  
 $\phi 1200$  (MAX)  $\times \phi 300\text{mm}$   
Cutting thickness  $t=10\text{mm}$  (max)



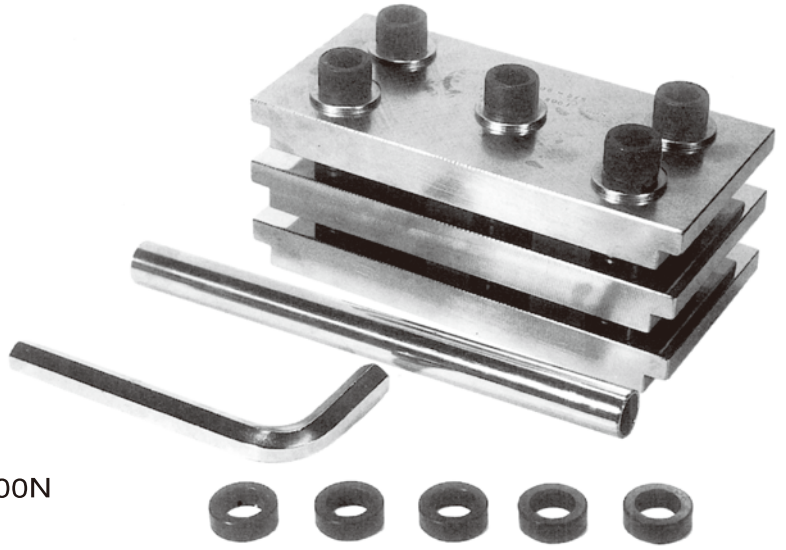
**SCM-1004L**

For vulcanized rubber compression set test device  
 JISK-6262(L)  
 Set number of test piece : 4-6 pcs.  
 Compressive plate polishing and hard chrome plated mirror finish



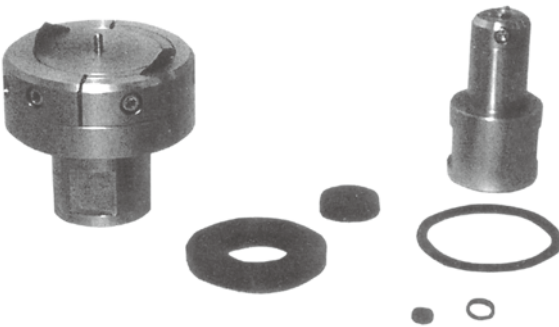
**SCM-1008L**

For vulcanized rubber compression set test device  
 JISK-6262(L)  
 Set number of test piece : 8~10 pcs.  
 Compressive plate polishing and hard chrome plated mirror finish



**SDHR-100R-1 SDHR-100R-2 SDHR-100N**

High-Speed Rotation Cutter  
 JISK-6251-1, 2 (ring shaped)  
 JISK-6264 LAMBOURN abrasion tests (ring shaped)  
 The cutter is to be exclusively combined with SDHR-1000  
 Cutting thickness t=7mm (max)



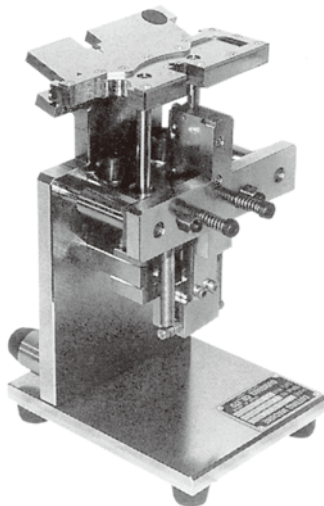
**SDRK-1000CS**

For vulcanized rubber compression set test specimen  
 Cutting thickness t=6mm (max)  
 Ø29mm



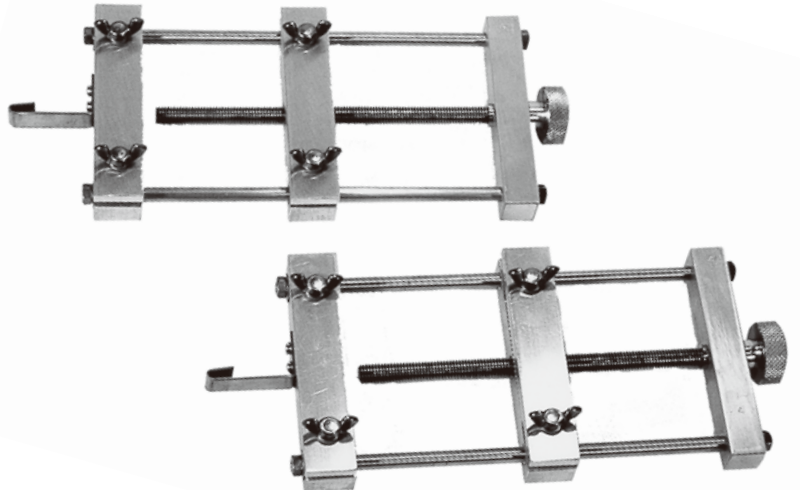
**SDSC-1200Series**

Slitting jig for vulcanized rubber  
 Co-developed with Shin-Etsu CHEMICAL CO., LTD. (Patented)  
 Exclusive use for crescent shape  
 SDSC-1200NJ JISK-6252 type crescent  
 SDSC-1200J JISK-6301-A  
 SDSC-1200AS ASTM D-624-B



**SDMF-1202**

Constant stretch jig  
 Set number of test piece : 2 pcs.  
 Mtls : Aluminum, SUS-304

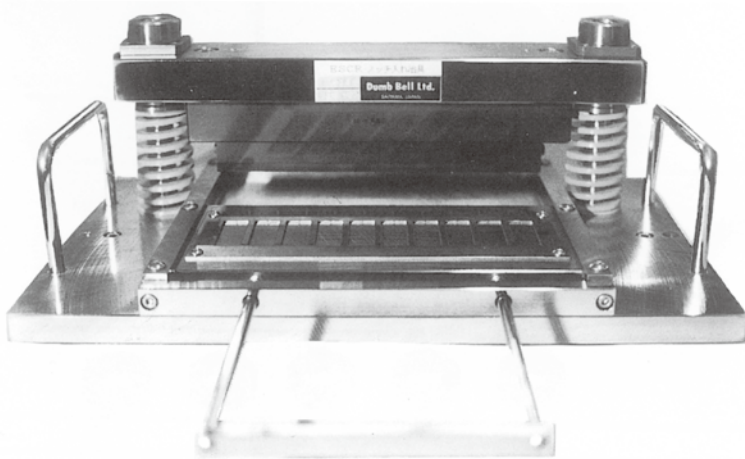


\* The JIS K6301 standard was abolished in August 1998.



**MS-1010**

Notch working system for plastics stress-cracking test  
 ASTM-D1693 set number 10 pcs. notch working simultaneously  
 Set depth of notch By spacer replacing system  
 (SDAP-1200)series is used as combination pressurizing press  
 machine with this equipment.)  
 Notch blade replacing exchange equipment



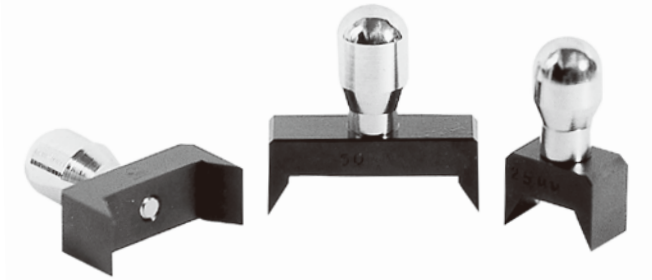
**SDT-110NJ**

Exclusive use thickness measuring device for vulcanized rubber  
 JISK-6250A method (for plate shaped test piece)  
 Measuring range: 0—10mm  
 Minimum scale: 0.01mm  
 Anvil:  $\phi 5.0\text{mm}$   
 Pressurized force: 44g



**SDB-100**

Benchmark  
 Gauge marker for benchmarks.  
 20, 25, 25.4, 40, 50, 50.8mm  
 Other specified sizes required



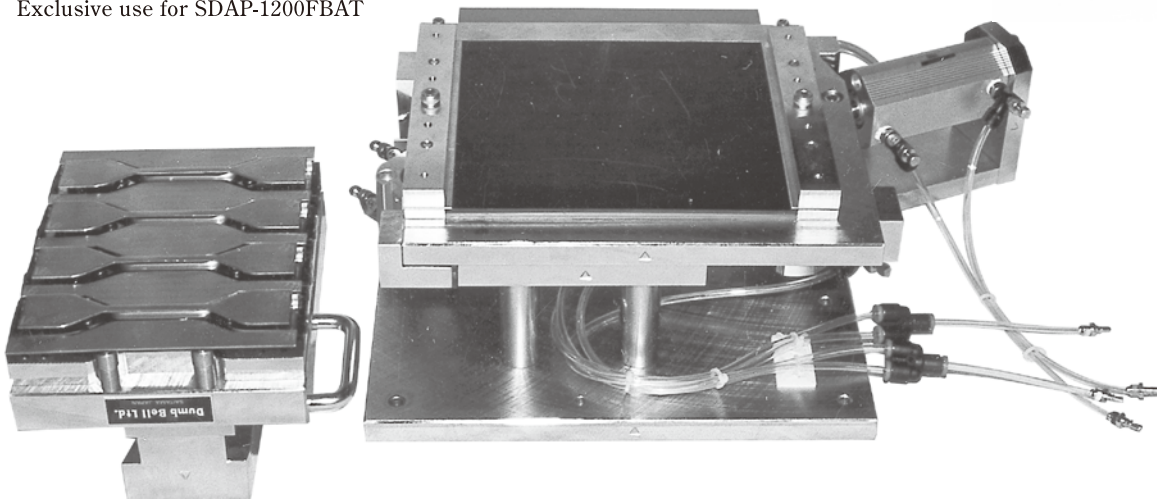
**SDT-120NJ**

Exclusive use thickness measuring device for vulcanized rubber  
 JISK-6250A method (for column shaped test piece)  
 JISK-6262  
 Measuring range: 0—20mm  
 Minimum scale: 0.01mm  
 Anvil:  $\phi 5 \pm 0.05\text{mm}$  (upper part)  
 Pressurized force: 44g



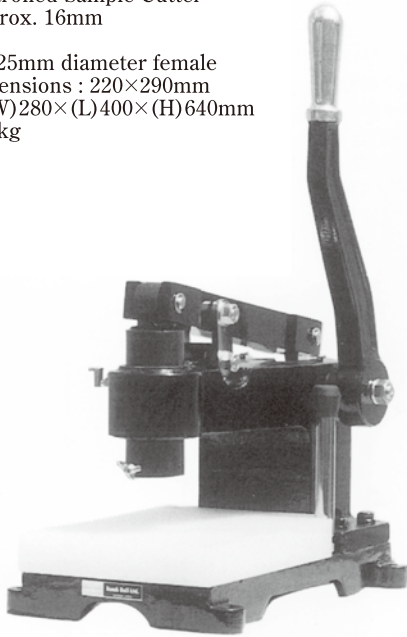
**SDK-504-DU**

4-gang Super Dumbbell Cutter and SDAP-Z jig zag pattern  
 diagonal moving work table unit  
 work size : 165×170mm×2(t)mm  
 (In case of JISK-6251-5 piece)  
 4 pcs./shot 8 pcs./2shots  
 Exclusive use for SDAP-1200FBAT



**SDL-200**

SD Type Lever-Controlled Sample Cutter  
 Cutting stroke : Approx. 16mm  
 Lever ratio : 1:30  
 Cutter connection : 25mm diameter female  
 Specimen stage dimensions : 220×290mm  
 Unit dimensions : (W)280×(L)400×(H)640mm  
 Weight : Approx. 60kg



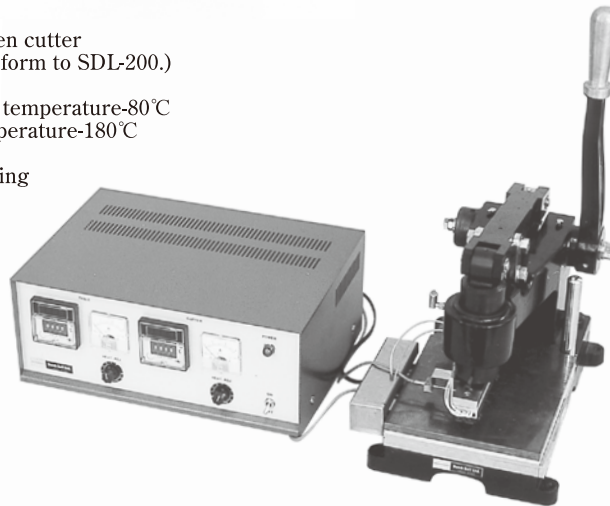
**SDL-100**

SD Type Lever-Controlled Sample Cutter  
 Cutting stroke : Approx. 16mm  
 Lever ratio : 1:15  
 Cutter connection : 25mm diameter female  
 Specimen stage dimensions : 220×230mm  
 Unit dimensions : (W)220×(L)350×(H)610mm  
 Weight : Approx. 27kg



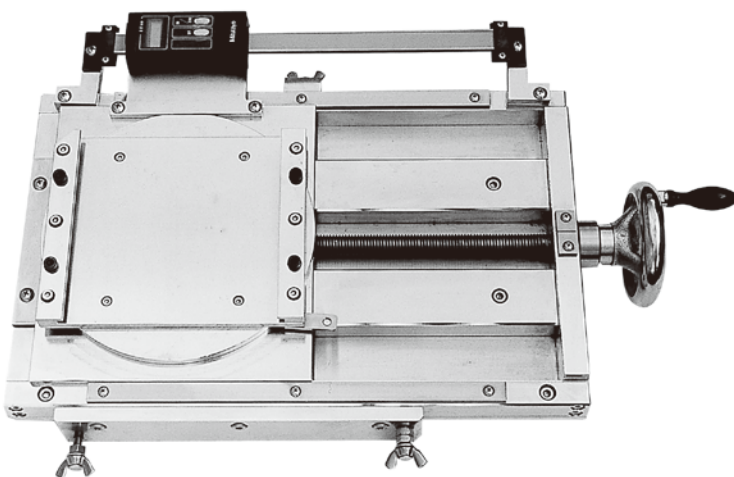
**SDL-200HC2**

Heater heating system specimen cutter  
 (Mechanical specifications conform to SDL-200.)  
 Temperature setting  
 : (1) Specimen stage-Room temperature-80°C  
 : (2) Cutter side-Room temperature-180°C  
 Temperature adjustment  
 : Digital indicating and setting  
 Temperature adjustment  
 : Pid control-2 system  
 Power source  
 : AC-100V 50/60Hz  
 single phase 1KW



**ST-T**

Turn table type parallel moving equipment  
 Stroke 180mm (max)  
 Turn of nut 0°~90°  
 Measuring moving amount and displaying by liquid crystal digital method

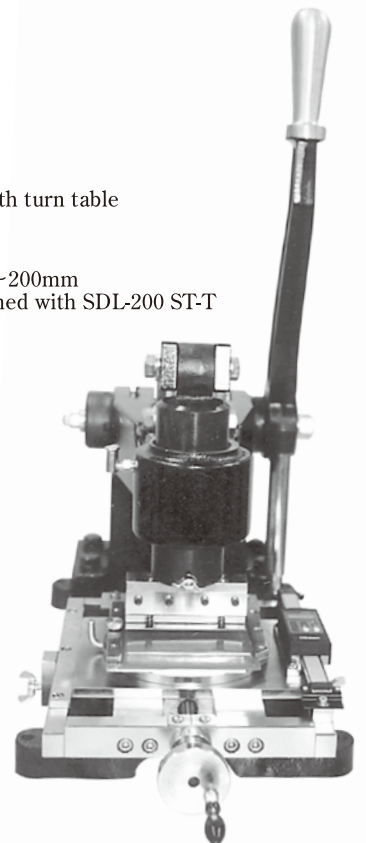


**SDL-200ST-T**

Parallel moving cutting equipment with turn table

**SSK-3200S**

Super single straight cutter  
 Overall length of blade edge L = 100~200mm  
 The cutter is to be exclusively combined with SDL-200 ST-T



**SDAP-100N (Desk type)**

Unit Type Compressed Air Sample Cutter

Specification:

Air cylinder ram dia. :  $\phi 200 \times 100$  (st) mm

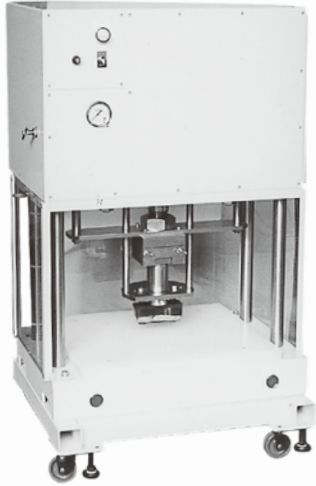
Room inside dimensions : Approx. (W)400×(D)350×(H)350mm

Source air pressure : 0.6MPa

Unit dimensions : Approx. (W)580×(D)470×(H)850mm

Weight : Approx. 180kg

Power source : AC-100V Single phase 1.2A



**SDAP-1200FBAT**

Underhead type test piece automatic cutting equipment (with moving caster frame)

Specification:

Air cylinder ram dia. :  $\phi 200 \times 150$  (st) mm

Room inside dimensions : Approx. (W)600×(D)400×(H)400mm

Source air pressure : 0.6MPa

Unit dimensions : Approx. (W)850×(D)450×(H)1450mm

Weight : Approx. 350kg

Power source : AC-100V Single phase 1.2A

Work moving by table move parallel move jig zag pattern (diagonal move)

Cutting number : With moving mode set mechanism  
Infrared rays beam sensor system with area function



**SDSM-1006**

Adhesive tape testing panel starching equipment

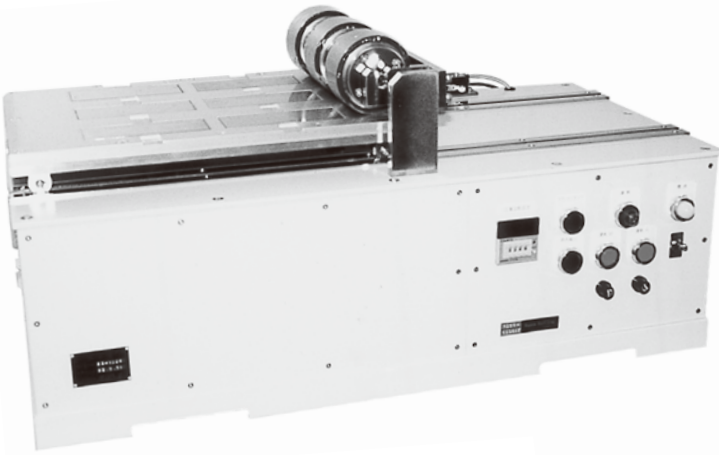
Nos. of test piece : 6 pcs. (electric sliding type)

Clamping roller  $\phi 83 \times 45$  mm

Rubber lining thickness 6mm

Weight (roller) 2kg

Sliding speed 300mm/min Power source : AC-100V Single phase 1A



**SDFT-1002**

Vulcanized rubber permanent elongation testing machine

Metal frame (light alloy)

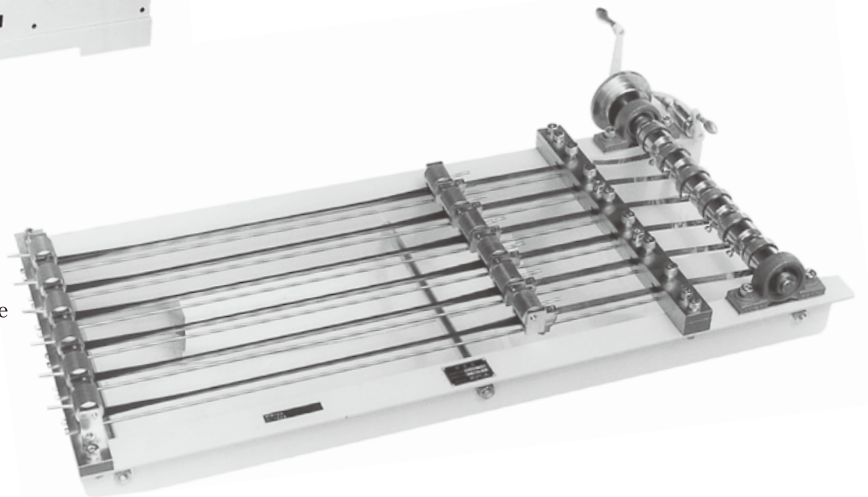
Permanent set tester

Nos. of test piece : 6 pcs.

Chuck single eccentric type

Unit dimensions : Approx. (W)1000×(D)460×(H)200mm

Stroke : Approx. 500mm





## SDAP-1182FBAT-PT

**Twin head type full automatic cutting machine**

By setting up maximum two of the press-molded slab sheet and various sheet, and only by pressing the start button, two kinds of test specimens (any number) can be collected within a few seconds. Kinds and required cutting number of test specimens can be easily set by liquid crystal display.

Air cylinder ram dia.:  $\phi 180 \times 150$ (st)mm

Table moving mechanism: Pulse motor

Safety mechanism: Safety switches are provided on a work set door and a maintenance door.

Air pressure: 0.5MPa

Power source: AC-100V Single phase 50/60Hz 5A

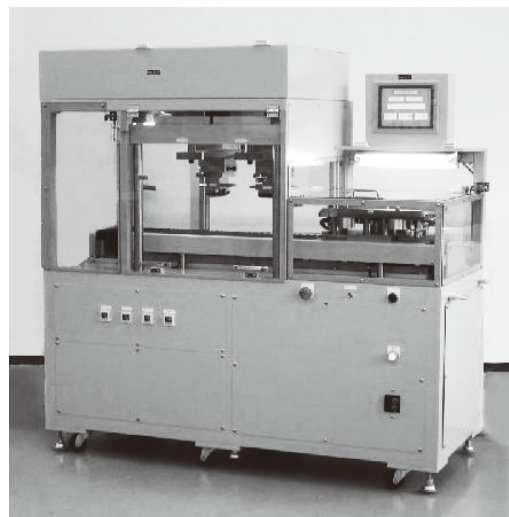
Unit dimensions: Approx. (W)1400×(D)600×(H)1450mm

Weight: Approx. 550kg

Operation mode (Standard): ① JIS K6251-3 (Dumbbell-shaped)

② JIS K6252 Angle type without nick

Special additional mechanism (Option): Addition of various cutting modes



## SDAP-1200FBGK Pneumatic type unvulcanized rubber cutting machine [Pneumatic type bale cutting machine]

If a damage or wear occurs in the blade edge of the conventional guillotine cutter, maintenance is required by re-grinding, etc.

However, this device adopts the Super Dumbbell® with excellent cutting force to the end of the cutter unit, and is designed for replaceable blade type. So, the blade edge can be easily replaced with a new spare blade when the sharpness of the blade edge falls down.

Air cylinder ram dia.:  $\phi 200 \times 250$ (st)mm

Air pressure: 0.15~0.65MPa

Safety mechanism: Infrared rays area sensor, cutter unit free drop protection mechanism

Bale size: Approx. 700×350×200(t)mm (MAX):

Corresponds to various dimensions

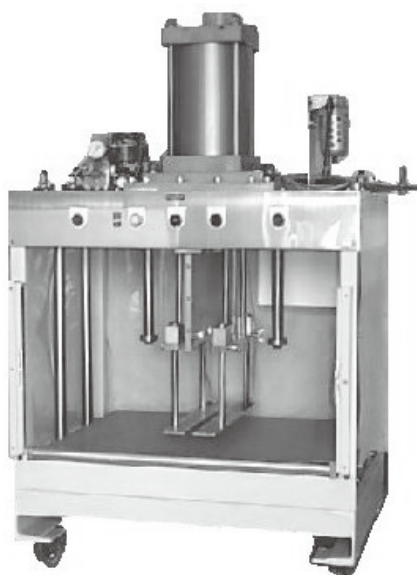
Power source: AC-100V Single phase 50/60Hz 3A

Unit dimensions: Approx. (W)870×(D)600×(H)1440mm

Weight: Approx. 350kg

Super guillotine cutter unit (one piece blade)

Model SS-4500S (Blade length 500 (L)mm, etc. (see page 8))



## SDAP-1200TS (Special type) Table type pneumatic unvulcanized rubber cutting machine [Table type pneumatic bale cutting machine]

Slide table mechanism type

With the combination of thrust bearing mechanism and LM guide, bale weight of net 35kg can be moved easily.

Bale can be cut to any size from the end of the bale.

In addition, by means of air brake mechanism, the table can be firmly fixed during cutting.

Air cylinder ram dia.:  $\phi 200 \times 300$ (st)mm

Air pressure: 0.15~0.65MPa

Safety mechanism: Infrared rays area sensor, or turn over type safety door

Super guillotine cutter sliding mechanism: Oiles type wear plate

Work slide table moving direction: left-right-left

Work sliding table size: Approx.: (W)850×(D)550mm

Power source: AC-100V Single phase 50/60Hz 3A

Unit dimensions: Approx. (W)2000×(D)750×(H)1850mm

Weight: Approx. 600kg



## SDAP-1183FBAT-PT

Plastic full automatic test specimen cutting machine

### Correspond to New JIS K7139 Plastics - Test specimens

New JIS K7139:2009 based on ISO standards (ISO 20753) for plastic, has defined the tensile test specimens of three types of A1, A2 and A3. As they can be applicable to a wide range of applications, tensile test specimens of three types of A1~A3 are often referred to as multipurpose test specimens. The feature of multipurpose test specimens is that test specimens are formed under the same conditions and are measured in the same state. It is said therefore, that the dispersion does not occur in the characteristic value of the test specimens to be obtained.

### Full labor-saving by full automatic

Ready to start, only by setting the press sheet  
Automatically cut, in accordance with the pre-set conditions (cutting mode, collection numbers, etc.)

Air cylinder ram dia.:  $\phi 180 \times 100$ (st)mm (3-stroke parallel arrangement system)

Air pressure: 0.15~0.75MPa

Safety mechanism: Transparent PVC safety hood mechanism, turn over type 2 safety doors.

Work table size: 200×200mm (standard)

Outer control panel: Programmable terminal (Liquid crystal display)

### Operation Mode (standard)

A Mode JIS K7139 Type A2, or Type A3 (Dumbbell-shaped test specimen)

B Mode JIS K7139 Type B3 (10×80mm) Cutting pitch (P=10mm)

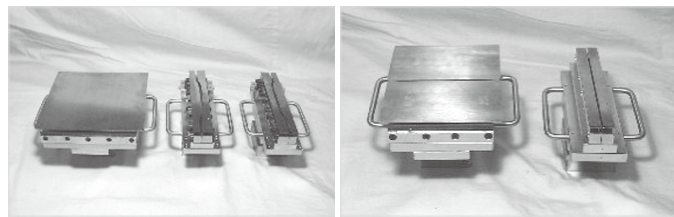
Power source: AC-100V Single phase 50/60Hz 5A

Unit dimensions: Approx. (W)1500×(D)600×(H)1400mm

Weight: Approx. 450kg

### Special additional mechanism (Option):

Heating mechanism by temperature control (4-system)  
Addition of various cutting modes



Super Dumbbell Separate Cutter and Super Single Straight Cutter Unit

## SDAP-1200FD-TRPL Plastic almighty test specimen cutting machine (Patented)

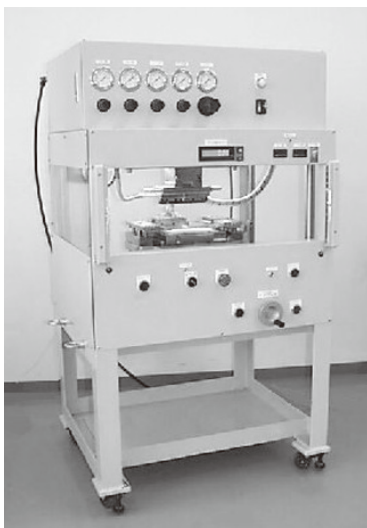
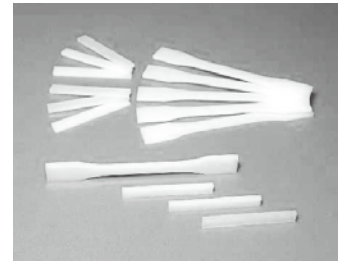
Correspond to New JIS K7139 Plastics - Test specimens

### ◆ Dumbbell-shaped test specimen (Type A2 or Type A3)

- 1) First, cut a longitudinal half side from the press-molded 4(t)mm sheet.
- 2) Next, table turns automatically by 180° and cut the remaining half side. The work completes only by two shots.

### ◆ Rectangle-shaped test specimen (Type B3)

- 1) Cut one side of the longitudinal direction in one shot, and while sliding the table to any pitch with manual feed handle, cut any numbers required.
- 2) After the longitudinal side cutting (required numbers) completes, rotate the table by 90° and then cut the end face side.



Air cylinder ram dia.:  $\phi 200 \times 100$ (st)mm

Work table turning portion: Oiles thrust washer, thrust bearing mechanism

Work table turning range: 0°~90°/0°~180° Shift by manual

Work table sliding part: Y-axis (back and forth), LM linear guide, and thrust bearing mechanism

Moving distance indication: Linear scale/Liquid crystal display 5-digit (3-integer/2-decimal)

Air pressure: 0.15~0.75MPa

Attached standard cutter: ① SDSPK-1001B-Du [For JIS-K7139 Type A2 or

Type A3 (Dumbbell-shaped)]

② SSSK-1000S-Du [For JIS-K7139 Type B3

and other rectangle-shaped]

Safety mechanism: Transparent PVC safety hood mechanism, turn over type safety door.

Power source: AC-100V Single phase 50/60Hz 3A

Unit dimensions: Approx. (W)800×(D)750×(H)1150mm

Weight: Approx. 250kg

### Special additional mechanism (Option)

Heating mechanism by temperature control (2-system)

Safety mechanism by area sensor with infrared rays at the front opening area.



**SDOP-1042-2H-AT**

42ton Automatic vulcanization forming press machine  
Correspond to JIS K6299

Full-automatic operation, by setting molding time, gassing shot number and time, etc.

Easy setting operation, by liquid crystal display (5.7 inch, color)  
Save space design, by one block type metal frame.

(Oil pressure generating device is integrated in one block type metal frame.)

Hydraulic drive: 42ton (MAX)

Cylinder ram dia.:  $\phi 160 \times 150$ (st)mm

Heating plate size: 400×400mm

Heating system: Electric heating (MAX. 200°C)

Temperature control: 2-system (Top-bottom heating plate)

Digital type PID proportional control system

Unit dimensions: Approx. (W)1200×(D)1150×(H)1500mm

Weight: Approx. 1000kg

**SDOP-1042-2HC-AT**

Heating / Cooling 2-stage 42ton Automatic vulcanization forming press machine

① Full-automatic operation, by setting cooling time, molding time, gassing shot number and time, etc.

② Easy setting operation, by liquid crystal display (5.7 inch, color)

Hydraulic drive: 42ton (MAX)

Cylinder ram dia.:  $\phi 160 \times 250$ (st)mm

Heating plate size: 400×400mm

Heating system: Electric heating (MAX. 200°C)

Cooling system: Water-cooling system (with air blow)

Temperature control:

2-system (Top-bottom heating plate)

Digital type PID proportional control system

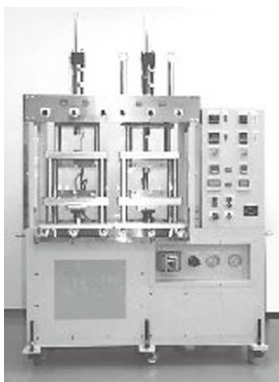
Unit dimensions:

Approx. (W)1200×(D)1150×(H)1600mm

Weight: Approx. 1100 kg

**SDOP-1004PT-SD (Special type)**

Vertical transfer forming machine



**2-head vertical type automatic injection forming machine**

Die clamping pressure 7.8ton (MAX)

Injection pressure 1.6ton (MAX)

Cylinder ram dia.

【Clamping die】  $\phi 100 \times 100$ (st)mm

【injection】  $\phi 50 \times 200$ (st)mm

Heating plate size: 250×250mm

Heating system:

Electric heating (MAX. 250°C)

Temp. control:

4-system independent control

Digital type PID proportional control system

Unit dimensions:

Approx. (W)1480×(D)800×(H)1950mm

Weight: Approx. 950kg

**SDOP-1042-8H-AT**

4-stage 42ton Automatic vulcanization forming press machine



Hydraulic drive: 42ton (MAX)

Cylinder ram dia.:  $\phi 160 \times 330$ (st)mm

Heating plate size: 350×350mm

Heating system:

Electric heating (MAX. 200°C)

Temp. control: 8-system

(Top-bottom heating plate)

Digital type PID proportional control system

Unit dimensions:

Approx. (W)1350×(D)1200×

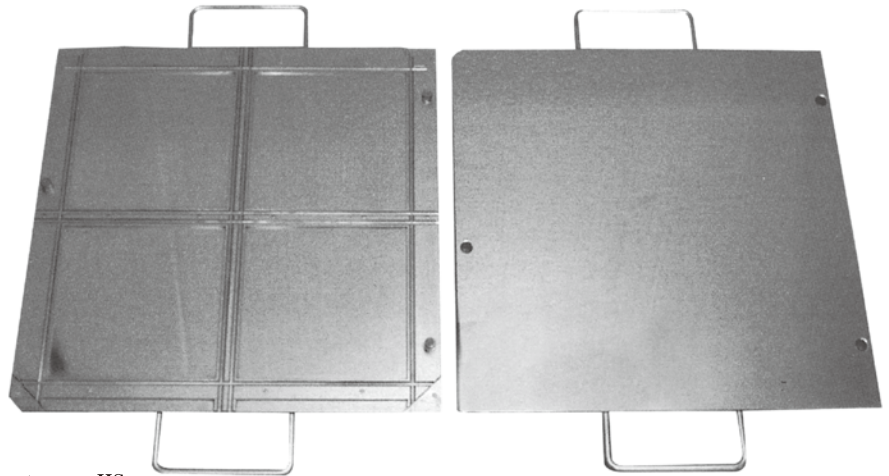
(H)1700mm

Weight: Approx. 1600kg



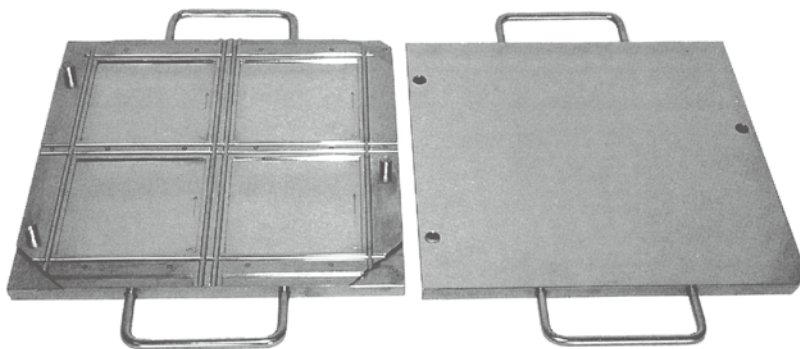
**MP-124NJ**

Slab sheet forming mold corresponding to new JIS  
 JISK-6299 Cavity filler type mold  
 Sheet size : 150×150×2(t)mm cavity : 4  
 Mtls : S55C  
 Surface treatment : Polishing and hard chromium plated with mirror surface finish  
 Outer dimension of mold : (Approx.)380×380×27(t)mm (Approx.)28kg



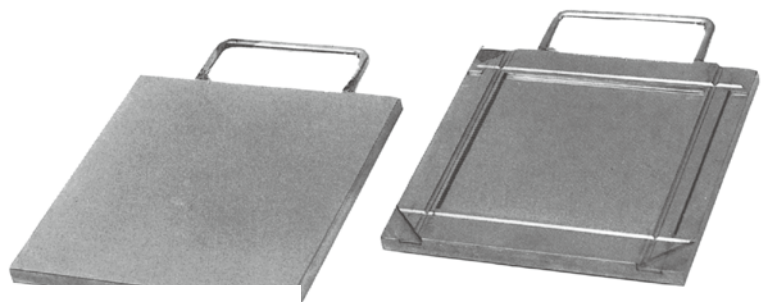
**MP-124NJAKC**

Light weight slab sheet forming mold corresponding to new JIS  
 JISK-6299 Cavity filler type mold  
 Sheet size : 150×150×2(t)mm cavity : 4  
 Mtls : Hard aluminum (YH75)  
 Surface treatment : Polishing and hard chromium plated with mirror surface finish  
 Outer dimension of mold : (Approx.)380×380×27(t)mm (Approx.)9kg  
 Weight is approx. 1/3 than that of carbon steel (S55C)



**MP-120NJ**

Sheet forming mold  
 Sheet size : 150×150×2(t)mm cavity : 1  
 For handle, it is special additional specification (Option).

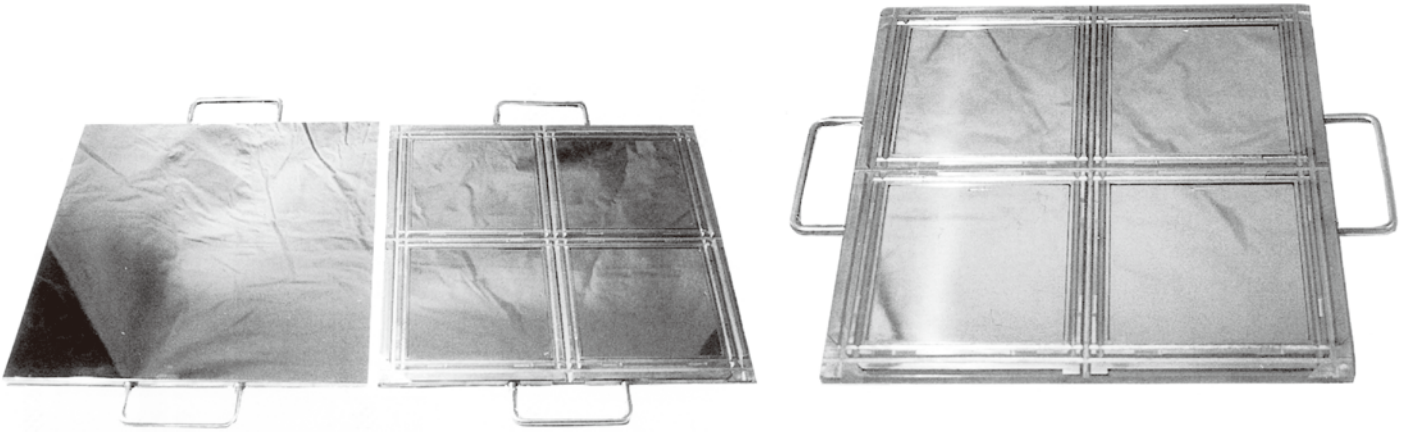


**MP-124NJAKC (With hinges / option)**



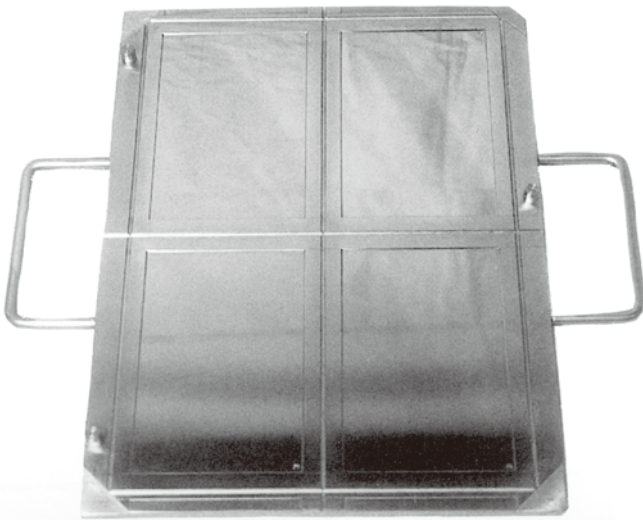
**MP-124N**

Slab sheet forming mold corresponding to new JIS  
 JISK-6250  
 Sheet size : 150×150×2(t)mm cavity : 4  
 Co-developed with THE YOKOHAMA RUBBER CO.,LTD. (patent pending)



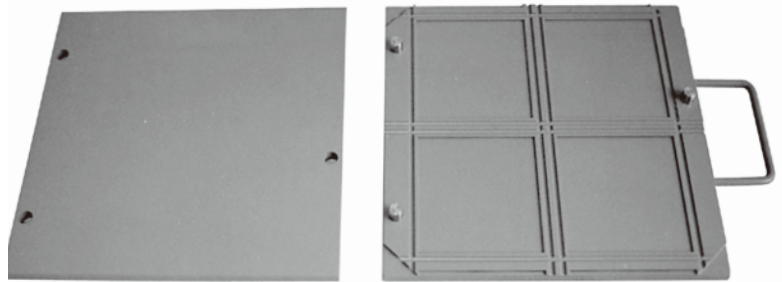
**MP-1004**

Slab sheet forming mold  
 Sheet size : 200×150×2(t)mm cavity : 4  
 Mtls : S55C  
 Surface treatment : Polishing and hard chrome plated mirror finish



**MP-1000-ATF**

Light weight slab sheet forming mold  
 Sheet size : 120×150×2(t)mm cavity : 4  
 Mtls : Hard aluminum (YH75)  
 Surface treatment : Teflon coating finish



**MP-1004 (special)**

Slab sheet forming mold (detachable crosspiece method)  
 Sheet size : 100×150×5(t)mm cavity : 4  
 Mtls : S55C  
 Surface treatment : Polishing and hard chrome plated mirror finish



**MPL-316L**

Mold for vulcanized rubber compression set test  
JISK-6262 Large test piece  
cavity : 16



Mold for Vulcanized Rubber Compression Set test

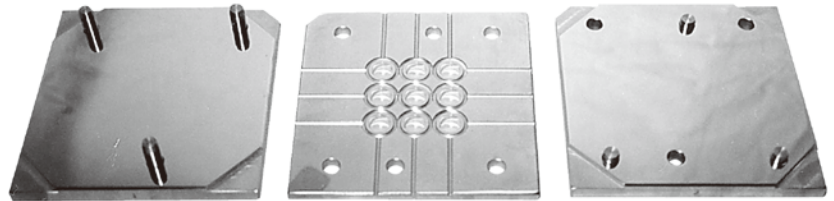
The products seen in photos are a part of whole production line.

Available Products

- ◆ Standard:  
JISK-6262, JISK-6301, ASTM-D-395, etc.
- ◆ Cavities:  
4, 6, 9, 12, 16, 20, 25, 36, etc.
- ◆ Materials:  
S55C, Hard Aluminum

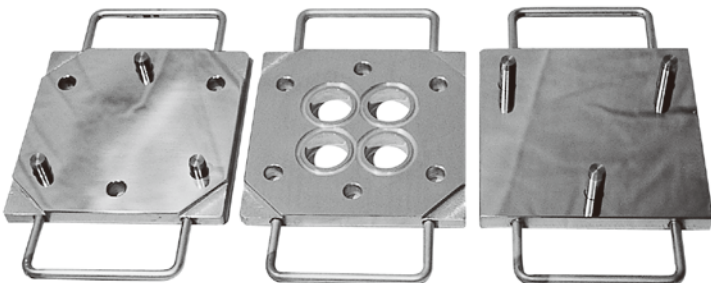
**MPL-309S**

Mold for vulcanized rubber compression set test  
JISK-6262 Small test piece  
cavity : 9



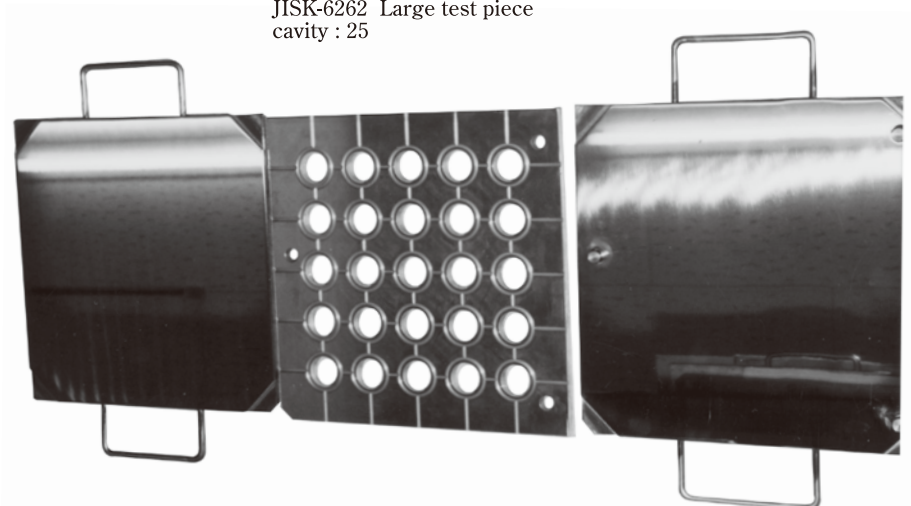
**MPL-304L**

Mold for vulcanized rubber compression set test  
JISK-6262 Large test piece  
cavity : 4  
For handle, it is special additional specification (Option).



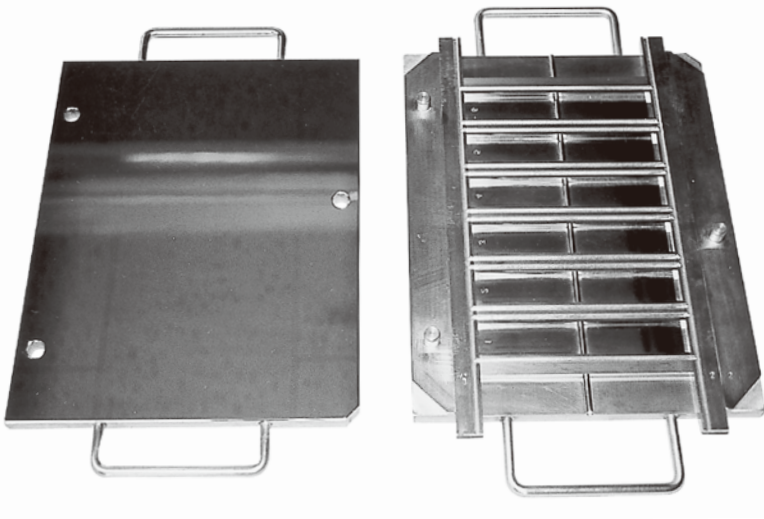
**MPL-325L**

Mold for vulcanized rubber compression set test  
JISK-6262 Large test piece  
cavity : 25



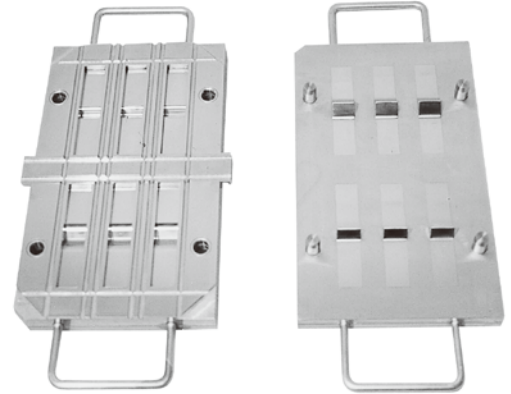
**MPD-506**

Mold for vulcanized rubber bending/cracking test (Demattia bending)  
 JISK-6260 JISK-6301 ASTM-813  
 cavity : 6



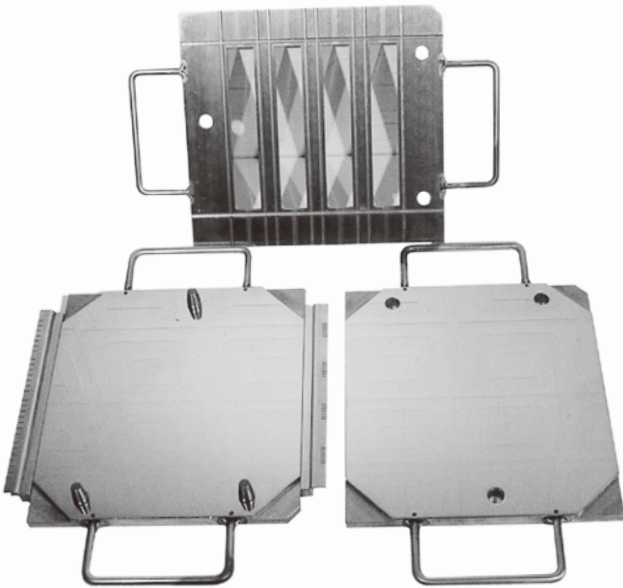
**MPM-1006**

Mold for vulcanized rubber dynamic bending test  
 (mold for special test piece)  
 cavity : 6



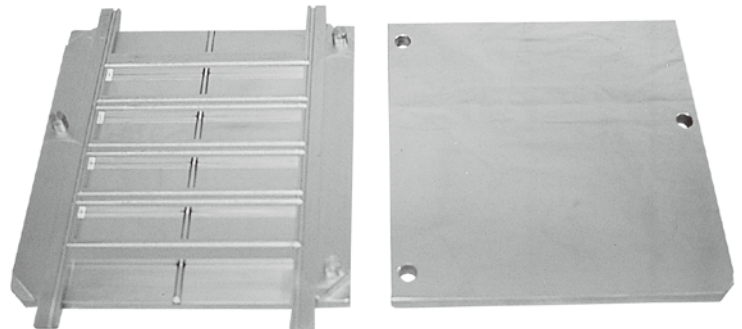
**MPM-1004**

Mold for vulcanized rubber special fatigue test  
 (combination of three surfaces)  
 cavity : 4



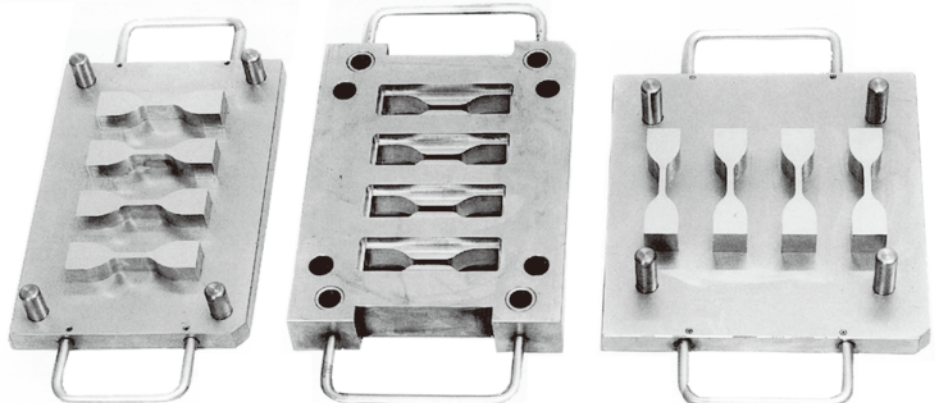
**MPD-504**

Mold for vulcanized rubber bending/cracking test  
 (Demattia bending)  
 JISK-6260 ASTM-813 JISK-6301  
 cavity : 4



**MPM-1004**

Puncher type special mold  
 (combination of three surfaces)  
 cavity : 4

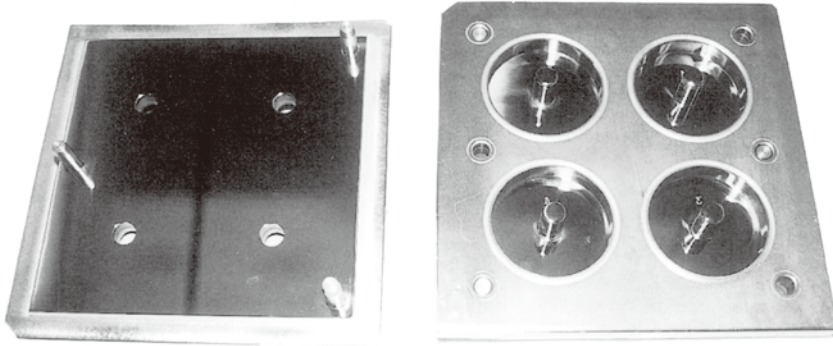


\* The JIS K6301 standard was abolished in August 1998.



**MPA-604**

Forming mold for Akron abrasion test  
 (combination of three surfaces)  
 JISK-6264  $\phi 63.5 \pm 0.5 \times \phi 12.7 \times (t) 12.7 \pm 0.1 \text{mm}$   
 cavity : 4  
 Mtls : S55C  
 Surface treatment : Polishing and hard chrome plated mirror finish



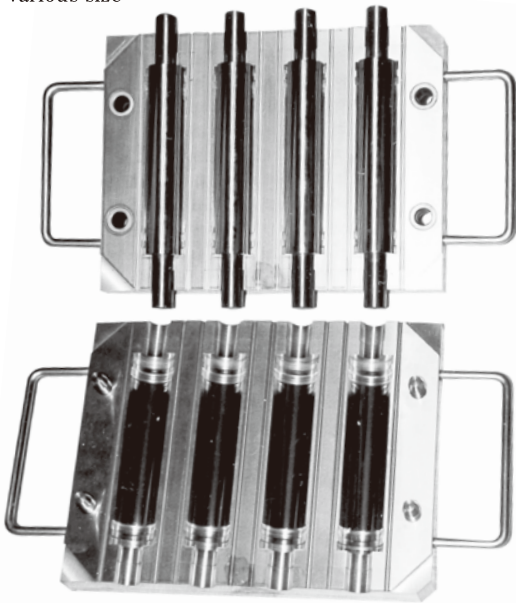
**MPO-1002**

O-ring forming mold  
 (combination of two surfaces)  
 cavity : 2  
 various size JISB-2401 (Refer to nominal diameter)



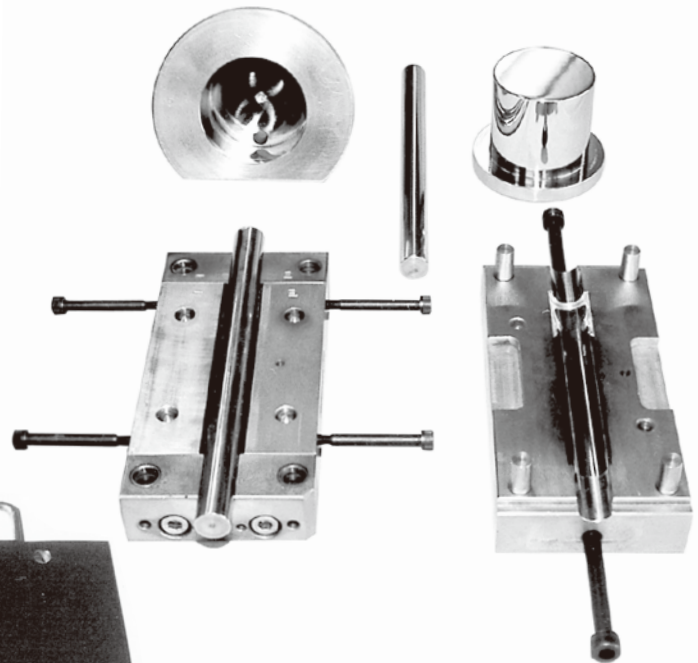
**MPR-1004**

Mold for vulcanized rubber roller test  
 (combination of two surfaces)  
 cavity : 4  
 various size



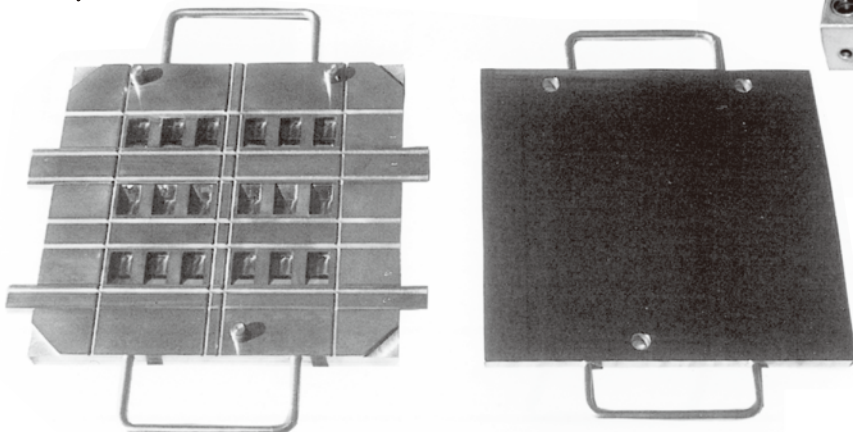
**MPTR-1000**

Special sleeve shaped transferring forming mold  
 (including pot part and cylinder, complete)  
 Composition : upper/lower cavity molds, mandrel type & plunger type



**MPW-718**

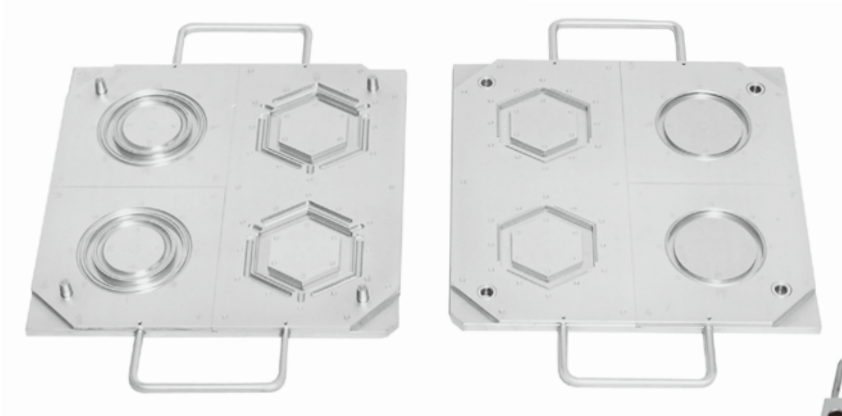
Forming mold for Williams abrasion test  
 (detachable crosspiece method)  
 JISK-6264 ASTM D-394  
 cavity : 18





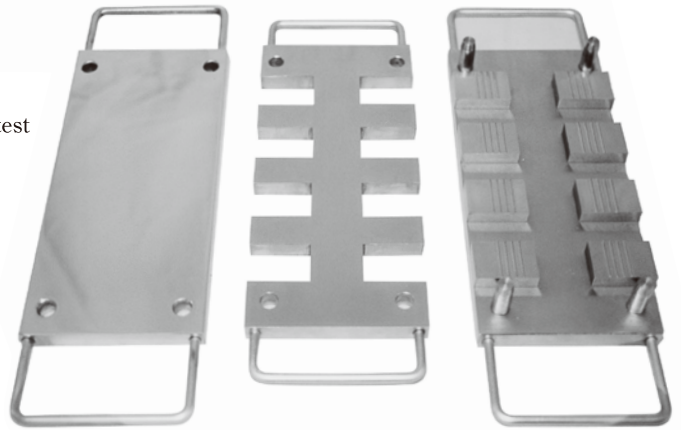
**MPM-1004 (Special)**

Mold for forming mold eat up evaluation test  
Set 4 conditions  
Special forming mold (combination of two surfaces)



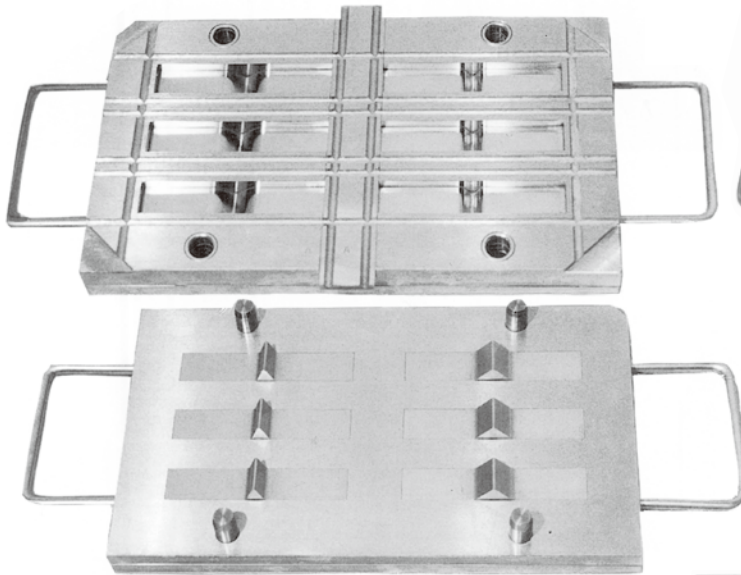
**MPM-1008**

Evaluation test piece mold for vulcanized rubber forming characteristic (combination of three surfaces)  
Mtls: S55C  
Surface treatment : Polishing and hard chrome plated mirror finish



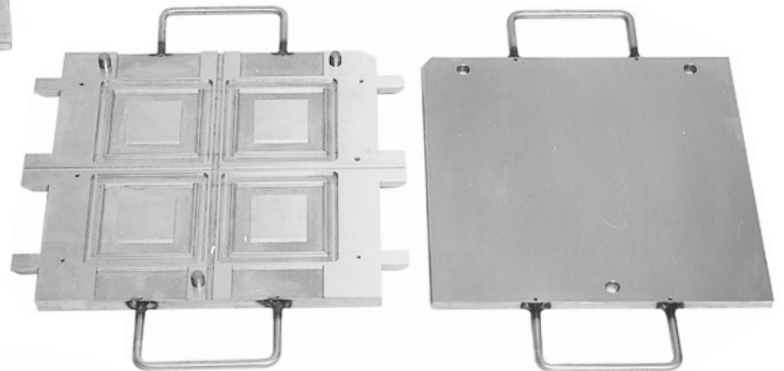
**MPM-1006**

Special test piece forming mold for vulcanized rubber dynamic fatigue test  
cavity: 6  
Mtls: S55C  
Surface treatment : Polishing and hard chrome plated mirror finish



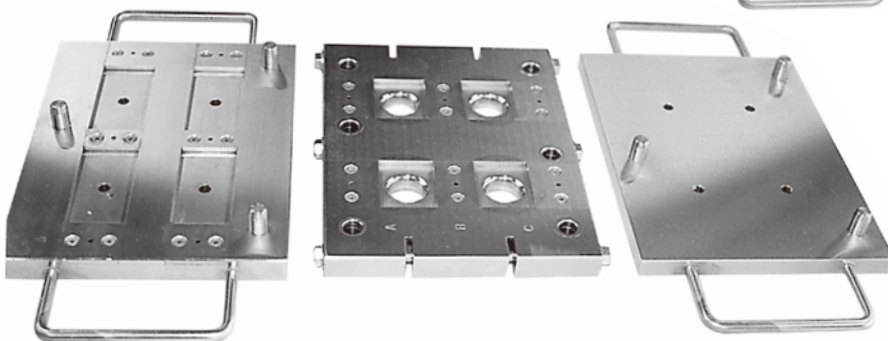
**MPM-1004**

Vulcanized rubber forming characteristic evaluation mold  
(Die for fluidity evaluation test)  
Detachable crosspiece method

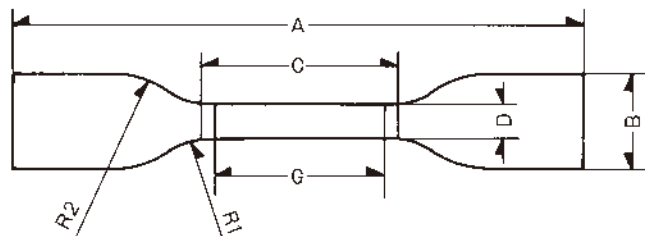


**MPM-1004**

Dynamic shearing fatigue test piece forming mold  
(combination of three surfaces)  
Mtls: S55C  
Surface treatment : Polishing and hard chrome plated mirror finish



(Dumbbell dimension diagram) Units : mm



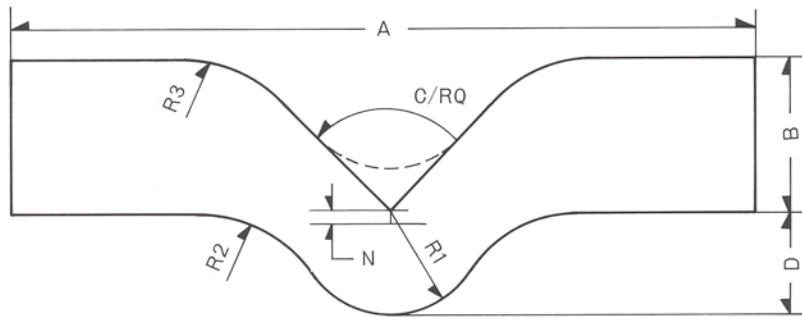
Standard No.	TYPE	A	B	C	D	G	R1	R2
JISK-6251 (JISK-6301)	1	120	25	40	10±0.1	40±0.5	21	25
JISK-6251 (JISK-6301)	2	100	25	20	10±0.1	20±0.5	21	25
JISK-6251 (JISK-6301)	3	100	25	20	5±0.1	20±0.5	11	25
JISK-6251 (JISK-6301)	4	100	15	20	5±0.1	20±0.5	40	—
JISK-6251	5	115	25	33	6 <sup>+0.4</sup> <sub>-0</sub>	25±0.5	14	25
JISK-6251	6	75	12.5	25	4±0.1	20±0.5	8	12.5
JISK-6251	7	35	6	12	2±0.1	10±0.5	3	3
JISK-6251	8	50	8.5	16	4±0.1	10±0.5	7.5	10
JISK-6259	I-shaped	63	6.5	50	2±0.2	—	1	—
JISK-6273 (JISK-6262:1997)	I-shaped	38~63	6.5	23~48	2±0.2	—	1	—
JISK-6723		115	25±1	33±2	6±0.4	25±1	14±1	25±2
JISK-6732	Fig 3	120	25±1	40 <sup>+2</sup> <sub>-0</sub>	10 <sup>+0.4</sup> <sub>-0</sub>	40 <sup>+2</sup> <sub>-0</sub>	14±1	25±1
JISK-6734		150-	20±0.5	60±0.5	10±0.2	50±0.5	60-	—
JISK-6760 (Abolished in 1997)		115-	25±1	33±2	6±0.4	25±1	14±1	25±2
JISK-6767		152	25	55	13	25 or 50	13	13
JISK-6781	Fig 3	120	25	40	10	40	14	25
JISK-6783	Fig 3	120	25±1	40	10 <sup>+0.4</sup> <sub>-0</sub>	40 <sup>+2</sup> <sub>-0</sub>	14±1	25±1
JISK-6871 (Abolished in 1997)		175	20±0.5	60±0.5	10±0.5	50±0.5	60	—
JISK-7113	1	175	20±0.5	60±0.5	10±0.5	50±0.5	60	—
JISK-7113	1 (½)	75-	10±0.5	30±0.5	5±0.2	25±0.5	30	—
JISK-7113	2	115	25±1	33±2	6±0.4	25±1	14±1	25±2
JISK-7113	2 (½)	60-	12±1	16±1	3±0.2	12±0.5	7±0.5	12±1
JISK-7113	2 (⅓)	57-	8±0.5	11±1	2±0.2	8±0.5	4.7±0.5	8±0.5
JISK-7127 (ISO 527-3)	TYPE 5	115-	25±1	33±2	6±0.4	25±0.25	14±1	25±2
JISK-7127 (ISO 527-3)	TYPE 1B	150-	20±0.5	60±0.5	10±0.2	50±0.5	60-	—
JISK-7160	2	60±1	10±0.2	10±0.2	3±0.05	—	10±1	—
JISK-7160	3	80±2	15±0.5	10±0.2	10±0.2	—	20±1	—
JISK-7160	4	60±1	10±0.2	—	3±0.1	—	15±1	—
JISK-7161-2 (ISO 527-2)	1A	170	20±0.2	80±2	10±0.2	50±0.5	20~25	—
JISK-7161-2 (ISO 527-2)	1B	150-	20±0.2	60±0.5	10±0.2	50±0.5	60-	—
JISK-7161-2 (ISO 527-2)	1BA	75-	10±0.5	30±0.5	5±0.5	25±0.5	30-	—
JISK-7161-2 (ISO 527-2)	1BB	30-	4±0.2	12±0.5	2±0.2	10±0.2	12-	—
JISK-7161-2 (ISO 527-2)	5A	75-	12.5±1	25±1	4±0.1	20±0.5	8±0.5	12.5±1
JISZ-1702	Fig 1	120	25±1	40 <sup>+2</sup> <sub>-0</sub>	10 <sup>+0.4</sup> <sub>-0</sub>	40 <sup>+2</sup> <sub>-0</sub>	14±1	25±1
JISZ-2201	5	Irregular	30-	60	25	50	20~30	—
JISZ-2201	13B	Irregular	20-	Approx. 60	12.5	50	20~30	—

\* The JIS K6301 standard was abolished in August 1998.

Standard No.	TYPE	A	B	C	D	G	R1	R2
ISO 37	1	115-	25±1	33±2	6 <sup>+0.4</sup> <sub>-0</sub>	25±0.5	14±1	25±2
ISO 37	1A	100-	25±1	20 <sup>+2</sup> <sub>-0</sub>	5±0.1	20±0.5	11±1	25±2
ISO 37	2	75-	12.5±1	25±1	4±0.1	20±0.5	8±0.5	12.5±1
ISO 37	3	50-	8.5±0.5	16±1	4±0.1	10±0.5	7.5±0.5	10±0.5
ISO 37	4	35-	6±0.5	12±0.5	2±0.1	10±0.5	3±0.1	3±0.1
ISO 2285	I-Shaped	38~63	6.5	23~48	2±0.2	—	1	—
ISO 1798	—	152	25	55	13	25 or 50	13	13
ISO 12086-2	—	38-	15-	22±0.25	5±0.25	22±0.25	5±0.5	—
ASTMD-412	A	140-	25±1	59±2	12 <sup>+0.05</sup> <sub>-0</sub>	50±0.5	14±1	25±2
ASTMD-412	B	140-	25±1	59±2	6 <sup>+0.05</sup> <sub>-0</sub>	50±0.5	14±1	25±2
ASTMD-412	C	115-	25±1	33±2	6 <sup>+0.05</sup> <sub>-0</sub>	25±0.25	14±1	25±2
ASTMD-412	D	100-	16±1	33±2	3 <sup>+0.05</sup> <sub>-0</sub>	25±0.25	14±1	16±2
ASTMD-412	E	125-	16±1	59±2	3 <sup>+0.05</sup> <sub>-0</sub>	50±0.5	14±1	16±2
ASTMD-412	F	125-	16±1	59±2	6 <sup>+0.05</sup> <sub>-0</sub>	50±0.5	14±1	16±2
ASTMD-1822	L	63.5	9.53	9.53±0.08	3.18±0.03	9.53±0.08	12.7±0.08	—
ASTMD-1822	S	63.5	9.53	0/12.7R	3.18±0.03	—	12.7±0.08	—
ASTMD-638	I	165-	19 <sup>+6.4</sup> <sub>-0</sub>	57±0.5	13±0.5	50±0.25	76±1	—
ASTMD-638	II	183-	19 <sup>+6.4</sup> <sub>-0</sub>	57±0.5	6±0.5	50±0.25	76±1	—
ASTMD-638	III	246-	29 <sup>+6.4</sup> <sub>-0</sub>	57±0.5	19±0.5	50±0.25	76±1	—
ASTMD-638	IV	115-	19 <sup>+6.4</sup> <sub>-0</sub>	33±0.5	6±0.05	25±0.13	14±1	25±1
ASTMD-638	V	63.5-	9.53 <sup>+3.18</sup> <sub>-0</sub>	9.53±0.08	3.18±0.03	7.62±0.02	12.7±0.08	—
ASTMD-1708	Fig 1	38-	15-	22±0.25	5±0.25	22±0.25	5±0.5	—
ASTMD-2116	Fig 1	38-	15-	22±0.25	5±0.25	22±0.25	5±0.5	—
ASTMD-4894	Fig 11	38-	15-	22±0.25	5±0.25	22±0.25	5±0.5	—
DIN-53504	S1	115-	25	33	6±0.05	25	14	25
DIN-53504	S1A	100-	25	20	5±0.05	25	11	25
DIN-53504	S2	75-	12.5	25	4±0.05	20	8	12.5
DIN-53504	S3	35-	6	12	2±0.05	10	3	3
DIN-53504	S3A	50-	8.5	16	4±0.05	10	7.5	10
BS-2782	3	114	25	33	6 <sup>+0.4</sup> <sub>-0</sub>	25	14±0.5	25±1
BS-6746		75	12.5±1	25±1	4±0.1	20±0.1	8±0.5	12.5±1
IEC-540	Fig 7	75	12.5	25	4±0.1	20±0.1	8±0.5	12.5
IEC-540 (S)	Fig 8	50	8.5	17	4±0.1	10±0.1	7.5	10
UL-746A	A	140-	25±1	59±2	12 <sup>+0.05</sup> <sub>-0</sub>	50	14±1	25±2
UL-746A	B	140-	25±1	59±2	6 <sup>+0.05</sup> <sub>-0</sub>	50	14±1	25±2
UL-746A	C	115-	25±1	33±2	6 <sup>+0.05</sup> <sub>-0</sub>	25	14±1	25±2
UL-746A	D	100-	16±1	33±2	3 <sup>+0.05</sup> <sub>-0</sub>	25	14±1	16±2
UL-746A	E	125-	16±1	59±2	3 <sup>+0.05</sup> <sub>-0</sub>	50	14±1	16±2
UL-746A	F	125-	16±1	59±2	6 <sup>+0.05</sup> <sub>-0</sub>	50	14±1	16±2
UL-62.84.1A	A	152.4	25.4±1	50.8±2	6.4 <sup>+0.05</sup> <sub>-0</sub>	50.8	22.2±1	25.4±2

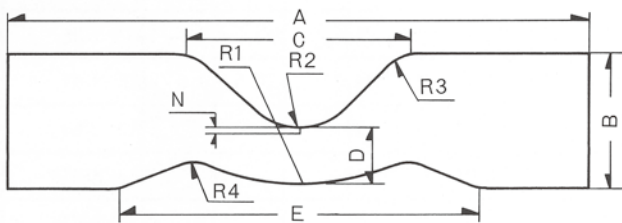
\* The JIS K6301 standard was abolished in August 1998.

Angle dimension diagram Units : mm

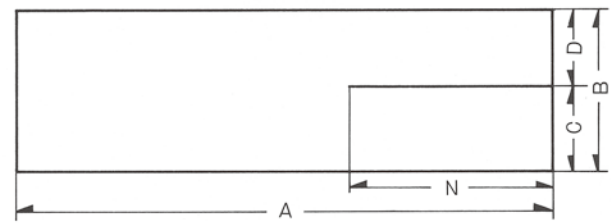


Standard No.	TYPE	A	B	C/RQ	N	R1	R2	R3
JISK-6252	Fig 1-(b)	100-	19±0.05	90°	1±0.2	12.7±0.05	25.4±0.05	19±0.05
JISK-6252	Fig 1-(c)	100-	19±0.05	90°		12.7±0.05	25.4±0.05	19±0.05
JISK-6301	B	100	20	90°		13.5	20	20
JISK-6732	Fig 4	100	20±1	90°		13.5 <sup>+0.5</sup> <sub>-0</sub>	20±1	20±1
JISK-6767	Fig 5	100	20	90°		13.5	20	20
JISK-6781	Fig 4	100	20	90°		13.5	20	20
JISK-6783	Fig 4	100	20±1	90°		13.5 <sup>+0.5</sup> <sub>-0</sub>	20±1	20±1
JISK-7128	Fig 9	100	20±1	90°		13.5 <sup>+0.5</sup> <sub>-0</sub>	20±1	20±1
JISK-7311	Fig 3	100	20	90°		13.5	20	20
JVAS-1002		100	20±1	90°	2±0.5	13.5 <sup>+0.5</sup> <sub>-0</sub>	20±1	20±1
ASTMD-624	C	102±0.5	19±0.05	90°		12.7±0.05	25±0.05	19±0.05
ISO-34-1	Fig 2	100-	19±0.05	90°		12.7±0.05	25±0.05	19±0.05
DIN-53515		100-	19±0.2	90°	1±0.2	12.7±0.1	25.4±0.2	19±0.2

Crescent dimension diagram Units : mm



Trouser dimension diagram Units : mm



Standard No.	TYPE	A	B	N	D	R1	R2	R3
JISK-6252	Fig 1-(a)	110-	25±0.5	1±0.2	10.5±0.05	43±0.2	12.5±0.1	9±0.2
JISK-6301	A	110	25	0.5±0.08	10	44	12.5	10
ASTMD-624	B	110±0.5	25±0.05	0.5±0.05	10.2±0.05	43±0.05	12.5±0.05	9±0.05
ISO-34-1	Fig 3	110-	25±0.5	1±0.2	10.5±0.05	43±0.2	12.5±0.1	9±0.2

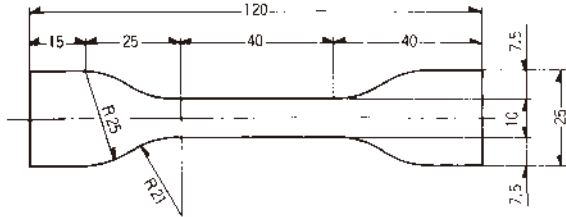
Standard No.	TYPE	A	B	C	D	N
JISK-6252	Fig 1-(d)	100-	15±1	7.5±0.5	7.5±0.5	40±5
ISO-34-1	Fig 1	100-	15±1	7.5±0.5	7.5±0.5	40±5
ASTMD-624	Fig 2	150	15±1	7.5±0.5	7.5±0.5	40±5
JISK-7128	Fig 2	150	50	25	25	75±1
JISK-6772	Fig 1	150	40	20	20	75
JISK-6328	Fig 1	200	76	38	38	75

Type Trouser

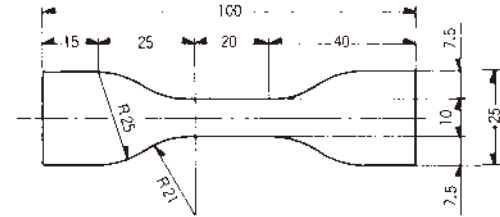
\* The JIS K6301 standard was abolished in August 1998.

JISK-6251, K-6252 (For vulcanized rubber tensile and tear tests)

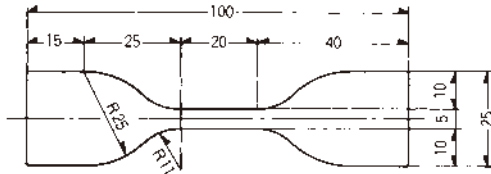
JISK-6251-1, JISK-6301-1



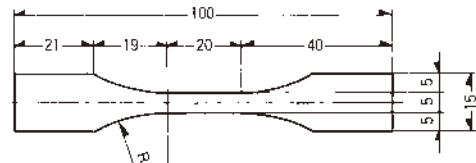
JISK-6251-2, JISK-6301-2



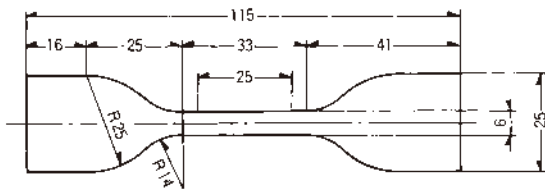
JISK-6251-3, JISK-6301-3, ISO 37-1A



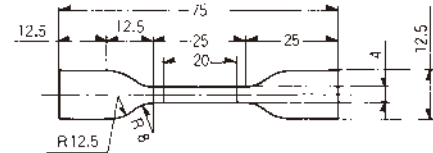
JISK-6251-4, JISK-6301-4



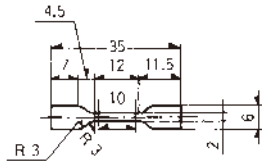
JISK-6251-5, ISO 37-1



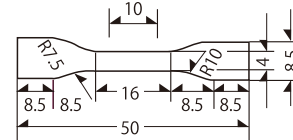
JISK-6251-6, ISO 37-2



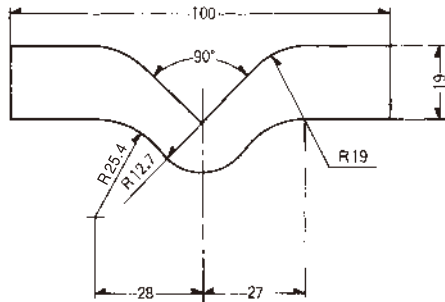
JISK-6251-7, ISO 37-4



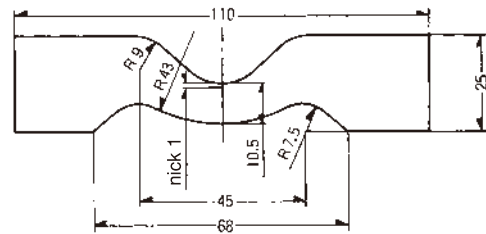
JIS K-6251-8, ISO 37-3



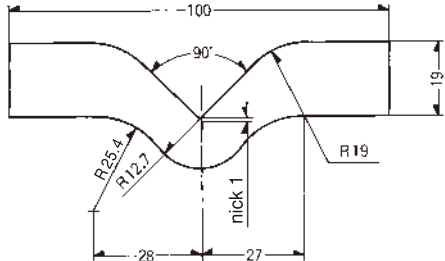
JISK-6252 type angle, ISO 34-1 type angle



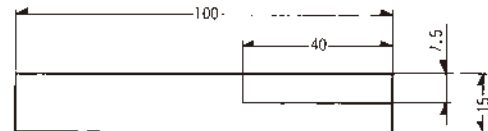
JISK-6252 type crescent, ISO 34-1 type crescent



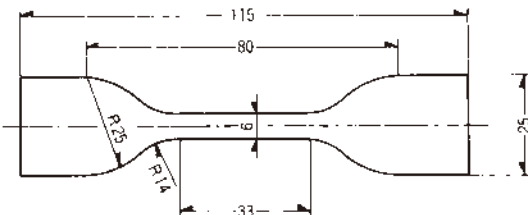
JISK-6252 type angle (with nick), ISO 34-1 type angle (with nick)



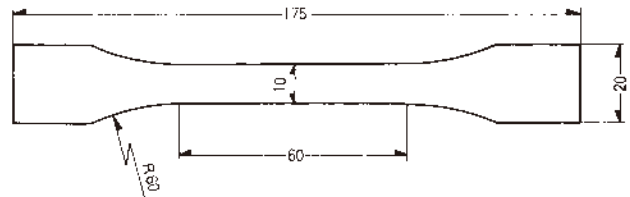
JISK-6252 type trouser, ISO 34-1 type trouser



JISK-7113-2, JISK-7127 type 5, ISO 527-3 type 5



JISK-7113-1, JISK-7127-1B, ISO 527-3 type 1B

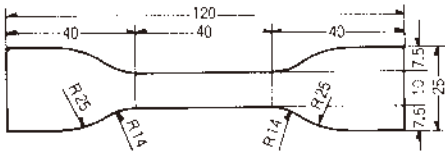


\* The JIS K6301 standard was abolished in August 1998.

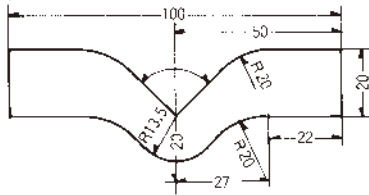


# Test Specimen

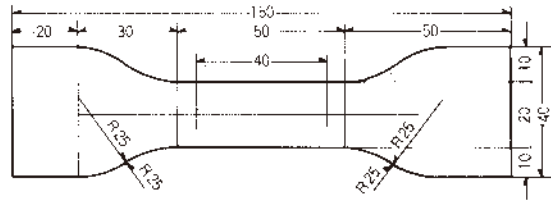
JISZ-1702, JISK-6732, K-6781



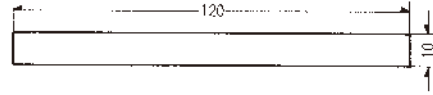
JISK-6732, JISK-6781



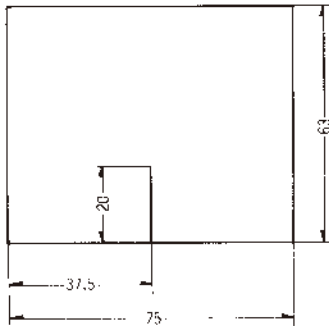
JISK-6402



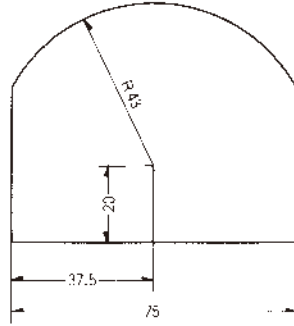
JISK-6732



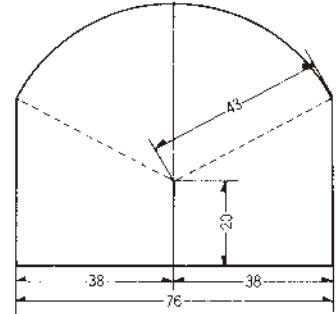
JISK-7128-2, Elmendorf (Rectangular test)



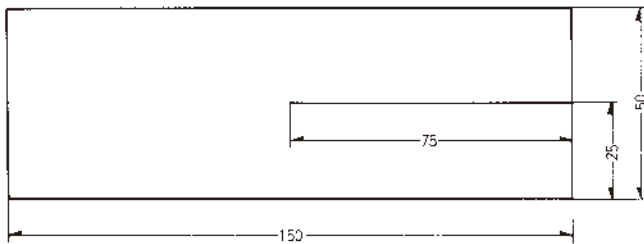
JISK-7128-2, Elmendorf (Constant-radius test)



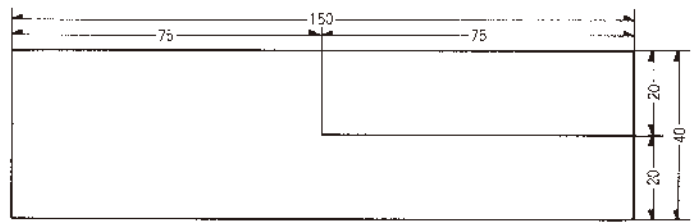
ASTMD-1922, (Elmendorf)



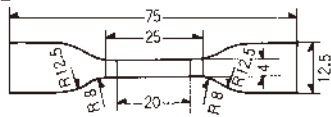
JISK-7128-1, type Trouser



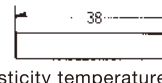
JISK-6772 Tear test



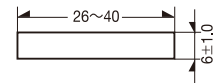
BS-6746 DIN-53504-S2  
IEC-540(L)



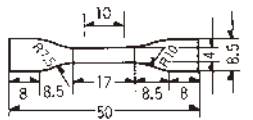
JISK-6760 Low temperature resistance



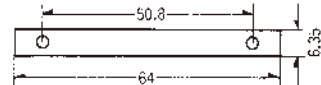
JISK-6261 (Low temperature brittleness type-A)



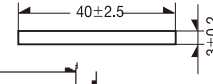
IEC-540(S)



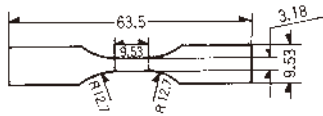
JISK-6745 Elasticity temperature



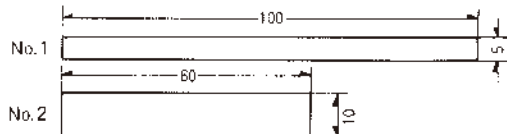
JISK-6261 (Low temperature stiffening)



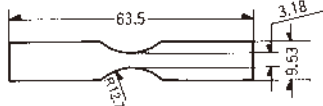
ASTMD-1822-L



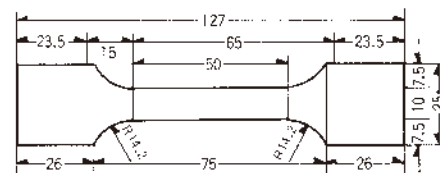
JISK-6254 (Stress strain)



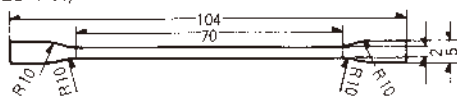
ASTMD-1822-S



JANNAF



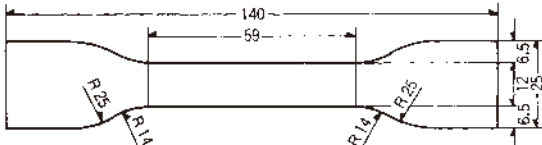
reference (ASTMD-1329 T-R)



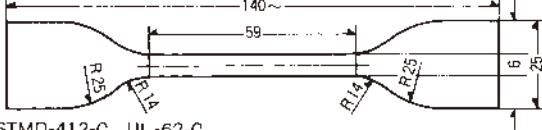
\* The JIS K6301 standard was abolished in August 1998.



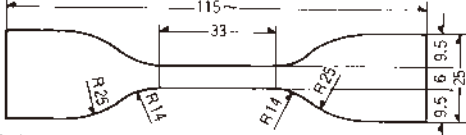
ASTMD-412-A, UL-62-A



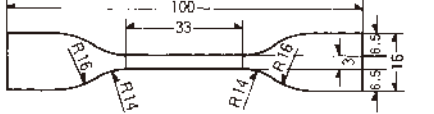
ASTMD-412-B, UL-62-B



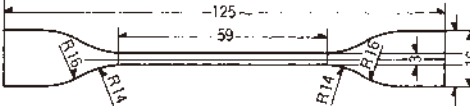
ASTMD-412-C, UL-62-C



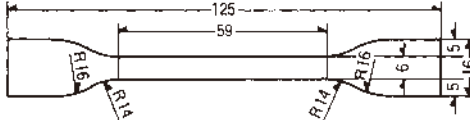
ASTMD-412-D, UL-62-D



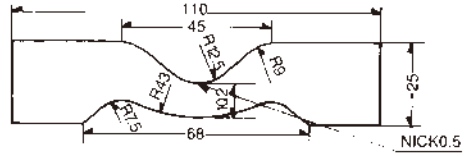
ASTMD-412-E, UL-62-E



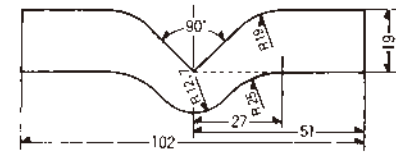
ASTMD-412-F, UL-62-F



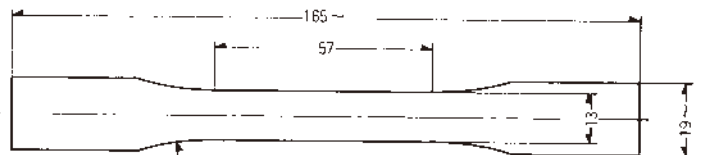
ASTMD-624-B



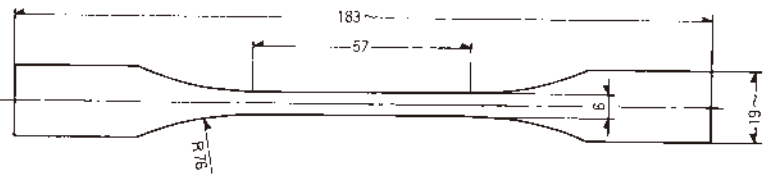
ASTMD-624-C



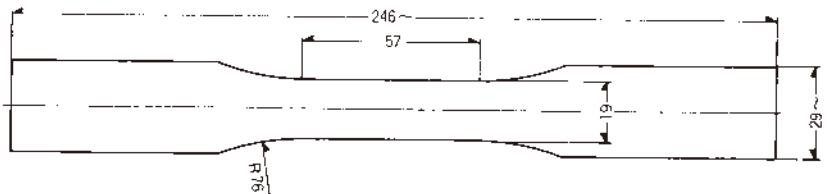
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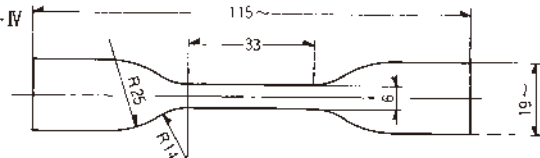
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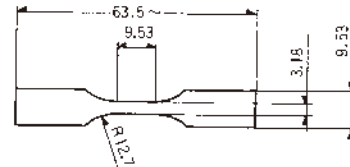
ASTMD-638-III



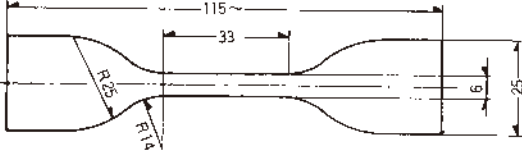
ASTMD-638-IV



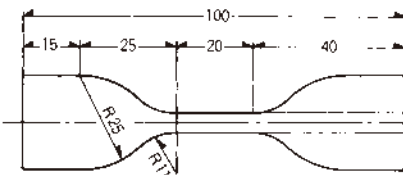
ASTMD-638-V



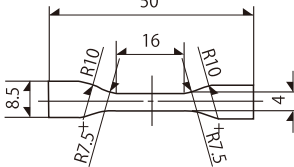
DIN-53504-S1



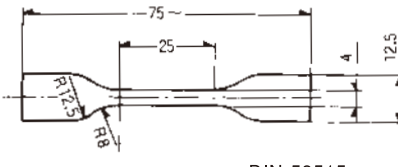
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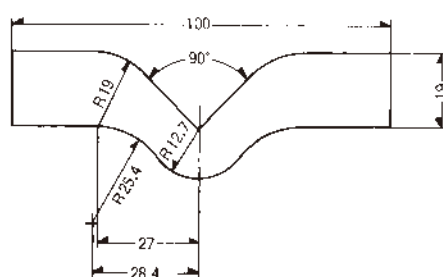
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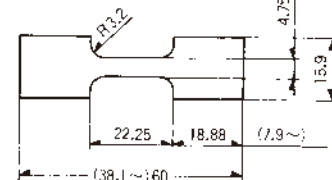
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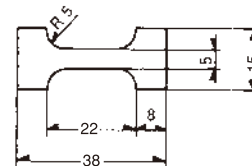
DIN-53515



JISK-6897



ASTMD-1708, ASTM-2116, ASTM-4894, ASTM-4895



\* The JIS K6301 standard was abolished in August 1998.

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