TOSISINITO LA MINISTRA DE MINI

DESIGN & MODELING CATALOG BOOK

Teels INT'L

No.11 English Edition

DESIGN & MODELING CATALOG BOOK

Tools INT'L

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Our original company, IZUMIYA (Too) was established in 1919 as an artists' supply store. Over the years IZUMIYA evolved to become Too group, encompassing companies related to design support, IT and media. In 2009, 90 years after the foundation of IZUMIYA, we established TOOLS INT'L Corp. to focus on our original clay series, modeling materials, equipment, design materials, school teaching materials and special design workshops.

Our company specializes in providing materials and support for designers at every step of the way. With 100 years of experience in the field of design supplies, we have accumulated the knowhow to serve designers and modelers in the current age.

We produce and supply our original products, which we have developed and perfected in response to our customers' needs. Our original products are researched, developed, and quality tested in Japan. Although we first developed our clay formula in 1981, our research team is constantly researching and developing new formulas in response to customer feedback. Our products are well established in advanced automotive design regions like the USA and Europe, as well as high growth regions such as China and India. Our products are well-loved staples in studios across the globe.

Business Functions:

Encompassing business in manufacturing and sales of car design materials, car modeling apparatus, design materials, painting materials, stationery, design equipment, R&D, educational training for business personnel and all accompanied businesses.

T N	TOOLS INTERNATIONAL S
Trade Name	TOOLS INTERNATIONAL Corporation
President & CEO	Kentaro Shimokura
Business Functions	Relating business in manufacturing and sales of the car design material, car modeling apparatus, design materials, painting materials, stationeries, design equipments, R&D, educational business for personnel training and all accompanied business.
Founded	February 2, 2009
Head Office	Toranomon 36 Mori Building, 3-4-7 Toranomon, Minato-ku, Tokyo 105-0001, Japan
Paid Capital	JPY 98,000,000
Employees	30

History

IZUMIYA Artists' Supply Store' in Shibuya, Tokyo following 'Bauhaus' in Germany.

After a temporary closure post-WWII. business began operations again in Ikebukuro, Tokyo.

'IZUMIYA Artists' Supply Store' is renamed 'Izumiya Limited.'

Izumiya Limited expands business to include trade and sales. Izumiya helped to spread modern Western design trends in Japan.

Commenced importing 'Industrial Clays' from the US.

'Izumiya Limited' is renamed and reorganized to become 'Izumiya Corporation.'

1972

Famous Detroit car modeler Ron Martin is invited for a clay modeling seminar in Japan. With his help, clay modeling techniques became popular in Japai







Commenced domestic production of 'Industrial Clay J-525.'



Developed 'Clay Modeling Film'



Developed 'Copic' alcohol markers that are widely used by designers



'Izumiya Corporation' is renamed 'Too Corporation.'

Developed 'Clay Modeling Check Foil.'



The 'Too Corporation' sales departments for art supplies, clay, educational materials, equipment, design and modeling materials were grouped together to become a new entity known as 'Tools Corporation.'

Tools Corporation develops our original 100% sulfur-free 'Industrial Clay NS' series. The NS series is widely adopted by automotive studios worldwide. At the same time our 'Clay Modeling Sheet' is also released.



Tools Corporation develops original stencils in 'Ellipse Curves 10pcs/set' and 'Curves 3pcs/set.'



2004

Released the 'PM Pad A3 Standard'.

Released the 'Marker Sketch Design Book.'

Developed our standard sized 'Ellipse Curves' stencil.



2007

Developed our 'Clay Warmer PU-01.'



Developed 'Chrome Silver' film. Developed 'Clay Shaper NSD-120.' Developed 'Marker Sketch Design DVD Vol.1.







'Tools Corporation' international sales department for clay, modeling materials, equipment, automotive design educational materials separated to become 'TOOLS INT'L Corp.'

Developed the 'Modeling Table MT01' and the 'Marker Sketch Design DVD Vol.2.'

Company HQ moved to Edogawa-ku, Rinkai-cho, Tokyo.

Published 'The Basic Techniques of Clay Modeling' and the 'Marker Sketch Pad A4 Standard.'



'Industrial Clay (Vacuum Packed)' and 'NS Clay Tape' were released



Company HQ moved to Minato-ku, Toranomon, Tokyo.

Too Group's 100th Anniversary. Establishment of Too (Shanghai) Corporation.



Office relocated to Shibuya-ku, Sarugakucho, Tokyo.

North America

Academy of Art University
Art Center College of Design

Canoo

College for Creative Studies

Daimler AG

Ford Motor Company

General Motors Company

Humber College

Lucid Motors

Mazda North American Operations

Nikola Motor Company

Nissan North America Inc.

Nuro

PACCAR Inc.

Rivian Roush

Singer Vehicle Design

SIVAX North America, Inc.

Stellantis N.V.

SUBARU Research & Development, Inc.

Tesla, Inc.

Toyota Calty Design Research Incorporated

Volvo Group North America, LLC

South America

Fiat Automoveis Brasil

iCON Design

Instituto Maua de Tecnologia Mercedes-Benz do Brasil Ltda.

Moto Honda da Amazonia Ltda.

Peugeot Citroen do Brasil Automoveis Ltda.

Renault do Brasil

Volkswagen do Brasil Ltda.

Europe

AB Volvo

Aston Martin Lagonda Limited

AUDI AG

Bayerische Motoren Werke (BMW) AG

Bentley Motors Limited Borgward Group GmbH

Citroen

DAF Trucks N.V.

Daimler AG

Fiat S.p.A

Ford-Werke GmbH Honda R&D Europe S.r.l.

Jaquar Land Rover Automotive PLC

Kia Europe

Group Lotus PLC

Mazda Motor Europe GmbH

Mitsubishi Motor R&D Europe GmbH

Opel Automobile GmbH

Peugeot S.A.

Porsche AG

Renault S.A.

SEAT S.A.

Skoda Auto a.s.

Suzuki Italia S.p.A.

Toyota Europe Design Development

VOLKE Entwicklungsring SE

Volkswagen Group

Russia

AVTOVAZ

India

Bajaj Auto Ltd.

DYPDC Center for Automotive

Hero MotoCorp Ltd.

Honda R&D India Pvt. Ltd.

Indian Institute of Technology

Mahindra & Mahindra Ltd.

Maruti Suzuki India Ltd.

MIT Institute of Design National Institute of Design

Ola Electric Mobility

Renault Nissan Automotive India Pvt. Ltd.

River Mobility Private Limited

Royal Enfield India

Studio34 Designart (P) Ltd.

TATA Motors Ltd.

TVS Motor Company University of Petroleum & Energy Studies

Japan

ARRK Corporation

Daihatsu Motor Co., Ltd.

Honda Motor Co., Ltd.

Isuzu Motors Limited

Mazda Motor Corporation

Mitsubishi Motors Corporation

Nichinan Corporation

Nissan Motor Co., Ltd.

Phiaro Corporation Inc.

Shonan Design Inc.

SIVAX Inc.

Subaru Corporation

Suzuki Motor Corporation Tokyo R&D Co., Ltd.

Toyota Motor Corporation Yamaha Motor Co., Ltd.

Southeast Asia

ARRK Corporation Ltd. (Thailand)

Autofreeform Co., Ltd.

Bufori Motor Car Company (M) Sdn. Bhd.

Honda R&D Asia Pacific Co., Ltd.

Honda R&D Southeast Asia Co., Ltd.

Isuzu Technical Center of Asia Co., Ltd. Kawasaki Motors Enterprise Co., Ltd. (Thailand)

National University of Singapore

Naza Group

Nissan Motor Asia Pacific Co., Ltd. Oriental Nichinan Design Engineering Sdn. Bhd.

Perodua Manufacturing Sdn Bhd.

PT Isuzu Astra Motor Indonesia

SIVAX Ltd. (Thailand)

Thai Rung Union Car Public Co., Ltd. Toyota Daihatsu Engineering & Manufacturing Co., Ltd.

Yamaha Motor Asian Center Co., Ltd.

Oceania

Breville Pty Ltd.

Ford Motor Company of Australia Pty Ltd.

Massey University
Monash University

Toyota Motor Corporation Australia Ltd.

China

BAIC Motor Corporation Ltd.

BYD Co.,Ltd.

Changan Automobile Co.,Ltd.

Changan-Mazda Automotive Co., Ltd. Chery Automobile Co., Ltd.

China FAW Group Co., Ltd.

DongFeng Motor Corporation.

GAC Honda Automobile Co., Ltd.

GAC HONGA AUTOMOBILE CO., LIC

Great Wall Motor Company Limited.

Guangzhou Automobile Group Co.,Ltd. Guangzhou Xiaopeng Motors Technology Company Ltd.

The Hong Kong Polytechnic University

IAT Automobile Technology Co., Ltd. Ideal International Holding Group

JAC Motors.

NIO LIMITED

Pan Asia Technical Automotive Center Co., Ltd.

SAIC-GM-Wuling Automobile Co., Ltd.

SAIC Motor Corporation Ltd.

Sichuan Yema Automobile Co., Ltd. Zhejiang Geely Holding Group

Taiwan

China Motor Corporation

Chung Yuan Christian University

Foxtron Vehicle Technologies Co., Ltd.

KUOZUI Motors, Ltd. Ming Chi University of Technology

Yamaha Motor R&D Taiwan Co., Ltd.

Korea
GM Korea Co., Ltd.

Hyundai Motor Company

Kia Corporation
SsangYong Motor Company

Event

Automotive Designers' Night, JAPAN









Launched to coincide with the 1985 Tokyo Motor Show, Automotive Designers Night annually gathers car designers from across the globe to celebrate modern automotive design.

Automotive Designers' Night, FRANKFURT









Tokyo Motor Show Kids' Workshop (Exhibition)









Instructed by professional clay modelers, TOOLS INT'L hosts clay modeling workshops to introduce children to the joy of clay modeling.

C&T Meeting









TOOLS INT'L Corp., with Car Styling Magazine, hosts our annual C&T Award ceremony in honor of distinguished Japanese automotive design.



Based on a core drawing, create a foam armature for the clay model. Make the core approximately 10mm smaller than the actual core drawing. If anticipating large design changes, create a smaller core.

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After warming the clay, apply the clay to the core. The first layer of clay should be thin in order to adhere to the core. Before the temperature of the first layer comes to room temperature, apply more layers of clay to complete the core. When applying clay layers, it is important to avoid creating air pockets.



Using a template, former gauge, surface gauge, height gauge etc. to improve accuracy. Use Clay Modeling Tools to shave the clay surface. It is important to check clay surface with Clay Modeling Film and Modeling Check Foil. Then repeat application and shaving process.



Fitting is the process to make clay models look like realistic cars, confirm final design and style/coloring. After finishing the clay surface, use Clay Modeling Film for fitting.

Clay Modeling Film

Modeling Check Foil

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Styrofoam ▶Page 49

This is hard foam used for foam armatures. When applying clay, use a box cutter to make the surface of the core abrasive so clay can adhere easily.



This soap is used to remove oil stains and epoxy paint. Good to use after using clay. Refill packs are also available.



Profoam Cutter Profoam Cutter L



Profoam Cutter: Max cutting height: 155mm Max cutting width: 180mm

Max cutting height: 200mm Max cutting width: 300mm



Clay Warmer PU-01

"Industrial Clay NS Series" is absolutely sulfur free, and can be incinerated after use. It is an environmentally friendly new generation clay.

Cutting machine using nichrome wire for styrene foam materials such as Styrofoam.

Profoam Cutter L:

Hand Gloves ▶Page 51

These gloves have excellent fit and are recommended for applying clay. Feels like applying clay with bare hands. The palm of the gloves have thin rubber to protect from heat and friction. The back of the gloves have thin nylon fiber to keep hands dry and clean.



Recommended for use at design schools or small design firms. Temperature settings for either 45°C or 60°C. It is a portable size, and with its capacity, can hold 15 billets at once. This capacity is ideal for making scale models.

Cutter for Clay Modeling



It can cut Styrofoam and polyurethane foam easily

Hand-Wash Brush ▶Page 50



This brush can be used for removing clay shavings from fingernails and fingertips easily.

Former Gauge



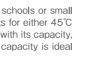
Metal wire gauge used for replicating sectional shapes.

Clay Modeling Tools ▶Paae 16 Chokkaki Wire Use for rough scraping. Use for shaping concaves and fine details. [Rake]





Use for rough scraping.



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▶Page 14







Modeling Tape

Metal Spatula

Use to remove clay

and surface plates.



Highly recommended for plotting key line drawings or shape adjustment on clay models.



Whetstone

during clay modeling.



Thin aluminum foil used to check clay surfaces

Clay Modeling Film is stretchable enough to

apply to three dimensional curved surfaces.

Main usage: Checking clay surface shapes of

exteriors & interiors/checking highlights/fitting.

For safety reasons, Clay Modeling Tools are unsharpened. Blades needto be sharpened before use. Please sharpen blades with whetstones before use.



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Industrial Clay

Our industrial clay is a synthetic clay used for designing 3D modeling products such as automobiles, motorcycles and consumer electronics. Our clay has minimal expansion/shrinkage and retains its hardness at room temperature (around 25°C). Our clay hardens at room temperature and remains hard unless heated. Special ovens are used to warm the clay into a consistent and malleable texture at 60°C. As many times as necessary, our industrial clay can be reapplied or shaved in order to sculpt your model. TOOLS INT'L Industrial Clay is completely sulfur free and recyclable with our Clay Shaper.

NS60L

The NS series clay is 100% sulfur free! Unlike traditional industrial clays which use sulfur as filler, we developed Japan's first sulfur free industrial clay. Our NS series weighs ½ lighter than sulfur-based clay. The NS60 series has a working temperature of 60°C.

*Please DO NOT mix different types of clay due to the fact that the quality will be affected.







Product Name	Working Temp	*Hardness (25°C)	Specific Gravity	Odor	Billet Size	Mass	Unit (per box)
NS60L	60°C	82	1.00	Slightly	55 <i>¢</i> ×275mm	Approx 620g	15

^{*}Measurement by ASKER Durometer Type C which is based on JIS K 7312. *The color of the clay here might not be the same as actual color due to printing.

Why We Developed Sulfur Free Clay

Industrial Clay is wax and oil based synthetic clay originally formulated for industrial and automotive design. With industrial-type clay, you can create large-scale models that have a beautiful, smooth and slick finish.

Unlike hobby clays, industrial clay remains hard at room temperature, and softens to become workable when heated to 60°C, which is ideal for crafting models.

We, TOOLS INT'L Corp., create custom clays at request. Our clays are completely customizable to softness/hardness, elongation, stickiness, color and texture. Our high performing clays are designed to allow the modeler to reach 0.1mm accuracy with a consistent finish.

In addition to uniform quality, we have also developed our clays to be an eco-friendly alternative to traditional sulfur-based clays. In the automotive industry, consumers and companies are holding suppliers responsible for their environmental footprints. We at TOOLS INT'L Corp. also care about our environmental impact and our researchers have considered raw materials all over again to develop completely sulfur free, recyclable clays that are now widely used domestically and internationally.

Properties of Sulfur Free Clay

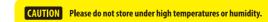
Consideration for the Environment

Our clay is developed to be completely sulfur-free, therefore it can be safely incinerated without using smoke extractors. Our NS series can be safely and completely incinerated, making it compatible with landfill-free initiatives even on an industrial scale.

30% lighter than sulfur-based clays (specific gravity of NS Series= 0.97), choosing TOOLS INT'L Corp. clays can help reduce CO2 impacts from transportation.

• Industrial Clay in Model Studios

We have formulated our clay to be lightweight so that it will be remarkably easy to handle, making a safer studio environment for modelers working with large-scale models. Studios without smoke extractors must consider security and confidentiality regarding the disposal of clay models. However, our clay can be safely incinerated so that models can be disposed of discreetly with minimal environmental impacts. Lastly, compared to sulfur-based clays, our clays are designed to have minimal odor and improved workability.









NS60 Series Color variations

Unlike other clays used for automotive model making, our industrial clay is absolutely sulfur-free!

Our NS series is next generation eco-friendly clay.

Our Clay

- Easily disposable and free of harmful materials
- Does not experience shrinkage
- · Crack-free
- Designed specifically to be used with our Clay Modeling Film
- Excellent texture and plasticity for model making
- Smooth application when heated
- Designed for use with hands and machinery

CAUTION Please do not store under high temperatures or humidity.







Instructions for Use

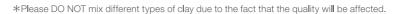
- Heating temperature is 60°C.
- Heating time is 3 hours using our clay oven.
- Does not require a heat gun to heat the clay model surface for clay applica tion.
- ★ DO NOT heat our industrial clay over the recommended temperature as irreversible changes to the physical properties of the clay may occur.
- * Please DO NOT mix different types of clay due to the fact that the quality will be affected.
- * Measurement by ASKER Durometer Type C which is based on JIS K 7312.
- * The color of the clay here might not be the same as actual color due to printing.



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NS58RC

Industrial Clay NS58RC does not contain any sulfur as a filler (absolutely sulfur free clay). Industrial Clay NS58RC is developed for improved milling. Tapes adhere well to this clay.









FAQ for Industrial Clay



1. Where can I purchase clay?

Please see the last page of this catalog for a list of our overseas distributors. If there is a distributor in your country, please contact them directly. If you are in a country without a distributor, please contact TOOLS INT'L Corp. directly.

2 How should clay be stored?

Storage Conditions:

- Deterioration begins once the box is opened.
- Please keep boxes sealed when not in use.
- Please do not store under high temperatures, humidity and avoid direct sunlight.
- The appropriate temperature is under 25°C for storage.
- Once the clay is removed from the box, we recommend that clay should be used as soon as possible to avoid deterioration.

4. What is the warming temperature for clay?

- For the NS60 Series, the oil and wax components are designed to be warmed up to 60°C. At this designated temperature, our clays soften for proper use. Heating our clays above or below the specified temperatures can result in changes to the physical properties of our clay, which is not ideal for use.
- Proper warming time is 3 hours when using controlled temperatures.
- Do not attempt to warm these clays with less time and higher temperature.

5. Is the clay too hot to handle with bare hands?

• Low temperature burns may occur on skin if applying clay with bare hands. We recommend using latex gloves, or similar types of gloves.

Is it possible to mix different types of clays together? (Even types with the same working temperature?)

• Each type (even types with the same working temperature) has different properties. If mixing different clays for use, color inconsistency, cracking, peeling etc. may occur after molding. We do not recommend mixing our clays.

7. Are there any precautions to take when reapplying clay to models?

• It is important that clay is adhered well. In order to do so, you should be careful to prevent air bubbles between layers. Any air bubbles may cause cracks in the model. If possible, we recommend using a heat gun to warm the surface of your clay model before applying more clay.

8. Is it possible to recycle (reuse) clay?

• Yes, our clay can be recycled and reused after kneading and de-airing through our clay shaper. Please note that mixing clay with other contaminants will compromise the quality of the clay.

Compared to new clay, recycled clay has the following characteristics and features:

- Physically, recycled clay becomes harder, heavier, drier and loses some of its tackiness.
- Recycled clay may become darker after the recycling process.
- Clay can be recycled a few times at most; however, we do not have a standard measurement of times that our clay can be recycled.

9. After finishing the clay model, how should it be painted?

• Our clay is not designed to be directly painted on. Directly painting the model is not recommended because solvents in paint can cause the clay surface to melt. However, our "Clay Modeling Film" is crafted specifically to be used to color industrial clay models.

10. Can clay be disposed of by incineration?

- Our clay does not contain any sulfur. Thus, it is possible to dispose of our clay by incineration.
- *It is hazardous to dispose of any clay containing sulfur (even small amounts) by incineration. We strongly advise against doing so.

Can microwave ovens be used to warm up clay?

• Do not use microwave ovens to heat clay! Our clays are designed to be evenly heated at the exact temperature of 60°C, which can't be achieved with microwaves. Microwaves heat from the core of the clay, which as it warms, expands in volume. As a result, if the clay's core rapidly warms while the surface remains hard, an explosion may occur.

Clay Modeling Equipment

Our equipment is built for reliability. For reliable modeling equipment, please inquire with TOOLS INT'L Corp.

TOOLS INT'L Corp. takes steps to explore new materials used for product design. After years of experience working with R&D designers and modelers, we respond to our customers' needs and provide dependable products for the industry.



Clay Oven DOAS-60L This oven can warm up to 60 billets of clay at once. The temperature set by the automated temperature controls safely warms the clay

within the range of $\pm 1^{\circ}$ C. Our oven warms the

core of the clay for consistent softness. The door

of the oven is equipped with a reinforced pane of

glass for easy visibility. Easy to clean, stainless

steel trays are rust free. The oven also features

safety precautions to prevent leaks, thermal

Outer dimension: W800×H1530×D650mm

relay, overheating and falling trays.

Preset temperature: 40°C~70°C

Model: DOAS-60L

Number of trays: 4

Mass: 135kg

Max capacity: 60 billets

Clay Ovens & Clay Warmers

The main function of the clay ovens and warmers is to warm up the clay and maintain a consistent temperature for ready-to-use workable clay. The equipment is used by many automakers around the world to maintain the consistency of clay in a controlled environment.



Warmed up clay by Clay Oven & Clay Warmer



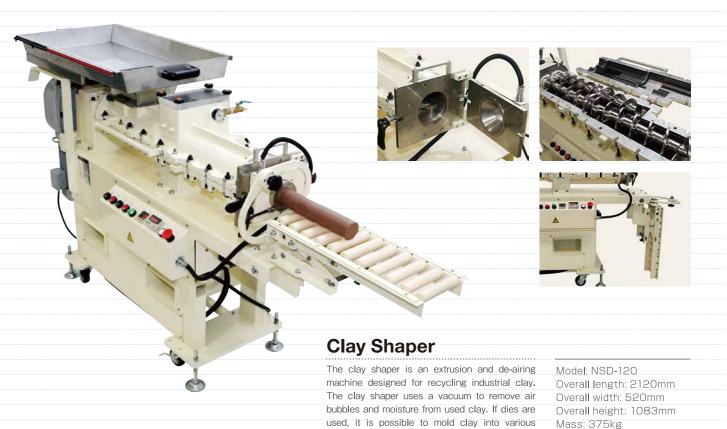


Clay Warmer PU-01

This warmer is made specifically for industrial clay. The temperature settings are set for either 45°C or 60°C with a switch. Its portable size can hold up to 15 billets at once. This capacity is ideal for making scale models. This warmer is convenient, lightweight and space saving.

Model: PU-01 Max capacity: 15 billets Number of trays: 3 Outer dimension: W450×H450×D410mm

Preset temperature: 45°C/60°C with switch



shapes for point modeling.

Machine capacity: 80kg or 120kg/hour It depends on the type of clays.



Mylar Film with 100mm grid section

This milky-white film with 100mm grid section is used for tape rendering and dimension rendering using 217J Tape or IC Free Tape. It is possible to mark the surface of this film with pencil.



1 facet/sheet

Thickness: 0.14mm Size: 1700mm×5m (100mm Grid 17×50 measure)





Petite Clay Tools

[Petite Clay Tools] Made in Korea

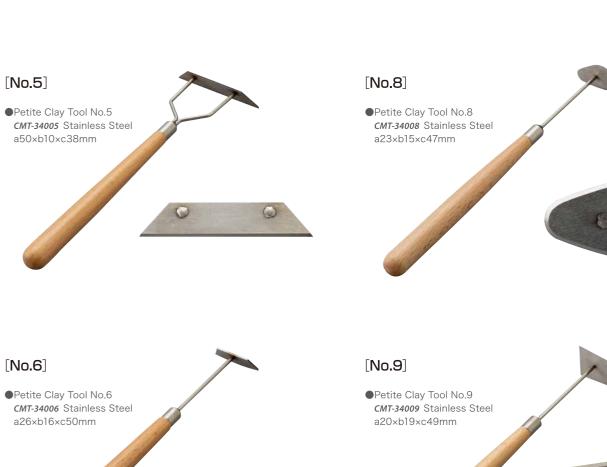
Custom-made tools for clay modeling. Designed to sculpt small-scale models and fine interior parts. These tools are available in 10 styles for versatile sculpting.



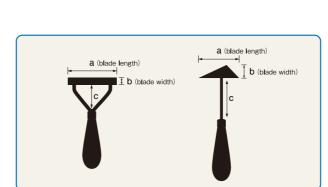














CAUTION Clay Modeling Tool

Each tool is delivered not fully whetted with the intention that customers will whet the blade to their preference. It is also a safety precaution. If the blade arrives with deficiency, we will offer a replacement.

[HG Chokkaki]

A higher-grade version of our Chokkaki tool used by modelers to scrape clay into flat or slightly curved surfaces. Made with Japanese 'aogami', blue steel. The HG Chokkaki is made of harder and more durable steel compared to our other series. Crafted in Tsubame-Sanjo, Japan—one of the world's leading metal industry towns.



[HG Triangle Rake]

A higher-grade version of our Triangle Rake used for fine, intricate modeling. Made with Japanese 'aogami', blue steel. The HG Triangle Rake is made of harder and more durable steel compared to our other series. Crafted in Tsubame-Sanjo, Japan-one of the world's leading metal industry towns.



SK Series

[SK Chokkaki]

The Chokkaki is a standard tool used by modelers to scrape clay into flat or slightly curved surfaces. The Chokkaki's saw-blade is designed to achieve smooth surfaces with low resistance. Crafted in Tsubame-Sanjo, Japan—one of the world's leading metal industry towns.



[SK Triangle Rake]

Triangle Rakes are used for fine, intricate modeling. Along with the Chokkaki, the Triangle Rake is a staple for car modeling. Crafted in Tsubame-Sanjo, Japan—one of the world's leading metal industry towns.



[Finisher]

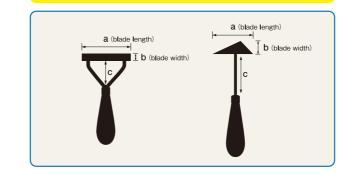
Finisher as the name suggests is used in finalizing shapes prior to using a steel. They vary in shape and size depending on the particular task that needs to be done. Used to finish off clay surface after using Rake.





CAUTION Clay Modeling Tool

Each tool is delivered not fully whetted with the intention that customers will whet the blade to their preference. It is also a safety precaution. If the blade arrives with deficiency, we will offer a replacement.



Clay Modeling Tools **II** Series

[ChokkakiII] Made in China

The Chokkaki is for shaping clay into flat or slightly curved surfaces. Various sizes are used for rough scraping. The Chokkaki's saw-blade is designed to have low resistance when scraping, so surfaces can be levelled with ease.





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Clay Modeling Tools **II** Series



[RakeⅢ] Made in China

Rakes are tools for shaping the clay as you scrape it off. Primarily used for rough scraping.



[Trapezoid RakeIII] Made in China

After shaping with the Chokkaki, use the Trapezoid Rake III to finish a perfectly smooth surface.



[WireⅢ] Made in China

Wire is used for scraping concave surfaces or making detailed parts. Available in various shapes and sizes.



[HoggerIII] Made in China

Used for digging and scooping deep inner curves.



Triangle Rakes are used for fine, intricate modeling on areas that are difficult to shape with the Chokkaki. Triangle Rakes Fine Tip CMT-07011 a46xb14xc85mm

[Double Sided RakeIII] Made in China

Double Sided Rake III JAGGED BLADE

CMT-08011

a76×b35×c47mm



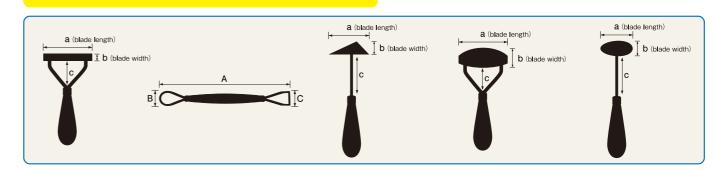
●Triangle RakeII Small

a38×b19×c80mm

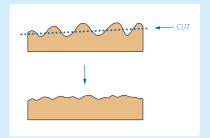
CMT-07012

CAUTION Clay Modeling Tool

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Basic shaving process







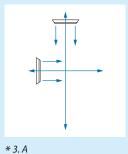
* 2. Use the saw edged end.

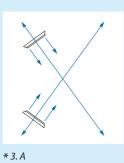
1. Shaving.

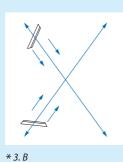
With the use of the blade face, scrape the large rugged surface of the clay to achieve an overall smoothness.

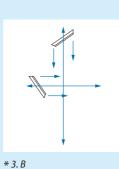
2. Rough shaving.

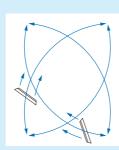
With the use of the saw edged end of the rake the basic shape should be formed. It is advisable to move the rake in random directions in order to achieve the best result.











* 3. C

3. Steps for rough shaving.

A: A large area can be shaved off by setting the rake at a 90° angle against the pulling direction. This is favorable during the early stage of surface treatment.

B: A steady sway of the rake can be achieved by inclining the rake to tilt against the direction of the pull. At the same time a more increased slanted shave becomes possible.

C: More steady shaving can be achieved by pulling the rake to draw a curved line and inclining it into a tilt.
This will, however, decrease the amount being shaved, but the condition of the surface will improve.

4. After rough shaving the surface, begin the mid-finish process.

The use of a finisher will produce a much smoother surface. At this stage the surface should be prepped for actual modeling. To mid-finish the model, lightly shave the surface with a well sharpened blade.

Effective ways to handle the tool during this process:

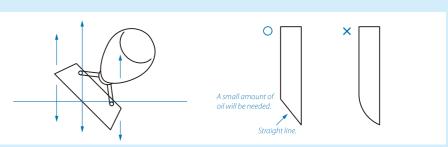
A: Grip the tool gently and lightly shave the surface.

B: Maneuver the tools in random directions.

NB: The surface of the clay will end up with wavy lines if the surface finishing process is carried out too swiftly while the surface is still rough.

Methods for sharpening CLAY MODELING TOOLS





* Prepare sandpaper beforehand.

1. Rough Sharpening

Sharpen the blade using #240 grit (very fine) sandpaper, handling the blade so that it is positioned in a 45° angle. Sharpen the blade by dragging it in this position up and down.

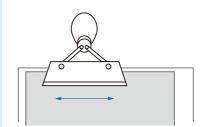
2. Medium Sharpening

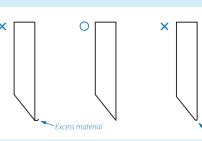
Next, sharpen the blade using #600 grit (super fine) sandpaper. With oil, sharpen in the same 45° angle as above.

3. Finishing Sharpening

Using oil, finish the blade with #1000 grit (ultra fine) sandpaper. To be considered properly sharpened, it is necessary to finish the blade using #1000 grit sandpaper.







4. Back-end Sharpening

If using #600 grit sandpaper, sharpen

- ${\it *Without\, sharpening\, the\, backside\, of\, the\, blade, the\, blade is\, unfinished\, and\, will\, not\, cut\, with\, optimum\, precision.}$
- * Sharpening the backside more than twice will result in an R—making the edge blunt.





5. Edge Sharpening

Rubbing the edge lightly just once against the surface of superfine sandpaper will result in a mirror-like finish.

This is the most recommended finish for blades.

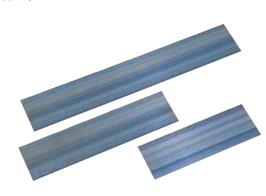
Testing the sharpness of the blade—as pictured on the left, can be done by placing a thumb against the sharp edge of the blade and flicking towards oneself.

* Only flick upwards, dragging the finger sideways will result in injuries.

Steel

[Steel]

Steel is an essential tool for the final finish of your clay model. These flexible steel sheets are designed to fit the curvature of your clay surface to achieve a smooth and flawless finish. Sizes are available from 150mm to 300mm.



●Steel	#1501	CMT-17001	t0.1mm	a150×b50mm
●Steel	#1515	CMT-17002	t0.15mm	a150×b50mm
●Steel	#1525	CMT-17003	t0.25mm	a150×b50mm
●Steel	#1504	CMT-17004	t0.4mm	a150×b50mm
●Steel	#2015	CMT-18001	t0.15mm	a200×b50mm
●Steel	#2025	CMT-18002	t0.25mm	a200×b50mm
●Steel	#2004	CMT-18003	t0.4mm	a200×b50mm
●Steel	#3004	CMT-19001	t0.4mm	a300×b50mn

*t:thickness

[Steel Band]

Steel Bands stick to the clay surface and are used as supplementary guides for templates and gauges.



●Steel Band *CMT-20001* t0.15mm 12.7mm×10m *t:thickness





The blade tip is finished at a 90° angle. The saw blade edge creates rough surfaces, which scrapes efficiently and quickly. 90° angle. The shape and thickness can be adjusted to your needs.

QSK 5 Steel

[QSK 5 Steel]

Our high quality QSK 5 Steel plates can be used for multiple purposes. QSK 5 Steel can be cut into small pieces and can be made into ellipse shapes or any other custom shapes. QSK 5 can be used as guidelines on 1/1 full-scale clay models due to its long length and hard quality. Various sizes are available. QSK 5 steel is a special steel strip (SK Steel) that is processed via quenching.

*Delivery time takes approximately 1 month as this product is a made-to-order product.

102mm Width Series

●t0.15mm	a1000×b102mm
●t0.15mm	a600×b102mm

- ●t0.2mm a1000×b102mm ●t0.2mm a600×b102mm
- ●t0.3mm a1000×b102mm ●t0.3mm a600×b102mm
- ●t0.4mm a1000×b102mm ●t0.4mm a600×b102mm
- ●t0.5mm a1000×b102mm ●t0.5mm a600×b102mm
- ●t0.6mm a1000×b102mm ●t0.6mm a600×b102mm
- ●t0.7mm a1000×b102mm ●t0.7mm a600×b102mm
- ●t0.7mm a600×b102mm ●t0.8mm a1000×b102mm
- ●t0.8mm a600×b102mm ●t0.9mm a1000×b102mm
- ●t0.9mm a600×b102mm ●t1.0mm a1000×b102mm

a600×b102mm

t1.0mm
*t:thickness

75mm Width Series

- ●t0.15mm a1000×b75mm ●t0.15mm a600×b75mm ●t0.3mm a1000×b75mm
- ●t0.3mm a600×b75mm ●t0.5mm a1000×b75mm
- ●t0.5mm a600×b75mm

*t:thickness









Mendasu

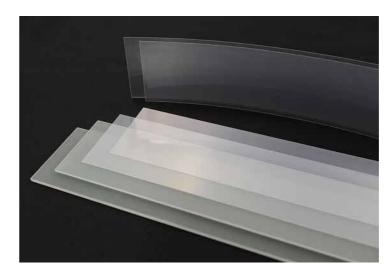
[Mendasu] Laminated Glass Resin material

Mendasu is used for rough surface scraping, Unlike carbon and steel, the Mendasu has adequate flexibility and hardness, for easy scraping even on delicate surfaces.

%There may be errors of \pm 10% thickness against the notation.

*Custome sizes are available.

Please feel free to contact us for the minimum order quantity, sizes and price.



- ●t0.2mm 1,000×1,000mm
- ●t0.3mm 1,000×1,000mm
- ●t0.4mm 1,000×1,000mm
- ●t0.5mm 1,000×1,000mm
- ●t0.6mm 1,000×1,000mm ●t0.8mm 1,000×1,000mm
- •t1.0mm 1,000×1,000mm
- ●t1.2mm 1,000×1,000mm
- ●t1.6mm 1,000×1,000mm
- ●t2.0mm 1,000×1,000mm
- ●t3.0mm 1,000×1,000mm ●t4.0mm 1,000×1,000mm
- 1,000

*t:thickness



SP Mentori

The SP Mentori extracts scraped clay, which transfers through the outward shaped holes designed to avoid clogging. The SP Mentori is finished with a special hardener and is rust resistant. Made in Japan.

















●SP Mentori Coarse Mesh 100mm *MTSP-030003* 100mm×34mm×14mm 28g



●SP Mentori Coarse Mesh 200mm MTSP-030002 200mm×34mm×10mm 53g



The SP Mentori

Original Tools

TOOLS INT'L Corp

Made in Japan Quality

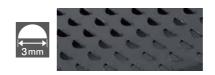
Mentori

Scraped debris extracts smoothly through Mentori meshes, so the Mentori is not easily clogged.

Processed with a special hardening finish and rust resistance. Made in Japan.















●Mentori Pocket 200 MT-200 Coarse Mesh 200mm×35mm×10mm 50g





























Surform Tools

Surform Tools are used for tidying up planes and surface edges. These are planes for scraping off clay, used in the stage before steel sheets. They are not suitable for large surfaces. Their grater-like blades come in many shapes and their clips also differ accordingly.













Template Resin Board

Special Resin Board to make templates for line drawings of models. Also usable for scraping clay surfaces.



■t0.5mm 650×725mm ■t1.0mm 650×725mm

*t:thickness





Diamond Whetstone [iWood series]

This whetstone is used for rough whetting tools or steel. Since it has a thin layer of diamond on its surface, tools can be whetted easily. When it becomes difficult to whet, please inquire about replacement whetstones.









■#300 Coarse 205×70×8mm

■#800 Fine 205×70×8mm

鮮やかに研磨



Diamond Whetstone [DiaStar series]

High quality Whetstone.

■#150 Extra Coarse

205×70×8mm

Since particulate Diamonds are kneaded into Whetstone, it is long lasting to use. As this Whetstone is very fine, you can whet the tools to use.



■#1000 Fine 205×70×8mm

■#6000 Extra Fine 205×70×8mm

=#1000/#6000 Reversible 205×70×8mm

STABA Former Gauge

Former Gauge is used for replicating sectional shapes, such as for bodies and bumpers. They come in handy when you want to copy the form of the left side for use on the right side.









CLAY MODELING FILM

TOOLS INT'L Corp., developed our original Clay Modeling Film specially designed for clay models. Crafted to conform to complex interior and exterior surfaces and check highlights.

Features of Clay Modeling Film

Clay Modeling Film is developed to be used for modeling and dressing. Specifically designed for industrial clay models, Clay Modeling Film is directly applied to the clay surface and used to check highlights on the surface of the model. Using our film allows modelers to create models that closely resemble the final product. Our modeling film is a better alternative to paint, as it can be easily applied directly to the model and can be removed with ease. Clay modeling film is notable for its high tolerance to stretch. Our film can be easily and beautifully stretched when applied to the model. This ensures that even detailed parts of the model can be checked and quickly modified. Additionally, because we use a water-based glue for our film, our films are easily adjustable.

*As for Clear Clay Modeling Film, unlike our colored Clay Modeling Films, paint (organic solvent) should be applied beforehand.

Use of Clay Modeling Film

- · For modeling and fitting on industrial clay
- · For modeling and fitting on resin models
- · For other applicable modeling and fitting



Example for use of Clay Modeling Film Clear *Yellow paint applied on Clear film



Example for use of Clay Modeling Film **Red**



Example for use of Clay Modeling Film Silver



Example for use of Clay Modeling Film Black-M

■ Clay Modeling Film Clear

This is our clear transparent film. Paint the surface of the film with lacquer paint. Applying the paint causes the film to soften, then the film is ready to be soaked in water. Gently peel off the paper backing and apply the film to the surface of the clay

■ Colored Film

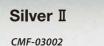
Colored film is frequently used in production. Painting the surface of this film is not necessary, as it is ready to be used as is. After soaking the film in water and peeling off the paper backing, apply the film to the clay surface.

If the surface of the clay is sprayed with water beforehand, the film can be easily applied and adjusted. You can gently remove air bubbles and excess moisture with a rubber spatula or squeegee. For a beautiful finish, wipe excess moisture away with a paper cloth.

CAUTION Please do not store under high temperatures or humidity.

Clear

CMF-01001 W930mm×L30m Roll



W930mm×L30m Roll



Red I

CMF-05002 W930mm×L20m Roll



White Metallic II

CMF-07002 W930mm×L20m Roll

Matte Black I

CMF-13002 W930mm×L20m Roll



Solid White II

CMF-22002 W930mm×L20m Roll

Flare Red I

CMF-24002 W930mm×L20m Roll



Nova Gray I

CMF-27002 W930mm×L20m Roll

Machine Silver II

CMF-17002 W930mm×L20m Roll

Champagne Silver I

CMF-28002 W930mm×L20m Roll

*Swatched colors may appear different from the actual product.

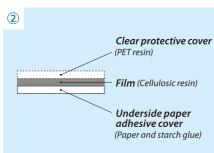
How to use Clay Modeling Film

■ How to set up the colour type

Peel off the clear protective film (clear polyethylene terephthalate (PET) resin) from the surface of the film. Then soak the entire piece of film in tepid water. The paper backing of the film will be loosened enough to remove. After gently removing the paper backing, you should be left with clean, bare film. To apply the film to the clay, please first dampen the surface of the clay by spraying the model with water. This helps to make application and adjustment easier to achieve a smooth, finished surface. Scrape the surface of the film with a rubber spatula or squeegee to remove water and air bubbles from beneath the film. Finally, wipe away excess water with a cloth.



Cut the modeling film slightly larger than the clay model.



Our Clay Modeling Film has a clear protective film, the colored film itself, and the paper backing. Both the protective film and the paper backing must be removed before application.



The protective film (clear PET resin) is first removed before use.



Soak the remaining colored film with the colored-side down in a tray of tepid water.



Having the paper face up makes it easy to confirm that the film is thoroughly soaked.



Completely submerge the film in water, applying gentle pressure to keep it beneath the surface of the water.



After soaking for a few minutes, the paper backing should peel off effortlessly from the film.









Lifting along the edges of the film, turn the film over.



Cut excess film from the edges carefully while the model is still moist. When the film dries, it adheres to the surface of the clay with a paste. Once the film has dried, it becomes difficult to cut.







Moisten the surface of the clay by wetting it with water, then carefully apply the film to the model.



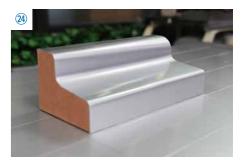




Adjust the film with a spatula to release water and air bubbles that appear on the surface, being careful to smooth corners. Finish by wiping away excess water with a cloth.







Finely finish the edges of the film with a spatula.



FAQ for Clay Modeling Film

1. Is Clay Modeling Film adhesive?

• Yes, our films are backed with a thin layer of water-based

2. What is Clay Modeling Film used for?

• Our film is specifically used for checking highlights on clay models, qualification studies and presentation models.

What is the shelf life of 3. Clay Modeling Film?

• If stored under appropriate conditions, our clay has a shelf life of over 1 year.

How should Clay Modeling Film 4. be stored?

• Our film should be stored in cool places with low humidity, out of direct sunlight. Long-term exposure to humidity and direct sunlight may result in shrinkage and discoloration.

5. Is a "trial" necessary?

• No, but we recommend doing so before the actual fitting. That way, you can get a better feel for how our product is

What tools are necessary for 6. Clay Modeling Films?

• The basic tools you need are cutting tools, such as scissors, to cut the film.

Additionally, you need a receptacle or a vat to soak the film in, a water sprayer, a rubber or plastic spatula to remove water and air bubbles beneath the film, and towels or paper towels to wipe the surface.

Does "Clear" Clay Modeling Film need to be painted prior to use?

• Yes. Please be sure to apply lacquer paint on the surface of the film. Without pre-painting, the "Clear" film does not stretch at all. It becomes elastic with the application of an organic solvent.

How long should the film be 8 soaked in water?

• The soaking time of film will vary depending on the size of the film and the environment. The film is ready to be used when the paper backing can smoothly be removed from the film.

9. Should the water used for soaking the film be changed often?

• Yes! Using the same water to soak film multiple times may cause discoloration on the film, as the glue left in the water can adhere to the surface. Therefore, we recommend changing the water often.

What is the scale printed on 10 the underside of the paper backing? How is it used?

- Thin Line: 100mm plotting (50mm scale mark)
- Thick Line: 500mm plotting
- The scale mark is helpful for cutting the film. In addition, it is easy to see and adjust the direction of the film before adhering the film to the clay surface.

Is the water used for soaking the film harmful?

• No! It is only water mixed with starch glue. The water can be disposed of normally.

12. Can Clay Modeling Film be reused?

• We do not recommend doing so. After initial use of our film, most of the adhesive is lost, so it is not ideal for multiple uses.

How to Use Clay Modeling Film

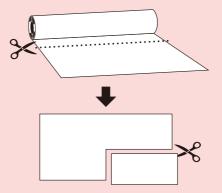
Follow the instruction manual for correct usage of Clay Modeling Film

Only cut the film immediately before use.

Once film is cut, air pockets can occur between the film and clear protective layer, which can result in discoloration and deformation.

Cut the film in straight lines.

Cut the film in a straight line along the entire width of the role, then cut into necessary sizes. This is to prevent air from entering the film.



Remove the clear protective layer immediately after cutting the film.

Air can easily enter between the film and clear protective layer, which may cause discoloration and deformation.

Roll the remaining unused sheet of film tightly and securely after use.

To avoid air entering the film, we recommend rolling the remaining film back tightly and firmly, securing with crepe tape on either end of the film. Then wrap in a plastic bag and store it back in the box.



Clay modeling Film is considered to be a delicate product. Your understanding and cooperation on proper usage is appreciated.

Components of Clay Modeling Film

1: Clay Modeling Film is composed of three layers.



* When disposing of above materials, please accord to relevant laws of local governments as required.

- 2: The materials used for packaging:
- a. Cardboard and inner tube----paper
- b. Pipe Holder----Plastic (PP)
- * For handling of used water when peeling film, this water can be drained directly into sewers.





CLAY MODELING FILM Special order products

We will gladly accept orders for custom colors, please inquire with your sales representative for more information.

Modeling Check Foil

Aluminum Foil for Highlight Checking & Model Mock-up

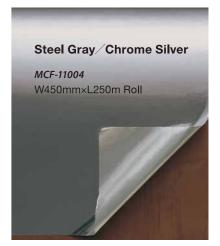
Our foil is used to check clay model surfaces. They can also be used to fit simple parts.





















*Swatched colors may appear different from the actual product.

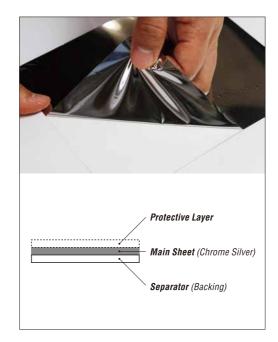
Modeling Sheet Chrome Silver

Used for modeling chrome parts such as door handles, headlight housing, and console parts.

Modeling Sheet can be stretched ultra-thin and maintain its high gloss and chrome quality.



●5M *MSC-14001* W540mm×L5m Roll





Tint Film No.3 (Gray)

Transparent Gray Vinyl Sheet without adhesive. Used for window glass fitting on automotive clay models. NOT suitable for free curves.



●Tint Film No.3 Gray t0.3mm W915mm×50m Roll *t:thickness

Hot Air Gun HAG-1551

Resistant Temperature: 50-550° C Used for heating adhesives, drying paint, heat holding of acrylic/viny chloride boards or resin pipes. DO NOT USE on inflammable materials,



●HAG-1551 L255mm×W82mm×H205mm

Felt Spatula

The Felt Spatula is used to apply Clay Modeling Film onto clay models.

The Felt Spatula can be cut into small pieces and custom made into ellipse shapes or any other desired shapes.



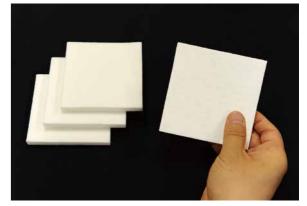
[Soft type] Natural fiber

●t5mm 125×90mm 12 sheets/set

●t10mm 125×90mm 12 sheets/set

*t:thickness





CAUTION Please do not store under high temperatures or humidity.

Modeling Film Spatula

●SH type 100×80mm



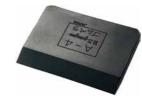
Rubber Spatula

Rubber Spatula used for applying Clay Modeling Film to clay models.









[Double-sided Blade Type]

●A-1 W25×L73mm ●A-2 W50×L67mm ●A-3 W75×L67mm ●A-4 W100×L73mm





Ellipse Shaped Rubber Spatula can be used to smooth clay model surfaces.

Ellipse Shaped

Rubber Spatula

●2254-539 Soft type t4mm×75mm *t:thickness



●2254-540 Hard type t4mm×75mm







[Single-edge Type Blade]

●B-1 W50×L59mm ●B-2 W75×L59mm



●C Type W70×L100mm One side blade

Resin Spatula 3 piece set / Yellow

3-piece Resin Spatula for applying Clay Modeling Film onto a clay model. Stiffer than the Rubber Spatula.







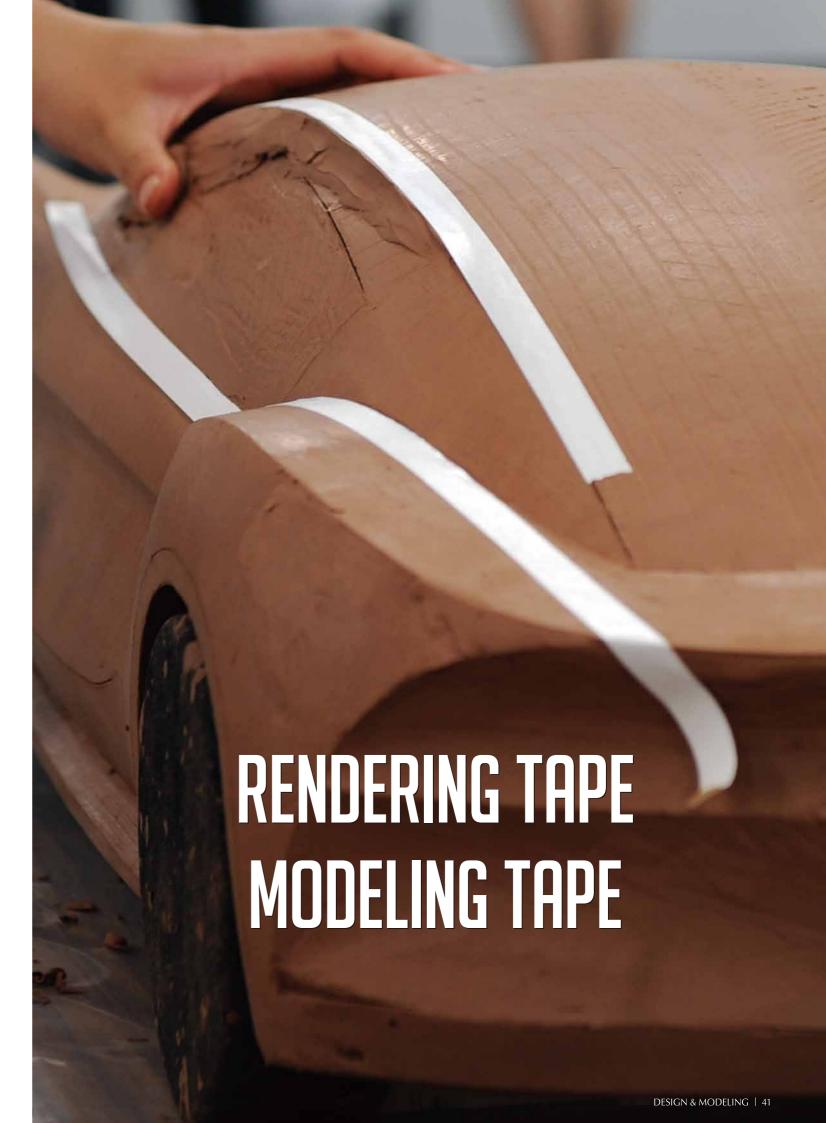
[3 pieces set]

OS W66×L108mm

●M W100×L68mm

●L W127×L74mm





Rendering Tape / Modeling Tape

IC Free Tape

Free curve tape made from crepe paper. Because of its gentle adhesion, this tape can be easily reapplied. 16m/roll with case (plastic case) and without case (packed in a paper box)

7 Available Colors

(Black, Red, Blue, Yellow, White, Gray, and Light Green)

With case

*IC Tapes w/Case are available in units of 10rolls/set. Please inquire for pricing.



	Black	Red	Blue	Yellow	White	Grey	Light Green
0.4mm	•						
0.5mm	•			0	0		
0.6mm	•						
0.7mm	•						
0.8mm	•						
1.0mm	•			0	0		
1.2mm	•						
1.5mm	•						
1.6mm	•						
2.0mm	•			0	0		
2.5mm	•						
3.0mm	•			<u> </u>	0		
4.0mm	•	•	•	0	0		•
5.0mm	•	•		0	0		

Without case

*All colors of IC Tapes without Case are available in units of 20rolls/set. Please inquire for pricing.

Black	Red	Blue	Yellow	White	Grey	Light Green
•	•	•	<u> </u>	0		•
0.3mm	20	roll		7.0n	nm	20 roll
0.4mm	20	roll		8.0n	nm	20 roll
0.5mm	20	roll		9.0n	nm	20 roll
1.0mm	20 roll			10.0	mm	20 roll
1.5mm	20 roll			11.0	mm	20 roll
2.0mm	20 roll			12.0	mm	20 roll
2.5mm	20	20 roll		15.0	mm	20 roll
3.0mm	20	roll		19.0	mm	20 roll
3.5mm	20	roll		20.0	mm	20 roll
4.0mm	20	roll		25.0	mm	20 roll
4.5mm	20 roll			30.0	mm	20 roll
5.0mm	20	roll		50.0	mm	20 roll
6.0mm	20	roll				
0.011111	20	1011	_			

IC Matte Tape

IC Matte Tape is for creating straight lines. Reflective (Gold/Silver) line tape with adhesion. 8m length.

8 Available Colors

(Black, Autumn Red, Deep Blue, Yellow, Moss Green, White,

*All colors of IC Tapes without Case are available in units of 20rolls/set, and IC Tapes w/Case are available in units of 10rolls/set. Please inquire for pricing.

With case

*IC Tapes w/Case are available in units of 10rolls/set. Please inquire for pricing.



eng	th	8M	

	Black	Autumn Red	Deep Blue	Yellow	Moss Green	White	Silver	Gold
0.5mm	•	•	•	0	•	0		
1.0mm	•	•	•	0	•	0		
2.0mm	•	•		0		0		
3.0mm	•	•	•	0		0		
4.0mm				<u> </u>		0		
5.0mm				<u> </u>		0		

Without case

*All colors of IC Tapes without Case are available in units of 20rolls/set. Please inquire for pricing.

0.5mm/1.0mm/2.0mm/3.0mm/4.0mm 5.0mm/6.0mm/8.0mm/10.0mm/12.0mm



CAUTION Please do not store under high temperatures or humidity.

KAMOI mt Matte Black

The mt Matte Black Tapes are made from washi paper (Japanese paper). It simulates matte black paint on clay models.

The paper-thin nature of this tape makes for a seamless boundary.

length 15M



.cg	mt tape
Size	Unit
w 6mm	160 roll
w 8mm	120 roll
w 9mm	120 roll
w 10mm	96 roll
w 12mm	80 roll
w 15mm	64 roll
w 18mm	56 roll
w 20mm	48 roll
w 24mm	40 roll
w 25mm	40 roll
w 30mm	32 roll
w 40mm	24 roll
w 50mm	15 roll

longth com	mt foto
Size	Unit
w 25mm	1 roll
w 38mm	1 roll
w 50mm	1 roll



KAMOI Washi Tape No. 220 Series

mt slim

Unit

3 roll

3 roll

Tape made from washi paper (Japanese paper). Useful for plotting key line drawings or shape adjustments while modeling.

9 Available colors (White, Brown, Yellow, Orange, Pink, Red, Green, Dark Blue and

length 7M

Size w 3mm

w 6mm



Size

w 50mm

w 100mm

mt CASA

Unit

1 roll

1 roll

nd Black)		
length 18M		
Size	Unit	Size
w 3mm	400 roll	w 19mm

	Size	Unit
_	w 3mm	400 roll
	w 4mm	300 roll
	w 5mm	240 roll
	w 6mm	200 roll
	w 7mm	170 roll
	w 8mm	150 roll
	w 9mm	120 roll
	w 10mm	120 roll
	w 11mm	110 roll
	w 12mm	100 roll
	w 13mm	90 roll
	w 14mm	80 roll
	w 15mm	80 roll
	w 16mm	80 roll
	w 17mm	70 roll
	w 18mm	70 roll

60 roll w 20mm 60 roll w 21mm 60 roll w 22mm 50 roll w 23mm 50 roll w 24mm 50 roll w 25mm 50 roll w 26mm 40 roll w 27mm 40 roll 40 roll w 29mm 40 roll w 30mm 40 roll w 40mm 30 roll w 45mm 20 roll w 50mm 20 roll 10 roll

KAMOI Silver & Chocolate Tape

Washi paper (Japanese paper) tape.



length 15M

Size	Unit
w 6mm	160 roll
w 10mm	96 roll
w 12mm	80 roll
w 15mm	64 roll
w 18mm	56 roll
w 20mm	48 roll
w 24mm	40 roll
w 25mm	40 roll
w 30mm	32 roll
w 40mm	24 roll
w 50mm	16 roll
w 100mm	8 roll

*Please feel free to contact us for the minimum order quantity, sizes and price.



CAUTION Please do not store under high temperatures or humidity.

RINREI Washi Tape No.136

Washi paper (Japanese paper) tape.
Useful for plotting key line drawings or shape adjustments while modeling.



length 18M

Regular Size	Unit
w 12mm	100 roll
w 15mm	80 roll
w 18mm	70 roll
w 24mm	50 roll
w 30mm	40 roll
w 40mm	30 roll
w 50mm	20 roll

RINREI Washi Tape No.140

Washi paper (Japanese paper) tape. Useful for plotting key line drawings or shape adjustments while modeling.

10 Available Colors

(White, Black, Red, Blue, Yellow, Green, Orange, Light Green, Sky Blue, Pink)



Regular Size	Unit
w 3mm	400 roll
w 4mm	300 roll
w 5mm	240 roll
w 6mm	200 roll
w 7mm	150 roll
w 8mm	150 roll
w 9mm	130 roll
w 10mm	120 roll

100 roll

w 12mm

Regular Size	Unit
w 15mm	80 roll
w 18mm	70 roll
w 20mm	60 roll
w 24mm	60 roll
w 25mm	40 roll
w 30mm	40 roll
w 40mm	30 roll
w 50mm	20 roll

RINREI Washi Tape No.138

Washi paper (Japanese paper) tape.
Useful for plotting key line drawings or shape adjustments while modeling.



length 18M

Regular Size	Unit
w 12mm	100 roll
w 15mm	80 roll
w 18mm	70 roll
w 24mm	50 roll
w 30mm	40 roll
w 40mm	30 roll
w 50mm	20 roll

RINREI Brown Tape

Washi paper (Japanese paper) tape.

Useful tape for quickly and easily modifying lines before changing the actual design on sills or bumper parts of clay models.



length 18M

Size	Unit
w 5mm	240 roll
w 10mm	120 roll
w 15mm	80 roll
w 20mm	60 roll
w 25mm	40 roll
w 30mm	40 roll

Nichiban Masking Tape No. 222

Masking tape based on washi paper (Japanese paper) tape. Can be used for cutting guidelines on clay models.



length 18M

Regular Size	Unit
w 12mm	100 roll
w 15mm	80 roll
w 18mm	70 roll
w 20mm	60 roll
w 24mm	50 roll
w 30mm	40 roll
w 40mm	30 roll
w 50mm	20 roll

Nichiban Masking Tape No. 2311

Masking tape based on washi paper (Japanese paper) tape. Can be used for cutting guidelines on clay models.



length 18M

Regular Size	Unit
w 9mm	120 roll
w 12mm	100 roll
w 15mm	80 roll
w 18mm	70 roll
w 20mm	60 roll
w 24mm	50 roll
w 30mm	40 roll
w 40mm	30 roll
w 50mm	20 roll

Nichiban Masking Tape No. 2312

Masking tape based on washi paper (Japanese paper) tape. Can be used for cutting guidelines on clay models.



length 18

Regular Size	Unit
w 9mm	120 roll
w 12mm	100 roll
w 15mm	80 roll
w 18mm	70 roll
w 20mm	60 roll
w 24mm	50 roll
w 30mm	40 roll
w 40mm	30 roll
w 50mm	20 roll

 $\star \text{Please}$ feel free to contact us for the minimum order quantity, sizes and price.

CAUTION Please do not store under high temperatures or humidity.

3M Masking Tape 243J Plus

Masking tape based on washi paper (Japanese paper) tape. Can be used for cutting guidelines on clay models.



length 18M

Regular Size	Unit
w 6mm	200 roll
w 9mm	120 roll
w 10mm	120 roll
w 12mm	100 roll
w 15mm	80 roll
w 18mm	70 roll
w 20mm	60 roll
w 24mm	50 roll
w 30mm	40 roll
w 36mm	30 roll
w 40mm	30 roll
w 50mm	20 roll
w 60mm	20 roll

3M Masking Tape 343

Masking tape based on washi paper (Japanese paper) tape. Can be used for cutting guidelines on clay models.



length 18M

Regular Size	Unit
w 6mm	200 roll
w 9mm	120 roll
w 10mm	120 roll
w 12mm	100 roll
w 15mm	80 roll
w 18mm	70 roll
w 20mm	60 roll
w 24mm	50 roll
w 30mm	40 roll
w 36mm	30 roll
w 40mm	30 roll
w 50mm	20 roll
w 60mm	20 roll

3M Fine Line Tape 218

Used for complicated masking parts and stripes. Suitable to be applied on paint. Heat resistant.



length 54.8M

	Size	Unit
#6306	w 1.6mm	1 roll
#6300	w 3.2mm	1 roll
#6301	w 6.4mm	1 roll
#6303	w 12.7mm	1 roll

*Please feel free to contact us for the minimum order quantity, sizes and price.

CAUTION Please do not store under high temperatures or humidity.

3M Rendering Tape 217J

A semi-matte black crepe paper tape.

Flexible and easy to apply to curve shapes.

Base material and adhesive are slightly stronger than other crepe tapes.





Example for use of 3M Rendering Tape

Nitto Vinyl Tape SPV-202 for model checking

Suitable for shape or highlight checking on clay models, hard models and metal molds.



*Please feel free to contact us for the minimum order quantity, sizes and price.

CAUTION Please do not store under high temperatures or humidity.

length 25M

Regular Size	Unit
w 3mm	1 roll

length 50M

Regular Size	Unit
w 5mm	1 roll
w 7mm	1 roll
w 9mm	1 roll
w 12mm	1 roll
w 19mm	1 roll
w 25mm	1 roll
w 50mm	1 roll

Unit
96 roll
65 roll
50 roll
40 roll
26 roll
20 roll
13 roll
10 roll
4 roll

length 30M

Size	Unit
w 10mm	240 roll
w 50mm	48 roll
w 75mm	24 roll
w 100mm	24 roll
w 150mm	12 roll
w 200mm	12 roll
w 300mm	12 roll



Example for use of Nitto Vinyl Tape

Hard Urethane Foam

This hard foam cube is mainly used for product modelling, clay modeling, surfboard repair and Master Modeling. Easy to process with cutters or gravers. Resistant to heat, thinners, colorability and abrasion. Fine texture and light like styrene foam.

●#80 W2000mm×D1000mm×H300mm









EPS Block

[High Density Styrene Foam]

Hardness varies with foaming magnification.

The lower the number on foaming magnification, the harder the foam. Foaming magnification #60 is suitable clay model armatures.



Foaming Magnification #60, #50, #40, #30

Meter Size

W2000mm×D1000mm×H500mm

●3×6 Size

W1830mm×D 925mm×H440mm

Achilles FM50

EPS block used by automotive R&D. Foaming magnification is #20.



Foaming Magnification #20

●3×6 Size W1830mm×D925mm×H200mm

Multi-Purpose Adhesive

Strong adhesive for materials such as styrene foam, metals, plastic, wood and concrete.

●120ml





Styroace II

Fine texture, thin, blue extrusion processed polystyrene foam.

Durable against pressure and can be soaked in water.



Size 600×900mm

- Thickness 20mm
- ●Thickness 25mm
- Thickness 30mm
- ●Thickness 40mm
- ●Thickness 50mm
- ●Thickness 75mm
- ●Thickness 100mm

Black Core

Black foam board lined with black paper and aluminum foil. Multi-purpose.



Size 910×1820mm

●Thickness 5mm

●Thickness 7mm

Styrofoam FIII

Extrusion processed polystyrene foam with ultrafine texture.

Model Board

Styrene foam board with pure white craft paper on front and back surfaces.



Size 600×900mm

●Thickness 100mm

Black Board

Black foam board. Lightweight and suitable for display, presentation mount board, backboard, photography backgrounds, hobby.



Size 900×1800mm

Thickness 5mmThickness 7mm

Size 841×1189mm

●Thickness 5mm ●Thickness 7mm

Size 728×1030mm

●Thickness 5mm

●Thickness 7mm

Size 594×841mm

●Thickness 5mm

●Thickness 7mm

Instant Panel

Size 800×1100mm

●Thickness 1mm

●Thickness 2mm

●Thickness 3mm

●Thickness 5mm

●Thickness 7mm

Too Corp's original Styrofoam board for presentation and panel making.

Size 900×1800mm

●Thickness 5mm

●Thickness 7mm



B1 760×1080mm

●Thickness 5mm

Thickness 7mm

B2 540×760mm

●Thickness 5mm

●Thickness 7mm

B3 380×540mm

●Thickness 7mm

A1 605×910mm

•Thickness 5mm

●Thickness 7mm

Profoam Cutter

The Profoam Cutter cuts styrofoam and styrene foam with heat rays.

Profoam Cutter

- ■Size: W400×D300×H250mm
- Accessory: T Ruler/Guide for angle adjustment/Nichrome wire (0.14×5m)
- ■T Ruler for Profoam Cutter
- Guide for angle adjustment for Profoam Cutter
- Nichrome wire 5m for Profoam Cutter





Profoam Cutter L

- Size: W450×D300×H357mm
- Accessory: T Ruler (with Protractor) /R Ruler for circle cut/Nichrome wire (0.23×30m)
- ■T Ruler for Profoam Cutter L, Precise T Ruler (with Protractor)
- ■R Ruler for Profoam Cutter L, for circle cut
- Nichrome cutter for Profoam Cutter L, Nichrome wire 30m in reel





Kimwipe S-200

(Paper Cleaning Cloth)

Suitable to wipe microdust on delicate surfaces or precision measuring equipment.

Hand Soap for Clay Use

Cream type cleanser for oil or epoxy paint.



●1.5kg Refill Pack

Hand-Wash Brush

This brush can be used for removing clay shavings from fingernails and fingertips.



●W96×D96×H37mm

●Size120×215mm 1box 72pcs (200 Sheets/pcs)

3M Abrasive Sponge

Resilient grinding material with grit. 114x140mm.



- ●No.5081 Medium Grain Size #120~180 (10pcs)
- ●No.5082 Fine Grain Size #240~320 (10pcs)
- ●No.5083 Super Fine Grain Size #320~600 (10pcs)
- ●No.5084 Ultra Fine Grain Size #800~1000 (10pcs)
- ●No.5085 Micro Fine Grain Size #1200~1500 (10pcs)

Joint Spatula

Used to scrape clay scraps from studio floors and work surfaces.



Small W100×L210mm ●Medium W160×L210mm W210×L230mm

Metal Tool with Handle

Metal spatula suitable for painting or resin kneading. Used for scraping scrap clay from floors or work surfaces.



- ●Type45 W45×L250mm
- ●Type75 W75×L295mm ●Type105 W105×L315mm ●Type120 W120×L315mm

Palm Fit Gloves

Comfortable, fit gloves to apply clay as if with bare hands.



- ●Medium 10 pairs/set
- ●Large 10pairs/set

Antistatic Brush

Acrylic conductive fiber-made brush for preventing dust from adhering to the model.



- ●150mm
- ●300mm



COPIC Classic (214 Colors)

214 available colors.

Nib is smooth for drawing and has a durable polyester tip.



●36 Color Set

●72 Color Set A

●72 Color Set B

●72 Color Set C

- Single 214 Color
- Original (Empty Marker)
- ●12 Color Set
- Cool Gray 12 Color Set
- Neutral Gray 12 Color Set
- ●Toner Gray 12 Color Set



COPIC Sketch (358 Colors)

COPIC with Super Brush and Medium Broad nibs. Largely used in comic industries.



- Single 358 Colors
- Original (Empty Marker)
- Comic Illustration 24 Color Set
- Basic 12 Color Set A
- Basic 12 Color Set B
- Basic 12 Color Set C
- Basic 24 Color Set
- Basic 36 Color Set



COPIC Ciao (180 Colors)

Price is set for first time users of COPIC markers. Quality drawing and coloring feeling as COPIC Sketch.



●72 Color Set A

●72 Color Set B

- Single 180 Colors
- Start 12 Color Set
- ●24 Color Set
- ●36 Color Set A
- ●36 Color Set B
- ●36 Color Set C
 - ●36 Color Set D
 - ●36 Color Set E



COPIC Ink

Copic refill ink that comes in a bottle with nozzle to refill Copic markers.

Its pen-shape form is compact and easy to fit in a Copic wallet for traveling. Users may also use the ink alone to create ink art.





- Single 358 Color(12ml) *Including Colorless Blender
- ●Empty Bottle(12ml), Nozzle, Cap
- Colorless Blender 200ml
- Amount of ink for refill/1 time
- COPIC Classic : Approx. 2.5ml
- COPIC Sketch: Approx. 1.8ml ● COPIC Ciao: Approx. 1.4ml
- COPIC Wide: Approx. 3.5ml



Caps correspond with ink colors Copic Ink comes in a bottle with a colored cap that matches the actual ink.

[Spare Nib for COPIC]

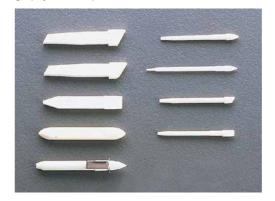
5 types for bold strokes and 4 types for detailed strokes for COPIC markers.

For Bold Strokes

- Standard Broad(10ocs/set)
- Soft Broad (10pcs/set)
- Calligraphy 5mm(10pcs/set)
- Round(10pcs/set)
- Brush(3pcs/set)

For Detailed Strokes

- Standard Fine (10pcs/set)
- Super Fine (10pcs/set)
- Semi Broad (10pcs/set)
- Calligraphy 3mm (10pcs/set)



[Spare Nib for COPIC Sketch]

Spare Nib for COPIC Sketch. Install these replacement nibs with a tweezer.



COPIC OPAQUE WHITE

White for highlighting.





COPIC Multiliner

Multiliners do not bleed with COPIC.

Super thin drawing pen.

7 types of line widths and 10 colors available.

%12pcs/set



[Brush]

Multiliner with Brush Type Nib

%12pcs/set



[Set]

● A-2 Set 7 Black Multiliners

● B-2 Set 7 Black Multiliners and 2 Black Brush Multiliners





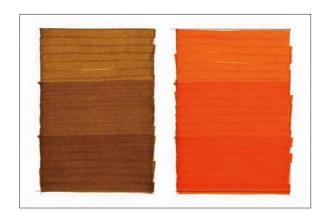
PM Pad White

The PM Pad in White is a bound paper pad developed for pastels and markers. The paper has optimum roughness, hardness, and thickness which makes it usable as an underlay and overlay. This pad can be used as rough-sketch, comprehension, presentation and illustration paper.

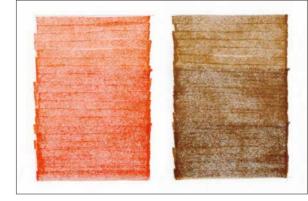
- ●B2 50sheets/book
- ●A2 50sheets/book
- ●B3 50sheets/book
- ●A3 50sheets/book ●B4 50sheets/book
- ●A4 50sheets/book
- ●B5 50sheets/book







Example of COPIC markers on the PM Pad in White From the top, first coat, second coat, and third coat.



Example of bleed-through on the back. The PM Pad does not bleed on the paper underneath

Trepe Pad

1 book contains 50 sheets which are made from transparent matte tracing paper. The Trepe Pad has high transparency and will not have under reflections when working with oil-based markers.

[Thick]

- •A2 50sheets/book
- •A3 50sheets/book
- •A4 50sheets/book

[Thin]

- •A2 50sheets/book
- •A3 50sheets/book
- ●A4 50sheets/book
- Cabinet 135×178mm



Trepe Roll

The Trepe Roll is used for illustration drawing, layout, sketch and overlay.



KARISMA Color (72 Colors)

The KARISMA Color's soft, thick lead has less oil, so they are blendable with other colors. These colored pencils are suitable for use with pastels when rendering.

- Single dozen(12pcs/set)
- ●48 Color Set
- ●24 Color Set
- ●72 Color Set





[KARISMA Color Color Chart]

PC-901	PC-910	PC-916	PC-924	PC-930	PC-939	PC-947	PC-989	PC-1003	PC-1012	PC-1031	PC-1060
Indigo Blue	True Green	Canary Yellow	Crimson Red	Magenta	Peach	Dark Umber	Chartreuse	Spanish Orange	Jasmine	Henna	Cool Gray 20%
PC-902	PC-911	PC-917	PC-925	PC-931	PC-940	PC-948	PC-992	PC-1004	PC-1014	PC-1032	PC-1063
Ultramarine	Olive Green	Sunburst Yellow	Crimson Lake	Dark Purple	Sand	Sepia	Light Aqua	Yellow Chartreuse	Deco Pink	Pumpkin Orange	Cool Gray 50%
PC-903	PC-912	PC-918	PC-926	PC-932	PC-941	PC-949	PC-994	PC-1005	PC-1021	PC-1033	PC-1065
True Blue	Apple Green	Orange	Carmine Red	Violet	Light Umber	Metallic Silver	Process Red	Limepeel	Jade Green	Mineral Orange	Cool Gray 70%
PC-905	PC-913	PC-919	PC-927	PC-933	PC-942	PC-950	PC-995	PC-1006	PC-1023	PC-1051	PC-1069
Aquamarine	Spring Green	Non-Photo Blue	Light Peach	Violet Blue	Yellow Ochre	Metallic Gold	Mulberry	Parrot Green	Cloud Blue	Warm Gray 20%	French Gray 20%
PC-907	PC-914	PC-921	PC-928	PC-935	PC-944	PC-956	PC-997	PC-1007	PC-1027	PC-1054	PC-1072
Peacock Green	Cream	Pale Vermilion	Blush Pink	Black	Terra Cotta	Lilac	Beige	Imperial Violet	Peacock Blue	Warm Gray 50%	French Gray 50%
PC-908	PC-915	PC-922	PC-929	PC-938	PC-946	PC-988	PC-1002	PC-1008	PC-1030	PC-1056	PC-1074
Dark Green	Lemon Yellow	Poppy Red	Pink	White	Dark Brown	Marine Green	Yellowed Orange	Parma Violet	Raspberry	Warm Gray 70%	French Gray 70%

Too QROQUIS Book

The Too QROQUIS Book has pure white paper. Ideal for drawing with pencil and chalk, convenient for sketch and quoquis.

- ●B3 60sheets/book
- ●B4 70sheets/book
- ●B5 70sheets/book
- ●A4 70sheets/book



Too QROQUIS Book Section

Same transparency as the Too QROQUIS Book with a printed scale.

- ●B4 70sheets/book
- ●B5 70sheets/book
- •A3 60sheets/book
- ●A4 70sheets/book



Sketch Book

Pure white paper. Ideal for pencil drawing, watercoloring and ink drawing.

- SM 20sheets/book
- ●F3 20sheets/book
- ●F4 20sheets/book
- F6 20sheets/book ●F8 20sheets/book
- ●F10 20sheets/book
- ●B3 20sheets/book
- B4 20sheets/book



NT Cutter

Various versions of the NT Cutter are available.

World bestseller and standard cutter knife. Excellent quality for cutting paper, film, wallpaper and leather.

● A-300 A Type Blade (Thickness 0.38mm) with BA Spare Blade 58° 3pcs included



Longtime selling cutter excellent for cutting thick materials such as cardboard, carpet, floor sheeting, and plywood. Useful for cutting clay armatures.

● L-500 L Type Blade (Thickness 0.45mm) with BL Spare Blade 58° 3pcs included



Standard design knife model. Loosen the tip of the knife, insert blade and fix the blade for use. Smooth cutting for detailed work such as art and paper cutting work.

● D-400 D Type Blade (Thickness 0.38mm) with BDA45° · BDC30° Spare Blade 5pcs included



Aluminum blade disposer that is attachable to belts for easy disposal while working.

Blade Disposer

●BD-2P

Professional model for fine work with a stainless body. It has a self-locking function.

● A-1P A Type Blade (Thickness 0.38mm) with BA Spare Blade 58° 3pcs included



● AD-2P AD Type Blade (Thickness 0.38mm) with BAD Spare Blade 30° 1pcs included



NT Cutter Spare Blades

● BA-160 A Type Blade 58° 10pcs/set



●BAD-21P AD Type Blade 30° 10pcs/set



●BL-300P L Type Blade 58° 6pcs/set



● BDA-200P DA Type Blade 45° 40pcs/set



●BDC-200P

DA Type Blade 30° 40pcs/set



NT Circle Cutter CL-100

The NT Circle Cutter CL-100 can precisely cut plywood to thickness from a diameter of 10mm0- 1000mm.



[Spare Blade for CL-100]

●BC-501P 2pcs/set



Olfa Compass Cutter

Cuts sizes from 10mm-150mm.

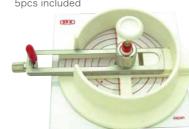
Includes 5 spare blades.



NT Circle Cutter C-1500P

Cuts sizes from 18mm-170mm. By attaching the beam slide, maximum cutting size would be 400mm.

C-1500P with Spare Blade5pcs included



[Beam Slide] for C-1500P

Special extend slide for NT Circle Cutter C-1500P.

● CE-700P



[Spare Blade BDA-200P] for C-1500P

●BDA-200P 45° 40pcs/set



NT Circle Cutter C-2500P

Cuts sizes from 30mm-160mm.

Ideal for cutting thick and hard materials.

● C-2500P with Spare Blade 2pcs included



[Spare Blade BC-400P] for C-2500P

●BC-400P 10pcs/set



[Spare Blade BC-501P] for C-2500P

●BC-501P 2pcs/set



New Tweezer

Stainless light tweezer. Made to last.

New Tweezer Length 160mm



New Tweezer Special Version Length 160mm

Developed for medical use. Sharper tip to hold more precisely.



Safety Base

Surface has 50mm sections. Color: Green.

Two available types: Soft (can be stretched back after being rolled up) and Hard (strong body with fine finish).

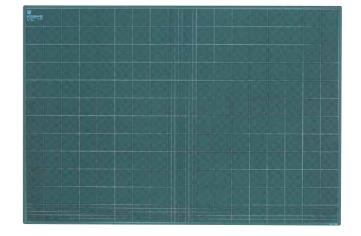
[Soft type]

● SM2000 300×450×3mm ● MM3900 450×620×3mm

●LM7000 620×900×3mm

[Hard Type]

SS1000HSM2000H300×450×3mm



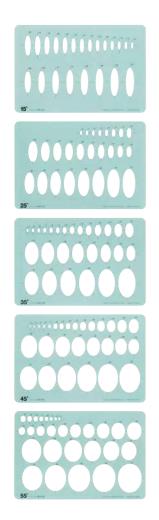
TOOLS INT'L Ellipse Curves 10pcs/set

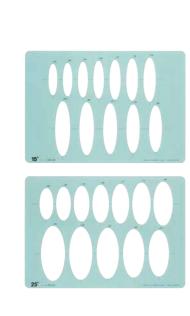
An essential item for designers.

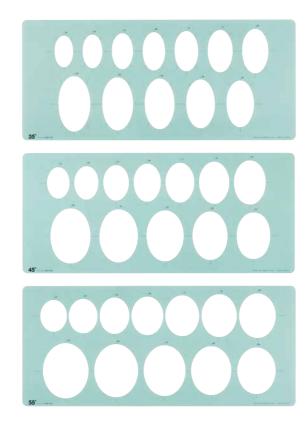
The TOOLS INT'L Ellipse Curves 10pcs/set is arranged with the frequently used oval angles of 15°, 25°, 35°, 45° and 55° between the pitch 2mm-4mm.

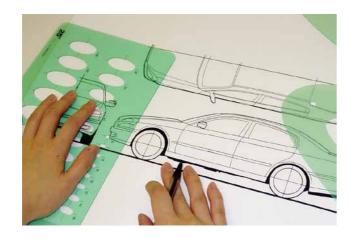
- ●Ellipse Curves 10pcs/set
- 15° 10mm 52mm
- 15° 56mm 100mm
- 25° 6mm 52mm
- 25° 56mm 100mm
- 35° 4mm 52mm
- 35° 56mm 100mm
- 45° 3mm 52mm
- 45° 56mm 100mm
- 55° 3mm 52mm
- 55° 56mm 100mm







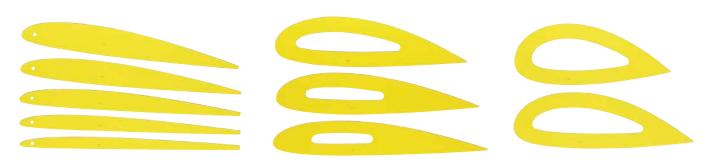




IZUMIYAN Professional Curves 10pcs/set

Acrylic made transparent orange curves.

● Set C 10pcs/set Maximum Length: 520mm, Thickness 2mm



Railway Curves

The Railway Curves are made from clear acrylic with 2 parallel R curves from 30mm-5000mm. Comes in a wooden case.

- ●30pcs/set 100~1000mmR
- ●50pcs/set 30~2900mmR
- ●100pcs/set 30~5000mmR

Thickness 2mm Transparent acrylic made

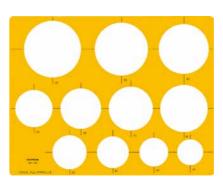






Circle Ruler Large No.106

● No.106 330×260×0.8mm (40~90mm with 11 circles)



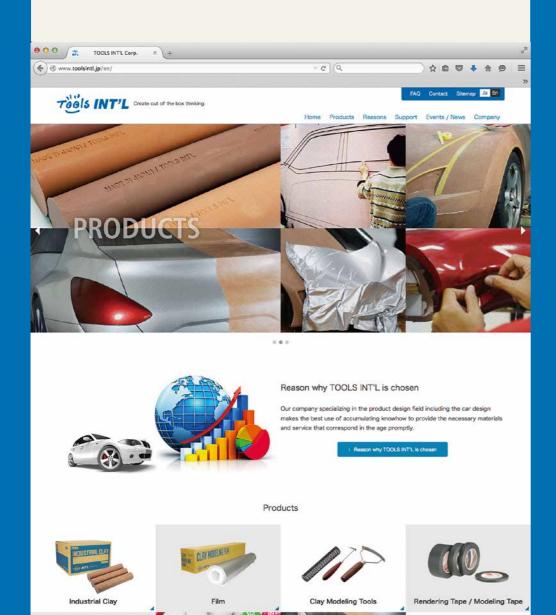
Rib Ruler

●Color: Green 172×173×0.8mm(1~1000mmR)



Please visit our website. Japanese and English are available.

www.toolsintl.jp/en



TOOLS INT'L Corp also carries and supplies many kinds of design/modeling materials and equipments other than shown in this catalog. Please feel free to contact us or your nearest global distributor.



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www.toolsintl.jp

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