

# A GUIDE THROUGH THE 'WORLD OF 'OUR CUTLERY



»DOVO«  
STAHLWAREN

42719 SOLINGEN-GERMANY



MERKUR  
STAHLWAREN

42719 SOLINGEN-GERMANY

# IMPORTANT INFORMATION ABOUT CUTLERY

**For shaving, manicure, haircare, hobby and  
the production location in Solingen, the City of Cutley**

Over the last eight centuries, Solingen has become universally known as the city of cutlery thanks to its good reputation for producing cutlery. The coal and steel from the nearby Ruhr region and the water power of the Wupper river for the grinding stones were geographical factors in the development of a hub for manufacturing cutlery. Resulting from the "Solingen Act" of 1938, the "Solingen Regulation" – in connection with the Trademark Protection Act 1994 – became the regulation for the protection of the Solingen name. Here, the use of the Solingen name is subject to certain conditions. Raw materials and semi-finished products as well as further processing must be carried out in Solingen.



The "Solingen Compliance" of most of our products is important to us so that the location, with all of its manufacturers and service providers, remains a centre of excellence for fine cutlery in the future. The worldwide reputation of the SOLINGEN name is therefore invaluable to us.



Quality standards are defined for the individual product groups. The Chamber of Industry and Commerce of Wuppertal-Solingen-Remscheid (IHK) is tasked with monitoring the regulation of fair competition and protecting the name SOLINGEN from misuse in nearly all parts of the world.

The classic design of many "DOVO" products, some of which go back almost 100 years, are based on forged blanks from smithies in Solingen.

Some 80% of our production, which is mostly handmade, is based on forged raw materials. Tried and tested carbon steels with well-known cutting properties but without rust protection are still in use. The amount of stainless steel in use with at least 13% chrome content and other alloying elements continues to grow. From a chrome content of 10.5%, you are dealing with a stain-less, rust-resistant or acid-resistant steel. Because this material is still predominantly made of iron, corrosion is always possible. Chloride, hand sweat or storage in damp conditions can damage the surface and encourage rust. Even good, stainless steel cutlery needs to be maintained. That's why a cuticle or nail nipper should always only be stored in a case when well dried.



## Units of Measure

As is traditional, we continue to offer many packing units by the dozen (12 pieces) or half dozen (6 pieces). We also give sizes in inches (") just as we have for over 100 years. This unit of measurement is based on the Prussian table of measurement and weight from 1693 (valid until 1872). The Rhenish Inch is thus equal to 26mm.

In this booklet, we want to give you some explanations and tips about the specifics of our products. At first glance, you may not be able to see the vast amount of work that goes into creating many things. In the following pages, we want to give you a little more information on some of the many steps involved.

# THE STRAIGHT RAZOR

Nowadays, electric razors and multi-blade razors dominate the drug store market. Archaic, challenging, dangerous and a modern lifestyle are many of the attributes for men's beard care using a straight razor. For centuries, it has become an integral part of shaving culture and is currently an important focus on the topic of men's cosmetics. Lathering up the soap and wielding a brush - wet shaving is often an event. Just imagine a Sunday morning doing something good for yourself, relaxing and skilfully handling one of the sharpest blades.

## Manufacture

Standard steel with a carbon content of approx. 1% is favoured as a base material for good straight razors to achieve the greatest hardness, elasticity and edge-holding property.

At the beginning of the process blanks consist of a piece of steel, diameter 10 mm. The red-hot piece of metal is shaped by the high pressure of a drop hammer in the die (forging tool) while warm. The surplus burr (wing) is cut off in the punching tool and the hole is drilled to accommodate a nail.

Great importance is placed on the treatment (hardening and tempering) of the blank, which is heated to 810°C (1,490°F) or 1040°C (1,904°F) depending on the steel grade and then quenched in special oil. The temperature limits are often decisive and occasionally even a professional secret kept by the experienced hardener. The final tempering at around 200°C (around 392°F) provides the blade with elasticity and viscosity. Regular hardness tests according to Rockwell (HRC) guarantee sharpness and edge-holding property.

The hollow grinding takes place in around 15 work phases on special machines where the diameter of the grinding stone is decisive for the desired hollowness. The tang and back are then ground before the hollow part, wall and cutting edge are polished (fine grinding). The cutting edge is then ground by hand to the thickness of a razor blade (0.1 mm = approx. 0.004"). The final blue polishing produces a uniform, colour-reflecting matt finish. The subsequent work of the etching craftsman is to decorate the blade with laser engravings and gold applications. Careful handiwork is required for the electroplating when cleaning and lacquering with asphalt varnish. Both halves of the handle scales are made of waterproof hardwoods, cow horn or acrylic (tortoiseshell or mother-of-pearl imitation) and mounted with a German silver nail so that the blade folds in the middle.

All straight razors are sharpened, stropped and checked by experienced employees in five steps. Work is concluded with a final polish of the handle scales as well as cleaning, oiling, buffing and packaging.



## Handle Materials and Blade Design

The handle scales of the straight razor are made from black plastic, acrylic (tortoiseshell or mother-of-pearl imitation), real cow horn, exotic wood such as ebony, redwood, oak, coloured pakkawood or even stainless steel.

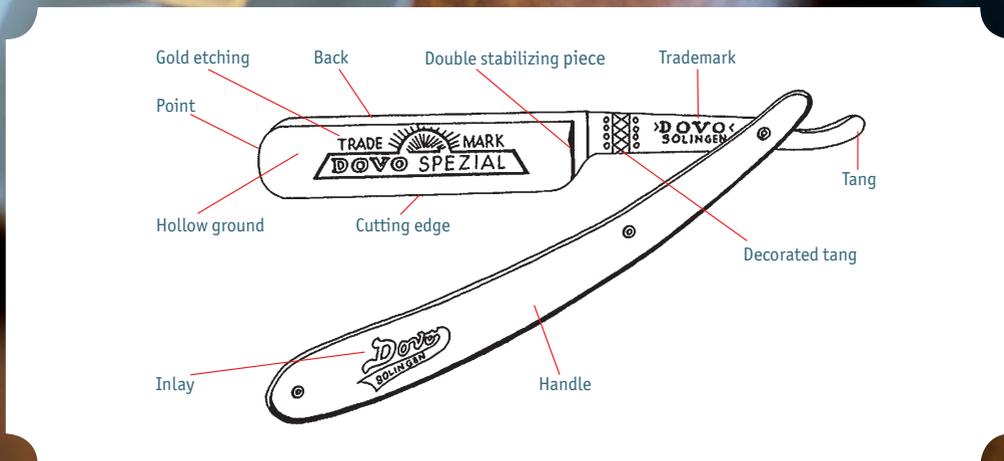
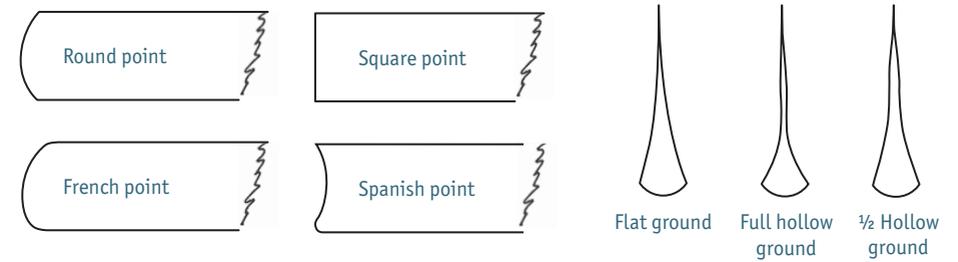
The blades vary:

- 3/8" flat ground → for salon and clinic use, eyebrows
- 5/8" 1/2 hollow or 1/1 hollow → for universal beard shaving
- 6/8" 1/1 hollow with concave mirror → for experienced shavers

Point shapes vary between:

Round point, French point, square point, Spanish point

Cross-sections of razors – Degree of hollowness:



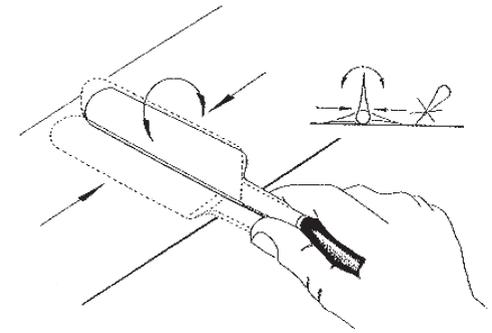


## Maintenance

Straight razors must be rinsed after use, ideally in clear, hot water, and carefully dried without touching the blade!! For long periods without use, it is recommended that you grease the blade with thin, acid and resin-free oil. The blade should be stored in a dry and ventilated place. You should also remove any leftover soap from both the outside and inside of the handle scales and dry it thoroughly. Only pack the blade away once it is well dried. Finger prints, stains from cleaning materials and chlorinated water quickly tarnish (beginnings of rust) the blades. Disinfectants are equally as harmful to steel and plating.

When stropping the blade, there is one important rule: The blade should rest for at least 48 hours between shaves, preferably longer. Old school wet shavers know that "The cutting edge grows", i.e. the microscopically visible, wafer-thin fin of the cutting edge looks like the teeth of a comb. It bends due to the cutting during shaving, but then returns to its old position due to elasticity. It stretches itself out wafer-thin again.

For this reason, it is often worth lightly dragging the blade across the palm of your hand before shaving. This fine burr is removed again and then at the latest, the razor strop with leather balm bought along with the straight razor should be used.



## Razor Strop and Stropping

While flat ground straight razors are pushed off on handheld strops (tension screw strops), a tension screw strop (adjustable handheld strop exclusively treated with leather balm) or a classic hanging strop made of fine, vegetable-tanned cowhide leather is used for semi-hollow or full-hollow straight razors, with a swivel eye hook for hanging, some of which are equipped with a cotton band on the back. The band side is for stropping using Vienna lime chalk. For the leather side, we recommend – of the fat-based strop pastes – our fine leather balm (grease) without milling additives. This should be rubbed in extremely finely, kneaded with the palm of your hand or a cotton cloth and polished. The blade should not stick to the layer of grease on the leather surface during stropping.

The leather must be clean and undamaged. Fine, metal splinters loosened during stropping damage the edge and are a sign of a chipped cutting edge. Then the straight razor has to be resharpened. Other straight razors used with the same strop may also sustain damage. The stropping happens when the cutting edge and the back rest simultaneously on the tightly stretched razor strop, resulting in the cutting angle. The straight razor must be pulled carefully without pressure (but with constant contact with the leather surface) and only in the direction of the back! The blade may only be flipped over the spine – see sketch – and then moved in the opposite direction. Turning over the edge will destroy the burr. In this case, only resharpening by an expert will help.



## MERKUR SAFETY RAZORS

Since 1996, the "DOVO" range has also included safety razors from MERKUR produced in SOLINGEN. Safety razors like those from 100 years ago are trendier than ever in the world of men's cosmetics. The retro design has endured the decades and with the classic blade – Made in Germany – still offers a good shave, as well as having a clear price advantage over multi-blade razors.

The 2019 product portfolio includes:

- Safety razors
- Body hair razors
- Eyebrow razors
- Shaving brushes
- Razor blades
- Shaving sets
- Corn razors
- Corn razor blades



90 15 001



90 23 001



90 34 001



90 700 002

# THE SHAVING BRUSH

We offer high-quality brushes with selected badger hair bristles suitable for many "DOVO" straight razors and MERKUR razors. This is a sensitive natural product and requires careful handling. The following instructions should be followed for daily use:

- If the brush smells when new, the cause is a harmless preservative substance that keeps germs and microorganisms away from badger hair; this usually washes out after a few days.
- Never press on the brush, rather move it in a horizontal line like a paintbrush to avoid hair breakage.
- After use, rinse out, shake off any water and leave to dry in a ventilated place. Occasionally wash with a grease-removing hair shampoo. Residues of the alkaline soaps break the badger hair, excessive hair loss is the result.



## Razor Cases

Durable leather varieties and sturdy designs characterise the leather collection for safety razors and accessories. From a simple carry case for razors with blades, right up to a case including scissors and beard comb or the luxury case with a variety of accessories, our range has it all.



# SCISSORS

## General Instructions

**M**aterial testing, hardness testing, checking grinding patterns and grinding dimensions, functional testing and optical control are all decisive in quality control at "DOVO".

Examples of material composition:

Material C 45                      0.45%C; 0.30%Si; 0.7%Mn  
Hardening: 830°-860 °C, quench in oil  
Tempering: 180°-250 °C,  
Hardening quenched and tempered: approx. 52-55 HRC

Material 1.4034 stainless        0.50C; 0.5Mo; 15Cr;  
Hardening: 1040 °C, quench in air  
Tempering: approx. 190 °C,  
Hardening quenched and tempered: approx. 52-55 HRC

Variants, i.e. higher hardness values apply when using the material C 60 for tailoring scissors or stainless materials such as 1.4109 partly for hair scissors or cuticle and nail scissors. The consistent quality of the steel in terms of analysis and microstructure formation is a prerequisite for good hardening properties and elasticity in the scissors. For each batch, the material is therefore examined with the aid of factory certificates, the hardness of the scissors is continuously checked in the batches and special attention is paid to the precisely aligned "twist", i.e. the finely tuned twist of both scissor halves.

Point

Cutting edge

Blade

Inner blade

Back

Joint

Laser engraving

Ride

Shanks

Finger ring





## Surfaces

**F**or simpler qualities, such as C 45 carbon steel, three-quarters of the scissors, i.e. excluding the inner blade, are nickel-plated and then polished with a high gloss. Partial or full gold plating is also possible.

A small number of scissors are offered in oxidized black. Scissors made of stainless steel are mainly glare-free fine-matted thanks to ceramic blasting.



## Development of Forged Hair Scissors

- ① Metal piece, prepared for hot forging in the die
- ② Forged scissor half
- ③ Cut-out scissor half with forging waste
- ④ Finger ring punched out
- ⑤ Screw holes drilled, countersunk and threads cut
- ⑥ Inner blade (hollow side) and outer scissor blade sanded
- ⑦ Both halves of the scissors finely sanded, including shank and finger ring
- ⑧ Scissor parts polished with blade etching
- ⑨ Finished scissors, sharpened, straightened and set on their tip, cutting test with nettle cloth / cotton material



## Hair Scissors

**H**air scissors are often equipped with fine micro serration so that they can cut even fine hair reliably. The blades of our hair scissors are ground by hand and honed on some models. Honing must be carried out very carefully on a grinding wheel covered in diamond dust to ensure that the hair scissors work very easily and smoothly. Adjustable screw systems allow the user to set an individual scissor motion, i.e. to regulate the tension between the scissor blades



## Finger Rests

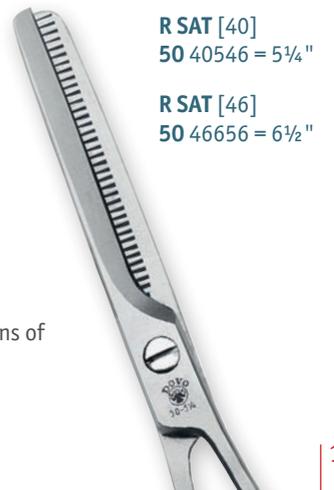
Finger rests, as detachable rests (1) or forged-on rests (2), provide comfort and easy balance between the little finger and index finger.



## Thinning Scissors

**T**hese are offered single-sided as modelling scissors or double-sided serrated, with 23, 40, 42 or 46 teeth. Double-sided thinning scissors with 21 or 23 teeth are preferred by private clients and some are particularly good for cutting the top layer of hair close to the head. Modelling scissors with 40, 42 or 46 teeth are used by hairdressers for exact and clean layer cutting at the ends of the hair.

The fine and exact prism milling of the individual teeth, the smooth run and a well-supported screw mounting are all signs of good-quality thinning scissors.





# SCISSORS FOR HOUSEHOLD, WORK AND HOBBIES

Here are the most important kinds of scissors from the varied range

A complete selection of **household scissors**, forged from stainless steel or occasionally carbon steel, nickel-plated, divided into so-called sewing or cutting scissors and fabric scissors. Slim blades and fine points allow for picking seams, cutting yarn and doing fine needlework. Medium-sized models are also intended for normal cutting with foil, string, cardboard, etc. Heavy fabric scissors with a long handle are suitable for exact cutting of normal textiles, as long as tailors' shears are not necessary.

**Tailors' shears** are used especially for heavy fabrics, cardboard, foils, etc. You should thus pay attention to the size, weight and strength of the sheets. Carbon steel C60 guarantees sufficient hardness. Optionally, fine serration can be obtained to prevent the fabric from shifting, not to be confused with the special serrated scissors, which are only used to trim hem edges.

**Embroidery and silhouette scissors** are extremely fine and pointed. For this reason, they should be handled very carefully and stored in a leather pouch.

**Left-handed scissors** are special designs with completely mirrored blades and handles and are increasingly in demand by kindergartens, schools and households.



## Different Handle Shapes



concave shanks  
with straight finger rings

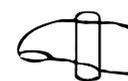


convex shanks  
with slanted finger rings



bent trimmer

In order for the user to find the right tool, it is helpful if their fingers fit into the finger rings(handles) well. This is the only way to ensure that the scissors are well guided when used. This means: fine scissors for slim fingers, large scissors for strong fingers. Following the rule: the best tool for me is the one with which I achieve the best results.



## SCISSORS FOR NAIL CARE AND COSMETICS

With this type of scissors, good advisory service is particularly important. On the one hand because nothing is resented more than bad or even painful results with the cuticle and nail care. On the other hand, also because of the relatively high price of good-quality scissors. This results from a largely manual production process, from the raw forging to the finished product, in which more than 120 production steps are required.

Good **cuticle scissors** must be particularly sharp to cut through the finest cuticles and pointed enough to lift the smallest skin particles. They are curved to point away from the nail bed and avoid piercing it. The easy movement of the scissor halves and the exact alignment of the fine tips against each other is precision. The delicate ends of the extra pointed blades in particular should be stored in a protective cover if possible. Please never use cuticle scissors for cutting nails or other materials!



**Nail scissors** are generally sturdier than cuticle scissors and must also meet high requirements. In order to follow the curve of the nail well, nail scissors should also be curved. Additional micro serration, especially with heavy nail scissors, is advantageous because the nail is not pushed away, and the cut is easier to control. Sturdy toenail scissors from 4" in size can make nail care easier when you don't want to use nail nippers.



### Scissors for Beard, Nose and Ears

Although this group of scissors is less well known, it is nevertheless one of the most important pieces of equipment for personal hygiene.

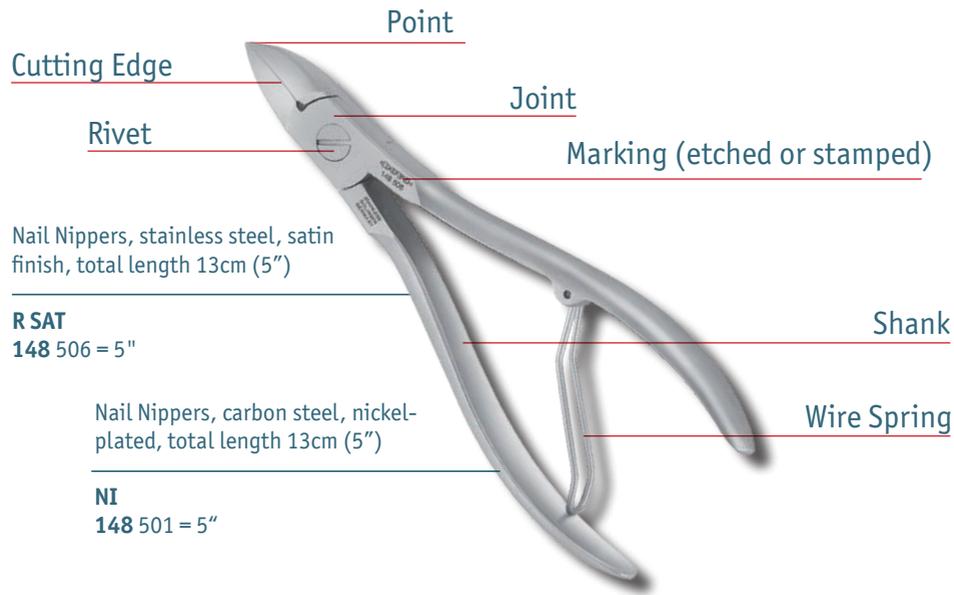
Any hair scissors up to 4½" in size, or 12cm, can be considered beard scissors. Micro serration is absolutely necessary with these scissors so that the beard hair doesn't slip from the edge.

Nose and ear hair scissors are small, handy scissors with a ball tip for removing annoying hair from the nose and ear. Make sure you do not use any pointed scissors in these areas as they can easily injure sensitive sections of the skin.



Rounded Tip

# NAIL NIPPERS



Nail Nippers, stainless steel, satin finish, total length 13cm (5")

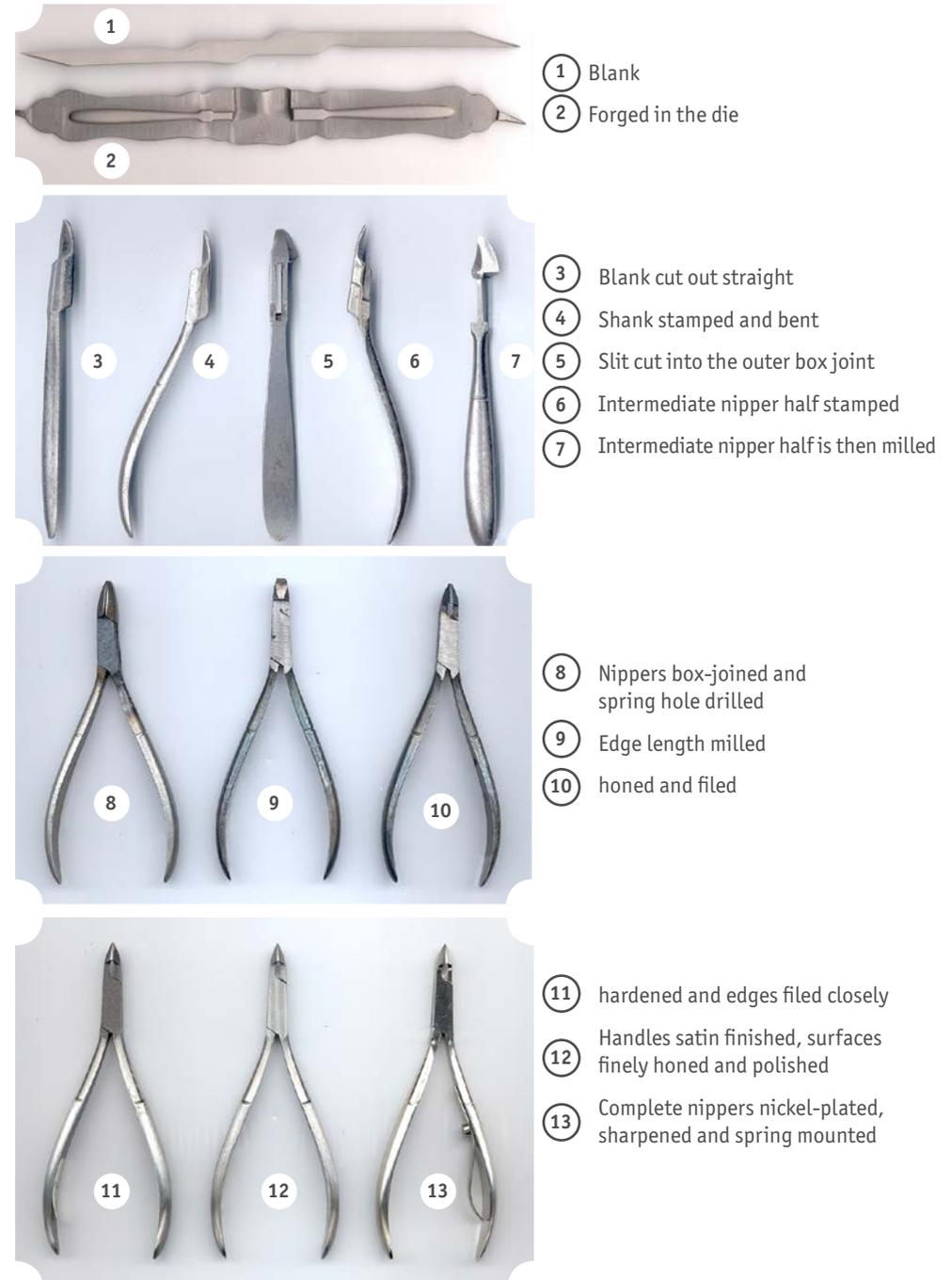
**R SAT**  
148 506 = 5"

Nail Nippers, carbon steel, nickel-plated, total length 13cm (5")

**NI**  
148 501 = 5"



## Development of Box Joint Cuticle Nippers





## Cuticle Nippers

**W**ith cuticle nippers, you first need to choose between nippers with scissor handles and shank nippers with leaf springs. Where possible, cuticle nippers should be box-joined due to the relatively small contact area. The most significant distinction, however, is between the cutting lengths 1/8 jaw (approx. 3mm), 1/4 jaw (approx. 5mm), 1/2 jaw (approx. 7mm) and 1/1 (9mm) jaw.

Cuticle nippers are used to remove cuticles or horny skin from the nail bed. In the medical application of podiatry, they are used to remove cornification (hyperkeratosis) as well as various types of clavus on the foot and in the area between the toes.

Nippers with Scissor Handles

Stainless steel  
Total length 10 cm  
(approx. 4")

**R SAT 4"**

**1830 056** = 1/2 S = 7 mm  
**1830 106** = 1/4 S = 9 mm



Cuticle Nippers with Leaf Spring

Carbon steel, nickel plated  
Total length 10 cm  
(approx. 4")

**NI 4"**

**190 081** = 1/8 S = 3 mm  
**190 041** = 1/4 S = 5 mm  
**190 051** = 1/2 S = 7 mm  
**190 101** = 1/1 S = 9 mm



## Nail Nippers

**H**ere our products range from manicure nippers, pedicure nippers and head cutters to a variety of cutting edge shapes on ingrown nail nippers. With manicure or pedicure nippers, a distinction is made between the flat, the hollow (concave arched) and the "high nosed" versions with a significantly raised cutting end. Small nippers are perfect for hard fingernails, sturdy nippers are better for strong toenails.

Pedicure nippers generally have hollow arched edges. The cutting edge usually determines the slight curvature of the incision on the toe nail. In contrast to fingernails, toenails are cut comparatively straight and in small sections.

Compared with the usual nail nippers, head cutters first close the edges at the end tips and then, with added pressure, towards the middle. Pros use these nippers to work in a straight line "before the head". Due to the favourable leverage ratio from the pivot point to the cutting edge, it is easier to apply greater force with a head cutter.

The medical purpose or role of podiatry nippers with CE marking according to the Medical Devices Act is the exact shortening of the (toe) nails in a medically correct way to avoid damage to the foot. This type of nipper is used to treat incorrectly grown toenails and thus to alleviate the resulting injuries or cornification of the foot.

Podiatry nippers for ingrown nails are used mostly by experienced pedicurists for nail corners in hard-to-reach places because of their slim and precise cutting edge. The cutting edges are divided into single, pointed or double-pointed (pointed and relief ground). The medical purpose or role of podiatry nippers for ingrown nails is to round the (toe)nails in a medically correct way to avoid damage to the foot. Cutting the lateral, distal loose edges of the nail. Lifting and removing separated nail parts from the nail fold. Removing cornification (callosities) in the nail fold as well as calluses on the foot.

# MANICURE CASES

»DOVO«'s sturdy, elegant and finely crafted manicure cases offer the perfect container for high-quality nail care tools. Each tool has its own place and is protected from damage at the fine cutting edges and tips. You can choose between zipper, frame, pouch, push-button and rolled-up cases. Frames cases with extensive features have been regarded as elegant luxury models for decades. As an accomplished supplier of high-quality stainless-steel manicure tools, it is only logical that our range of cases is presented appropriately, including attractive matt finishing on tools and stainless-steel frames, and shows "quality for life" in the design.

Vegetable tanned hides are preferred. A special feature here is the Russian-type leather. It is

tanned with willow or birch bark and impregnated with birch tar oil. It therefore emits a smoky smell and is reminiscent of a Swedish log cabin. Another variety is the soft nappa leather that is pleasant to the touch.

The types of leather used for DOVO cases are:

- Calfskin
- Cow leather
- Elk leather
- Deer leather
- Water buffalo



## The most important types of case at a glance



Cow leather

**R SAT** (Stainless steel, satin-finished tools)  
2056 056



Cow leather

**R SAT** (Stainless steel, satin-finished tools)  
8017 066

Nubuk leather

**NI** (Regular steel, nickel-plated tools)  
1058 051

**R SAT** (Stainless steel, satin-finished tools)  
1058 056



Solid steel, buffalo leather, graphite

**R SAT V** (Stainless steel, satin-finished tools)  
8061 118  
(with 10630 006)



Calfskin

**R SAT** (Stainless steel, satin-finished tools)  
407 066



# MAINTENANCE OF ITEMS

»DOVO« and MERKUR products come with a price tag and merit occasional maintenance. Metal parts on all materials can rust or oxidise if stored in a damp place. For this reason, they should be dried before storage. The mechanics of the scissors and nippers as well as the surfaces occasionally need a drop of oil for lubrication. This must be acid and resin-free. Sewing machine oils, paraffin oils and also pure camelia oil, for example, are all suitable. Otherwise, oils are available that highlight their good rust protection properties.

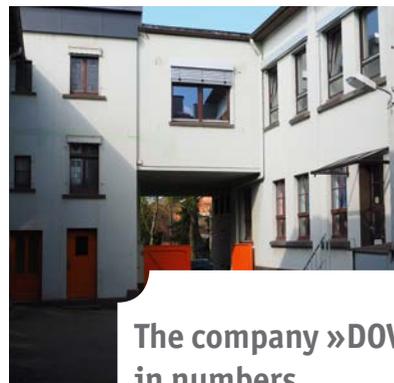
Straight razors must be stored when dry. It is helpful to rinse the blade with hot water. This has a disinfectant effect and makes the warm blade dry well. The scales and other blade parts can be wiped clean with toilet paper, for example. A thin layer of oil will preserve the dry knife for a longer period of storage. Disinfectant is not suitable for use with straight razors. Chloride and acid cause stains on the carbon steel and the alcohol it contains makes the plastic casing brittle and fragile.

Even the leather on a case should be cleaned like a good shoe and cared for with a light oiling. Damp leather can go mouldy, so scissors and accessories that have been used in the bath should be dried before packing in the case.

Naturally, shaving soaps have a high fat content. The surface of razors therefore becomes dull over time. Wash occasionally using hair shampoo or dishwashing detergent along with warm water and a brush to refresh chrome surfaces. The result is often astonishing. For stubborn and encrusted dirt, it can be helpful to leave the razor in a solution of water and detergent for a few days.

A similar rule applies for the durability of shaving brushes with badger hair bristles. Fatty alkaline soaps are supposed to make beard hair swell. The same thing happens to the badger hair, then it breaks, and the brush loses a lot of hair. You can avoid this premature aging by repeatedly cleaning with a grease-removing (normal) shampoo. Rinsing and drying an expensive shaving brush after each use will pay off.

When carrying out repairs, we always see products that can reach an old age with good care. However, durability is very limited by constant contact with water and thus follows normal wear and tear. Differences in water quality around the world in terms of lime and chlorine make shavers and manicure instruments look old, just like other household appliances. It therefore isn't possible to rule out the need for a replacement after a few years.



## The company »DOVO« Stahlwaren Bracht GmbH & Co. KG in numbers

Information correct as of 2019

Employees: 60

Production space: 3,900 m<sup>2</sup> developed

Founded: 1906, independent family company since 1936

Markets: about 120 countries  
Proportion 25% Germany, 75% worldwide  
most important consumers: Europe, USA, Canada, Japan, South-East Asia and South America  
Representation: 3 in Germany, 4 in Europe, 11 oversees

Range: Straight razors and safety razors, hair and thinning scissors, household and professional scissors, cuticle and nail scissors, cuticle nippers and nail nippers, podiatry nippers, manicure sets, shaving cases, shaving sets

Sold via cutlery shops, knife shops, internet stores, hairdressing supplies, podiatrists and cosmeticians, shaving supplies, men's cosmetics, men's grooming



# OUR BRANDS



## SHAVETTE Bismarck



The 100 Years of »DOVO« anniversary brochure from 2006



The Merkur anniversary brochure "About Merkur" from 2014



### WET SHAVING

In the brochure, "Guidelines for Wet Shaving," you can find valuable information on wet shaving. You will find information about the production and how best to care for our razors and safety razors and get helpful tips to simplify the use of them.



QR code with link to brochures in DE, EN, ES, RF

