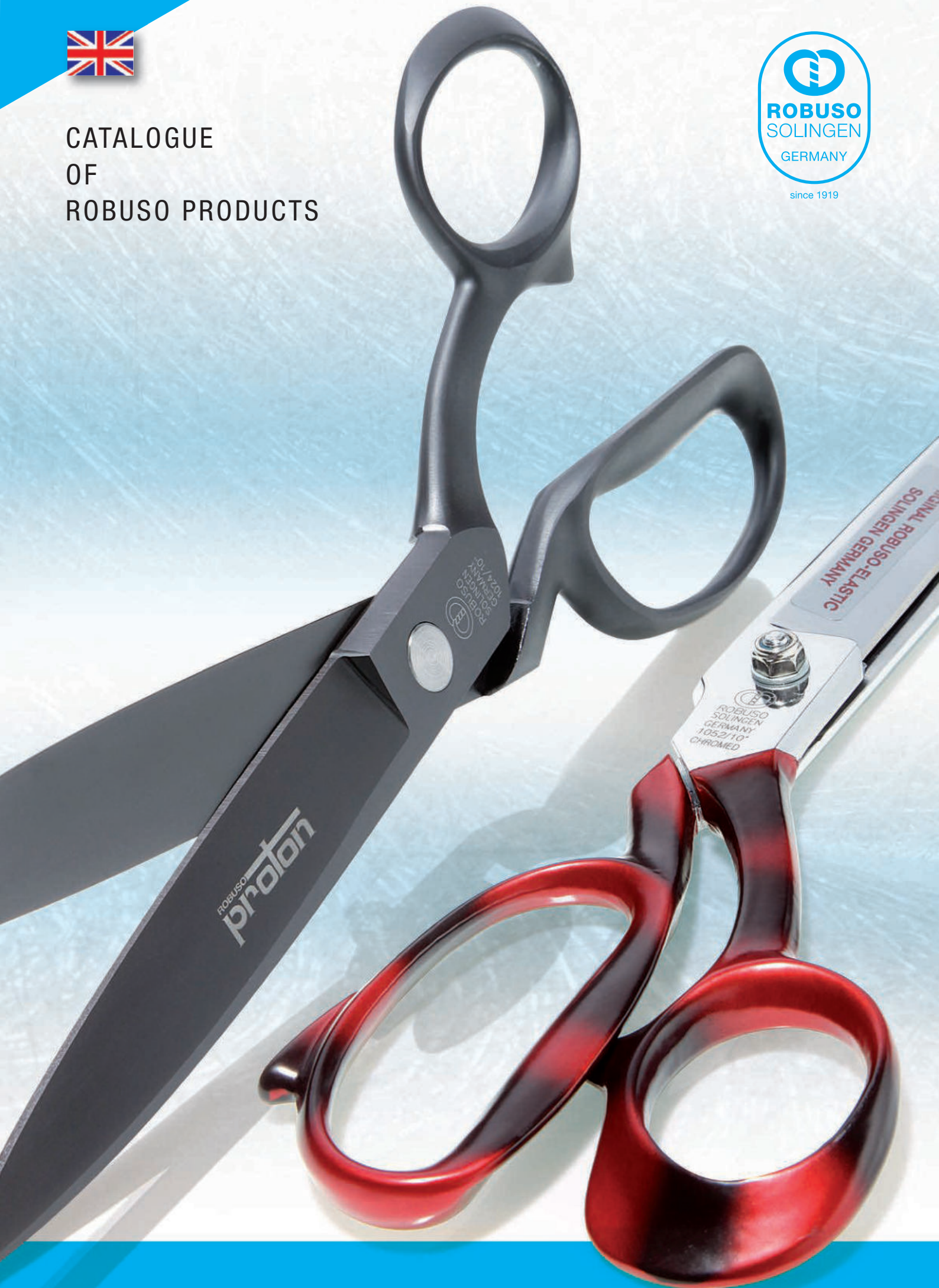




CATALOGUE
OF
ROBUSO PRODUCTS



since 1919





Maintenance and Care of Scissors:

Scissors and Shears are - like all tools - subject to normal wear. So, keep the inner blade surfaces free from dust and residuals and apply an occasional droplet of sewing machine oil to the joint faces, which restores the cutting efficiency and adds considerably to the service life.

When Cutting leaves a lot to be desired:

Rough and tiresome cutting is not necessarily an indication that regrinding is needed. Never attempt to untighten the screw - a thorough clean-up and lubrication usually work wonders. Failing that, it's time for a regrind service.

ROBUSO Regrinding Service:

Cutting edges tend to wear in the long run, no matter how well shears or scissors are kept. Forward them to us for thorough regrinding, servicing and prompt return. ROBUSH Shears and Scissors are designed to permit ROBUSH Service regrinding for at least four to five times. Further details are given on Page 18/19.

Legend to Symbols

Colour Coding for Technical Textiles

	Aramide:	
	Dyneema®:	
	Glass Fiber:	
	Carbon Fiber:	
	Saturated Fabrics:	

Please let us have your specific material sample to enable us to test which scissors or shears are suited best.



Best Runners = most popular products in demand



Grade C60 carbon specialty steel featuring an exceptionally high hardness rating of 59 HRC - in contrast to grade C45 standard steel - providing for above-average cutting efficiency.



Shears for left-handers



Internal Spring = installed in the fulcrum to provide for comfortable and reliable cutting operations



These shears have one micro-serrated blade which prevents slippage of smooth fabric material and provides for controlled and precise cutting operations.



Both blades micro-serrated.



Case-hardened Screw = high stability - permanent trouble-free fulcrum joint function



Canted eye design = hand-fit ergo-styled



Bent blades = ideal to trim borders and edges



Bent handles



Offset Handles = designed for controlled trimming of borders and edges

Advice and Support



ROBUSO Stahlwarenfabrik
Buntenbach & Sohn GmbH
Gleisdreieck 13
42651 Solingen / Germany

Telefon: +49 - 212 - 233 625 - 0
Telefax: +49 - 212 - 233 625 - 21
E-Mail: info@robuso.de
www.robuso.de

Index

► SHEARS FOR TECHNICAL TEXTILES

proton® Scissors and Shears	8/9
Shears for use with Aramide, Glass and Carbon Fiber Fabrics	10/11
Mould-Making Scissors and Shears	12/13
Scissors and Shears to trim „high-tech“ Threads	14
High-Tech Shears made in Japan	15
Logical Alternatives for use with Glass Fiber	16

► REPAIR AND SERVICE / ADVERTISING GIFTS

Regrinding Service / Grinding Machine	18/19
Advertising Gifts	20

► TRADITIONAL TAILORING

ROBUSO® Tailor's Shears	22/23
ROBUSO®-ELASTIC Tailor's Shears	24/25
ROBUSO® Shears / KAI Shears	26/27
Scissors and Shears for Left-Handers	28/29
Floor Layer's, Leather and Cardboard Pattern Shears	30/31
Small Universal Scissors / Embroidery and Weavers' Scissors	32/33
Sewing Scissors / Light-weight Tailor's Scissors	34/35
Thread Clippers / Pinking and Scalloping Shears	36/37
Pocket, Fabric and Textile Scissors / KAI Scissors and Shears	38/39
ROBUR® stainless Scissors and Shears with „Soft-Coat“ Plastic Handles	40

► MACHINES

ROBUSO® Electro-Powered Heavy-Duty Shears	42/43
ROBUSO® Pneumatic Shears	44/45
HOOG's Electro-Powered Rotary Blade Shears	46/47
EC Cutter / Battery-Powered Rotary Blade Shears	48/49
HSGM Hot-Melt Cutting	50/51
System Components	52

► TOOL ITEMS

Pattern Notchers and Check Markers	54
Revolving Punch Pliers and Punches	55
Rotary Blade Cutters	56
Seam Rippers, Tracing Wheels, Industrial Tweezers	57
Tailor's Chalk and Marking Pens / Leather Marking Items	58/59
UV-Marking Pen, Ceramic Marking Pen, Textile Glue Stick	60
Safety Cutters	61



Craftsmanship nonplussed: Production of ROBUSO® Scissors and Shears

ROBUSO Scissors and Shears represent top-quality products, clearly identified by the PRETZEL and ROBUSO SOLINGEN GERMANY imprints below the fulcrum screw.

SOLINGEN ist not just an indication of origin, but a statement of quality. Following the "Solingen By-Laws", cutting tools shall only bear the reference 'Made in Solingen', if any such product has passed all substantial production stages in Solingen. In addition the scissors are required to meet or exceed the minimum quality standards. We take pride in stating that our products surpass the requirements by far.

The majority of our products are made of C60 carbon steel with hardening qualities of between 57 and 59 HRC to guarantee the high cutting performance of our scissors and shears.

The **FORGE**: The C60 steel arrives here in the form of long steel rods trimmed into slugs, the configuration and size of which depends on the specific shears model. These slugs wind up under a drop hammer to be hot-forged into blanks, a process by way of which the glowing-hot piece is deposited in the lower die and drop-hammered into shape. The blank so produced is now deburred and the eye precision-blanked upon which the true shape of the scissors becomes visible for the first time.

The **HEAT-TREATING** Shop: Prior to hardening, the operator presses the unique fulcrum bevel into the male and female boxes because the two blades are not in flat-joint but in bevel-edge contact during the cutting process. The twist so generated produces a clearance angle behind the blade intersection point so that the material is cut and not squeezed apart. After the hardener has punched or cut the thread for the screw into the blades, the scissor blades are loaded into the hardening furnace - the scissor blades are only hardened up to the screw hole. The next hardening step is a quenching process in an oil bath, after which they are tempered down to

processing hardness because the blades would otherwise be too brittle and likely to break. This heat-treatment produces the final degree of hardness and resilience for the finishing steps.

The so finished blades are then pre-ground inside and out in high-tech automatic wet-grinding systems.

The **EYE-PRECISION-GRINDER** is now 'super'-polishing the handle eyes from all angles, which process is craftsmanship of the highest order. It is here worth-while to take a close look at handle eyes of a ROBUSO tailor's shears: There are a multitude of surface angles to cover, which takes anything from 12 to 20 finishing passes, whereby the grinder puts an endless polishing belt through the eye and skillfully manipulates it to all surface zones at considerable speed and with sparks surrounding him. It was well into the seventies that this job was based on a three-years apprenticeship. It has become general practice to replace this high-cost finishing process by way of "Trowalising", a form of barrel-polishing (i.e. pebble-finishing) whereas ROBUSO scissors and shears without powder-coated handles are "eye-precision ground" today, tomorrow and the days after.

Our Master **GRINDER** starts with grinding the shanks up to the eye-transition point and the 'over-and-above' zones, i.e. all the surfaces untouched by the machine grinder, namely the two small outer sides of the joint faces.

The inner and outer surfaces of the blades and the joint faces of the majority of ROBUSO scissors and shears are "precision blue-ground", which is not only a form of grinding artistry but, also, a significant quality feature of our scissors. The term "precision blue-ground" is based on the fact that outsidess so polished show a super-fine surface finish with a blueish shimmer of light. Scissors finished by this process produce a noticeably better cutting performance due to the absence of surface deficiencies; even flash rust hasn't got a

chance which is important because scissors and shears made of carbon steel are not stainless. The artistry of our grinder is that he bonds his special precision blue-grinding leathers to hardwood wheels, almost one for each model version, all hung up on the wall ready to hand.

Nickel-plated scissors and shears represent a speciality regarding the precision grinding. The 'soft' nickel settled on the hollow ground inner blade and the cutting edge must be ground off to retain the cutting efficiency. This process requires great skill and experience on the part of the grinder.

The 'soul' of a scissor is the fulcrum, namely the point within the screw-zone, where the upper and lower blade are in closest contact. The grinder creates the optimum leverage point, so that the cutting effect will be smooth and without undue pressure. The grinder consults the master assembler where and how the fulcrum point effect is best obtained. This process is one of the most important steps for quality production.

The Master **ASSEMBLER** mates the finished scissor blades into a complete cutting tool. This final step is also some sort of artistry because he is responsible for ensuring that the mated blades respond in optimal harmony. Forged blanks never turn out as identical twins, with further dissimilarities added by the various production steps.

A few precisely aimed hammer blows, and he has aligned the blades to the best possible fit - provided he is a master of his trade, which is the case at ROBUSOs.

The final **ALIGNMENT** phase follows once the two blades have been screwed together, the cutting edges are precision ground, the lower blade is, if and when required, micro-serrated and the scissors are now really sharp for the first time.

The final Quality Inspection consists of a full-scale



examination plus elimination of any possible minor flaws likely to interfere with the required cutting efficiency right down into the tips.

Having passed all physical and visual inspections and tests, these scissors and shears are marked with the laser-cut imprints PRETZEL and ROBUSO SOLINGEN GERMANY plus Article Number.

POWDER-COATING: The shanks and eyes of precision blue-ground (not nickel-plated) scissors and shears are now powder-coated by way of a spray-coating process. This is a rather complex procedure because the powder-coat must end exactly at the transition point between shank and blade. Our powder-coated forged shears are a genuine new development used successfully since 2010 and replacing the traditional wet-film process. The absolutely smooth finger contact surface, the excellent impact-resistance and durability render these shears a 'felt handling pleasure'.

FINAL FUNCTION TEST: Each individual pair of scissors and shears are tested with the material recommended for in this catalogue, namely: Curtain, lining, leather, Aramide, glass fiber, etc. This final test is designed to verify that each scissor model meets the claimed cutting efficiency "right down into the tips" requirement. The final act includes the application of a drop of oil to the screw and a thin oil film to the inner and outer blades.

Definition of ROBUSO Codings:

B-CR	Handles precision eye-ground, blades precision blue-ground and chrome-plated, lower blade micro-serrated; 100% solvent-resistant.
C	Powder-coated handles, blades precision blue-ground inside and out, identified by a super-fine surface finish with a blueish shimmer of light - hence the term.
CR	Handles red/black powder-coated, blade outsides nickel-plated and inside and out chrome-plated for rust protection, with internal fulcrum spring.
D	Handles powder-coated, blade outside nickel-plated and precision hollow-ground.
DMR	Our coding for the MASTER ROBUSO Series: Handles brilliant-red powder-coated, blade outside nickel-plated and precision hollow-ground - with golden blade etching "MASTER ROBUSO".
E	Handles are precision eye-ground and mirror-finish nickel-plated, outer blades mirror-finish nickel-plated and hollow-ground inner blade precision ground.
L	Handles are precision eye-ground and gold-plated, blades, depending on model version, chrome- or nickel-plated.
R	Plastic handles, blanked stainless sheet steel blades.
S	Handles precision eye-ground, handles and blades Proton®-coated, lower blade micro-serrated. The blue/black surfaces are extremely hard and guarantee effective protection against abrasive wear. These shears can be readily cleaned with solvent.

Our Brands:

ROBUSO SOLINGEN GERMANY®:

This brand represents our top grade finish quality products:
Made in Solingen and Made in Germany

ROBUR®: Our second quality brand, forged or made of stainless steel:
Made in Germany and, partly, Made in Solingen

PELLORO®: Our brand covering all scissors and shears imported from abroad. PELLORO is also an economy quality brand covering sewing scissors and tailor's shears, and a top quality brand covering some pinking shears models





Julist/Germany 1923: The founder families-outside right: Julius Buntenbach with little daughter Klara



Julius Buntenbach



„Burger Brezelbäcker“



seit 1919



Early Advertising



Reinhold Mohaupt, Klara Pukelsheim, Christian Pukelsheim



Trade Fairs: JEC – Composite Europe – Textextil – Heimtextil – Interzum



ROBUSO Catalogue (1924)

"All about us - a self-portray"

Our company was originally established 1919 in SOLINGEN by *Julius Buntenbach*, the grandfather of the present Managing Director *Reinhold Mohaupt* and his older brother Robert, with the company name ROBUSO made-up as follows:

RObort **B**untenbach **SO**lingen = ROBUSO.

The PRETZEL was chosen by the elders of ROBUSO as company logo in recognition of the culinary speciality of the Burg-upon-Wupper district of Solingen. Scissors, shears, open razors and razor blades were on the original ROBUSO production programme during the first decades of the company and well received on part of barbers, hairdressers and iron-mongers, representing loyal business partners there and then.

It was in 1948 when *Johann Pukelsheim*, an engineer and son-in-law of *Julius Buntenbach*, joined the company and eventually took over company management in 1957. He changed the company activities in favour of garment and textile industries and focussed on the production of forged scissors and shears as professional cutting tools. One of our top products, namely the ROBUSO-ELASTIC tailor's shears, developed by him and featuring the internal fulcrum spring and micro-serrated blades, is still a great success. It was *Johann Pukelsheim* who promoted ROBUSO - by way of attending important textile trade fairs - in to a highly respected Quality Brand in international specialist circles.

In 1984 the third generation, namely *Reinhold Mohaupt*, daughter of *Johann Pukelsheim*, and her late husband *Detlef Mohaupt* († 1999) took over.

This was also the time where technical textiles moved into the foreground along with the related Aramide, glass and carbon fiber fabrics cutting requirements, in response to which we developed the ROBUSO proton® scissors and shears with their special proton® coatings, which reduce cutting-edge wear to a hitherto unknown extent. We have, by now, extended our own comprehensive product range by way of adding top-quality products of other brands. High-efficiency electro-powered and pneumatic shears complement our equipment programme.

The PRETZEL and ROBUSO SOLINGEN GERMANY imprints below the screw of all ROBUSO scissors and shears warrant a top-quality standard well above the claim of quality defined by the "made in Solingen" law. Every Solingen-made final product must consist of high-grade basic material having passed through a multitude of production steps performed by such specialists as are the tool-smith, the heat-treater, the precision eye-grinder, the nickel-plater, the precision grinder, the master-assembler - all of these are highly-skilled specialists in the scissors production industry, existing for centuries centuries in Germany exclusively in

Solingen. These elaborate production processes are the guarantee for a long tool-life, i.e. all ROBUSO scissors and shears can be reground back to "as good as new" condition.

Reinhold Mohaupt's management duties are, since 2007, backed up by her nephew *Christian Pukelsheim*, a graduated computer specialist. He will continue with the successful ROBUSO tradition as the fourth generation family member and emphasise the advantages of a strong family-held company: flexible organisation, short decision paths and a knowledgeable staff. Needless to say that the ISO 9001 Quality Management has already been introduced in 1997.

Based on almost a century of successful scissors and shears production serving a world-wide clientele, ROBUSO is synonymous with **Competence in Cutting**. We want to serve you, our clients, in the best way. Trust in our knowledge, when you are looking for cutting solutions. We have a lot of possibilities, to master even difficult demands.

Reinhold Mohaupt and Christian Pukelsheim



***Shears for
Technical Textiles***





ROBUSO®-proton® Scissors and Shears designed to cut

Kevlar
Only by DuPont

twaron®
The Power of Aramid

Dyneema®
The Power of Polyethylene

- ▶ **C60** Made of forged and hardened C60 carbon steel
- ▶ Eyes precision ground by hand
- ▶ These shears are completely proton®-coated
- ▶ **M** One micro-serrated blade
- ▶ Super-hardened surface
- ▶ Extreme ease of handling
- ▶ Controlled non-slip cutting

The blue-black coating provides effective protection against abrasive wear and produces super-hard cutting edges, rating about 3400 (HV).

The coating reduces the friction effect providing these proton® Shears with truly comfortable controlled-handling features.

The chemically indifferent properties of this coating provide an active barrier against fouling of the blades - which is very much in contrast to conventional shears - and certainly a great advantage when working with adhesive-bonded materials. Proton® Shears with their 'all-coated' surfaces - handles included - can be safely and readily cleaned with solvent to remove any resin and/or adhesive residuals, especially for a final clean-up at the end of each workday.

Art.-No. 1024/S/10"



	Size	Order No.	Total Length	Length of Cut	Weight
✓	10"	1024.121.260	26.0 cm	10.0 cm	361 g

ROBUSO proton® Shears for use with light- to medium-weight Aramide and Dyneema® fabrics

The positive leverage factor provides effortless cutting.

The big eye fits into a man's hand, micro-serration prevents slippage of smooth, tough fabric material.

one blade micro-serrated

shown in
original size

Micro-Serrated Blades:



Working with tough and hard fiber materials demands high performance qualities from shears. All ROBUSO shears for use with technical textiles are micro-serrated to prevent uncontrolled slippage during the cutting process.



one micro-serrated blade



both blades are micro-serrated

ROBUSO Craftsmanship: „precision eye-grinding“

This is a fine polishing technique, used for grinding the eyes of a scissors. This technique is now gradually disappearing from the scene for lack of skilled manpower.

An endless polishing belt is threaded through the eye and skillfully manipulated by the operator.

For detailed information refer to Page 4/5.

1024/S/10"



option:



Left-handers'
Shears
1041/S/10"
see Page 29



Art.-No. 1026/S

	Size	Order No.	Total Length	Length of Cut	Weight
✓	8"	1026.121.210	21.0 cm	8.0 cm	166 g
✓	9.5"	1026.121.250	25.0 cm	9.5 cm	230 g

ROBUSO proton® Shears for use with light-weight Aramide and Dyneema® fabrics

This Model is a special ROBUSO-development featuring pointed blades, an extra large "oblong" eye and a fulcrum point located closer to the blades for positive leverage. Unusually high cutting efficiency right down into the tips.

Art.-No. 1253/4/S/7" bent-up

Size	Order No.	Total Length	Length of Cut	Weight
7"	1253.421.185	18.5 cm	6.5 cm	111 g

ROBUSO proton® Mould-Making Scissors for use with light-weight Aramide and Dyneema® fabrics

with bent-up blades and handles - one micro-serrated blade

Art.-No. 1071/S/7.75"

Size	Order No.	Total Length	Length of Cut	Weight
7,75"	1071.121.200	20.0 cm	5.0 cm	208 g

ROBUSO proton® Scissors for use with light- to medium-weight Aramide and Dyneema® fabrics

One micro-serrated blade for forcefull short-length cuts, starting cuts in corners and edges, tapes, thin ropes and hoses.

Art.-No. 322/S/5"

Size	Order No.	Total Length	Length of Cut	Weight
✓ 5"	0322.121.130	13.3 cm	4.0 cm	56 g

ROBUSO proton® Thread Trimming Scissors for use with light-weight Aramide and Dyneema® thread material

Both blades micro-serrated, rounded blade tips.

For a multitude of uses, trimming of threads, etc. Pocketable, thus always ready to hand.

Art.-No. 615/S/5"

Size	Order No.	Total Length	Length of Cut	Weight
5"	0615.121.130	13.0 cm	4.2 cm	48 g

ROBUSO proton® Thread Trimming Scissors for use with light-weight Aramide and Dyneema® thread material

Both blades micro-serrated, rounded blade tips.

For a multitude of uses, trimming of threads, etc. Pocketable, thus always ready to hand.

ROBUSO Regrinding Service:

proton® Scissors and Shears can be reworked and refinished by our Regrinding Services - see Page 18.



ROBUSO® Shears for glass and carbon-fiber and

Kevlar
DuPont

twaron®
The Power of Aramid

Dyneema®
The Power of Polyethylene

- ▶ **C60** Made of forged and hardened C60 carbon steel
- ▶ Blades precision blue-ground
- ▶ **M** One micro-serrated blade
- ▶ easy-grip, powder-coated handles

Important Information:

- Shears can be reground by our Regrinding Services - see Page 18.
- Care of shears: Please remember that the carbon steel is not rust-proof, towards which end we recommend that the "hollow ground inner blade" should always be kept clean and the fulcrum and blades be covered by an oil film. These measures keep the shears in good shape and increase their service life considerably.
- All shears shown here are high-performance tools. We would recommend that you use individual Models when handling Aramide and Dyneema® fabrics. Their cutting edges are exposed to other criteria than are those for use with carbon and glass fiber materials. That will increase their cutting performance enormously.

Art.-No. 1024/C

	Size	Order No.	Total Length	Length of Cut	Weight
✓	10"	1024.103.260	26.0 cm	10.0 cm	361 g
	12.75"	1024.103.330	33.0 cm	13.0 cm	553 g

Art.-No. 1024/C-RD/10" rounded tips

Size	Order No.	Total Length	Length of Cut	Weight
10"	1024.103.265	26.0 cm	10.0 cm	361 g

ROBUSO Shears - solid design for use with glass fiber, Aramide and Dyneema® fabrics

The positive leverage factor provides for effortless cutting. The big eye fits into a man's hand, micro-serration prevents slippage of smooth, tough fabric material.

The rounded tips render these pocketable and are, thus, always ready to hand.

Accessorial Item:



Leather Holsters
8" – 10"
see Page 22

1024/C/10"

C60 M

option:



rounded tips:
1024/C-RD/10"

Powder Coating Advantages:

Powder-coated handles of forged shears represent a truly new approach towards conventional wet-paint coating practices.

ROBUSO shears for use with technical textile fabrics are now identified by their blue and inviting powder-coated handles:

- structured easy-grip surface
- controlled cutting, even with slippery hands or oily gloves
- excellent durability
- high impact resistance
- improved handling comfort under hot, sweaty and humid conditions

ROBUSO Craftsmanship: „precision blue-grinding“

Precision blue-ground blades are a specific quality feature of shears. This technique can only be handled by highly skilled shear grinders. These extrafine grinding results are manifested in the handling qualities of the shears.

For detailed information refer to Page 4/5.



shown in
original size



Art.-No. 1026/C

	Size	Order No.	Total Length	Length of Cut	Weight
✓	8"	1026.103.210	21.0 cm	8.0 cm	166 g
✓	9.5"	1026.103.250	25.0 cm	9.5 cm	230 g

ROBUSO Shears for use with light-weight, thin glass fiber Aramide and Dyneema® fabrics

This Model is a special ROBUSO-development featuring pointed blades, an extra-large "oblong" eye and a fulcrum point located closer to the blades for positive leverage. Unusually high cutting efficiency right down into the tips.

Art.-No. 1026/3/C/8"

Size	Order No.	Total Length	Length of Cut	Weight
8"	1026.303.210	21.0 cm	8.0 cm	166 g

ROBUSO Mould-Making Scissors for edge trimming

Blades straight, Handles bent

Art.-No. 1071/C/7.75"

Size	Order No.	Total Length	Length of Cut	Weight
7.75"	1071.103.200	20.0 cm	5.0 cm	208 g

ROBUSO Shears for forceful short-length cuts into light- and medium-weight glass fiber, carbon fiber, Aramide fabrics, knitteds and felts.

Also good for use with tapes, cords, thin ropes and hoses with Aramide cores. This Model is also a special ROBUSO-development featuring short, sturdy blades and long handles resulting in excellent leverage for efficient cutting performance down into the tips, all providing for forceful short-length cuts.

Art.-No. 1081/C/8.5"

Size	Order No.	Total Length	Length of Cut	Weight
8.5"	1081.103.225	22.5 cm	6.5 cm	240 g

ROBUSO Scissors for forceful short-length cuts into light- and medium-weight glass fiber, carbon fiber and Aramide fabrics

The shorter blades plus the long handles result in an excellent leverage for efficient cutting performance right down into the tips. The cutting length is somewhat longer than that of 1071/C/7.75".

Art.-No. 1041/C

Size	Order No.	Total Length	Length of Cut	Weight
8"	1041.103.210	21.0 cm	9.0 cm	191 g
10"	1041.103.260	26.0 cm	10.5 cm	340 g

ROBUSO Tailor's Shears for Left-Handers for use with all technical textiles

These are true Left-handers' shears with mirror-inverted blades and handles permitting a full view of the path of cut whilst standing in upright position.

Art.-No. 405/C

Size	Order No.	Total Length	Length of Cut	Weight
5.5"	0405.103.145	14.5 cm	4.5 cm	54 g
6"	0405.103.160	16.0 cm	5.0 cm	55 g

ROBUSO Glass Fiber Scissors for light-handed cuts

With straight, precision blue-ground blades, hardened screw, blue powder-coated handles. This Model features narrow, pointed blades and large handle eyes. The 5.5" Model features a shortened blade for applications requiring full power at the blade tips.



ROBUSO® Mould-Making Scissors and Shears

- **C60** Made of forged and hardened C60 carbon steel
- **Blades precision blue-ground**
- **Eyes precision ground by hand**
- **Completely chrome-plated**
- **M** One micro-serrated blade

Model Version "B-CR":

The shears plus handles are precision ground and chrome-plated for 100% solvent-resistance

Application Details:

ROBUSO Laminating and Mould-Making Shears

- with straight blades: make-up cutting for laminating glass and carbon fiber fabrics
- with bent blades: for surface-finishing
- with bent-up blades and handles: for trimming edges and borders

Bent-up blades facilitate reaching unduly projecting fibers, even in hardly accessible places, without the risk of piercing the fabric. Bent-up handles increase the distance between hand and material, improve material management and prevent fingers from contacting saturated laminate.

Maintenance and Care:

Working with saturated laminate fabrics is bound to foul the shears. Make sure that residual resin solutions are not allowed to cure on the surfaces of the shears. Perform thorough clean-ups right after the end of use. The blank and smooth surfaces facilitate the tiresome cleaning duties.

ROBUSO Regrinding Service:

All Shears can be reworked and refinished by our Regrinding Services - see Page 18

ROBUSO Craftsmanship: „precision blue-grinding“

Precision blue-ground blades are a specific quality feature of shears. This technique can only be handled by highly skilled shear grinders. These extra-fine grinding results are manifested in the handling qualities of the shears.

For detailed information refer to Page 4/5.



Art.-No. 1024/B-CR/10"

Size	Order No.	Total Length	Length of Cut	Weight
10"	1024.108.260	26.0 cm	10.0 cm	361 g

ROBUSO Laminating Shears - chrome-plated

Heavy-Duty Shears, straight blades, for use with saturated laminates.

The positive leverage factor provides for effortless cutting. The big eye fits into a man's hand, micro-serration prevents slippage of smooth, tough fabric material.

Art.-No. 1026/B-CR

Size	Order No.	Total Length	Length of Cut	Weight
8"	1026.108.210	21.0 cm	8.0 cm	166 g
9.5"	1026.108.250	25.0 cm	9.5 cm	230 g

ROBUSO Laminating Shears - chrome-plated

Slender Shears, straight blades, for use with saturated laminates

This Model is a special ROBUSO-development featuring pointed blades, an extra large "oblong" eye and a fulcrum point located closer to the blades for positive leverage. Unusually high cutting efficiency right down into the tips.

Art.-No. 1150.045.000

KAI Rotary Blade Cutter

with 45 mm dia tungsten steel blade, Hardness Rating ca. 65 HRC, ideal for swift make-up cuts in carbon, glass-fiber and PREPREG fabrics.



Art.-No. 405/2/B-CR/6" bent-up				
Size	Order No.	Total Length	Length of Cut	Weight
6"	0405.208.160	16.0 cm	5.0 cm	60 g

ROBUSO Mould-Making Scissors - chrome-plated

finely shaped, bent-up, pointed blades, hardened screw, large eyes

for use with light-weight glass, carbon and saturated laminate fabrics

Art.-No. 1026/2/B-CR/8" bent-up				
Size	Order No.	Total Length	Length of Cut	Weight
8"	1026.208.210	21.0 cm	8.0 cm	166 g

ROBUSO Mould-Making Shears - chrome-plated

Heavy-Duty Shears with bent-up blades

This Model is a special ROBUSO-development featuring pointed blades, an extra large "oblong" eye and a fulcrum point located closer to the blades for positive leverage. Unusually high cutting efficiency right down into the tips.

Art.-No. 1026/4/B-CR/8" bent-up				
Size	Order No.	Total Length	Length of Cut	Weight
8"	1026.408.210	21.0 cm	8.0 cm	166 g

ROBUSO Mould-Making Shears - chrome-plated

same as Model Version 1026/2/B-CR, but with bent-up handles

Ideal for edge-trimming of saturated laminates

Art.-No. 1253/4/B-CR/7" bent-up				
Size	Order No.	Total Length	Length of Cut	Weight
7"	1253.408.185	18.5 cm	6.5 cm	111 g

ROBUSO Mould-Making Shears - chrome-plated

Sturdy shears for use with glass, carbon and saturated laminates
Blades bent-up, handles offset

Useful for trimming borders and edges

Art.-No. 1249/4/E/6" bent-up				
Size	Order No.	Total Length	Length of Cut	Weight
6"	1249.407.160	16.0 cm	6.0 cm	38 g

ROBUSO Mould-Making Scissors

Offset handles, bent-up blades, completely nickel-plated, precision hollow-ground, hardened screw

extra-light Model for delicate work

Art.-No. 1076/4/B-CR/7" bent-up				
Size	Order No.	Total Length	Length of Cut	Weight
7"	1076.408.185	18.5 cm	4.5 cm	85 g

ROBUSO light-weight Scissors for use with light glass, carbon and saturated laminate fabrics, chrome-plated

short, bent-up blades, offset handles, both blades micro-serrated

Ideal for precise trimming of borders and edges



ROBUSO® Scissors and Shears designed to trim "high-tech" Threads

- **C60** Made of forged and hardened C60 carbon steel
- **Blades and handles precision ground**
- **M** One micro-serrated blade



Art.-No. 322/E/5"

	Size	Order No.	Total Length	Length of Cut	Weight
✓	5"	0322.107.130	13.3 cm	5.0 cm	56 g

ROBUSO Weavers' Scissors

Nickel-plated, precision hollow-ground, hardened screw
one blade serrated: for use with glass, carbon and Aramide threads

Sturdy Model Version with optimum leverage factor and compact, pointed blades

Art.-No. 322/E-RD/5"

	Size	Order No.	Total Length	Length of Cut	Weight
✓	5"	0322.124.130	13.3 cm	5.0 cm	56 g

ROBUSO Weavers' Scissors

Both blades serrated: for precise trimming of extremely smooth, tough threads such as Dyneema® products
with rounded tips for safe pocketing

Art.-No. 615/E/5"

	Size	Order No.	Total Length	Length of Cut	Weight
✓	5"	0615.107.130	13.0 cm	4.2 cm	48 g

ROBUSO Weavers' Scissors - Compact Model Version

Nickel-plated, precision hollow-ground, hardened screw

Art.-No. 721/E/4"

	Size	Order No.	Total Length	Length of Cut	Weight
✓	4"	0721.107.105	10.5 cm	3.8 cm	23 g

ROBUSO Weavers' Pocket Scissors for very thin threads

Both blades micro-serrated with rounded tips for safe pocketing, completely nickel-plated, precision hollow-ground.

Also a popular advertising gift: with gold-plated handles and your company logo.

Art.-No. 2111/H/6"

	Size	Order No.	Total Length	Length of Cut	Weight
✓	6"	2111.140.160	16.0 cm	3.0 cm	71 g

ARS Weavers' Scissors

The blades of these scissors are made of sintered "PM" speciality steel with a hardness rating of as much as 1300 HV. This is another High-Tech product designed for excellent cutting performance at a minimum of physical effort plus an extremely long service life.

The black plastic handles of these scissors, Made in Japan, are generously dimensioned and produce, in combination with the short blades a high leverage effect. Round-tipped blades are OK for pocketing, i.e. always ready to hand.

both blades micro-serrated

High-Tech Shears made in Japan

- Powder Metallurgy
- Duplex metal
- Laser Technology

= 3x applied high-tech for efficiency optimization

-  One micro-serrated blade




Adjustable
Blade Contact
Pressure

2110/H/10"


2151/HSS


2201/R/9.5"



Art.-No. 2110/H/10" 				
Size	Order No.	Total Length	Length of Cut	Weight
10"	2110.140.260	26.0 cm	9.0 cm	248 g

ARS Aramid Eater

The blades of these High-Tech shears - Made in Japan - are made of sintered "PM" speciality steel with a hardness rating of 1300 HV (equal to a theoretical rating of approx. 72 HRC), thus lasting very long. The light-weight, cast aluminum handles are of absolute hand-fit design and in perfect balance with the blades.

The contact pressure of the blades can be adapted to the material thickness across the adjusting screw. Both blades are micro-serrated.


Extreme cutting efficiency, even with PBO (Zylon®).

Art.-No. 2151/HSS 				
Size	Order No.	Total Length	Length of Cut	Weight
9.5"	2151.150.250	25.0 cm	10.0 cm	218 g
11.0"	2151.150.290	29.0 cm	11.0 cm	318 g

SLD Tailor's Shears - HSS Steel

Shears made of duplex metal "Made in Japan". The cutting edges are made-up of deposition-rolled HSS high speed steel with a hardness rating of ca. 64 HRC. This Model is perfectly ergo-styled and features an extra-large oblong eye and a positive leverage factor.

The structural make-up renders these shears as ideal for use with Aramide fabrics and other technical textiles.

Art.-No. 2201/R/9.5" 				
Size	Order No.	Total Length	Length of Cut	Weight
9.5"	2201.113.250	24.0 cm	8.0 cm	212 g

KAI Shears, stainless

A light-weight Model made of high-alloyed, laser-processed stainless steel with a hardness rating of 58 HRC. Designed for making up of lightweight technical textiles.

High-Tech Steel turned into a lightweight facility.

ROBUSO Regrinding Service:

Shears can be reworked and refinished by our Regrinding Services - see Page 18.



Logical Alternatives for use with glass fiber

These three shears are a good alternative solution for cutting glass fiber. They feature micro-serrated cutting edges to prevent material slippage.

One micro-serrated blade



Art.-No. 2170/CV/6"

Size	Order No.	Total Length	Length of Cut	Weight
6"	2170.133.160	16.0 cm	3.0 cm	55 g

Pelloro Weavers' Scissor

with large eyes for handling comfort
cutting edges are induction hardened,
one blade micro-serrated

Art.-No. 1021/HQ/C/

Size	Order No.	Total Length	Length of Cut	Weight
8"	1021.153.210	21.0 cm	9.0 cm	210 g
10"	1021.153.260	26.0 cm	12.5 cm	360 g

Pelloro Glass Fiber Shears

Forged carbon steel blades, machine-ground,
handles black lacquer finish,
one blade micro-serrated

Art.-No. 2050/R

Size	Order No.	Total Length	Length of Cut	Weight
9"	2050.113.235	24.5 cm	9.0 cm	203 g
10"	2050.113.260	26.5 cm	10.0 cm	227 g
11.5"	2050.113.300	30.5 cm	14.0 cm	275 g

ROBUR Stainless glass fiber shears

Stainless glass fiber shears with ergo-styled plastic handles,
one blade micro-serrated



Repair and Service





ROBUSO® Regrinding Services: **Expert workmanship, efficient, budget-priced and prompt**

1. INCOMING ITEMS INSPECTION

Your shears are subjected to a thorough inspection upon arrival, their condition is recorded and the critical details are noted in the repair order. Regrinding results depend on the remaining width of the blades and if the lower limit is reached you will be advised accordingly in our confirmation of order.

2. DISASSEMBLY

Your shears are taken apart, screws are sorted, graded and deposited on a tray whilst the blades are threaded onto a rod for processing. Residuals of any description are removed by hand and the blades are now ready for the "precision hollow-grinding".

3. HOLLOW-GRINDING

Forged shears are now subjected to a classic Solingen Special, namely "precision hollow-grinding". Used blades are usually showing signs of corrosion, clotting or other defects. The hollow inner blades are decisive for perfect cutting results, towards which end our master grinder will hollow-grind the blades on special leather wheels by carefully following the original concave contour. This process requires the use of a number of different concave surface leather wheels to redress the cutting edge. Upon completion the hollow inner blade is clean and a smooth cutting is reestablished.

4. ASSEMBLY

The master assembler puts the shear blades together, installs the original screw and arranges for the cutting edge grinding process. In case screws are worn to the point where they fail to grip, they will be replaced by new.



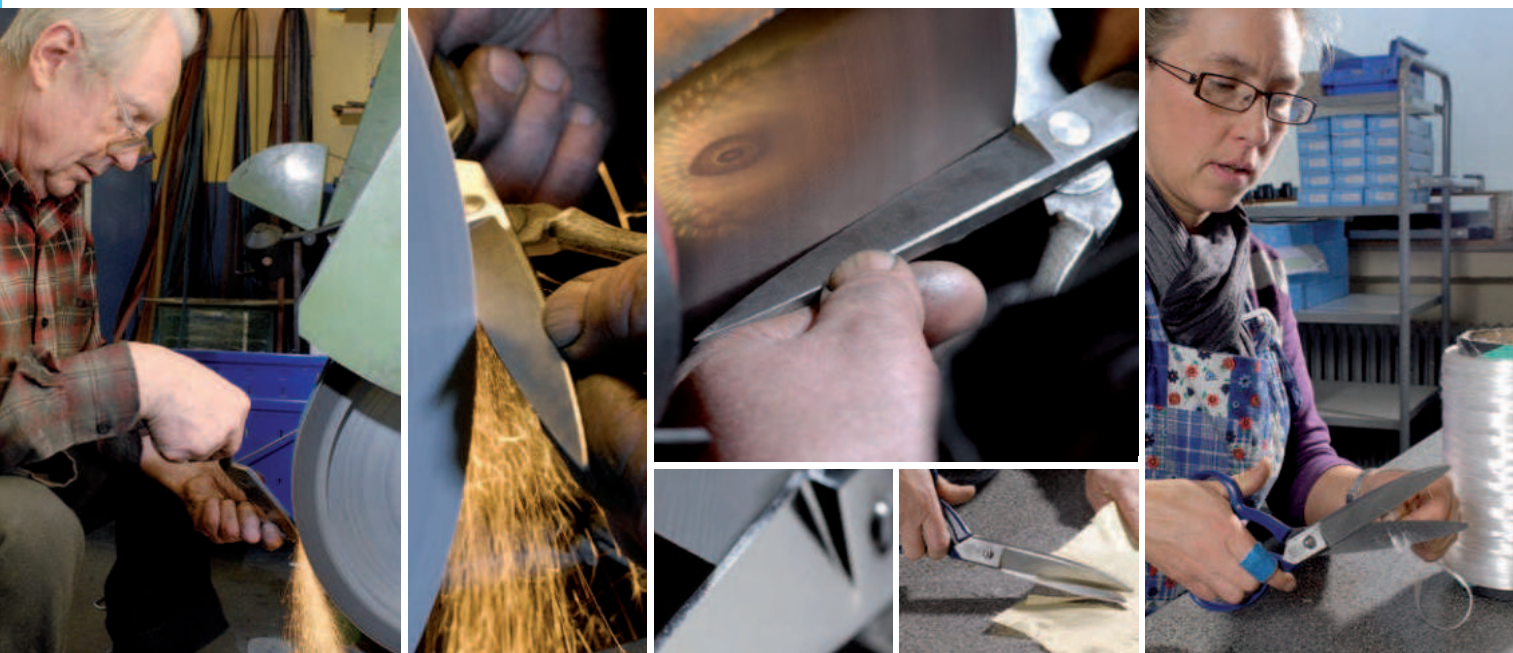
ROBUSO® Regrinding Services:

- ▶ always at your service, even during vacation periods
- ▶ all brands will be handled
- ▶ lead time normally one week
- ▶ each regrinding order will be duly confirmed

Special Requirements?

- Upgrading by micro-serration
- Micro-serrating of carbide metal machine blades
- Grinding of tips to acute needle-point sharpness
- Rounding of tips
- Bending of handles
- PVC-coating of handles
- Adaption of shears to specific material types: e.g. extra edge bevel for cutting of felt, leather

- or somewhat thicker materials, or increasing or reducing blade contact pressure, or increasing of tip-end pressure
- Teflon®-coating of shears (minimum volumes subject to prior agreement)
- Numbering of shears for improved stock control
- Inscription of shears with company name or logo (for intercompany identification or for advertising purposes)



5. EDGE GRINDING

This operation is performed on the sharpening stone with the shears in completely assembled condition. Our master assembler makes sure that the original regrind angle is strictly adhered to, with the rounded edge zones included. Remaining notches not having been removed yet are finally erased by way of the "edge grinding" pass, which requires greatest skill and many years of experience. Due to this experience an overheating of the cutting edge, which would cause a weakening of the steel hardness, does not take place.

6. SERRATING

Micro-serrated blades are of greatest advantage when working with synthetic fibers such as polypropylene, glass fiber, Aramide because they prevent material slippage and provide, thus, for precise cutting. Many ROBUSO shears feature micro-serration on the blades, which is removed during the "edge grinding" in order to reproduce the original precision-ground cutting edge. Once this is accomplished, an absolutely new micro-serrated edge will be applied.

7. EFFICIENCY CHECK

The master assembler is now checking the efficiency of the reground shears. He makes sure that the start of a cut is even and not vicious, the cut continues flawlessly right down into the tips and that they produce an even and delicate cut. The slightest deviation from these basic requirements is then expertly balanced out and corrected. Our claim is, that reground shears should cut as easily and delicately as new ones do.

8. QUALITY INSPECTION

Every reground shears wind up on the final inspection bench where our specialist tests the reground cutting quality with the material you provided or we recommend: ROBUSO-Elastic - curtain material, ROBUSO Tailor's Shears - lining material, ROBUSO proton® - Aramide material. Once these tests are passed, our specialist applies a drop of oil to the screw and a thin oil film to the inner and outer blades. The Quality Control Final: Numbers are checked against the repair order, confirmed and forwarded to the Shipping Department.

Maier Grinding Machine "do it yourself"

A compact-size grinding machine with an articulated support arm and tool holder in which the shears are firmly mounted and safely guided towards the grinding and stropping wheel surfaces. Ideal for use with shears up to 8".

MAIER 111 Grinding Machine

Order No.	Weight
2911.000.000	7.2 kg

Accessorial Items

Order No.	Description
2911.013.000	Articulated Support Arm Assy. for Maier 111
2911.011.000	Grinding Wheel - 10 mm wide
2911.012.000	Stropping Wheel





ROBUSO® Scissors and Shears

The ideal Advertising Gifts

- ROBUSO Scissors and shears bearing your Company Name and/or Logo will positively remind your customers of you, your representatives and your products.
- Moreover, gifts are not necessarily based on ulterior commercial motives, but can also be used to express personal feelings involved with anniversaries, retirements, openings, etc. In other words, quality gift scissors will always be appreciated.
- After all, it's the thought that counts.

Plain Laser Inscriptions:

Your text, of which we require a digital copy, will be lasered onto the blade.

Coloured Laser Inscriptions:

These involve two steps, first a deep laser cut followed by adding any desired colour, your house colour included.

Surface Etchings:

These require an etching stencil for your inscription - minimum 100 each.

Contact us, we shall be happy to help you selecting the best method.

Advertising medium or simply a gift - ROBUSO Scissors do what they are meant to do

You select which model is best for customers or deserving employees. You can be sure of positive responses - we shall be happy to advise you.



Page 38
2007/R/5"

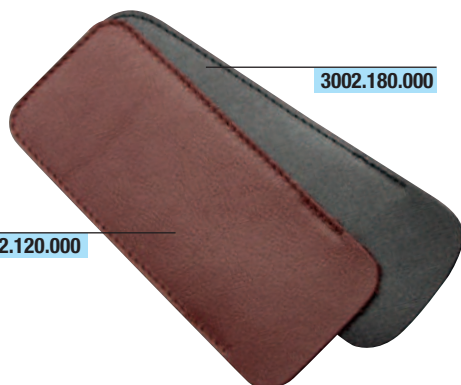
Page 27
2200/R/8"

That's where your advertisement could show up



Page 38
705/L/6"

Page 25
1055/L/9.5"



3002.180.000

3002.120.000



3001.050.000



Tailor's Shears Case for Sizes 8", 9" and 10"

Order No. 3001.050.000

Tailor's Shears Case

outside black leather, inside grey "Sudet" velvet

Protective Leather Cases

Order No.	Description
3002.120.000	5" Case - bordeaux
3002.180.000	6" Case - black

***Shears for Traditional
Tailoring***





ROBUSO® Tailor's Shears in Master-crafted Quality perfect in Function and Efficiency

Classic Model Design

ROBUSO Tailor's Shears are expertly crafted, forged from C60 high carbon steel, hardened, precision blue-ground, perfectly aligned and assembled, thus featuring:

- ▶ high-rate hardness (ca. 59 HRC)
- ▶ interlocked screw
- ▶ extreme ease of handling
- ▶ uniform full-length cutting efficiency right down into the tips
- ▶ excellent cutting characteristics with thin and thick materials
- ▶ long service life

Please note that carbon steel is not a member of the stainless steel family, i.e. it tends to rust, but its cutting performance exceeds that of stainless steel by far.

That's why we prefer to use carbon steel in ROBUSO Shears in our efforts to provide the tailoring industry with truly heavy-duty products.



Powder Coating Advantages:

Powder-coated handles of forged shears represent a truly new approach and a technical progress compared to conventional wet-paint coating practices. ROBUSO shears for use with classic textile fabrics are now identified by their brilliant-red powder-coated handles:

- perfect flawless coating
- eudermic and smooth surface
- excellent durability
- improved shock resistance
- high impact resistance under hot, sweaty and humid conditions

ROBUSO Craftsmanship: „precision blue-grinding“

Precision blue-ground blades are a specific quality feature of shears. This technique can only be handled by highly skilled shear grinders. These extra-fine grinding results are manifested in the handling qualities of the shears.

For detailed information refer to Page 4/5.



Holster

Art.-No. 1020/C

	Size	Order No.	Total Length	Length of Cut	Weight
	7"	1020.103.185	18.5 cm	8.0 cm	130 g
✓	8"	1020.103.210	21.0 cm	9.0 cm	185 g
✓	9"	1020.103.235	23.5 cm	10.5 cm	260 g
✓	10"	1020.103.260	26.0 cm	12.5 cm	340 g
	11"	1020.103.290	29.0 cm	13.5 cm	420 g
	12"	1020.103.315	31.5 cm	15.0 cm	525 g
	13"	1020.103.340	34.0 cm	16.5 cm	695 g
	14"	1020.103.365	36.5 cm	18.0 cm	705 g

ROBUSO Tailor's Shears

Blades precision blue-ground,
handles brilliant-red powder-coated

Holster

Size	Order No.
8"	3002.160.210
9"	3002.160.235
10"	3002.160.260

Leather - fits sizes 8", 9" and 10"

ROBUSO Regrinding Service:

All scissors and shears can be reworked and refinished by our Regrinding Services- see page 18



Art.-No. 1020/DMR

Size	Order No.	Total Length	Length of Cut	Weight
7"	1020.106.185	18.5 cm	8.0 cm	130 g
8"	1020.106.210	21.0 cm	9.0 cm	185 g
9"	1020.106.235	23.5 cm	10.5 cm	260 g
10"	1020.106.260	26.0 cm	12.5 cm	340 g
11"	1020.106.290	29.0 cm	13.5 cm	420 g

ROBUSO Tailor's Shears MASTER ROBUSO

Outer blades nickel-plated, precision hollow-ground, with deep-etched and gold-lined "MASTER ROBUSO" imprint, Handles brilliant-red powder-coated.



Art.-No. 1020/HQ/C

Size	Order No.	Total Length	Length of Cut	Weight
7"	1020.153.185	18.5 cm	8.0 cm	130 g
8"	1020.153.210	21.0 cm	9.0 cm	210 g
9"	1020.153.235	23.5 cm	10.5 cm	285 g
10"	1020.153.260	26.0 cm	12.5 cm	360 g
11"	1020.153.290	29.0 cm	13.5 cm	400 g
12"	1020.153.315	31.5 cm	15.0 cm	515 g

PELLORO Tailor's Shears

Blades machine-ground, handles black lacquer finish





ROBUSO®-ELASTIC

the Tailor's Shears with built-in "Power Steering", designed for "Maximized Ease of Handling"

- Outer blades are nickel-plated, inner and outer blades are chromium-plated for extra rust protection
- Now with red/black powder-coated handles
- Comfortable handle eyes
- Ideal for use with curtain fabrics
- Internal Fulcrum Spring

1052/CR/10"

C60

option:

rounded
tips
1052/CR-RD

Micro-Serrated Blades:



Synthetic fiber materials represent a great challenge to any shears because they are usually smooth, hard and tough.

All ROBUSO Shears for use with technical textiles feature micro-serrated blades to cope successfully with such fabrics as they grip the material firmly and permit, thus, controlled cuts.



One micro-serrated blade

All about the Internal Spring:

The fulcrum of these shears is leaf-spring-loaded to ensure that the joint faces 'float', i.e. do not contact one another, thus not causing any internal friction during the cutting process and that the blades are constantly in preloaded edge-to-edge contact right down into their tips.

The Advantages of ROBUSO-ELASTIC Tailor's Shears:

- extreme ease of handling and control
- absence of undue physical effort due to the "power steering" effect

Art.-No. 1052/CR

Size	Order No.	Total Length	Length of Cut	Weight
8"	1052.104.210	21.0 cm	9.0 cm	185 g
9"	1052.104.235	23.5 cm	10.5 cm	260 g
10"	1052.104.260	26.0 cm	12.5 cm	340 g
11"	1052.104.290	29.0 cm	13.5 cm	420 g
12"	1052.104.315	31.5 cm	15.0 cm	525 g

Art.-No. 1052/CR-RD/ rounded tips

Size	Order No.	Total Length	Length of Cut	Weight
8"	1052.104.211	21.0 cm	9.0 cm	185 g
9"	1052.104.236	23.5 cm	10.5 cm	260 g
10"	1052.104.261	26.0 cm	12.5 cm	340 g
11"	1052.104.291	29.0 cm	13.5 cm	420 g
12"	1052.104.316	31.5 cm	15.0 cm	525 g

ROBUSO-ELASTIC Tailor's Shears

Classic Tailor's Shears Model without micro-serrated blades

ROBUSO-ELASTIC Tailor's Shears with straight (i.e. without any serrations) blade edges are ideal for use with natural fibers, jersey and tricot fabrics, woollen and knitted materials, thin leathers, furs.

The golden rule: The thicker the material, the larger the size of the shears!



shown in
original size

**Art.-No. 1053/CR**

	Size	Order No.	Total Length	Length of Cut	Weight
✓	8"	1053.104.210	21.0 cm	9.0 cm	185 g
✓	9"	1053.104.235	23.5 cm	10.5 cm	260 g
✓	10"	1053.104.260	26.0 cm	12.5 cm	340 g
	11"	1053.104.290	29.0 cm	13.5 cm	420 g
	12"	1053.104.315	31.5 cm	15.0 cm	525 g

Art.-No. 1053/CR-RD rounded tips

	Size	Order No.	Total Length	Length of Cut	Weight
	8"	1053.104.211	21.0 cm	9.0 cm	185 g
	9"	1053.104.236	23.5 cm	10.5 cm	260 g
	10"	1053.104.261	26.0 cm	12.5 cm	340 g
	11"	1053.104.291	29.0 cm	13.5 cm	420 g
	12"	1053.104.316	31.5 cm	15.0 cm	525 g

ROBUSO-ELASTIC Tailor's Shears

Classic Tailor's Shears Model, precision hollow-ground with one micro-serrated blade

Cutting and making-up of plain synthetic fiber fabrics, curtain and decorative fabrics, natural and artificial silk, light-weight sailcloth, canvas and tarpaulin materials.

Art.-No. 1055/CR

	Size	Order No.	Total Length	Length of Cut	Weight
✓	8"	1055.104.210	21.0 cm	8.0 cm	170 g
✓	9.5"	1055.104.250	25.0 cm	9.5 cm	230 g

Art.-No. 1055/CR-RD rounded tips

	Size	Order No.	Total Length	Length of Cut	Weight
	8"	1055.104.211	21.0 cm	8.0 cm	170 g
	9.5"	1055.104.251	25.0 cm	9.5 cm	230 g

ROBUSO-ELASTIC Tailor's Shears

Point-tipped blades, precision hollow-ground, one blade micro-serrated

For use anywhere professionally controlled cutting and making-up is required: interior decorators handling curtain fabrics, tailor's studio for delicate making-up work.

Important Info:

This model is excellent for controlled cuts because users have full view of the path of cut. Three fingers are comfortably nested within the large "oblong" eye. Model 1055 offers excellent leverage and reduced physical effort due to the higher location of the screw. This Model Version weighs less than the comparable classic model.

Art.-No. 1053/L

	Size	Order No.	Total Length	Length of Cut	Weight
	8"	1053.109.210	21.0 cm	9.0 cm	185 g
	9"	1053.109.235	23.5 cm	10.5 cm	260 g
	10"	1053.109.260	26.0 cm	12.5 cm	340 g
	11"	1053.109.290	29.0 cm	13.5 cm	420 g
	12"	1053.109.315	31.5 cm	15.0 cm	525 g

Art.-No. 1055/L/9.5"

	Size	Order No.	Total Length	Length of Cut	Weight
	9.5"	1055.109.250	25.0 cm	9.5 cm	230 g

ROBUSO-ELASTIC Tailor's Shears

Narrow-bladed Model Version, handles precision eye-ground gold-plated, precision hollow-ground, one blade micro-serrated. The gold-plated handles are noble. Due to the extra-fine eye-grinding they adapt to the hand in a truly comfortable way.

Tailor's Shears as Advertising Gifts:

Scissors with gold-plated handles are exceptionally extravagant gifts for people appreciating quality tools and being honoured for having passed an examination, or having won a fashion contest, or having been a Company old-times or becoming a pensioner... (see also Page 20)



ROBUSO® "MASTER"-crafted Shears

In addition to our Classic and ROBUSO Elastic Tailor's Shears, we also have a further number of "Specials" on our Programme, featuring:



Art.-No. 1025/C

	Size	Order No.	Total Length	Length of Cut	Weight
	8"	1025.103.210	21.0 cm	8.0 cm	166 g
✓	9.5"	1025.103.250	25.0 cm	9.5 cm	230 g

ROBUSO Shears

A ROBUSO "Special Model" with narrow, point-tipped blades, large oblong eye and higher located screw for extra leverage and cutting efficiency right down into the tips. The blades are precision blue-ground, the handles brilliant-red powder-coated.

This Model is perfectly ergo-styled, features an extra-large oblong "three fingers" eye for powerful cutting efficiency right down into the tips.

Controlled cutting and making-up of light- and medium-weight fabrics, upholstery cloths, leathers, tarpaulin and canvas materials - also suitable for use with thin cardboard sheets.

Art.-No. 1025/E

	Size	Order No.	Total Length	Length of Cut	Weight
	8"	1025.107.210	21.0 cm	8.0 cm	166 g
	9.5"	1025.107.250	25.0 cm	9.5 cm	230 g

ROBUSO Shears - completely nickel-plated

This is another new ROBUSO-development, featuring:

- handles precision eye-ground
- completely nickel-plated
- precision hollow-ground
- hair scissors movement

The superb handling qualities, characterising professional hair scissors, are the accomplishment of our highly skilled master grinders in combination with a special Japanese fine-grinding technique - all this is adding up to something "Extraordinary" in the Tailor's Shears domain.

Note:

When handling really thick material, (e.g. felt, carpeting, saddle leather, etc.) the cutting edge may have to be ground with an extra bevel to require less effort.
Please let us have your material samples.

Art.-No. 1023/C

	Size	Order No.	Total Length	Length of Cut	Weight
✓	10"	1023.103.260	26.0 cm	10.0 cm	361 g
	12.75"	1023.103.330	33.0 cm	13.0 cm	553 g

ROBUSO Shears

A solid, so-called American WISS Model, with compact, pointed blades and an extra-large "four fingers" handle eye for strong hands to make the best of the positive leverage factor. Blades precision blue-ground, handles brilliant-red powder-coated. For use with heavy-weight fabrics, upholstery materials, felt, canvas and tarpaulin materials, tent cloths, leather, carpeting and thick wadding.

Art.-No. 2150/HSS

	Size	Order No.	Total Length	Length of Cut	Weight
	9.5"	2150.150.250	25.0 cm	11.0 cm	218 g
	11"	2150.150.290	28.0 cm	12.0 cm	318 g
	12"	2150.150.315	32.0 cm	13.5 cm	452 g

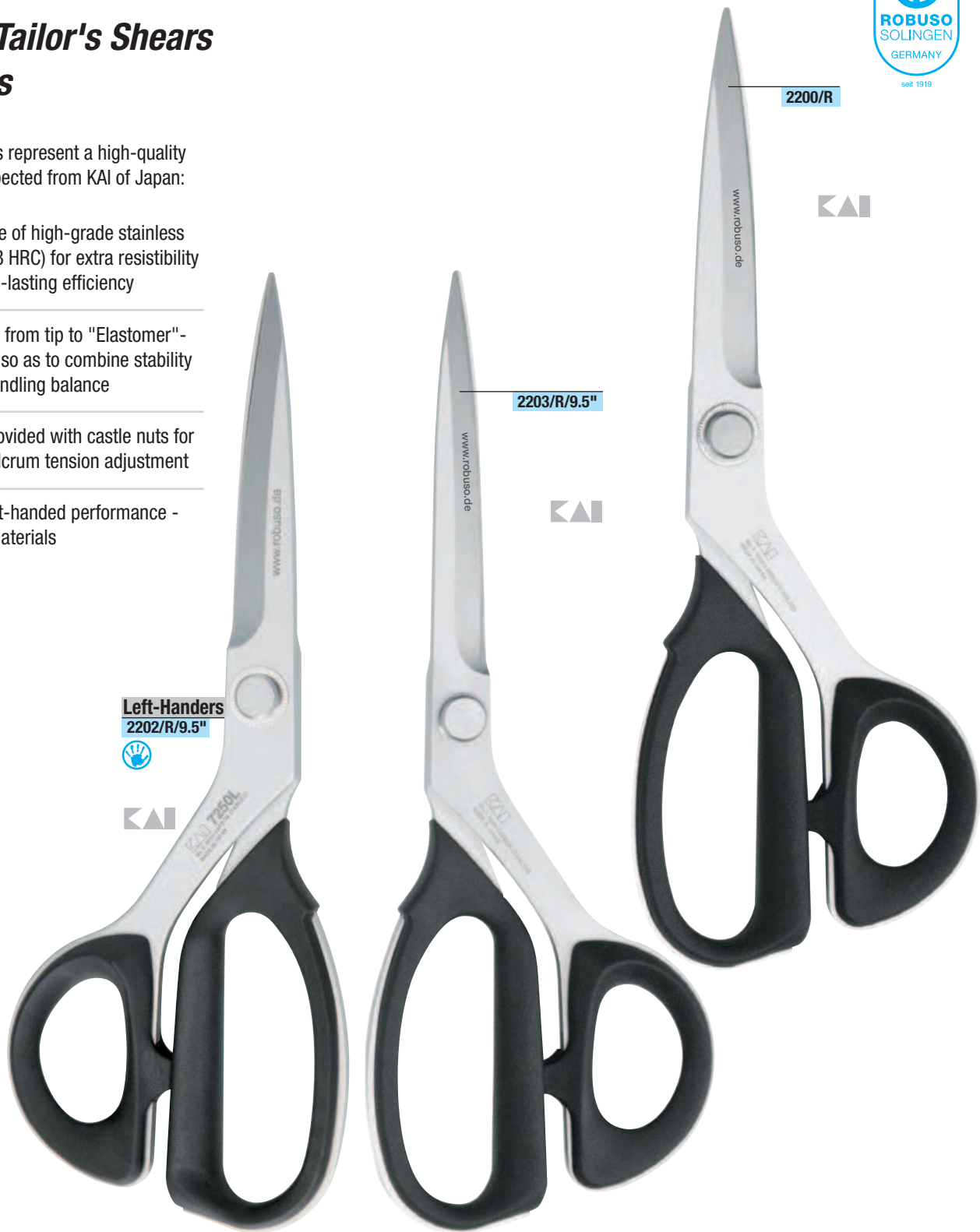
SLD Tailor's Shears - HSS Steel

Shears made of duplex metal "Made in Japan". The cutting edges are made-up of deposition-rolled HSS high speed steel with a hardness rating of ca. 64 HRC. This Model is perfectly ergo-styled and features an extra-large oblong eye and a positive leverage factor.

Stainless Tailor's Shears KAI Shears

These tailor's shears represent a high-quality series as can be expected from KAI of Japan:

- ▶ Blade edges made of high-grade stainless specialty steel (58 HRC) for extra resistibility coupled with long-lasting efficiency
- ▶ One-piece halves from tip to "Elastomer"-soft-lined handle so as to combine stability with improved handling balance
- ▶ All Models are provided with castle nuts for unproblematic fulcrum tension adjustment
- ▶ Exceptionally light-handed performance - even with thick materials



Applications:

Anywhere in upholstery and tailoring, also to cope with carpeting, tarpaulin material, tent cloths, felt and other heavyweights. Stainless means here usage under high humidity conditions, sweaty hands included.

Art.-No. 2202/R/9.5"

Size	Order No.	Total Length	Length of Cut	Weight
9.5"	2202.113.250	25.0 cm	9.5 cm	220 g

KAI Tailor's Shears - Left-handers' Version

Art.-No. 2203/R/9.5"

Size	Order No.	Total Length	Length of Cut	Weight
9.5"	2203.113.250	25.0 cm	9.5 cm	200 g

KAI Tailor's Shears - slim-line Version

Art.-No. 2200/R

Size	Order No.	Total Length	Length of Cut	Weight
8"	2200.113.210	21.0 cm	8.0 cm	200 g
8.5"	2200.113.225	22.5 cm	9.0 cm	170 g
9.5"	2200.113.250	25.0 cm	9.5 cm	220 g
10.5"	2200.113.275	28.0 cm	11.5 cm	260 g
11.5"	2200.113.300	30.0 cm	12.5 cm	315 g

KAI Tailor's Shears

ROBUSO Regrinding Service:

All Shears can be reworked and refinished by our Regrinding Services - see Page 18





Scissors and Shears for Left-Handers

ROBUSO-experience shows that left-handers are especially grateful for the availability of scissors and shears designed for their use.

These 'specials' fit perfectly into their hands, are readily controlled and require much less physical effort than is the case with having to use conventional designs.

Left-handers having had to use 'conventional' scissors or shears, are now required to refamiliarize themselves with these 'specials' because they are still likely to apply - subconsciously -

counteracting blade pressure with the result that these "Lefties Only" shears clamp the material between the blades instead of cutting.

Remember: Good things take time - after which you will appreciate our left-handers scissors and shears.



1012/E/7"



2202/R/9.5"



2221/R/8"



1040/C



Art.-Nr. 1012/E/7"

Size	Order No.	Total Length	Length of Cut	Weight
7"	1012.107.185	18.2 cm	7.8 cm	109 g

Light-weight **ROBUSO** Dressmaker's Scissors

Completely nickel-plated with inner blade surfaces precision blue-ground.

This is our only "semi-left-handers" model. Left handers having been used for years to work with right-handers' models will have no problem whatever with these scissors.

Hard sewing room duties and work in the studio.

Art.-Nr. 2202/R/9,5"

Size	Order No.	Total Length	Length of Cut	Weight
9.5"	2202.113.250	25.0 cm	9.5 cm	220 g

KAI Left-Handers' Scissors

This is the left-handers' Version of the KAI 2200 Series (see Page 27). The scissor halves are laser-cut in one

solid piece and almost razor-sharp, easy to handle thanks to the soft plastic-lined and ergo-styled handle eyes.

KAI stands for effortless controlled cutting.

Art.-Nr. 2221/R/8"

Size	Order No.	Total Length	Length of Cut	Weight
8"	2221.113.210	20.5 cm	7.3 cm	113 g

Light-weight **KAI** Left-Handers' Scissors

"Lefties only" = handles+blades in mirror-inverted configuration, stainless steel blades, soft plastic-coated handles with one 'four-fingers' eye

Light sewing room duties, work in the studio and/or wherever light-weight corrosion-protected scissors with an extremely large eye are required.

Art.-Nr. 1040/C

	Size	Order No.	Total Length	Length of Cut	Weight
✓	8"	1040.103.210	21.0 cm	9.0 cm	191 g
✓	10"	1040.103.260	26.0 cm	10.5 cm	340 g

ROBUSO Tailor's Shears for Left-Handers

"Lefties only" = handles+blades in mirror-inverted configuration, precision blue-ground blades, handles brilliant-red powder-coated. Excellent for controlled cuts with full view of the path of cut whilst standing in upright position.

For use with natural fibers, woolen and knitted materials, upholstery cloths, thin leathers, etc.



1041/C
C60 M



1041/S
C60 M



1048/CR
C60

option:
M
with micro-
serration
1049/CR

Art.-Nr. 1041/C				
Size	Order No.	Total Length	Length of Cut	Weight
8"	1041.103.210	21.0 cm	9.0 cm	191 g
10"	1041.103.260	26.0 cm	10.5 cm	340 g

ROBUSO Left-Handers' Tailor's Shears
for use with all technical textiles

A genuine left-handers' Model with blades and handles in mirror-inverted configuration for controlled cuts with full view of the path of cut whilst standing in upright position. The handles are enveloped by an easy-grip powder-coating.

The micro-serrated finish prevents slippage of smooth, tough fabric material.

Ideal for work with technical textiles such as glass and carbon fiber fabrics, Aramide and polyester composites

Art.-Nr. 1041/S				
Size	Order No.	Total Length	Length of Cut	Weight
8"	1041.121.210	21.0 cm	9.0 cm	191 g
10"	1041.121.260	26.0 cm	10.5 cm	340 g

ROBUSO Left-Handers' Shears
for all technical textiles

These proton®-coated left-handers' shears complement our proton® Series on Page 8 and 9.

proton®-coatings produce a super-hard surface with a hardness rating of ca. 3400 Vickers (HV) and provide effective protection against abrasive wear, which is of particular importance when working with Aramide material types and grades.

proton®-coated surfaces are, due to the chemically non-reactive qualities of the coating formula, less apt to cake as do uncoated surfaces. Proton®-overall-coated ROBUSO shears can be readily cleaned with solvent to remove any-resin and/or adhesive residuals, especially for a final clean-up at the end of a workday.

Art.-Nr. 1048/CR				
Size	Order No.	Total Length	Length of Cut	Weight
8"	1048.104.210	21.0 cm	9.0 cm	191 g
10"	1048.104.260	26.0 cm	10.5 cm	340 g

Art.-Nr. 1049/CR micro-serrated

Size	Order No.	Total Length	Length of Cut	Weight
8"	1049.104.210	21.0 cm	9.0 cm	191 g
10"	1049.104.260	26.0 cm	10.5 cm	340 g

ROBUSO-ELASTIC Left-Handers' Shears

with Internal Fulcrum Spring
Blades and handles in mirror-inverted configuration, blade outside surfaces nickel/chrome-plated, precision hollow-ground and chrome-plated. Handles with red/black mottled powder-coating, extreme ease of handling, corrosion-protected.

Art.-Nr. 1048/CR

For use with natural fiber fabrics, woollen and knitted materials, upholstery cloths, thin leathers, etc.

Art.-Nr. 1049/CR

For use with plain synthetic fiber fabrics, natural and artificial silk, curtain and decorative fabrics, etc.



ROBUSO® Floor Layer's, Leather and Cardboard Pattern Shears



Art.-Nr. 1073/D/7.75"

	Size	Order No.	Total Length	Length of Cut	Weight
✓	7.75"	1073.105.200	20.0 cm	5.0 cm	208 g

ROBUSO Floor Layer's and Cardboard Pattern Shears

with long handles and short, sturdy blades with nickel-plated outer surfaces, precision hollow-ground, internal fulcrum spring, one blade edge micro-serrated, brilliant-red powder-coated handles

An ideal all-purpose shears. Easy to handle, excellent leverage for efficient cutting performance right down into the tips, great for short-length cuts into thick material. Controlled cutting of cardboard patterns, corners, edges and borders of carpeting material.

Art.-Nr. 1080/D/8.5"

	Size	Order No.	Total Length	Length of Cut	Weight
✓	8.5"	1080.105.225	22.5 cm	6.5 cm	240 g

ROBUSO Leather and Carpeting Shears

Blade outsides nickel-plated, precision hollow-ground, brilliant-red powder-coated long handles, sturdy blades, large handle eyes for a masculine hand

The positive leverage factor plus the length of the blade are ideal for use with thick materials such as leather, cardboard, rubber, carpeting and multi-layered fabric material.

Art.-Nr. 1080/3/D/8.5"

Size	Order No.	Total Length	Length of Cut	Weight
8.5"	1080.305.225	22.5 cm	6.5 cm	240 g

ROBUSO Edge Trimming Shears

with bent handles to facilitate trimming of borders and edges in upholstery shops and carpet-laying work

Art.-Nr. 1076/C/7" straight-bladed

Size	Order No.	Total Length	Length of Cut	Weight
7"	1076.103.185	18.5 cm	4.5 cm	87 g

ROBUSO Leather Shears

with long handles and narrow, pointed and precision blue-ground and micro-serrated blades, brilliant-red powder-coated handles

Positive leverage factor, ideal for leather-work and for use in upholstery shops and with motor car interior panelling items.

Art.-Nr. 1076/2/C/7" bent blades

Size	Order No.	Total Length	Length of Cut	Weight
7"	1076.203.185	18.5 cm	4.5 cm	87 g

ROBUSO Leather Shears with bent blades

with long handles and narrow, pointed and precision blue-ground and micro-serrated blades, brilliant-red powder-coated handles

Positive leverage factor, ideal for leather-work and for use in upholstery shops and by the automobile industry to trim edges and projecting lengths in moulded part production.

Art.-Nr. 1078/C/9.5"

Size	Order No.	Total Length	Length of Cut	Weight
9.5"	1078.103.250	25.0 cm	4.5 cm	200 g

ROBUSO Stencil Plate Shears

with short, precision blue-ground blades and long, brilliant-red powder coated handles

Positive leverage factor providing for forceful short-length cuts in leather, felt, cardboard, etc.



1075/C/12"

Art.-Nr. 1075/C/12"

Size	Order No.	Total Length	Length of Cut	Weight
12"	1075.103.315	31.0 cm	6.0 cm	563 g

ROBUSO Cardboard and sheet metal Shear

Blades made of high cutting power C75 high carbon tool steel, extra hard grade in excess of 60 HRC. The blades are replaceable. Extra long, powder-coated handles with extra large oblong four-fingers eye for brute-force power transfer into the short blades.

For use with thick cardboard items, tarpaulin and tent materials, matting, tyre material and light sheet metal.

1075 Replacement of Blades

Size	Order No.
12"	1500.750.000

These blades are regrindable and can be replaced by us once worn down



1260/B

Art.-Nr. 1260/B

Size	Order No.	Total Length	Length of Cut	Weight
6"	1260.102.160	16.0 cm	5.7 cm	85 g
7"	1260.102.185	18.5 cm	7.2 cm	120 g

ROBUSO Upholsterer's Shears

with solid, wide sturdy blades and precision blue-ground eyes, handles and blades and screwed joint

A classic upholsterer's shears. The blunt blade tip serves to push any protruding material into the seam.

Art.-Nr. 1248/2/E/6"

Size	Order No.	Total Length	Length of Cut	Weight
6"	1248.207.160	16 cm	6.0 cm	38 g

ROBUSO Quilting Scissors

with bent-up, precision hollow-ground, completely nickel-plated blades

For use as quilting or leather shears - designed to trim borders and edges of floor covering and carpeting materials as are used in automobile interior finishing departments, in the upholstery trade, etc.



1248/2/E/6"

C60

Art.-Nr. 1271/3/E/5.5"

Size	Order No.	Total Length	Length of Cut	Weight
5.5"	1271.307.145	14.5 cm	4.0 cm	61 g

ROBUSO Pile Trimming Shears

with one narrow, pointed blade and one generously 'bulbed' blade to collect the trimmings, blades precision ground, nickel-plated, cranked handles

Art.-Nr. 1271/3/PVC/5.5"

Size	Order No.	Total Length	Length of Cut	Weight
5.5"	1271.311.145	14.5 cm	4.0 cm	61 g

ROBUSO Pile Trimming Shears

same as above, but with PVC-coated handles serving as nickel-allergy protection

for levelling of carpeting, rug, bath mat surfaces, etc.



1271/3/PVC/5.5"

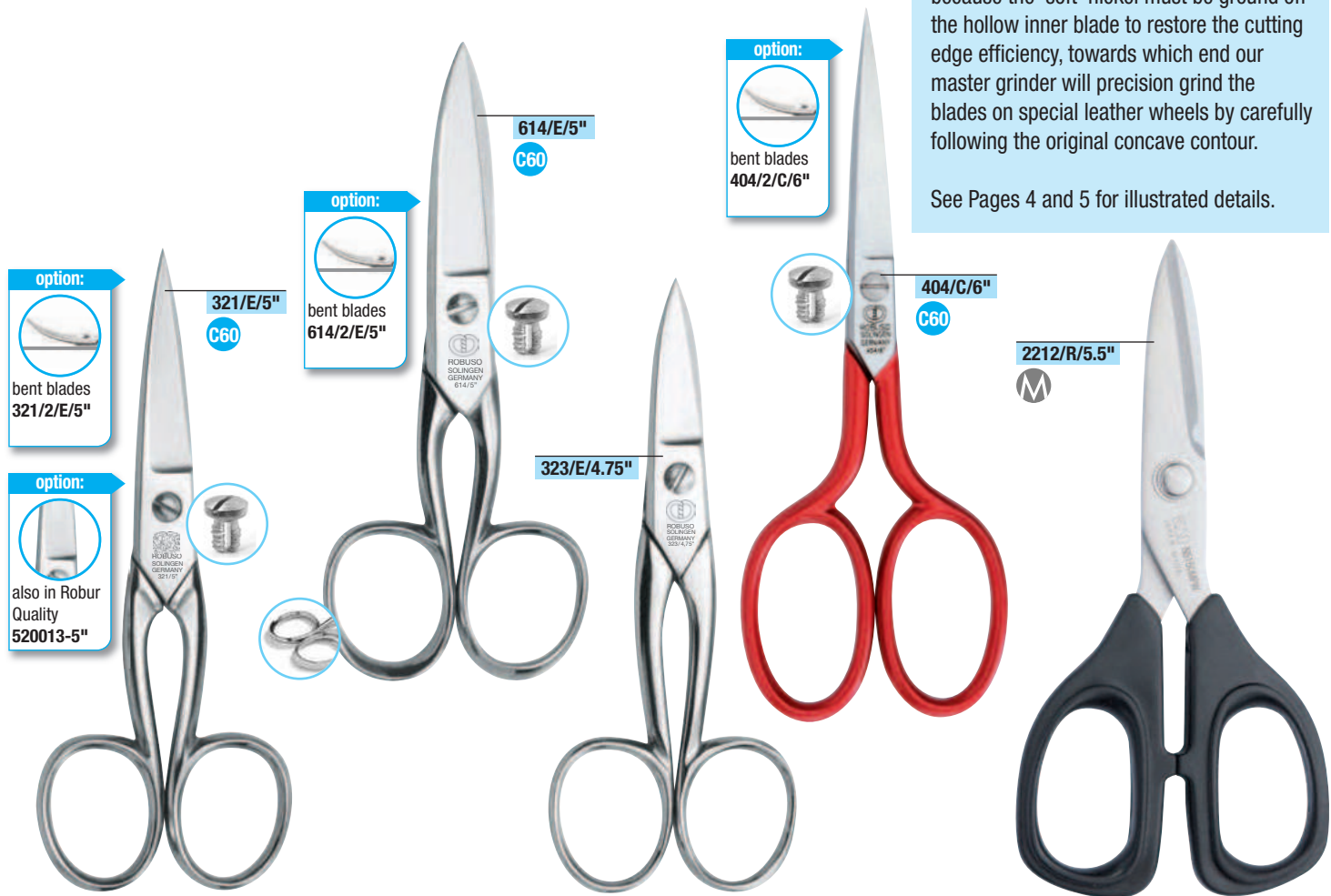
option:



nickel-plated
1271/3/E/5.5"



ROBUSO® MASTER-crafted small-sized universal Scissors



"precision hollow-ground" a ROBUSO Craftsmanship

This technique is an important step after scissors and shears have been nickel-plated because the 'soft' nickel must be ground off the hollow inner blade to restore the cutting edge efficiency, towards which end our master grinder will precision grind the blades on special leather wheels by carefully following the original concave contour.

See Pages 4 and 5 for illustrated details.

Art.-Nr. 321/E/5" straight-bladed

	Size	Order No.	Total Length	Length of Cut	Weight
✓	5"	0321.107.130	13.3 cm	4.0 cm	56 g

Art.-Nr. 321/2/E/5" bent blades

Größe	Order No.	Total Length	Length of Cut	Weight
5"	0321.207.130	13.3 cm	4.0 cm	56 g

Small sized Universal Scissors

in **ROBUSO** Master-crafted Quality

strong, slim-line, pointed completely mirror-finish nickel-plated, precision hollow-ground

The fulcrum point is located within the upper half of the scissors for optimum leverage for efficient cutting performance and high blade stability right down into the tips.

Art.-Nr. 520013-5" straight-bladed

Size	Order No.	Total Length	Length of Cut	Weight
5"	0321.167.130	13.3 cm	4.0 cm	56 g

ROBUR Universal Scissors

strong,
slim-line pointed blades forged from C45 carbon steel

Art.-Nr. 614/E/5" straight-bladed

Size	Order No.	Total Length	Length of Cut	Weight
5"	0614.107.130	13.0 cm	4.2 cm	48 g

Art.-Nr. 614/2/E/5" bent blades

Größe	Order No.	Total Length	Length of Cut	Weight
5"	0614.207.130	13.0 cm	4.2 cm	48 g

ROBUSO Ribbon and Weaver's Scissors

completely mirror-finish nickel-plated, precision hollow-ground, with canted ergo-style handle eyes to prevent blistered fingers, strong blades

Bent blades Version:

Ideal to trim curves, corners and edges and to cut thick threads.

Art.-Nr. 323/E/4.75" straight-bladed

Size	Order No.	Total Length	Length of Cut	Weight
4.75"	0323.107.125	12.4 cm	3.0 cm	38 g

ROBUSO Weaver's and Pinch Scissors

Blades straight, mirror-finish nickel-plated, precision hollow-ground, screw located in the upper half for positive leverage.

For short-length cuts in tough materials as are used in the interior furnishers' trade, garment and textile, footwear and leather-working industries.

Art.-Nr. 404/C/6" straight-bladed

	Size	Order No.	Total Length	Length of Cut	Weight
✓	6"	0404.103.160	15.4 cm	5.0 cm	60 g

Art.-Nr. 404/2/C/6" bent blades

	Size	Order No.	Total Length	Length of Cut	Weight
✓	6"	0404.203.160	15.4 cm	5.0 cm	60 g

ROBUSO Quilting Scissors in **ROBUSO** Master-crafted Quality

with long, slim-line, acutely pointed blades and large-sized handle eyes, precision hollow-ground, brilliant-red powder-coated handles - free from nickel, i.e. no risk of nickel-allergy.

Straight-bladed Version: Multi-purpose uses in the footwear, leather and leather garment as well as in the rubber industries.

Bent blades Version: For cutting curves, round shapes and borders in the footwear, leather and leather garment as well as in the rubber industries.

Art.-Nr. 2212/R/5.5"

Size	Order No.	Total Length	Length of Cut	Weight
5.5"	2212.113.145	14.5 cm	4.0 cm	54 g

KAI Multi-Purpose Scissors

stainless heavy-duty scissors with soft plastic-lined, ergo-styled handle, one micro-serrated blade and cable-trimmer

ROBUSO® Embroidery and Weavers' Scissors



Art.-Nr. 13/E straight-bladed

Size	Order No.	Total Length	Length of Cut	Weight
3.5"	0013.107.090	9.0 cm	2.5 cm	14 g
4"	0013.107.105	9.8 cm	3.2 cm	16 g

Art.-Nr. 13/2/E bent blades

Size	Order No.	Total Length	Length of Cut	Weight
3.5"	0013.207.090	9.0 cm	2.5 cm	14 g
4"	0013.207.105	9.8 cm	3.2 cm	16 g

Embroidery Scissors in ROBUSO Master-crafted Quality

with fine, straight needle-pointed blades, completely mirror-finish nickel-plated, precision hollow-ground

Straight-bladed Version: For delicate needle, embroidery and Hardanger work, undoing fine seams, trimming threads.

Bent blades Version: For pinking out of delicate embroidery work or ornamentations, trimming threads at final inspections.

Art.-Nr. 2003/R/5"

Size	Order No.	Total Length	Length of Cut	Weight
5"	2003.113.130	13.0 cm	4.5 cm	23 g

ROBUR Embroidery Scissors - stainless

with long, needle-pointed blades

Art.-Nr. 2213/R/4" straight-bladed

Size	Order No.	Total Length	Length of Cut	Weight
4"	2213.113.105	10.0 cm	2.5 cm	10 g

Art.-Nr. 2213/2/R/4" bent blades

Size	Order No.	Total Length	Length of Cut	Weight
4"	2213.213.105	10.0 cm	2.5 cm	10 g

KAI Embroidery Scissors - stainless

with short, needle-pointed blades

Art.-Nr. 2219/4/R/4"

Size	Order No.	Total Length	Length of Cut	Weight
4"	2219.413.105	10.0 cm	2.0 cm	12 g

KAI Embroidery Scissors - stainless

with offset handles and bent-up blades

Art.-Nr. 403/C straight-bladed

Size	Order No.	Total Length	Length of Cut	Weight
4"	0403.103.105	10.5 cm	3.4 cm	30 g

Weavers' Scissors in ROBUSO Master-crafted Quality

with fine, straight, pointed, sturdy, precision blue-ground blades, brilliant-red powder-coated handles, free from nickel, i.e. no risk of nickel-allergy

Standard scissors for trimming threads at weaving, sewing and textile machines, and undoing seams

Art.-Nr. 403/E straight-bladed

Size	Order No.	Total Length	Length of Cut	Weight
4"	0403.107.105	10.5 cm	3.4 cm	28 g
4.5"	0403.107.120	11.7 cm	4.0 cm	33 g

Art.-Nr. 403/2/E bent blades

Size	Order No.	Total Length	Length of Cut	Weight
4"	0403.207.105	10.5 cm	3.2 cm	28 g

Weavers' Scissors in ROBUSO Master-crafted Quality

with fine, straight, pointed, sturdy, blades, completely mirror-finish nickel-plated, precision hollow-ground

Straight-bladed Version:

Standard scissors for trimming threads at weaving, sewing and textile machines, and undoing seams.

Bent blades Version:

For trimming corners, borders and edges, curved and silhouette cuts, trimming of threads at final inspections.



Sewing Scissors in ROBUSO® Master-crafted Quality



Art.-Nr. 108/E

Size	Order No.	Total Length	Length of Cut	Weight
6"	0108.107.160	15.7 cm	6.8 cm	59 g
7"	0108.107.185	18.2 cm	8.0 cm	79 g

Sewing Scissors in **ROBUSO** Master-crafted Quality

with long, slim-line, pointed, completely mirror-finish nickel-plated blades, precision hollow-ground

Art.-Nr. 110/E

Size	Order No.	Total Length	Length of Cut	Weight
4"	0110.107.105	10.4 cm	3.7 cm	27 g
4.5"	0110.107.120	11.7 cm	4.2 cm	33 g
5"	0110.107.130	13.0 cm	4.7 cm	40 g
6"	0110.107.160	15.5 cm	6.5 cm	65 g
6.5"	0110.107.170	16.6 cm	7.0 cm	69 g
7"	0110.107.185	18.2 cm	8.0 cm	77 g

Sewing Scissors in **ROBUSO** Master-crafted Quality

with 'identical' handle eyes, outer blades mirror-finish nickel-plated, precision hollow-ground

Art.-Nr. 120/E

Size	Order No.	Total Length	Length of Cut	Weight
4.5"	0120.107.120	11.7 cm	4.2 cm	31 g
5"	0120.107.130	13.0 cm	4.7 cm	46 g
5.5"	0120.107.145	14.2 cm	5.5 cm	52 g
6"	0120.107.160	15.5 cm	6.5 cm	56 g

Sewing Scissors in **ROBUSO** Master-crafted Quality

with canted ergo-style handle eyes to prevent blistered fingers.

The inner handle surfaces are ergo-styled to fit the right hand properly, thus preventing blistered fingers. Outer blades mirror-finish nickel-plated, precision hollow-ground.

Art.-Nr. 120/HQ/E

Size	Order No.	Total Length	Length of Cut	Weight
4"	0120.157.105	10.4 cm	3.7 cm	27 g
5"	0120.157.130	13.0 cm	4.7 cm	41 g
6"	0120.157.160	15.5 cm	6.5 cm	62 g

Sewing Scissors in **PELLORO** Quality

Art.-Nr. 250/C

Size	Order No.	Total Length	Length of Cut	Weight
6"	0250.103.160	15.7 cm	6.2 cm	70 g
7"	0250.103.185	18.3 cm	7.4 cm	99 g

Sewing Scissors in **ROBUSO** Master-crafted Quality

with a large oblong eye, precision blue-ground blades, hardened screw, handles brilliant-red powder-coated, free from nickel, i.e. no risk of nickel-allergy

Art.-Nr. 250/E

Size	Order No.	Total Length	Length of Cut	Weight
6"	0250.107.160	15.7 cm	6.2 cm	64 g
6.5"	0250.107.170	17.0 cm	7.0 cm	81 g
7"	0250.107.185	18.3 cm	7.4 cm	95 g
8"	0250.107.210	20.7 cm	8.8 cm	114 g
9"	0250.107.235	23.3 cm	10.8 cm	142 g

Sewing Scissors in **ROBUSO** Master-crafted Quality

with a large oblong eye, completely mirror-finish nickel-plated, hardened screw, precision hollow-ground

Art.-Nr. 250/HQ/E

Size	Order No.	Total Length	Length of Cut	Weight
6"	0250.157.160	15.7 cm	6.2 cm	65 g
7"	0250.157.185	18.3 cm	7.4 cm	88 g

PELLORO Sewing Scissors

Light-weight Tailor's Scissors and Shears



Art.-Nr. 2025/R/9" without micro-serrated blades

	Size	Order No.	Total Length	Length of Cut	Weight
✓	9"	2025.113.235	23.5 cm	8.5 cm	131 g

Light-Weight **ROBUSO** Tailor's Shears

for use with light-weight natural fiber fabrics - and in corrosion hazard locations

Art.-Nr. 2026/R/9" micro-serrated

	Size	Order No.	Total Length	Length of Cut	Weight
	9"	2026.113.235	23.5 cm	8.5 cm	131 g

Light-Weight **ROBUSO** Tailor's Shears

one blade micro-serrated - for use with curtain fabrics, light-weight lining material, thin fiber fabrics - and in corrosion hazard locations

- ▶ solid, reinforced blades made of high-grade stainless specialty steel
- ▶ precision hollow-ground
- ▶ heavy-duty fulcrum with spring-loaded lock nut for maximum full-length blade edge-to-edge contact
- ▶ perfect ergo-style handle design with non-irritating, easy-grip coating

Art.-Nr. 1010/E

	Size	Order No.	Total Length	Length of Cut	Weight
	8"	1010.107.210	21.0 cm	8.7 cm	130 g
	9"	1010.107.235	23.5 cm	9.8 cm	161 g

Light-weight Tailor's or Dressmaker's **ROBUSO** Scissors

with acutely angled handles to run the lower blade along the table top for extra horizontal control. Completely nickel-plated, precision hollow-ground

Art.-Nr. 1001/E

	Size	Order No.	Total Length	Length of Cut	Weight
	6"	1001.107.160	16.0 cm	6.0 cm	83 g
	8"	1001.107.210	21.0 cm	9.0 cm	133 g

Light-weight Tailor's or Dressmaker's **ROBUSO** Scissors

also referred to as "straight trimmers" - compact sewing room scissors, completely nickel-plated, precision hollow-ground

Art.-Nr. 2100/CR/10" without micro-serrated blades

	Size	Order No.	Total Length	Length of Cut	Weight
	10"	2100.104.260	26.0 cm	10.0 cm	240 g

Art.-Nr. 2101/CR/10" micro-serrated

	Size	Order No.	Total Length	Length of Cut	Weight
	10"	2101.104.260	26.0 cm	10.0 cm	240 g

ARS-Tailor's Shears Made in Japan

With solid aluminum handles and screw-mounted forged

blades, ground and chrome-plated, corrosion-protected and regrindable. The contact pressure of the blades can be adapted by an adjusting screw to the material to be cut.

For use in tailor's shops and in the interior decorators trade.

Unserrated Version:

For use with natural fiber and jersey fabrics and leather

Micro-serrated version:

For use with all plain synthetic fiber fabrics.

SWISSORS

These are a patented Swiss invention incorporating a new and novel four-bar linkage mechanism requiring less than 50% of physical effort. The lower half of these shears glides absolutely horizontal across the table top whilst the upper half is effortlessly moved up and down by the user's thumb.

SWISSORS Shears without serrated blades

Order No.	Total Length	Length of Cut	Weight
2090.113.251	23.5 cm	9.0 cm	245 g

SWISSORS Shears with micro-serrated blades

Order No.	Total Length	Length of Cut	Weight
2090.113.250	23.5 cm	9.0 cm	245 g

1 Pair of SWISSORS Replacement Blades unserrated

Order No.	Weight
2091.100.000	20 g

1 Pair of SWISSORS Replacement Blades micro-serrated

Order No.	Weight
2091.000.000	20 g



Thread Clippers in ROBUSO® Master-crafted Quality

These clippers are often referred to as ring finger, nap, burling, palm, thread or cleaning scissors. The clippers are nested in the palm with the ring finger engaged in the eye - this leaves the hand free for other work. Threads are simply cut by pushing the upper blade down with the thumb whilst the ring finger

holds the clippers, which are spring-loaded to open automatically after each cut is made. Snipping requires no effort whatever. The screw is secured in position by a special lock nut.



258/E/4.5"

C60

option:

bent blades
259/E/4.5"

258/TFL/4.5"

C60

option:

bent blades
259/TFL/4.5"

258/HQ/E/4.5"

option:

bent blades
259/HQ/E/4.5"

2038/R/4.5"

option:

bent blades
2037/R/4.5"

2210/R/4.5"



2210.113.000



2211/R/4.5"

Art.-Nr. 258/E/4.5" straight-bladed

	Size	Order No.	Total Length	Length of Cut	Weight
✓	4.5"	0258.107.120	11.4 cm	3.2 cm	51 g

Art.-Nr. 259/E/4.5" bent blades

✓	4.5"	0259.207.120	11.4 cm	3.2 cm	51 g
---	------	--------------	---------	--------	------

in **ROBUSO** Master-crafted Quality

completely mirror-finish nickel-plated,
precision hollow-ground

Art.-Nr. 258/TFL/4.5" straight-bladed

	Size	Order No.	Total Length	Length of Cut	Weight
	4.5"	0258.120.120	11.4 cm	3.2 cm	51 g

Art.-Nr. 259/TFL/4.5" bent blades

	4.5"	0259.220.120	11.4 cm	3.2 cm	51 g
--	------	--------------	---------	--------	------

in **ROBUSO** Master-crafted Quality

completely Teflon®-coated, corrosion-protected,
free from nickel, i.e. no risk of nickel-allergy

Art.-Nr. 258/HQ/E/4.5" straight-bladed

	Size	Order No.	Total Length	Length of Cut	Weight
✓	4.5"	0258.157.120	11.4 cm	3.2 cm	75 g

Art.-Nr. 259/HQ/E/4.5" bent blades

	4.5"	0259.257.120	11.4 cm	3.2 cm	75 g
--	------	--------------	---------	--------	------

in **PELLORO** Quality

completely nickel-plated, ground inner blades,
ball-borne screw for swift cutting action

Art.-Nr. 2038/R/4.5" straight-bladed

	Size	Order No.	Total Length	Length of Cut	Weight
✓	4.5"	2038.113.120	12.0 cm	3.0 cm	34 g

Art.-Nr. 2037/R/4.5" bent blades

	4.5"	2037.213.120	12.0 cm	3.0 cm	33 g
--	------	--------------	---------	--------	------

ROBUR Thread Clippers - straight-bladed

plastic handles, stainless blades

Art.-Nr. 2210/R/4.5"

	Size	Order No.	Total Length	Length of Cut	Weight
	4.5"	2210.113.120	12.0 cm	2.0 cm	40 g

Replacement Blades

		2210.113.000		2.0 cm	8 g
--	--	--------------	--	--------	-----

KAI Thread Clippers - straight-bladed

with replaceable blades

Art.-Nr. 2211/R/4.5"

	Size	Order No.	Total Length	Length of Cut	Weight
	4.5"	2211.113.120	12.0 cm	2.0 cm	40 g

KAI Thread Clippers

Application Details:

Clippers with straight blades:

are used to cut sewing machine threads. They are not intended for undoing seams.

Clippers with bent blades:

are used to trim threads at final inspections. The curved blades facilitate picking up of threads on a flat stretch of fabric without accidentally damaging the fabric.

Pinking and Scalloping Shears

Forged pinking and scalloping shears are nowadays rarities on the market and it is not without a certain amount of pride that we are in a position to offer a range of them. The pinking shears with the brilliant-red handles are Made in Japan and feature extreme hardness along

with excellent quality. Our range also includes a further forged and a stainless pinking shears Model.



Art.-Nr. 1061/CR/9"

	Size	Order No.	Total Length	Length of Cut	Weight
✓	9"	1061.104.235	23.5 cm	7.0 cm	255 g

PELLORO Pinking Shears

made of forged and hardened steel with the teeth rating about 58 HRC and spaced in 5 mm intervals, blades precision ground and chrome-plated with brilliant-red powder-coated handles

We recommend these shears for use with delicate high-quality fabrics: thin curtain and decorative fabrics, fine silk, etc.

Art.-Nr. 1065/CR/9"

	Size	Order No.	Total Length	Length of Cut	Weight
	9"	1065.104.235	23.5 cm	7.0 cm	255 g

PELLORO Pinking Shears

blades made of forged and hardened steel, nickel-plated, with brilliant-red powder-coated handles, teeth spaced in 3.5 mm intervals, featuring an extreme hardness rating of about 58 HRC

Art.-Nr. 2080/R/8"

	Size	Order No.	Total Length	Length of Cut	Weight
	8"	2080.113.210	21.0 cm	6.5 cm	112 g

KAI Pinking Shears - stainless

stainless steel blades with black plastic handles, teeth spaced in 5 mm intervals

A budget-priced light-weight Model recommended for use in home-tailoring

Art.-Nr. 1063/D/9"

	Size	Order No.	Total Length	Length of Cut	Weight
	9"	1063.105.235	23.5 cm	7.0 cm	270 g

PELLORO Pinking Shears

made of forged and hardened steel, outer blades nickel-plated, handles black lacquer finish, teeth spaced in 7 mm intervals

The teeth of these pinking shears are not quite as hard as those of Model 1061/CR/9".

Art.-Nr. 1062/CR/9"

	Size	Order No.	Total Length	Length of Cut	Weight
	9"	1062.104.235	23.5 cm	7.0 cm	250 g

PELLORO Scalloping Shears

Blades chrome-plated and mirror-finish polished, handles brilliant-red powder-coated.

Application Details:

Pinking shears are used to trim edges to prevent fraying. Scalloping shears are used to produce decorative edges, particularly when working with fine leather material.



ROBUSO® Master-crafted Pocket, Fabric and Textile Scissors



Art.-Nr. 720/E

	Size	Order No.	Total Length	Length of Cut	Weight
	3.5"	0720.107.090	9.0 cm	3.0 cm	20 g
	4"	0720.107.105	10.5 cm	3.8 cm	23 g
	4.5"	0720.107.120	11.5 cm	4.3 cm	30 g
	5"	0720.107.130	13.0 cm	5.0 cm	42 g
	6"	0720.107.160	15.7 cm	6.5 cm	56 g

ROBUSO Pocket Scissors in Master-crafted Quality

with round-point blades, completely mirror-finish nickel-plated, precision hollow-ground
Pocket-plus-fabric scissors for cutting small samples and trimming of thread ends - always ready to hand whether in pocket, coat or brief case.

Art.-Nr. 1205/E/5"

Size	Order No.	Total Length	Length of Cut	Weight
5"	1205.107.130	12.9 cm	4.3 cm	38 g

ROBUSO Pocket-plus-Fabric Scissors in Master-crafted Quality

with slightly sideways-curved blades, rounded tips, precision hollow-ground, completely mirror-finish nickel-plated
Tuck-away type scissors for cutting fabric samples, etc., always ready to hand whether in pocket, coat or brief case.

Art.-Nr. 1215/HQ/E/5"

Size	Order No.	Total Length	Length of Cut	Weight
5"	1215.157.130	12.9 cm	4.3 cm	43 g

PELLORO Pocket-plus-Fabric Scissors

blades precision-finish ground, completely mirror-finish nickel-plated
An interesting price alternative not only for less demanding uses but, also, as a nice advertising gift.

Art.-Nr. 705/E/6"

Größe	Order No.	Total Length	Length of Cut	Weight
6"	0705.107.160	15.7 cm	6.3 cm	51 g

Art.-Nr. 705/L/6" with gold-plated handles

Größe	Order No.	Total Length	Length of Cut	Weight
6"	0705.109.160	15.7 cm	6.3 cm	51 g

ROBUSO Fabric and Curtain Material Scissors

with acutely sideways-curved blades, rounded tips, inner blades precision blue-ground, completely mirror-finish nickel-plated

Typical scissors for use with off-the-roll curtain and light decorative fabrics in home textiles departments.

Art.-Nr. 2007/R/5"

Size	Order No.	Total Length	Length of Cut	Weight
5"	2007.113.130	13.0 cm	4.5 cm	30 g

ROBUR Fabric Scissors - stainless

With sideways-curved blades and rounded tips, an interesting alternative for less demanding uses.

Handy tuck-away scissors for cutting fabric samples, curtain fabrics, etc. Also useful as a quality gift for those working in the textile business.

Pocket-plus-Fabric Scissors as advertising Gifts:

These scissors are highly popular anywhere in the textiles, home textiles and garment industries - and ideal advertising gifts for their sales representatives. It could be worth your while to present your favourite customers with such a high quality forged scissors for a long and rewarding business relationship. Please take a look at Page 20.

KAI Scissors and Shears

Why stainless scissors and shears from Japan, too? Simply because the price-benefit ratio is more than just convincing. Handles are made of solid rubber composites for cutting work comfort - and of a size to transfer physical effort into the blades right down to their points. The sturdy blades are made of stainless steel with a counter-locked screwed joint so as to be on 'industrial heavy-duty service' throughout their working life.

2215/R

option:



bent blades
2215/2/R

2222/R/8.5"

2224/R

2220/R/8"

2223/R/9"



Art.-Nr. 2215/R

Size	Order No.	Total Length	Length of Cut	Weight
5"	2215.113.130	13.0 cm	5.0 cm	45 g
6.5"	2215.113.170	16.3 cm	6.5 cm	63 g

KAI Sewing Scissors

Art.-Nr. 2215/2/R/6.5" bent blades

Size	Order No.	Total Length	Length of Cut	Weight
6.5"	2215.213.170	16.3 cm	6.5 cm	63 g

KAI Sewing Scissors - bent

Art.-Nr. 2220/R/8"

Size	Order No.	Total Length	Length of Cut	Weight
8"	2220.113.210	21.0 cm	8.0 cm	112 g

KAI Tailor's Shears

for dainty hands

Art.-Nr. 2222/R/8.5"

Size	Order No.	Total Length	Length of Cut	Weight
8.5"	2222.113.225	22.0 cm	8.0 cm	117 g

KAI Tailor's Shears with one large "oblong" four-fingers eye

Art.-Nr. 2223/R/9"

Size	Order No.	Total Length	Length of Cut	Weight
9"	2223.113.235	23.0 cm	9.5 cm	130 g

KAI Tailor's (straight trimmers) Shears

with acutely angled handles to run the lower blade along the table top for extra horizontal control without material lift-off.

Art.-Nr. 2224/R

Size	Order No.	Total Length	Length of Cut	Weight
9.5"	2224.113.250	25.0 cm	10.0 cm	175 g
10.5"	2224.113.275	27.5 cm	11.0 cm	195 g

KAI Tailor's Shears



ROBUR® Stainless Scissors and Shears with "Soft-Coat" Plastic Handles



Art.-Nr. 2010/R

	Size	Order No.	Total Length	Length of Cut	Weight
✓	8"	2010.113.210	21.0 cm	8.0 cm	90 g
	10"	2010.113.260	26.0 cm	11.5 cm	193 g

ROBUR Tailor's Shears - stainless

Art.-Nr. 2010/TFL/8"

Size	Order No.	Total Length	Length of Cut	Weight
8"	2010.120.210	21.0 cm	8.0 cm	90 g

ROBUR Tape Scissors

Blades teflon coated as nonstick coating for cutting tapes

Art.-Nr. 2009/R/10"

	Size	Order No.	Total Length	Length of Cut	Weight
✓	10"	2009.113.260	26.0 cm	11.0 cm	198 g

ROBUR Tailor's Shears - solid design

for use with anything from medium-weight fabrics to thin carpeting material

Art.-Nr. 2077/R/10"

Size	Order No.	Total Length	Length of Cut	Weight
10"	2077.113.260	26.0 cm	12.5 cm	122 g

ROBUR Paper Shears - stainless

also for use as decorator's shears

Art.-Nr. 2010/R

	Size	Order No.	Total Length	Length of Cut	Weight
✓	5"	2010.113.130	13.0 cm	4.5 cm	35 g
✓	6"	2010.113.160	16.0 cm	6.5 cm	41 g

ROBUR Sewing Scissors - stainless

Art.-Nr. 2011/R/5"

Size	Order No.	Total Length	Length of Cut	Weight
5"	2011.113.130	13.0 cm	4.5 cm	35 g

ROBUR Pocket Scissors - stainless

with rounded tips

Art.-Nr. 2060/R/7.25"

Size	Order No.	Total Length	Length of Cut	Weight
7.25"	2060.113.190	19.0 cm	4.2 cm	150 g

ROBUR Hobbyist's Shears - stainless
with black "soft-coat" handles

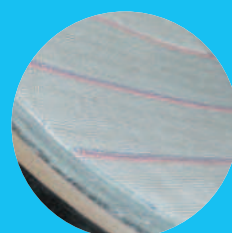
The safety blade lock is readily 'grip'-released and engaged.

Applications:

This tool is perfect for a great many uses:
Textile industry - cutting of fairly thick tapes and/or straps; electricians, plumbers, do-it-yourselfers - cutting of coarse materials, thin wiring, etc.; gardeners - cutting of flowers, trimming of thin twigs.



Machines





ROBUSO® Electro-Powered Heavy-Duty Shears

These are designed to cut multilayered Aramide, glass fiber and other heavy-weight materials without any problem whatever.

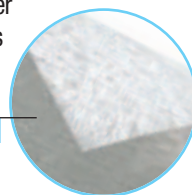
These electro-powered shears operate on the principle of conventional hand shears in that the cutting effect is produced by the up-and-down movement of the upper blade, the edge of which is in constant contact with the edge of the fixed lower blade. The principle employed in these shears has

the advantage over rotary blade shears in that there is no bare shaft for threads to catch and wind up to eventually block the machine. What's more, the operator has a clear view of the cutting zone.

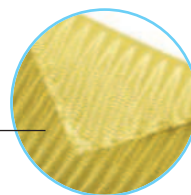
Shear Foot A



Glass Fiber



Aramide Fabric



Shear Foot B



Upper Blade A40 + A41
narrow-edge ground



A40: Unserrated: Order No. 2920.160.000
A41: Serrated: Order No. 2920.165.000 

Upper Blade A50 + A51



A50: Unserrated: Order No. 2920.140.000
A51: Serrated: Order No. 2920.145.000 

Lower Blade
A40/A41/A50/A51



Unserrated: Order No. 2920.150.000

Upper Blade B70/B71
Uncoated



Order No. 2920.120.000


Upper Blade B80/B81 + B60
proton®-coated



B80/B81: Order No. 2920.100.000
B60: with acute cutting angle
Order No. 2920.170.000

Lower Blade
B60/B70/B80 + B71/B81



B60/B70/B80: Order No. 2920.110.000
Unserrated
B71/B81: Order No. 2910.111.000 - Serrated 



Shear Foot A

The overdimensioned blades and its heavy-duty leverage design renders it ideal for use with extremely dense and tough materials. Maximum cutting thickness is ca. 6 mm. The special foot geometry design permits ready cutting of narrow radius contours.

Shear Foot Type B

Excellent for use with voluminous woven and knitted fabrics. Maximum cutting thickness is ca. 15 mm.

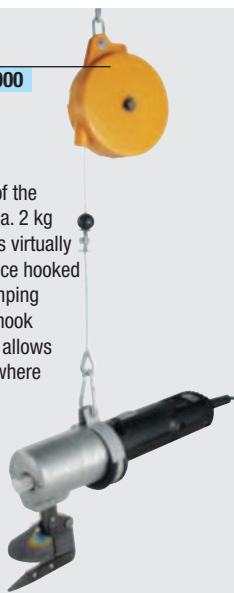
Electro-Powered Shears

Order No.	Complete with Shear Foot	Installed lower Blade	Installed upper Blade
2921.240.000	A40 with narrow-edge ground UPPER blade	2920.150.000	2920.160.000
2921.241.000	A41 with narrow-edge ground and serrated UPPER blade	2920.150.000	2920.165.000
2921.250.000	A50 with standard UPPER blade	2920.150.000	2920.140.000
2921.251.000	A51 with serrated UPPER blade	2920.150.000	2920.145.000
2921.260.000	B60 with coated UPPER blade and acute cutting angle	2920.110.000	2920.170.000
2921.270.000	B70 with uncoated UPPER blade	2920.110.000	2920.120.000
 2921.271.000	B71 with uncoated UPPER blade and serrated LOWER blade	2920.111.000	2920.120.000
 2921.280.000	B80 with coated UPPER blade	2920.110.000	2920.100.000
2921.281.000	B81 with coated UPPER blade and serrated LOWER blade	2920.111.000	2920.100.000

Spring-Loaded Overhead Assy

2920.601.000

The weight of the machine is ca. 2 kg and becomes virtually 'airborne' once hooked up - the clamping collar/snap-hook combination allows to work anywhere anytime.



Roller Base for Shear Foot B

2920.700.000

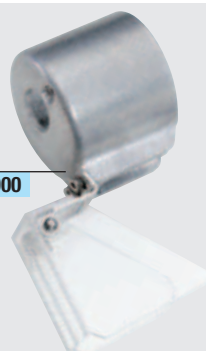
The machine becomes part of the Base and is ready to 'taxi' across what's to be cut - just guide it along.



Blade Visor

2920.800.000

This ROBUSO Blade Visor is hinge-mounted on the protective cap and remains in safe position until the edge of the material is contacted, upon which moment the visor folds back and the cutting work is done as usual.



Dynaflex safety Glove Set

2920.900.000

Both gloves are made of Dyneema® material so as to prevent the penetration of any glass fiber. The material-handling glove i.e. left hand, features a two-fingers metal-reinforced safety segment. The machine-handling glove, i.e. right hand, is of normal weave; this glove set is both highly protective as well as comfortable.



Important Information:

Due to the conductivity of carbon dust, electro-powered tools are of limited use for cutting carbon fiber material. We recommend the use of our pneumatic shears instead, which are featured overleaf.

Power Management:

Motor output can be regulated with the power control located at the rear end of the machine and serves to adapt the stroke rate of the blade to the characteristics of the material.

Material Sample Test:

Please let us have a sample of your material to enable us to advise you about the selection of the right shear foot/blade combination.

Recommended Applications

	A40	A41	A50	A51	B60	B70	B71	B80	B81
Aramid Fabrics/Knitted		●		○				●	●
Aramid Felts		●		○				○	●
Aramid Composites up to 2.5 mm		●	○	○				○	●
Dyneema® Fabrics/Knitted		○		○				○	●
Dyneema® UD	○	○	○	○				●	○
Felt and Insulation Matting	○	○			○	●	○	○	○
Glass Fiber Fabrics/Layers		○		○	○		●	○	○
Glass Fiber Composites up to 1.5 mm		○	○	●					
Rubber	●	○	○		○	○			
Rubber Composites		●							
Coconut Matting	○	○			○	●	○	○	○
Synthetic Resin Sheeting up to 1.5 mm		○	○	○					
Laminates, cured, up to 1.5 mm		○	○	○					
Leather/Saddle Leather	●				○	○			
Metal: Aluminum up to 2 mm			○						
Metal: Non-Ferrous up to 2 mm			○						
Metal: Wire up to 1.2 mm			○						
Metal: Wire Screen Fabrics, Metallized Felt		○	○	●					
Paste Boards	○	○	●	○					
PVC-Coatings/PVC-Sheeting	●		○		○	○			
Carpeting	○				○	●			
Textiles, diverse					○	●	○	○	○
Zylon®		○		○					●

○ possible / OK ● optimal

Regrinding Services

Order No.	Required Service	Details
	Adjustment of Blades	Your machine will be precisely adapted to the characteristics of your material sample submitted
1506.000.000	Overhaul of Shears	Shears will be overhauled, cleaned and worn parts replaced
1506.100.000	Grinding of Upper Blade B80/B81	Blade will be reground
1506.110.000	Grinding of Lower Blade B60/B70/B80	Blade will be reground
1506.111.000	Grinding of Lower Blade B71/B81	Blade will be reground
1506.120.000	Grinding of Upper Blade B60/B70/B71	Blade will be reground
1506.140.000	Grinding of Upper Blade A50	Blade will be reground
1506.145.000	Grinding of Upper Blade A51	Blade will be reground
1506.150.000	Grinding of Lower Blade A40/A41/A50/A51	Blade will be reground
1506.160.000	Grinding of Upper Blade A40	Blade will be reground
1506.165.000	Grinding of Upper Blade A41	Blade will be reground
1506.170.000	Grinding of Upper Blade B60	Blade will be reground

Technical Data

	Shear Foot A	Shear Foot B
Order No.	2921.24..., ...25...	2921.26..., ...27..., ...28...
Weight ca.	2.0 kg	2.0 kg
Handle dia	60 mm	60 mm
Length	31 cm	31 cm
Cutting Thickness max.	6 mm	15 mm
Cutting Speed max.	6 m/min	12 m/min
Power Input *	170 W/230 V	170 W/230 V
Blade Edges	Tool Steel, partly serrated	Tool Steel, partly serrated, AlTiN-coated

*110 V optional

Info:

Replacement Parts List upon request



ROBUSO® Pneumatic Shears

The production floor-proved, successful ROBUSO Electro-Powered Heavy-Duty Shears are now also available in the form of a PNEUMATIC Model Version featuring the same advantages plus a further extra, namely the use in areas where electro-powered tools are not recommended, as is the case with carbon fiber material, for example.



Shear Foot B




Shear Foot A

General Info:
Shear Feet are available in various type versions, with the blades being finished to meet different requirements. For shear foot/blade combinations see Pages 42 and 43.

Shear Foot A
Excellent for use with extremely compact material.
Cutting Thickness: 6 mm

Shear Foot B
Particularly efficient with voluminous woven and knitted fabrics.
Cutting Thickness: 15 mm

Extraction Device



When cutting carbon fiber, we recommend the use of this extraction device. It works in combination with an industrial vacuum cleaner and can be readily attached to the ROBUSO Pneumatic Shears. The suction tube inlet is located at the blade edges so as to intercept the carbon dust the moment it is generated.

Technical Data		
	Shear Foot A	Shear Foot B
Order No.	2925.24..., ...25...	2925.26..., ...27..., ...28...
Weight ca.	2.0 kg	2.0 kg
Handle dia	60 mm	60 mm
Length	31 cm	31 cm
Cutting Thickness max.	6 mm	15 mm
Cutting Speed max.	6 m/min	12 m/min
Power Input	170 W/230 V	170 W/230 V
Blade Edges	Tool Steel, partly serrated	Tool Steel, partly serrated, AlTiN-coated

ROBUSO® Pneumatic Shears

2990.200.000 CarbonCut

Pneumatic Shears with carbide-edged plane blades for long-lasting exact and swift cutting and making up of carbon fiber fabrics and other high-tenacity technical textiles.

2990.201.000 AramidCut

These pneumatic shears combine the advantages of CarbonCut and GlasCut into a micro-serrated carbide-edged blade, which prevents slippage of the tough fibers, and provides for a perfect cutting edge. The carbide metal-liner in the cutting head warrants a long service life.

2990.210.000 CompositeCut

Pneumatic shears with plane edges made of high-tensile tool steel to cut cured GRP- and CRP-laminates, also suitable for use with metals.

2990.211.000 GlasCut

A pneumatic shears with dual-serrated high-tensile tool steel blade edges, especially developed for cutting and making up of glass fiber fabrics and layers.



IMPORTANT Info:

We would seriously advise you to perform a trial cutting test with your material and the appropriate cutting head. Better still, you let us have a sample of your material to enable us to advise you about the right shear foot/blade combination.

2990.300.000
CarbonCut cutting head



2990.301.000
AramidCut cutting head



2990.310.000
CompositeCut cutting head



2990.311.000
GlasCut cutting head



Technical Data

	CarbonCut	AramidCut	CompositeCut	GlasCut
Order No. Shears	2990.200.000	2990.201.000	2990.210.000	2990.211.000
Order No. ...Cut Assy	2990.300.000	2990.301.000	2990.310.000	2990.311.000
Weight - total	1.5 kg	1.5 kg	1.4 kg	1.4 kg
Weight - ...Cut Assy	338 g	338 g	284 g	284 g
Handle dia	40 mm	40 mm	40 mm	40 mm
Length	23 cm	23 cm	23 cm	23 cm
Cutting Thickness max.	10 mm	10 mm	2,5 mm	10 mm
Cutting Speed max.	19 m/min	19 m/min	19 m/min	19 m/min
Air Consumption/Pressure	450 l/min / 6 bar	450 l/min / 6 bar	450 l/min / 6 bar	450 l/min / 6 bar
Blade Edges	Carbide	Carbide 1x Serrated	Tool Steel	Tool Steel 2x Serrated

Recommended Applications

	CarbonCut	AramidCut	CompositeCut	GlasCut
Carbon Fiber Layers/Fabrics	●	●		○
Glass Fiber Layers/Fabrics	●	●		●
Aramide laminated	○	●		
Composites, hard, up to 2.5 mm		○	●	○
Rubber/Rubber Composites			○	
Sheet Metals Aluminum/Steel up to 1.2 mm			●	

○ possible / OK

● optimal

Regrinding Services

Order No.	Required Service	Details
1506.320.000	Overhaul of CarbonCut cutting head	The cutting head is overhauled completely. All chamfers are reground.
1506.321.000	CarbonCut cutting head with 1 Carbide inlay	Fractured Carbide Liner will be replaced and bonded down on one blade
1506.322.000	CarbonCut cutting head with 2 Carbide inlay	Carbide Liners will be replaced and bonded down on both blades
1506.310.000	Overhaul of GlasCut cutting head	Complete overhaul - with all chamfers reground and new serration applied



HOOB's Compact Electro-Powered Rotary Blade Shears

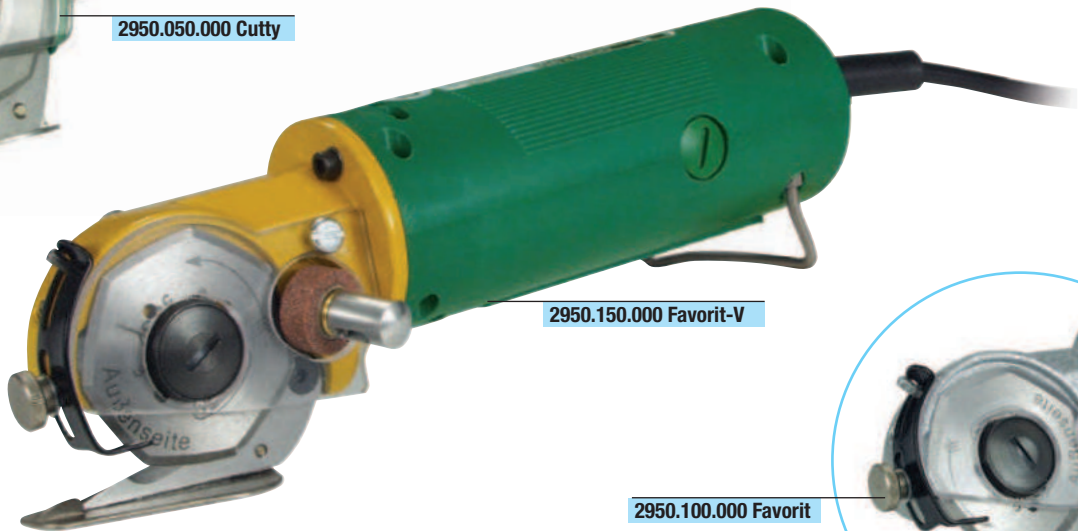
HOOB's Rotary Blade Products, Made in Germany, are specifically designed for use in trade and industry. They are comfortable in handling and feature finger guard, safety switch, grinding attachment and detachable skid.



2950.000.000 Rapido



2950.050.000 Cutty



2950.150.000 Favorit-V



2950.100.000 Favorit

2950.000.000 Rapido



This is a 'light-and-quiet' Rotary Blade Shears for use with light-weight fabrics, home textiles, etc.

2950.050.000 Cutty

This is a budget-priced 'beginners' Model for light-duty applications.

2950.100.000 Favorit

This is a compact Rotary Blade Shears of continuous-duty design for use in trade and industry.




2950.150.000 Favorit-V



This is the heavy-duty version of the above "Favorit", incorporating a high-efficiency motor-plus-gear combination, representing the most powerful Rotary Blade Shears of the compacts class. Ideal for use with heavy-weight materials, leather, upholstery cloths and in multilayer cutting applications.

Technical Data:

Type	Operating Voltage	Wattage	Blade dia	Blade Speed	Cutting Thickness	Weight	Dimensions
Cutty	230 V	45 W	50 mm	2950 RPM	7 mm	0.67 kg	270 x 50 x 80 mm
Rapido	230 V	40 W	50 mm	1800 RPM	5 mm	0.54 kg	225 x 50 x 90 mm
Favorit	230 V	58 W	50 mm	2800 RPM	10 mm	0.80 kg	230 x 65 x 75 mm
Favorit-V	230 V	90 W	50 mm	3100 RPM	10 mm	0.80 kg	230 x 65 x 75 mm

Replacement Blades	Tool Steel WS Grade	High Speed Steel HSS Grade	Applications
	Order No.	Order No.	
Circular Blades	2950.550.000	2950.551.000	for stiff fabrics
'4-bow' Blades	2950.510.000	2950.511.000	for heavy-weight fabrics
'7-bow' Blades	2950.500.000	2950.501.000	for standard fabrics
'10-bow' Blades	2950.540.000	2950.541.000	for soft fabrics
  	For natural materials such as wool, cotton, silk, leather	For synthetic fabrics such as upholstery cloths, PVC, Nylon®	

HOOG's Herkules

Truly the GIANT among the hand-guided Rotary Blade Shears for heavy-duty applications, especially for use with industrial textiles and composites, carpeting material, felts, synthetics, etc.

Made in Germany.



2950.260.000 Herkules-V

2950.200.000 Herkules-BW

2950.200.000 Herkules-BW



Designed for use with garments and underwear, with slim-line shear foot and spring-loaded lower blade. Ideal for use in the garment and upholstery furniture industries to cut thick material packages.

2950.260.000 Herkules-V

An upgraded version of the above, with slim-line shear foot and fixed lower blade to prevent jamming of stiff material grades even when curves are cut. The rotary blade is taken up in a spring-loaded mount. Ideal for use with tough automotive industry plastic materials, high-density felts and leather.

Technical Data

Type	Voltage	Wattage	Blade dia	Blade Speed	Cutting Thickness	Weight	Dimensions
BW+V	230 V	165 W	60 mm	1500 U/min	15 mm	1.15 kg	270 x 60 x 80 mm

Replacement Blades	Tool Steel WS Grade	High Speed Steel HSS Grade	Applications
	Order No.	Order No.	
Circular Blades	2950.530.000	2950.531.000	for stiff fabrics
'4-bow' Blade	2950.520.000	2950.521.000	for heavy-weight fabrics
'10-bow' Blade	2950.560.000	2950.561.000	for soft fabrics
 	For natural materials such as wool, cotton, jute, leather	For synthetic fabrics such as upholstery cloths, PVC, carpetry	

HOOG's Electro-Powered Rotary Blade Shears - large dias

These Model Versions use large dia rotary blades from 110 mm dia onwards and are designed for production operations involving materials with thicknesses of up to 50 mm.

The integrated roller base provides for comfortable handling. Complete with finger guard and grinding attachment. Made in Germany



2950.284.000 X-130-MV-L

2950.282.000 USM-G

With a mere 2.5 kg in weight and 260 Watts rating, it is the smallest 'light yet powerful' version, likely to be the worldwide champion of its class. For use with all textile standard products, cutting thickness 20-30 mm.

2950.283.000 USM-G-MV

Similar to Type USM-G above, but with centered blade guide for optimum control when working with stiff materials. Steel-bronze-reinforced gear system, thrust bearings and '4-bow' rotary blade of HSS high speed steel grade. For use with extremely stiff materials, cutting thickness 20-30 mm.

2950.281.000 X-130-N-S

A normal design version with high-speed motor. With 7.9 kg in weight and a 400 Watts/380 Volts three-phase AC motor probably the most powerful Rotary Blade Shears on the market. For use with all textile standard products, cutting thickness 40-50 mm.

2950.284.000 X-130-MV-L

With centered blade guide for maximum control - no chance for material to get entangled, steel-bronze reinforced gear system, thrust-bearings and '4-bow' rotary blade of HSS high speed steel grade. The slow-speed motor provides the rotary blade with an extra boost of power. This is a special design for use with heavy-weight industrial textiles such as Aramide composites, glass fiber fabrics, etc. and other extremely stiff fabrics. Cutting thickness 40-50 mm.

Technical Data

Type	Voltage	Wattage B	Blade dia	Blade Speed	Cutting Thickness	Weight	Dimensions
USM-G	230 V	260 W	110 mm	820 RPM	20-30 mm	2.5 kg	31 x 11 x 25 cm
USM-G-MV	230 V	260 W	110 mm	820 RPM	20-30 mm	2.5 kg	31 x 14 x 25 cm
X-130-N-S	380 V	400 W	130 mm	530 RPM	40-50 mm	7.9 kg	40 x 17 x 32 cm
X-130-MV-L	380 V	400 W	130 mm	280 RPM	40-50 mm	7.9 kg	40 x 14 x 32 cm

Replacement Blades	Steel Grade		Steel Grade		Applications
	WS 110 mm	HSS 110 mm	WS 130 mm	HSS 130 mm	
Circular Blades	2950.556.000	2950.555.000	2950.593.000	2950.592.000	for heavy-weight fabrics
'4-bow' Blades	2950.554.000	2950.553.000	2950.590.000	2950.591.000	for all fabric types
 	WS Tool Steel: For natural materials such as wool, cotton, sisal, coco, leather		HSS High Speed Steel: For synthetic fabrics such as upholstery cloths, PVC, Kevlar®, Twaron®		

Looking for Cutting Solutions? Just let us have a sample of your materials.



EC Cutter – the new Battery-Powered Generation

Designed for effortless single-layer cuts - Kevlar®, Twaron®, Dyneema®, glass and carbon fiber materials included !

Kevlar®
DuPont™

twaron®
The Power of Aramid

Dyneema®

This EC Cutter keeps up with high demands and features:

- ▶ a perfectly ergo-styled design for effortless, non-fatiguing handling
- ▶ carbide-edged blades for excellent cutting performance
- ▶ mains- and battery-powered operation for unrestricted choice of working environment
- ▶ clear view of the cutting zone for exact results
- ▶ extreme light-weight body - 220 g only
- ▶ recommended for use with materials of up to 200 g/m²

Recommended for use with materials of up to 200 g/m²

Carbide-Edged Blades

Ergo-styled design

Operates on Mains and rechargeable Battery



✓ 2965.011.000: EC Cutter Set - "serrated"

Order No. for Component Parts	Set made up of 1 each:
2960.109.000	Power-Drive Handle
2960.111.000	Cutter Head, short-bladed for curve cuts - serrated
2960.121.000	Cutter Head plus Foot for straight cuts - serrated
2965.173.000	Transformer (+ Power Cord)
2965.172.000	Charging Station (without Power Cord)
2960.170.000	Mains Connector
2960.171.000	Rechargeable Battery

Range of Applications:

Industrial and Synthetic Materials such as: Aramide (Kevlar®, Twaron®), Dyneema®, Zylon®, glass and carbon fiber fabrics, curtain materials, upholstery cloths and all synthetic fiber materials

2965.010.000: EC Cutter Set - "unserrated"

Order No. for Component Parts	Set made up of 1 each:
2960.109.000	Power-Drive Handle
2960.110.000	Cutter Head, short-bladed for curve cuts
2960.120.000	Cutter Head plus Foot for straight cuts
2965.173.000	Transformer (+ Power Cord)
2965.172.000	Charging Station (without Power Cord)
2960.170.000	Mains Connector
2960.171.000	Rechargeable Battery

Range of Applications:

Natural Materials, such as: Cotton, wool, leather, rubber, tapestry, paper, wood veneers

EC Cutter

Weight of EC Cutter - ready for use 220 g
EC Transformer Voltage 230 V
110 V/120 V also available
Rechargeable Battery Capacity 2 hrs
Cutting Thickness max. 2 mm

Other Cutter Heads (not part of any Set)

Order No.	
2960.130.000	Cutter Head - without guide foot
2960.131.000	Cutter Head - without guide foot - serrated
2960.140.000	Cutter Head - ball-type
2960.141.000	Cutter Head - ball-type - serrated



Battery-Powered Rotary Blade Shears

Power cordless means unrestricted freedom. These shears are ideal for straight off-the-roll and/or long cloth-run freestyle 'cutting' routines. And another advantage: All shears incorporate an integrated "on the job" grinding attachment not requiring the removal of the blade.

2950.401.000 BOM 101 Akku

This Model represents the most powerful rechargeable battery-operated shears on the market. The absence of a mains power cord provides for comfortable and exacting cutting operations, involving anything from tough to light-weight fabrics, made possible by a low-speed '4-bow' blade in combination with a spring-loaded counter blade. The technology applied here permits to handle single-layered light-weights as readily as material stacked up to a maximum height of 25 mm.

2950.401.000 BOM 101 Akku: Technical Data

Type	Wattage	Blade dia	Weight	Blade Speed	Cut. Thickness
BOM 101	160 W	100 mm	2.5 kg	750 RPM	25 mm

Order No Replacement Part BOM 101 Akku

2950.401.001	Rechargeable Battery
2950.596.000	'6-bow' HSS Blade
2950.596.001	'6-bow' WS Blade
2950.596.002	'4-bow' HSS Blade
2950.596.003	'4-bow' WS Blade

HSS = High Speed Steel WS = Tool Steel

2950.401.000 BOM 101 Akku



for light-weight material only -
let us have a sample of
your light material



2950.160.000 Battery-Powered Universal Shears

2950.160.000 Universal Rotary Blade Shears

Power cordless is synonymous with unrestricted freedom, towards which end we offer you this product with an excellent cost-benefit price. These shears are particularly suitable for use with light-weight fabrics, fleece, carpeting, etc. Supplied with a 230 V Quick-Charger and a rechargeable battery pack.

Order No. Replacement Part

2950.161.000	Rechargeable Battery
2950.565.000	'10-bow' HSS High Speed Steel Blade

2950.160.000 Battery-Powered Universal Shears: Technical Data

Type	Battery	Blade dia	Blade Speed	Cutting Thickness	Weight	Dimensions
Battery	9.6 V	60 mm	1200 RPM	12 mm	1.20 kg	295 x 60 x 80 mm



HSGM Hot-Melt Cutting and Bonding Appliances

HSGM Industrial Equipment designed for use with tapes, cords and fabrics made of meltable synthetic fibers.
Made in Germany



2940.010.000 HSG-0
with cutting loop R

2940.010.000 HSG-0 with cutting loop R

The best budget-priced hand-held Model Version for short-time applications. Designed for use with rope dias of up to 15 mm, tapes with thicknesses of up to 5 mm max. and synthetic fiber fabrics.

2940.030.000 HSG-0 electronic with cutting loop R-50

This is the logical onward development of Model HSG-0. Modern electronic technology has reduced the weight by 50% and doubled the heat rating - all in favour of even swifter working cycles. Once having had the opportunity to use this Model Version, it will never be given up in favour of anything similar. Ideal for use with rope dias of 2 cm and above, tapes of up to 1 cm thickness and synthetic fiber fabrics.

Light-Weight:
450 g
Efficient: 120 W

2940.030.000 HSG-0 electronic
with cutting loop R-50

2940.550.000 Cutting foot SF for HSG-0

The combination of this foot Version with Loop 'R' permits separation of synthetic fabrics and edge-welding without requiring a mat so that freehand working with largesized cloths and tarpaulins, such as sailcloths, awning fabrics and filter cloths, is made possible and facilitated.

Foot 'SF' is exclusively designed for use with Model HSG-0.

Foot 'SFV' is designed for use with Model Versions HSG-1-VW, HSG-03-VW and HSG-3-VW.

Standby Temperature:

This Transformer Unit provides automatically for a certain standby temperature so that the infinitely variable operating temperature at the appliance is readily reached and ready for the job on hand.

HSG-03 VW for Continuous Operation

Order No.	
2940.200.000	with 2 m long power cord (without loops)
2940.210.000	with 3 m long power cord (without loops)
2940.551.000	'SFV' cutting foot

Heat-cut appliance with transformer station for continuous operations. The Unit features a fixed standby temperature and an infinitely variable operating temperature providing for a swift job performance. Supplied complete with 2 m (optional 3 m) high-flex power cord between transformer station and cutter.



2940.2... HSG-... VW

Technical Data

Type	Order No.	Wattage at 230 V	Working Cycle	Temperature Control	Weight
HSG-0	2940.000.000	60 W	short	Switch ON/OFF	1.0 kg
HSG-0 + R	2940.010.000	60 W	short	Switch ON/OFF	1.0 kg
HSG-0 electronic	2940.020.000	120 W	short	Switch ON/OFF	0.45 kg
HSG-0 electronic + R-50	2940.030.000	120 W	short	Switch ON/OFF	0.45 kg
HSG-1-VW 2 m power cord	2940.130.000	160 W	continuous	Infinitely Variable	5.8 kg
HSG-03-VW 2 m power cord*	2940.200.000	250 W	continuous	Infinitely Variable	6.3 kg
HSG-03-VW 3 m power cord*	2940.210.000	250 W	continuous	Infinitely Variable	6.7 kg
HSG-3-VW 2 m power cord*	2940.230.000	500 W	continuous	Infinitely Variable	13.0 kg

*with fixed standby temperature and readily reached operating temperature for swift job performance

Cutting Loops

A diversity of cutting loops is available for use with an equal diversities of material, the most popular types of which are shown.

Material Sample Test:

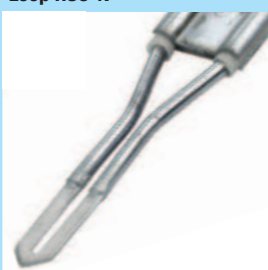
Please let us have a sample of your material to enable us to perform trial cuts and thus advise you about the selection of the right cutting loop, 'specials' included, after we have performed trial cuts.

2940.546.000
Loop N-1



for grooving of insulation mats

2940.510.000
Loop HSO-N



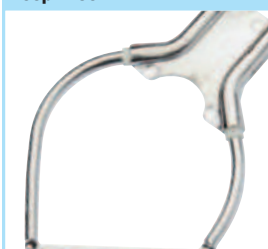
pointed loop, especially for light-weight fabrics and thin cords

2940.500.000
Loop R



for separating strong fabrics, cords and ropes with dias of up to 15 mm

2940.501.000
Loop R-50



for separating strong fabrics, cords and ropes with dias of up to 35 mm

2940.543.000
Loop HS-S



for separating and edge-welding of large-sized tarpaulins, sailcloths and awning fabrics

2940.547.000
Loop F-2



for separating tapes and strapping up to a width of ca. 35 mm and cords and ropes with dias of up to 35 mm

2940.548.000
Loop VST



for separating and edge-welding of large-sized strong tarpaulins, sailcloths and awning fabrics

2940.561. ...
Loop RU



for out-melting of holes in filter cloths and fabrics

Tabulation of Cutting Loops

Order No.	Type	For use with				
		HSG-0	HSG-0-electronic	HSG-1-VW	HSG-03-VW	HSG-3-VW
✓ 2940.500.000	R	●		●	●	●
✓ 2940.501.000	R-50		●	●	●	●
2940.543.000	HS-S	●		●	●	●
2940.546.000	N-1	r = max.10 mm	r = max.15 mm			
2940.510.000	HSO-N	●		●	●	●
2940.547.000	F-2	●	●	●	●	●
2940.548.000	VST		●			●
2940.561. ...	RU	Ø 3-10 mm	Ø 25-40 mm	Ø 3-35 mm	Ø 3-35 mm	Ø 3-160 mm

● optimal

Noteworthy Info:

Loops for use with HSG-0, HSG-0 electronic and HSG-03 VW are available in a wide range of configurations. Please inquire.



2940.221.000 HSG-00 for Continuous Operation

Compact unit designed for continuous operation with fixed loop blade (working width 30 mm) for efficient length-sizing of thin cords, tapes and braided tubular fabrics as well as for welding thin cords and tapes together so as to produce endless cords with dias of up to 5 mm.

2940.220.000 HSG-00 VW for Continuous Operation

Same as HSG-00 above, but with wider loop blade (working width 60 mm) and **adjustable** operating temperature.

Technical Data

Type	Order No.	Wattage at 230 V	Working Cycles	Temperature Control	Weight
HSG-00	2940.221.000	40 W	continuous	ON/OFF Switch	1.6 kg
HSG-00-VW	2940.220.000	90 W	continuous	Infinitely Variable	4.8 kg

Other Units, Specials and 110 V Equipment available, please inquire.



ROBUSO® System Components

These are designed to optimize your cutting operations



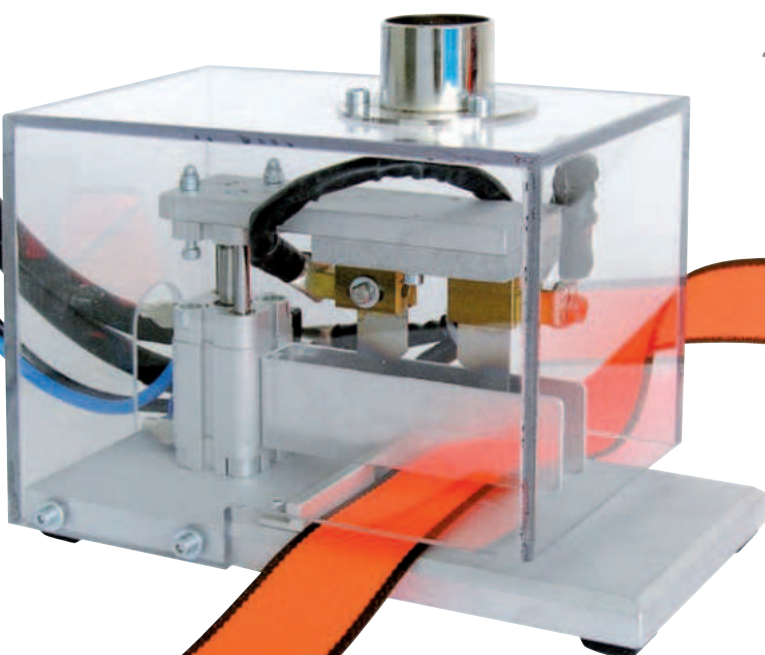
Pneumatic Shears with active upper blade



2950.290.000 Hoogs 1-AG

Order No.	Weight
Hoogs 1-AG 380-400V	3.2 kg

Built-in Unit, extreme torque output and minimum maintenance requirements, designed for continuous fabric cutting operations performed within production systems of any description. An ideal all-purpose equipment item, especially for use with tent and tarpaulin fabrics



Tape Hot-Cut Station



2990.001.210 ROBUSHO Shear Blades 8"

Order No.	Total Length
2990.001.210	13.5 cm

a system component item



Tool Items





ROBUSO® Pattern Notchers and Check Markers

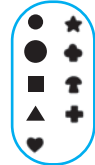
1130/E/1 x 8 mm
1130/E/2 x 8 mm



1130/E/5 x 6 mm



1139/E/115



1130/HQ/E/2 x 8 mm



1131/1.6 x 6 mm
1131/2 x 8 mm



Art.-No. 1130/E/1 x 8 mm semicircular

Order No.	Total Length	Weight
1130.018.000	11.0 cm	119 g

Art.-No. 1130/E/2 x 8 mm semicircular

Order No.	Total Length	Weight
1130.028.000	11.0 cm	119 g

Art.-No. 1130/HQ/E/2 x 8 mm semicircular

Order No.	Total Length	Weight
1129.028.000	11.0 cm	119 g

Economy Version of 1130/E/2 x 8 mm. Inside of handles standard ground finish = an interesting price alternative!

Art.-No. 1130/E/5 x 6 mm triangular

Order No.	Total Length	Weight
1130.056.000	11.0 cm	119 g

applies to all four versions:

Small-sized 'palm-fit' notcher for use with moderately thick materials

Art.-No. 1131/E/1.6 x 6 mm semicircular

Order No.	Total Length	Weight
1131.166.000	15.5 cm	174 g

Art.-No. 1131/E/2 x 8 mm semicircular

Order No.	Total Length	Weight
1131.028.000	15.5 cm	174 g

applies to these two versions:

Heavy-duty version with long handles providing extra leverage for forceful cuts

ROBUSO Pattern Notchers

These are made of Grade GTW 40 malleable cast iron, with the clipping bed made of forged and hardened high-grade tool steel brazed onto the base. This makeup en-sures clearly defined notch marks for an indefinite period of time.

Two dowel pins are installed in the fulcrum for extra stability.

The strong buffer spring between the handles provides for ease of handling. The surfaces of these notchers are nickel-plated, the clipping beds are left unplated.

Regrinding Services:

Regrinding is possible if and when required.

Applications:

ROBUSO Pattern Notchers are designed for identification of cardboard patterns or the parts, also to clearly mark distinctive characteristics.

Special Versions:

Other dimensions can be produced but would take anything between 4 to 6 weeks to deliver.

Art.-No. 1139/E/115 with 35 mm jaw depth

ROBUSO Check Markers are available with the following symbol marks:

Order No.	Description
1139.115.102	2 mm round hole
1139.115.103	3 mm round hole
1139.115.001	square hole
1139.115.002	triangular hole
1139.115.083	heart
1139.115.086	star
1139.115.089	cloverleaf
1139.115.090	mushroom
1139.115.094	cross

Applications:

ROBUSO Check Markers are designed to place marks within a pattern, leather, paper, etc

Revolving Punch Pliers and Punches



Art.-No. 1140.100.250

Order No.	Total Length	Weight
1140.100.250	25.0 cm	413 g

Revolving Punch Pliers 'active leverage' design with 6 replaceable turret-mounted punch tubes: dia 2, 2.5, 3, 3.5, 4 and 4.5 mm

Made of high-tensile specialty steel, nickel-plated; plastic-coated ergo-styled handles. Selected hole dias are indicated in a window to prevent wrong dia size punching. Turret head rotation is indicated by arrows on either side. A detachable locking strap is provided at the handle ends.

The new 'active leverage' design reduces physical effort to a minimum so that even thick and tough materials are readily perforated without risking distorted handles. Punching holes has never been easier.

Art.-No. 1140.000.220

Order No.	Total Length	Weight
1140.000.220	22.0 cm	271 g

Revolving Punch Pliers

with 6 replaceable turret-mounted punch tubes: dia 2, 2.5, 3, 3.5, 4 and 4.5 mm

This is a light-weight Version made of blanked sheet steel, nickel-plated, with six case-hardened punch tubes. The selected hole dias are indicated in a window to prevent wrong dia size punching.

Art.-No. 1142.006.000

Order No.	Total Length	Weight
1142.006.000	25.0 cm	530 g

Heavy-Duty Punch Pliers

with 6 replaceable turret-mounted punch tubes: dia 1.5, 2, 2.5, 3, 3.5, and 4 mm

Forged handles, turret made of industrial steel grade, readily rotating and of safe-lock design. Punch tubes special-process hardened and replaceable, so is the brass anvil plate. Handle surfaces plastic-coated.

Art.-No. 1142.008.000

Order No.	Total Length	Weight
1142.008.000	25.0 cm	540 g

Heavy-Duty Punch Pliers

with 8 replaceable turret-mounted punch tubes: dia 1.5, 2, 2.5, 3, 3.5, 4 mm, 4.5 and 5 mm

Forged handles, turret made of industrial steel grade, readily rotating and of safe-lock design. Punch tubes special-process hardened and replaceable, so is the brass anvil plate. Handle surfaces plastic-coated.

Applications:

These punch pliers are used for punching holes into material such as leather, rubber, cardboard and anything of similar nature.

Belt Punches

Order No.	
1144.001.000	with 1 mm dia
1144.002.000	with 2 mm dia
etc.	and up to 25 mm in mm-increments

Made of plain steel, stove-enamelled, finely polished punch tube finish.

Arch Punches

Order No.	
1144.502.000	with 2 mm dia
1144.503.000	with 3 mm dia
etc.	and up to 20 mm in mm-increments

Made of die-forged steel, stove-enamelled, punch tube ground and polished.

Hollow Punches:

Special Design Versions for use with Aramides - other sizes and configurations subject to inquiry.

Hole Cutting Set with 9 punch tubes 1.5 - 8 mm

Order No.	Dimensions	Weight
1144.850.000	17.0 x 7.8 x 5.0 cm	280 g

This Hole Cutter Version is designed for application where the intended holes are not located near the edge. The wooden handle provides for a safe grip and facilitates turning holes into the material with using an adequate mat.



Rotary Blade Cutters

Adjustable Blade
Contact PressureAdjustable Blade
Contact Pressure

1150.028.000

1150.045.100

1150.128.000
28 mm Replacement Blade

smooth finish

1150.145.000
45 mm Replacement Blade

smooth finish

1150.146.000
45 mm Replacement Blade

pinking edge finish

1150.147.000
45 mm Replacement Blade

waved edge finish

KAI Rotary Blade Cutter

Order No.	Colour	Blade dia	Total Length	Weight
1150.028.000	grey	28 mm	15.5 cm	35 g
1150.045.000	grey	45 mm	19.5 cm	87 g
1150.045.100	blue/black	45 mm	18.0 cm	92 g

With firmly mounted rotary blade made of tungsten steel.
The blade remains in position even under forceful pressure.

The 'grey' Version is made of solid plastic material.

The 'blue/black' Version features a perfectly ergo-styled handle made of solid plastic material with a firm-grip rubber edge-liner for efficient cutting results.

Replacement Blades

Order No.		Dia
1150.128.000	2 smooth blades, tungsten steel	28 mm
1150.145.000	1 smooth blade, tungsten steel	45 mm
1150.146.000	1 pinking blade, tungsten steel	45 mm
1150.147.000	1 waved blade, tungsten steel	45 mm

Applications:

KAI Rotary Blade Cutters are ideal for cutting of contoured pieces from leather, fabrics, paper, etc.; also for work with multilayered glass and carbon fiber material.

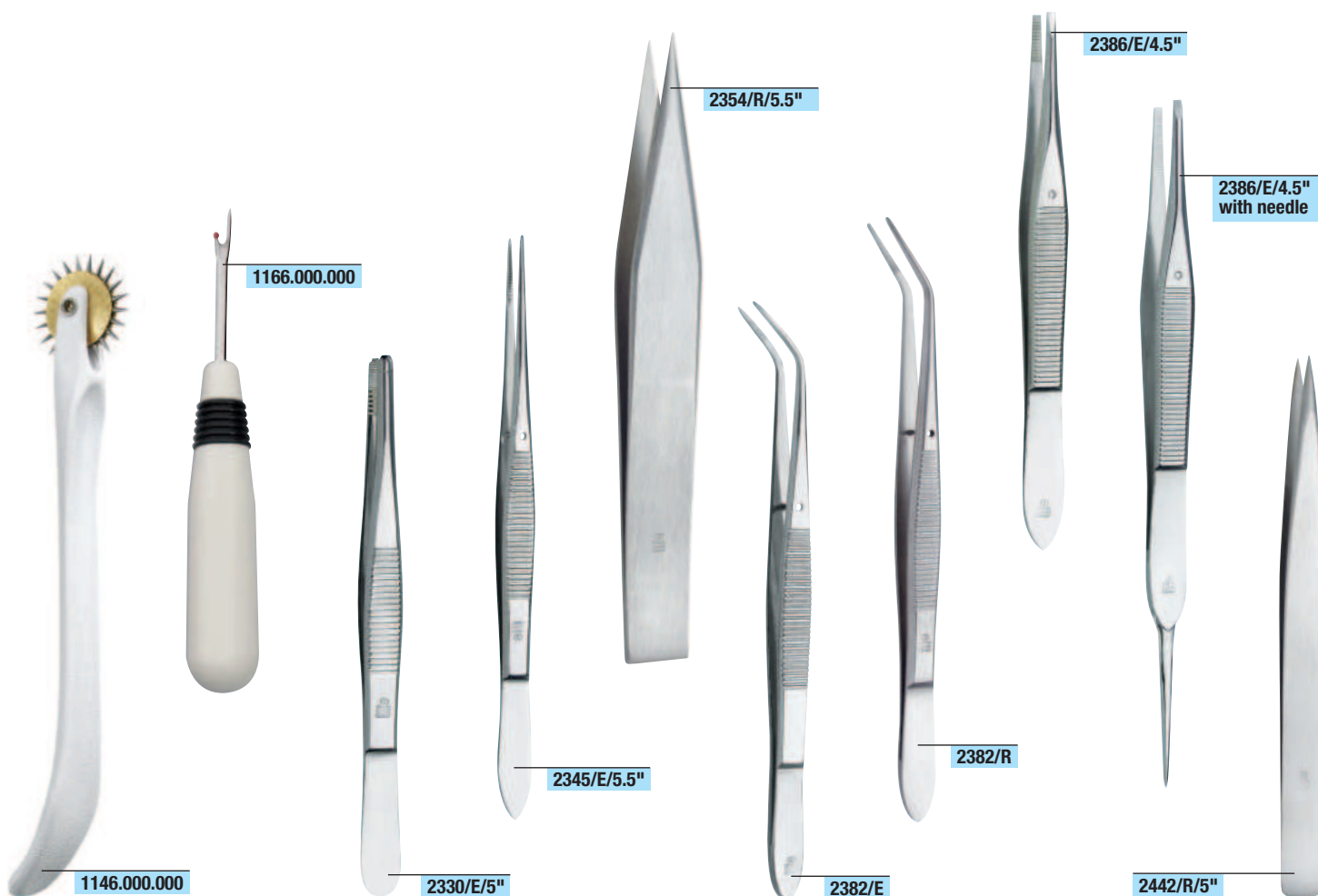
Cutting Mats for Rotary Blade Cutters

These are virtually indispensable for work with rotary blade cutters because blade edges last much longer. The mats are made of 1.5 mm thick self-sealing plastic material.

The following dimensions are available:

Order No.	Dimensions
1150.061.000	15 x 46 cm
1150.062.000	45 x 60 cm
1150.063.000	60 x 90 cm
1150.064.000	60 x 143 cm
1150.065.000	100 x 200 cm

Seam Rippers, Tracing Wheels, Industrial Tweezers



1146.000.000

Order No.	Weight
1146.000.000	21 g

Tracing Wheel

for tracing patterns into paper, with plastic handle and wheel tipped with 22 hardened high-grade specialty steel needles

1166.000.000

Order No.	Weight
1166.000.000	9 g

Seam Ripper

for undoing seams and button-holing, solid Version - ball-pointed

Art.-No. 2330/E/5"

Order No.	Total Length	Weight
2330.107.130	12.5 cm	24 g

Multi-Purpose Tweezers

with wide, rounded tips, nickel-plated

Art.-No. 2345/E/5.5"

Order No.	Total Length	Weight
2345.107.145	14.5 cm	20 g

Multi-Purpose Tweezers

with pointed tips, pilot-pin, nickel-plated

Art.-No. 2354/R/5.5"

Order No.	Total Length	Weight
2354.113.145	14.0 cm	43 g

Weaver's Tweezers

wide grip Version, stainless steel

Art.-No. 2382/E

Size	Order No.	Total Length	Weight
4.5"	2382.107.120	11.5 cm	15 g
5"	2382.107.130	12.5 cm	17 g
5.5"	2382.107.145	14.5 cm	21 g
6"	2382.107.160	16.5 cm	24 g
8"	2382.107.210	21.0 cm	38 g

Thread Tweezers

sidewise bent, with pilot pin for sure grip, nickel-plated

Art.-No. 2382/R

Size	Order No.	Total Length	Weight
5"	2382.113.130	13.0 cm	15 g
5.5"	2382.113.145	14.5 cm	22 g

Thread Tweezers

stainless Version with fine points

Art.-No. 2386/E

Size	Order No.	Total Length	Weight
4.5" without needle	2386.107.120	12.0 cm	23 g
4.5" with needle	2386.107.160	16.0 cm	25 g

Thread Tweezers

straight, flat ends, nickel-plated

Art.-No. 2442/R/5"

Order No.	Total Length	Weight
2442.113.130	12.5 cm	17 g

Mechanic's Tweezers

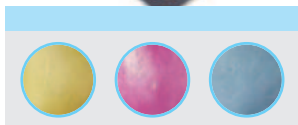
stainless, heavy-duty points, compact design



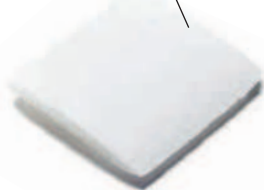
Tailor's Chalk and Marking Pens



Classic
Tailor's Chalk



Vanishing Chalk



Vanishing Mark
Pens



1173.110.000



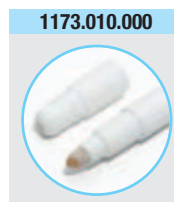
1173.210.000



1173.300.000



1173.000.000



1173.010.000



1173.100.000



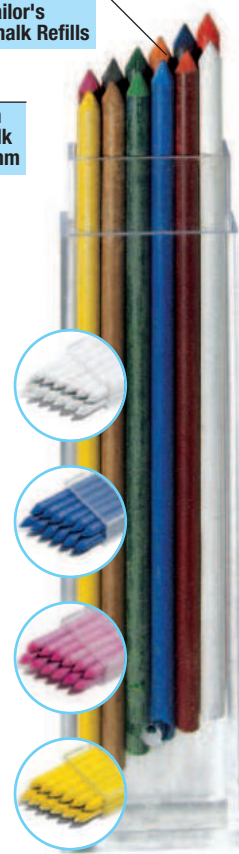
1173.200.000



Refill Sharpener

Tailor's
Chalk Refills

Drop-Action
Pen for Chalk
Refills 3.2 mm



Classic Tailor's Chalk

Order No.	Colour	Packaging Unit
1170.000.000	white	100 each
1170.001.000	white	25 each
1170.100.000	red	100 each
1170.101.000	red	25 each
1170.200.000	blue	100 each
1170.201.000	blue	25 each
1170.300.000	yellow	100 each
1170.301.000	yellow	25 each
1170.901.000	red/blue/yellow assorted	25 each

Drawn lines can be brushed away.

Vanishing Chalk

Order No.	Visual Perception	Packaging Unit
1172.000.000	normal: ca. 1 - 2 days	50 each
1172.100.000	longlife: ca. 3 - 5 days	50 each
1172.200.000	soft/extra longlife: ca. 5 - 6 days	50 each

The drawn line disappears in the course of time - or 'at once' when being ironed.

Vanishing Chalk Holder

Order No.	Packaging Unit
1172.900.000	1 each

Vanishing Mark Pens (self-erasing)

Order No.	Colour	Point	Packaging Unit
1173.000.000	white	1 mm	10 each
1173.010.000	white	2 mm	10 each
1173.100.000	violet	1 mm	10 each
1173.110.000	violet	1 mm*	10 each
1173.200.000	pink	1 mm	10 each
1173.210.000	pink	1 mm*	10 each
1173.300.000	violet/pink	1 mm	10 each

white markings: visible for about 2 - 4 days
erased 'at once' when being ironed
violet markings: visible for about 2 - 14 days
red markings: visible for about 10 - 20 hours
Caution: Do not iron or wash violet and pink markings for as long as these colours are visible.

Drop-Action Pen - for 3.2 mm Chalk Refills

Order No.	Packaging Unit
1174.900.000	10 each

Refill Sharpener with Shavings Collection Receptacle

Order No.	Packaging Unit
1174.910.000	10 each

Sharpener for Tailor's Fat Chalk and Omnichrome Refills

Tailor's Chalk Refills

Order No.	Colour	Packaging Unit
1174.000.000	white	12 x 12 each
1174.001.000	white	12 each
1174.100.000	red	12 x 12 each
1174.101.000	red	12 each
1174.200.000	dark-blue	12 x 12 each
1174.201.000	dark-blue	12 each
1174.210.000	light-blue	12 x 12 each
1174.211.000	light-blue	12 each
1174.300.000	yellow	12 x 12 each
1174.301.000	yellow	12 each
1174.500.000	green	12 x 12 each
1174.501.000	green	12 each
1174.800.000	assorted colours	12 x 12 each
1174.801.000	assorted colours	12 each
1174.850.000	Bagged Samples	1 dozen white 1 dozen assorted colours 2 Drop-Action Pens 3.2 mm, 1 Refill Sharpener

These chalk refills mark a great many surfaces, such as metal, plastic, wood, fabric, paper, etc. They are easy to use, robust, long-lasting and do not dry up.

The markings can be washed off - but we would recommend to run some tests before actually going to work.

* with additional erasing point

Leather Marking Items



Drop-Action Pen for 3.0 mm Omnichrome Refills

Order No.	Packaging Unit
1176.900.000	5 each

This high-quality drop-action pen advances the refill by increments without slipping through even at high temperatures.

Omnichrome Refills

Order No.	Colour	Packaging Unit
1176.050.000	white	12 x 12 each
1176.051.000	white	12 each
1176.100.000	red	12 x 12 each
1176.101.000	red	12 each
1176.300.000	yellow	12 x 12 each
1176.301.000	yellow	12 each
1176.600.000	black	12 x 12 each
1176.601.000	black	12 each

The ideal marker for industry and trade. For use on almost any surface, e.g. glass, leather, fabrics, stone, metal, wood, plastic, etc. Its hiding properties are also effective on dark and transparent surfaces, no striking through paper, brilliant colour saturation and non-fading, not drying out, odourless.

Silver Pen

Order No.	Colour	Packaging Unit
1176.000.000	silver	10 each

Refill

Order No.	Packaging Unit
1176.010.000	100 each

The silver ballpoint refills write on leather, paper, cardboard, etc. The silver markings are visible on light as well as dark surfaces and hard to remove so that it's best to place them on the "wrong side" or have them sewn over.

Pilot Silver Marker

Order No.	Packaging Unit
1176.020.000	12 each

The markings made with this pen are visible on both light or dark surfaces and can be wiped off with a wet cloth. Markings can also be made on paper or cardboard. The Pilot Silver Marker is preferably used in footwear and upholstery furniture production runs.

ESBE-Peel-Off-Marker

Order No.	Point Size	Packaging Unit
1176.030.000	1 - 2 mm	10 each
1176.040.000	2 - 4 mm	10 each

This pen produces rubbery markings which, once dried, can be readily rubbed off. These markings adhere to all smooth surfaces, such as glass, metal, artificial leather, organic leather etc. - not for use on "absorbent" surfaces.

Important tip for the use of all markers:

Prior tests on leftover material or hidden places are strongly recommended for all markers.



UV-Marking Pen, Ceramic Marking Pen, Textile Glue Stick



Sewline Drop-Action Ceramic Marking Pens

Order No.	Weight
1179.000.000	36 g

Ceramic refills feature high breaking resistance and "soft" line drawing characteristics, i.e. no surface scratching, no material penetration. The integrated eraser removes marking traces readily, and so does a wash.

Ceramic Refills

Order No.	Colour	Packaging Unit
1179.010.000	white	30 each
1179.020.000	pink	30 each
1179.030.000	yellow	30 each
1179.040.000	turquoise	30 each
1179.050.000	grey	30 each

Sewline Glue Stick

Order No.	Weight
1179.100.000	21 g

This Glue Stick is ideal for use with textiles when seaming or fixing of ornaments. Simply apply the glue, press the parts together and start sewing. Once dry, the glue becomes invisible and disappears upon washing.

Stick supplied with refill cartridge

UV Tincture Pen

Order No.	Line Widths
1178.010.000	2 – 4 mm
1178.020.000	1 – 2 mm

This item is a rechargeable high-performance UV Tincture Pen because of its full-capacity shaft with an integrated flow control valve.

The felt tip can be readily replaced.

Replacement Felt Tips

Order No.	Line Widths	Packaging Unit
1178.011.000	2 – 4 mm	100 each
1178.021.000	1 – 2 mm	100 each

UV alcohol-based Tincture Refill

Order No.	Colour	Contents
1178.100.000	UV - blue	250 ml
1178.110.000	UV - blue	1000 ml
1178.200.000	UV - green	250 ml
1178.210.000	UV - green	1000 ml

These are used for "invisible" marking of fabrics, leather and other smooth surfaces, with the markings becoming visible under UV light.

Important tip:

UV markings are highly problematic to remove even though this is not necessary considering their invisible nature at daylight. However, prior tests are recommended to be on the safe side.

KDS Safety Cutters



KDS Pocket Slim	
Order No.	Weight
1155.002.001	24 g

This impact-resistant cutter is made up of a steel skeleton with a high-grade plastic frame. Ideal for delicate cuts. Pocket clip-integrated blade snapper.

Supplied with 2 snap-off blades

KDS Slim Trim	
Order No.	Weight
1155.010.000	21 g

Slim-line, yet compact, stainless all-steel cutter using extra-fine snap-off blades with pointed 30° edge. Excellent for delicate cutting work with leather and plastic materials. Pocket clip-integrated blade snapper.

Cutter supplied with 10 Replacement Blades

KDS L22	
Order No.	Weight
1155.022.000	107 g

Handy, heavy-duty cutter with ergo-style plastic handle. The blade control slider locks in position during the cutting operation. The blades are specially heat-treated, hence having a high durability.

Spare blades are safely stored inside the handle and can be replenished upon pushing the button.

Supplied with 2 snap-off blades inside the handle

KDS L21	
Order No.	Weight
1155.021.000	109 g

Heavy-Duty Cutter with two snap-off blades in the handle-integrated magazine, with the blades reloading automatically.

The blade control slider locks in position during the cutting operation.

The blade outlet features a lock-screw to freeze the blade in position when performing forceful cuts.

Supplied with 2 snap-off blades inside the handle

KDS Automatic	
Order No.	Weight
1155.000.000	160 g

An innovative heavy-duty cutter, self-loading from the integrated snap-off blade magazine holding 8 blades. Palm-fit, ergo-style handle for safe and comfortable cutting operations.

The blade outlet features a lock-screw to freeze the blade in position when performing forceful cuts.

Supplied with 8 snap-off blades

Replacement Blades:			
Name	Order No.	Width of the blade	Packaging Unit
KDSAutomatic	1155.000.010	18 mm	10 blades
KDSAutomatic	1155.000.100	18 mm	100 blades
KDSPocketSlim	1155.002.010	9 mm	10 blades
KDSPocketSlim	1155.002.100	9 mm	100 blades
KDSSlimTrim	1155.010.010	9 mm	10 blades
KDSSlimTrim	1155.010.100	9 mm	100 blades
KDSL21	1155.000.010	18 mm	10 blades
KDSL21	1155.000.100	18 mm	100 blades
KDSL22	1155.022.010	18 mm	10 blades
KDSL22	1155.022.100	18 mm	100 blades

▶ **Index – in alphabetical order**

AB

Seite

Advertising Gifts	20
Aramide Shears	8/9/10/11/14/15
Arch Punches	55
ARS Scissors and Shears	14/15/35
Battery-Powered Shears	48/49
Belt Punches	55

CD

Carbon Fiber Scissors and Shears	8/9/10/11/12/13/14
Cardboard Pattern Shears	30/31
Carpeting Shears	30/40
Ceramic Refills	60
Chalk	58
Check Markers	54
Clippers	36
Curtain Scissors	24/25/38
Cutting Mats	56
Control Notchers	54
Decorator's Shears	40
Drop-Action Pen for Chalk and Omnichrome Refills	58/59
Dyneema Scissors	8/9/10/11/14/15

EF

EC Cutter	48/49
Edge Trimming Shears	9/13/30
Electro-Powered Shears	42/43/46/47
Embroidery Scissors	33
ESBE-Peel-Off-Marker	59
Extraction Device	44
Fabric Scissors	38
Floor Layer's Shears	30

GH

Glass Fiber Scissors and Shears	8/9/10/11/12/13/14/16
Glue Stick	60
Grinding	18/19/31/43/45
Grinding Machine	19
Grinding Services	18/19
Heavy-Duty Electro-Powered Shears	42/43
Hobbyist's Shears	40
Hole Cutting Set	55
Hollow Punches	55
Holster	22
HOOG's Electro-Powered Shears	46/47
Hot-Melt Cutters	50/51
Household Scissors	34
HSGM Hot-Melt Cutters	50/51

IK

Seite

Industrial Tweezers	57
KAI Rotary Blade Cutter	12/56
KAI Scissors and Shears	15/27/28/37/39
KDS Safety Cutters	61

L

Laminating Shears	12
Leather Cases	20
Leather Shears	26/30
Left-Handers' Scissors and Shears	11/27/28/29
Light-Weight Tailor's Scissors and Shears	27/28/35/39/40

MNO

Machine Components	52
Maier Grinding Machine	19
Marking Pens	58/59/60
Metal Shears	31
Mould-Making Shears	9/12/13
Multi-Purpose Tweezers	57
Multi-Purpose Scissors	32
Notchers	54
Omnichrome Refills	59
Overhead Suspender	43

PQ

Paper Shears	40
Paper Hanger's Shears	40
Pattern Notchers	54
PELLORO Scissors and Shears	16/23/34/36/37/38
Pile Trimming Shears	31
Pilot Silver Marker	59
Pinch Scissors	32
Pinking Shears	37
Pneumatic Shears	44/45
Pocket Scissors	14/38/40
Proton-Scissors and Shears	8/9/29
Punch Pliers	55
Quilting Scissors	32

R

Refills	59
Regrinding Services	18/19
Repair Services	18/19
Revolving Punch Pliers	55
Ribbon Scissors	32
ROBUR Scissors and Shears	16/33/36/38/40
ROBUSO-ELASTIC Tailor's Shears	24/25/29
Rotary Blade Cutters	12/56
Rotary Blade Machines	46/47/49

S	Seite
Safety Cutters	61
Safety Gloves	43
Scalloping Shears	37
Scissors 22/23/24/25/26/27/28/29/35/39/40	
Seam Rippers	57
Sewing Scissors 32/34/38/39/40	
Sewline Drop-Action Ceramic Marking Pens	60
Sewline Glue Stick	60
Sharpener for Chalk and Omnichrome Refills	58
Sheet Metal Shears	31
Silver Pen	59
Silver Refills	59
SLD Tailor's Shears 15/26	
Spring-Loaded Overhead Assembly	43
Stainless Scissors and Shears 15/16/32/33/35/36/37/38/39/40	
Stencil Plate Shears	30
SWISSORS®	35
System Components	52
T	Seite
Tailor's Chalk and Refills	58
Tailor's Scissors and Shears 22/23/24/25/26/27/28/29/35/39/40	

T	Seite
Textile Scissors	38
Thread Clippers	36
Thread Scissors 9/14/32/33	
Thread Tweezers	57
Tincture Pen	60
Tracing Wheels	57
Tweezers	57
U	Seite
Universal Scissors 30/32/40	
Upholstery Shears 22/23/24/25/31	
UV Tincture and Pen	60
V	Seite
Vanishing Mark Pens	58
Vanishing Chalk	58
W	Seite
Weaver's Tweezers	57
Weaver's Scissors 14/16/32/33	
Wheel Cutters 12/56	

▶ Index – in consecutive order of the first four digits of the Order-Number									
Order-No.	Page	Order-No.	Page	Order-No.	Page	Order-No.	Page	Order-No.	Page
0013	33	1021	16	1081	11	1253	9/13	2151	15
0108	34	1023	26	1130	54	1260	31	2170	16
0110	34	1024	8/10/12	1131	54	1271	31	2200	20/27
0120	34	1025	26	1139	54	2003	33	2201	15
0250	34	1026	9/11/12/13	1140	55	2007	20/38	2202	27/28
0258	36	1040	28	1142	55	2009	40	2203	27
0259	36	1041	11/29	1144	55	2010	40	2210	36
0321	32	1048	29	1146	57	2011	40	2211	36
0322	9/14	1049	29	1150	12/56	2025	35	2212	32
0323	32	1052	24	1155	61	2026	35	2213	33
0403	33	1053	25	1166	57	2037	36	2215	39
0404	32	1055	20/25	1170	58	2038	36	2219	33
0405	11/13	1061	37	1172	58	2050	16	2220	39
0614	32	1062	37	1173	58	2060	40	2221	28
0615	9/14	1063	37	1174	58	2077	40	2222	39
0705	20/38	1065	37	1176	59	2080	37	2223	39
0720	38	1071	9/11	1178	60	2090	35	2224	39
0721	14	1073	30	1179	60	2100	35	2330	57
1001	35	1075	31	1205	38	2101	35	2345	57
1010	35	1076	13/30	1215	38	2110	15	2354	57
1012	28	1078	30	1248	31	2111	14	2382	57
1020	22/23	1080	30	1249	13	2150	26	2386	57



since 1919

ROBUSO Stahlwarenfabrik
Buntenbach & Sohn GmbH

Gleisdreieck 13
42651 Solingen
Germany

Telefon +49 - 212 - 233 625 - 0
Fax +49 - 212 - 233 625 - 21

E-Mail: info@robuso.de
www.robuso.de