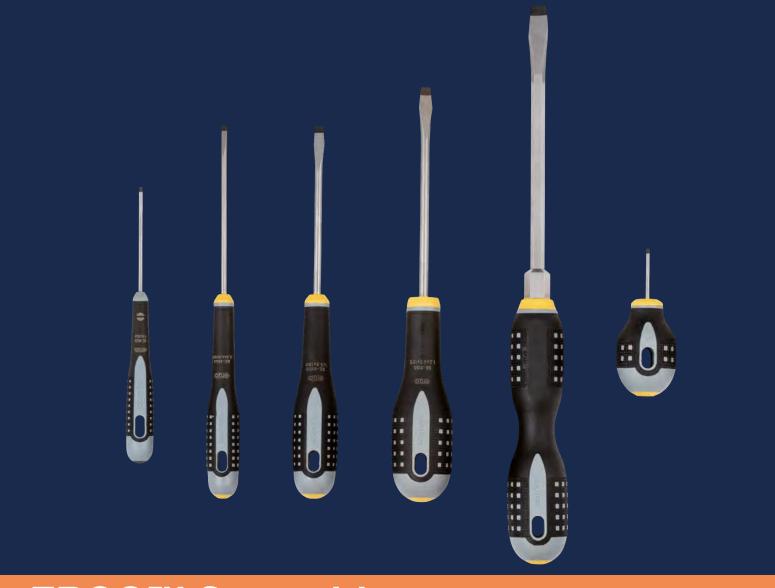
BAHCO_®



ERGO™ Screwdrivers



Index

ERGO™ Screwdrivers		2
ERGO™ With interchangeable blades	THE PERSON NAMED IN COLUMN TO SERVICE OF SER	20
ERGO™ Impact driver		22
ERGO™ Insulated with Slim blade		28
ERGO™ Insulated	1111111	36
Insulated ratcheting screwdriver with interchangeable blades	- I S I S I S I S I S I S I S I S I S I	40
ERGO™ Stainless Steel	Stateless	42
ERGO™ Non sparking		50







ERGOTM Screwdrivers

The Bahco ERGO™ Process

If hand tools are to be ergonomic, they must be suitable to the task, the user and the environment. That is why all three of these factors are crucial when creating an ERGO™ product.

Ergonomic tools are designed to fit the human hand, minimising grip-strength demands and allowing muscles to relax periodically, reducing the risk of static muscle fatigue.

Whenever an ERGO™ tool is being developed, sustainable efficiency and effectiveness are considered, as well as reliability and durability in challenging environments.

We work hard to deliver the best possible tools to every user, and over the years we have continuously developed, improved and fine-tuned the way we do this, which resulted in the Bahco ERGO™ Process. This is a comprehensive three-phase process (each phase including several steps), which ensures the validity of ERGO™ tools.

The Bahco ERGO™ Process is unique for Bahco and scientifically performed with the help of Industrial Designers and Ergonomists.

The Bahco ERGO™ Process is in accordance with ISO 9241.

BAHCO ERGO™ PRODUCTS ARE CONTINUALLY AWARDED WITH THE **MOST PRESTIGIOUS DESIGN AWARDS**

Bahco ERGO™ products have been included in research papers and business cases. We also actively work with universities and research centers all over to create our products:

- Comfort Effects of Participatory Design of Screwdrivers TU Delft The Netherlands
- Success Via Design Business case by Triad Design & Harvard University*
- Business case: AB SANDVIK SAWS & TOOLS: THE ERGO STRATEGY University of Western Ontario
- Mastership in Design research at UFSC Federal University of Santa Catarina - Brazil
- Ergonomía Universidad de Navarra, Spain
- Libro de la asianatura 'Ergonomia per il design' Politecnico di Milano
- Scandivanvian Design Taschen



Excellent Swedish Design Awards: The Svensk Form/Swedish Society of Crafts and Design verifies and spreads knowledge about good, self-assured Swedish design.



Reddot Award: With a history spanning more than 50 years, the "Reddot Award: product design" is one of the most important international product competitions.



Japanese Good Design Award: Since 1957, the Good Design Award has been given to outstanding designs for more than 50 years.

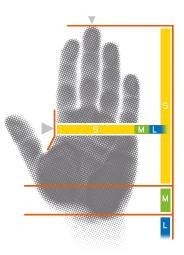


The Handle

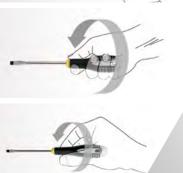
The handle diameter is optimized to transmit the maximum torque and increase productivity. Double handle for very high forces, when both hands are required.



SAFETY PLEASURE COOL TOOL **FEELING USER PRIDE**



We don't believe in average people, that is why we analyze anthropometrical databases to define the handle sizes in the assortment.





PRODUCTIVITY & PROFITABILITY **QUALITY PERFORMANCE**



INSPIRED BY PROFESSIONALS



DURABILITY INNOVATION

The Colour Coding

The colour coding supports the cognitive processes related to the identification of the right screwdriver. Instead of having to check every tip, you can quickly see which one is what just by the colour of the first injection.

The Blade

The blade is made of high performance alloy steel for maximum durability. Nickel chrome plated for maximum corrosion resistance.



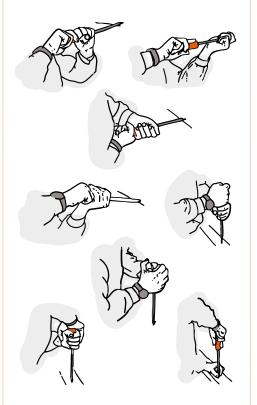


ERGO™ SCREWDRIVERS

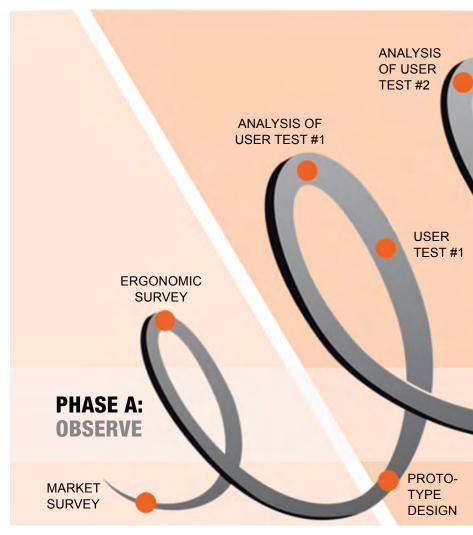
The ERGO™ Screwdriver has been developed through our three phase Bahco ERGO™ Process. This program takes account of facts and experiences from users, ergonomists, industrial designers, and R&D departments, as well as extensive testing and trials.

It is easier to use, more comfortable to hold and significantly more functional. It reduces muscle tension and risk of accidents and injuries, while increasing job satisfaction, productivity and profitability.

ERGO™ TOOLS START THEIR LIVES AS A SERIES **OF QUESTIONNAIRES TO END USERS ABOUT** THEIR EXPERIENCES WITH PARTICULAR TOOLS AND **HOW THEY WOULD LIKE TO SEE THEM IMPROVED.**



THIS INFORMATION IS THEN COUPLED WITH **DOCUMENTATION SHOWING HOW THE TOOL IS USED** IN THE NORMAL WORK SITUATIONS.



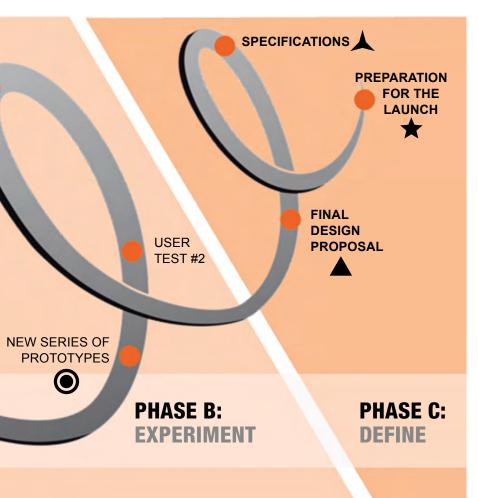
NEW SERIES OF PROTOTYPES

We tried very different handle diameters with different end users to understand what fits best the human hand.



WE OBSERVE PROFESSIONALS IN THEIR WORKING SITE TO **UNDERSTAND HOW THEY USE THE TOOLS**

In Bahco, we are forerunners in hand tool design and ergonomics. We have been designing hand tools since 1856 and researching in ergonomics since 1978.



A SPECIFICATIONS

Bahco ERGO™ tools are made with the most advanced technologies. As manufacturers, we comply with the highest quality standards.

PREPARATION FOR THE LAUNCH

In Bahco we are completely confident about the superiority of ERGO™ tools. That is why the launching of an ERGO™ tool always includes a demo unit so that professional users can feel the difference.





FINAL DESIGN PROPOSAL





Choosing the right tip

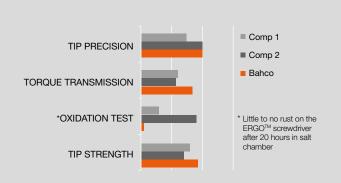


Tip Precision: The tip precision increases the lifetime of the screwdriver and avoids damage on a workpiece.

Torque Transmission: The screwdriver transmits the torque the and less force is needed to do the job.

Oxidation test: Less oxidation improves the lifetime and performance of the screwdriver.

Tip Strength: A strong tip will secure the tip precision throughout its lifetime.



More than just aesthetically pleasing



Choosing the right colour code

CONTINUOUSLY UPDATING THE RANGE ACCORDING TO THE LATEST **MARKET DEMANDS**

Bahco continuously works with end users and experts in the market. Being close to the most demanding end users, Bahco anticipates on changes in applications used in all industries. To keep delivering the best solutions, Bahco is continuously developing the screwdriver assortment to fit the latest request and market applications.



EASY TO FIND THE RIGHT TIP IN YOUR TOOL CASE WITH THE DOUBLE COLOUR CODE WHICH DOESN'T WEAR OUT









Info handle sizes



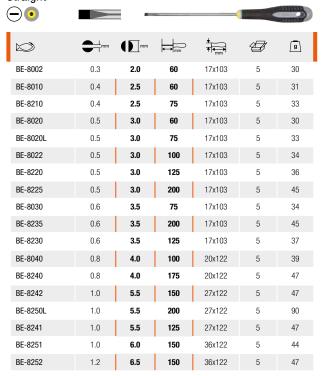


It's shape, it's dimensions and it's touch are all designed, extensively tested and developed, following a scientific process, to give the ERGO™ screwdrivers an optimal balance between torque (twisting force) and control. Because every situation demands another approach the ERGO™ screwdriver range offers a set of five handle sizes and a stubby to improve productivity at all times. E.g. The double shape handles for tasks where you need to use both hands to get the extra torque or the new extra small handle size when control and precision is a must.

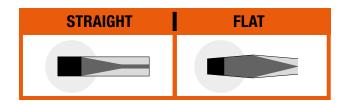
ERGO™ SCREWDRIVERS

Slotted

Straight



WHAT IS THE DIFFERENCE **BETWEEN FLAT AND STRAIGHT?**

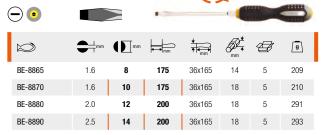




Flat



Hexagonal blade double handle



Stubby







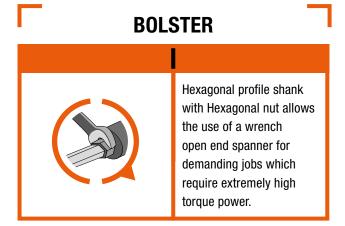
DOUBLE HANDLE

Double shape handle, for use with both hands (in large sizes). Its larger surface of elastomer together with its advanced ergonomic design allows an optimum comfortable grip and maximum torque power.



Phillips







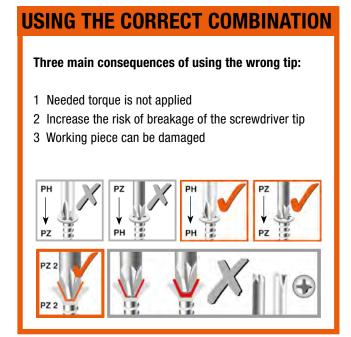


Pozidriv



Double handle









BLACK TIP = MORE ACCURACY

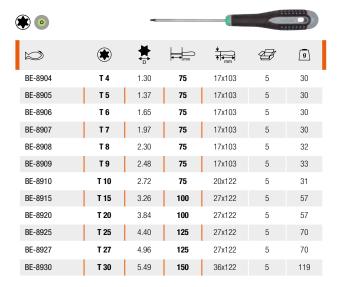
The black finish tip.

It's an oxidation process that is not adding any layer, therefore the tip is more precise. Use black finish tip for higher accuracy.

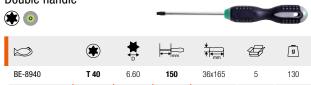


Stubby • •						
			→ mm	↓		g
ľ	BE-8801	PZ 1	25	36x58	5	40
	BE-8802	PZ 2	25	36x58	5	43

Torx®



Double handle



150

36x165

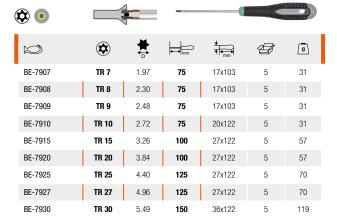
178

7.70

TORX® TAMPER

T 45

BE-8945



TORX® TAMPER double handle



TORX® TAMPER

TORX®, Tamper-Resistant contains a post or pin in the center of the head that prevents a "standard" TORX® driver from being inserted which means safety screws cannot be unscrewed.



Torx® Ball



30°

TORX® BALL

The spherical drive profile allows work at an angle of up to 30° with total effectiveness. TORX® BALL end tips are necessary when screwdriving in tight spots or at an angle.



TORX PLUS®



		*	₩mm	**************************************		g
BE-7715	T 15	3,26	100	27x122	5	57
BE-7720	T 20	3,84	100	27x100	5	57
BE-7725	T 25	4,40	125	27x122	5	70
BE-7727	T 27	4,96	125	27x122	5	70
BE-7730	T 30	5,49	150	36x122	5	119
BE-7740	T 40	6,60	150	36x122	5	119

TORX PLUS®

TORX PLUS® is designed to allow greater torque, to minimize wear and to increase productivity by reducing down-time. With a larger contact area than the standard TORX®, the amount of transmission increases, as well as the life time of the tools.



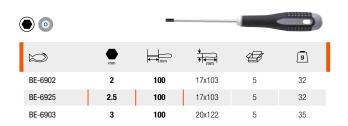
TORX® vs. TORX PLUS®





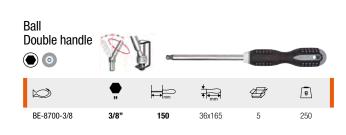
ERGO™ SCREWDRIVERS

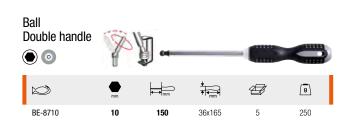
Hexagonal

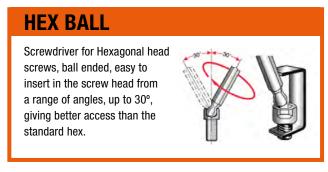


Ball inches	Z)	J -			-
	,,	← mm	+		g
BE-8700-7/64	7/64'	100	20x122	5	35
BE-8700-5/32	5/32"	100	27x122	5	66
BE-8700-3/16	3/16"	100	27x122	5	105
BE-8700-7/32	7/32"	100	36x122	5	110
BE-8700-1/4	1/4"	125	36x122	5	126
BE-8700-5/16	5/16"	150	36x122	5	197







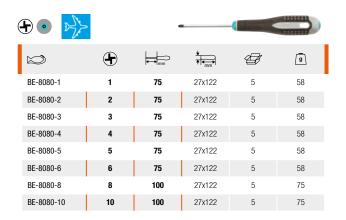


Robertson





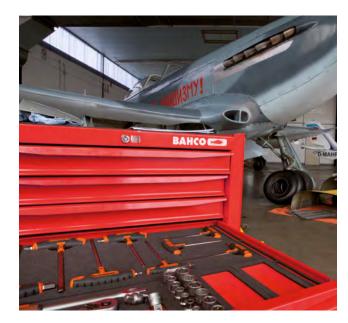
Torq-Set



Triwing



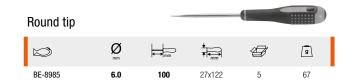




Awl

Stubby

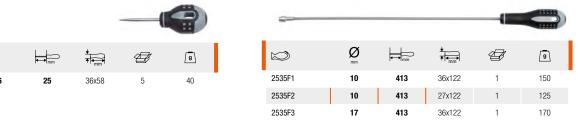
BE-8986



Reamer



Flexible Magnetic Puller



Ø

ERGO™ SCREWDRIVERS

O Nut Driver

Slim bore

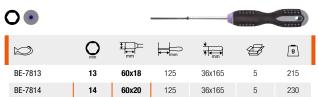


Long bore

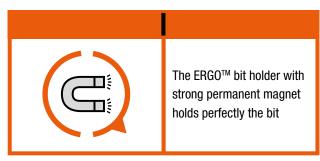




Long bore double handle



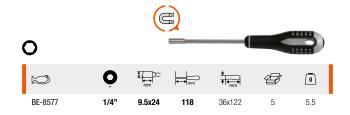
PERMANENT MAGNET



Bit Holder







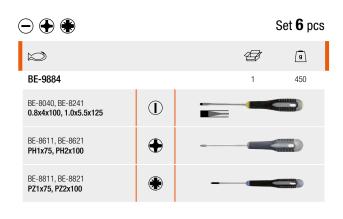
ERGO™ Screwdriver Sets

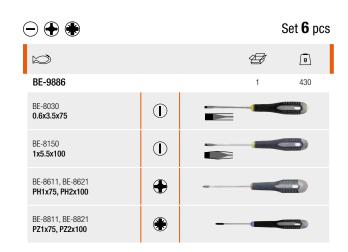








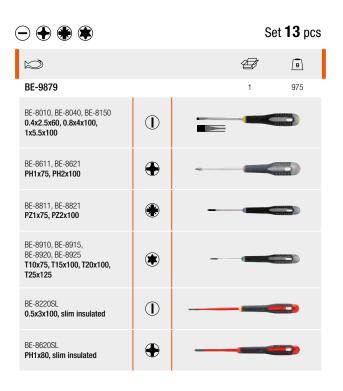




ERGO™ SCREWDRIVERS









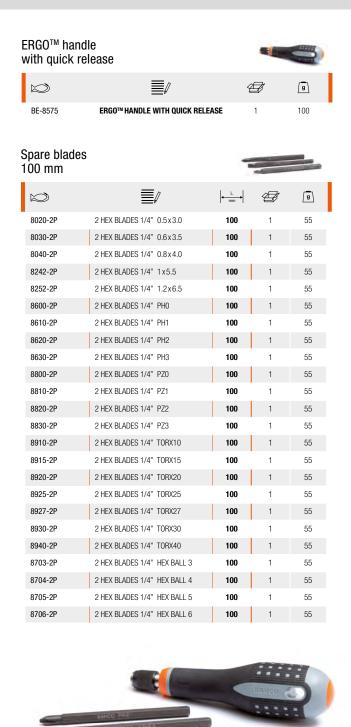


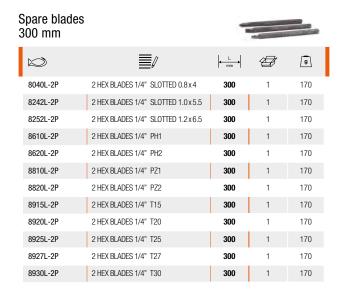
ERGO™ Handle with Interchangeable Blades

NOT ONLY THE MOST COMFORTABLE SCREWDRIVER BUT THE MOST UNIVERSAL TOO!

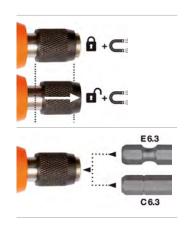
New to the ERGO™ assortment is the screwdriver with interchangeable blades, an ERGO™ handle combined with a quick release bit holder.

The ERGO™ handle with interchangeable blades combines the comfort of an ERGO™ screwdriver with the flexibility of easy changing blades.



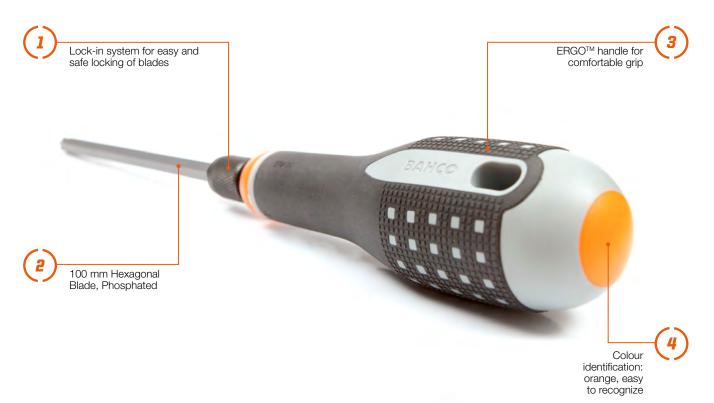








ERGO™ HANDLE WITH INTERCHANGEABLE BLADES



ERGO™ handle with interchangeable blades

_			_
			g
BE-8571	7 pcs set, ERG0™ handle with interchangeable blades: PH1, PH2, PZ1, PZ2, 1x5.5, 1.2x6.5	1	425
BE-8572	9 pcs set, ERG0™ handle with interchangeable blades: PH1, PH2, PZ1, PZ2, T10, T15, 1x5.5, 1,2x6.5	1	485
BE-8573	8 pcs set, ERG0™ handle with interchangeable blades: T10, T15, T20, T25, T27, T30, T40	1	450
BE-8576	22 pcs set, ERG0™ handle with interchangeable blades (16 pcs): PH1, PH2, PH3, PZ1, PZ2, PZ3, T10, T15, T20, T25, T30, T40, 0.6x3.5, 0.8x4.0, 1.0x5.5, 1.2x6.5 Bits (6 pcs): H2,5, H3, H4, H5, H6, H8	1	600
BE-8574	8 pcs set, ERG0 TM handle with interchangeable blades: PH1, PH2, PZ2, 0.8x40, T20, T25, T30	1	450



ERGO™ Handle with Interchangeable Blades











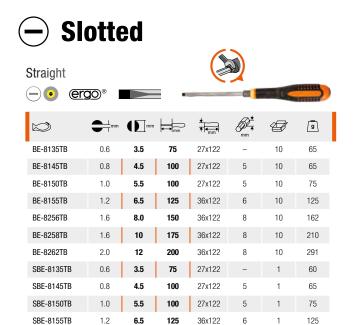
Designed for chiseling, fastening and loosening heavily rusted, corroded and seized screws, this screwdriver transfers impact force directly to the work surface.

The striking metal cap at the top of the handle gives additional protection for jobs requiring high impact and maximum force.





For strength and capability in your toughest jobs, the **ERGO™ Impact Driver** can do it all.



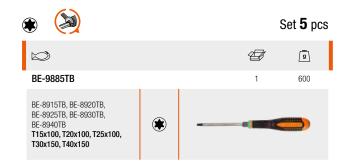






ERGO™ Impact Driver Screwdriver Sets

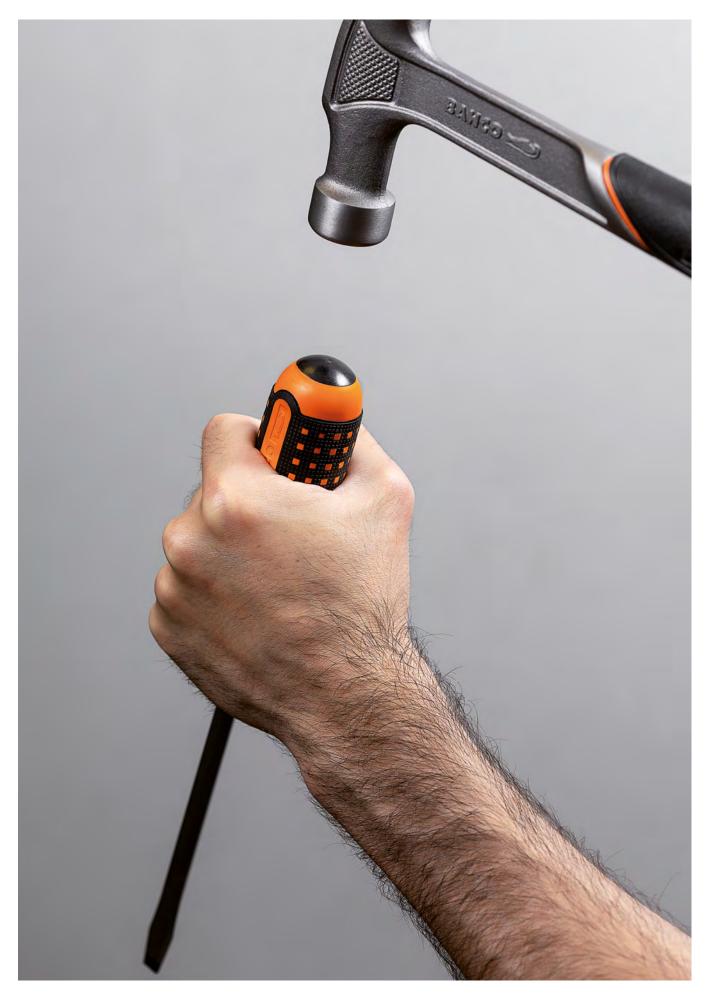








ERGO™ IMPACT DRIVER









ERGOTM Insulated

Insulated Screwdrivers

For work on live equipment up to 1000 volts, Bahco offers a wide range of insulated safety tools. All Bahco insulated tools are manufactured according to the International Standard IEC60900 for working with live systems up to 1000 V AC and 1500 V DC.



Dielectric test

The tools are immersed in water for 24 hours. A voltage of 10kV is then continuously applied for 3 minutes. The test is considered successful if no electrical puncture, spark over, or flashover occurs during the test period. Leakage limits must not be exceeded.



Flame test

When placed over a fire, where the height of the flames on the tools does not exceed 120 mm, if the insulation material does not melt or leak, then the test is passed.



Impact test

The tools are cooled to -25° C for 2 hours. Then, a special hammer is used with some force on the insulating layer. The test is considered successful if the insulating material shows no breaks and passes the dielectric test.



Permanent marking durability

The markings are rubbed for 15 seconds with a rag soaked in water, and then for 15 seconds with a rag soaked in isopropanol. The test is passed if, after this process, the markings are still legible.



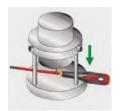
Insulation adhesion test

The tools are stored at a temperature of 70°C for 168 hours. Then, a force of 490 N is applied in the direction of the line dividing the insulating material from the conductive part for 3 minutes. During this test the insulation material must stay firmly attached to the tools.



ERGO™ INSULATED

They follow strict quality controls and all tools are subjected to the most stringent, individual tests. We recommend following the safety instructions very closely when working with any live systems.



Penetration test

The insulated surfaces of the tools are pressed with a special device. A voltage of 5000 V is then applied to the tool for 3 minutes. The test is considered successful if no electrical puncture, spark-over, or flash-over occurs during the test period.



Visual and dimensional

The tools, and in particular the insulation, are visually controlled and have to be free from external defects. The markings have to be perfectly legible and the dimensions have to be in accordance with the standard.



SCREWDRIVERS FOR ELECTRICIANS FOR WORK ON LIVE EQUIPMENT, **UP TO 1000 V**

ALL INSULATED SCREWDRIVERS ARE TESTED 100% FOLLOWING A STRICT QUALITY CONTROL. BAHCO SCREWDRIVERS ARE A GUARANTEE OF QUALITY AND SAFETY.

ROUTINE TESTS IN ACCORDANCE TO IEC60900 SPECIFICATION



ERGO™ Slim Insulated Screwdrivers

The Bahco ERGO™ insulated assortment includes the "Slim" line range.

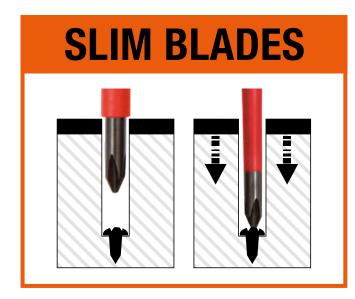
The normal blades are limited in confined spaces. The new "slim" blades are 30% slimmer than regular insulated blades for better accessibility and let users access deeply inset screws and operate spring tension clamp terminal blocks.

All Bahco insulated tools are manufactured according to the International Standard IEC60900 for working with live systems up to 1000 V AC and 1500 V DC. All insulated screwdrivers are tested 100% following a strict quality control to guarantee quality and user safety.







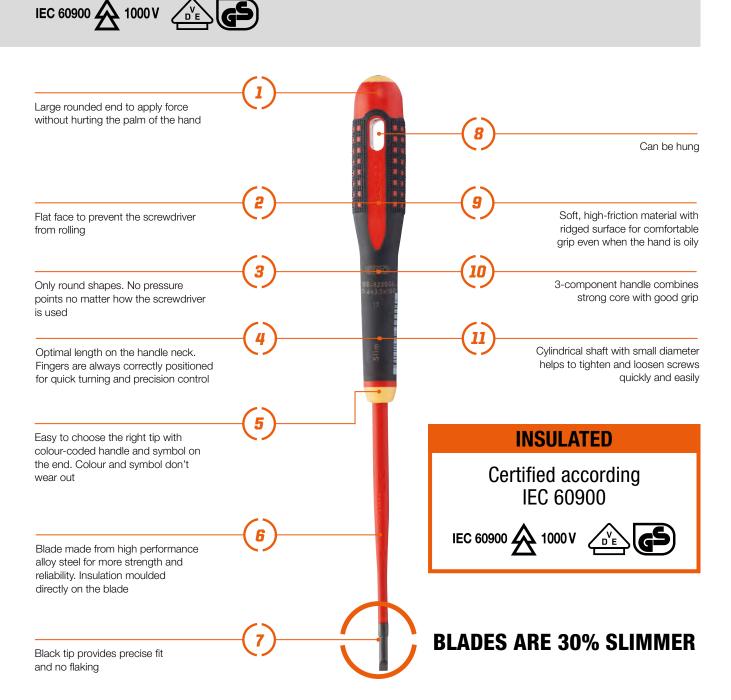






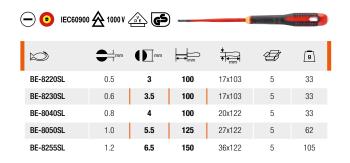
Insulated ERGO™ Screwdrivers

- Screwdriver developed according to the scientific ERGO™ process
- For work on live equipment, up to 1000 V
- Handle: 3-component handle, for maximum user comfort and force transmission
- Easy to choose the right tip, with the colour-coded handle and the symbol on the domed end
- High performance alloy steel, insulation moulded directly onto blade
- Black finish tip for higher accuracy
- Individually inspected and manufactured according to IEC 60900

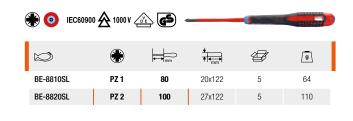


Slim

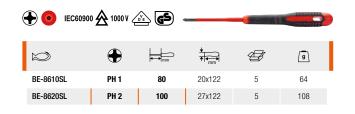
Slotted



🗰 Pozidriv



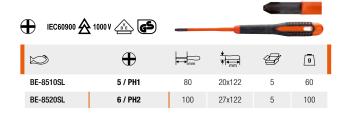
Phillips



Torx®



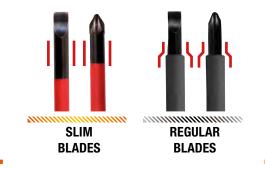
Combi tip SL/PH



Combi tip SL/PZ

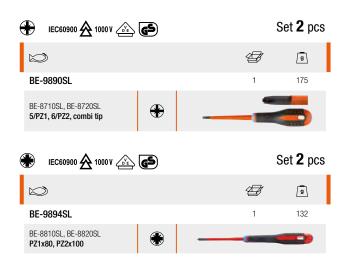


THE BLADES ARE 30% SLIMMER THAN REGULAR INSULATED BLADES FOR BETTER ACCESSIBILITY (E.G. SUNKEN SCREWS AND SPRING **ELEMENTS)**



Slim Sets















Standard insulated scewdrivers

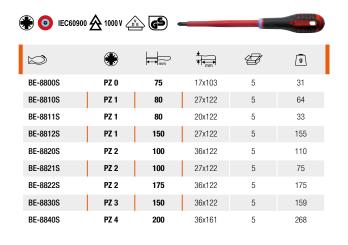
Slotted



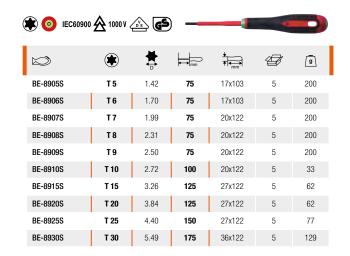
Phillips



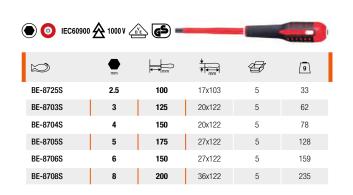
Pozidriv



Torx®



Hexagonal



O Nut Driver



Insulated Combi Screwdrivers IEC 60900 A 1000 V



Some tasks demand speciality tools.

That is why we have specially made combi screwdrivers for use in terminal blocks, control cabinets, switches, relays, or similar.







Insulated combi for Slotted and Phillips head screws

① Combi tip SL/PH



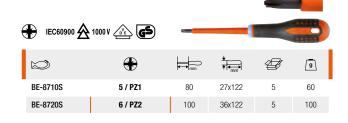






Insulated combi for Slotted and Pozidriv head screws

Combi tip SL/PZ

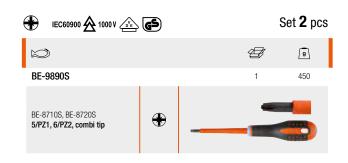




ERGO™ Insulated Screwdriver Sets

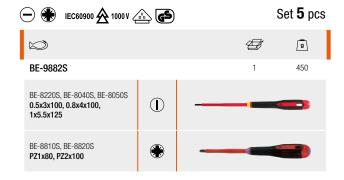
Hanging twinpack with 2 screwdrivers

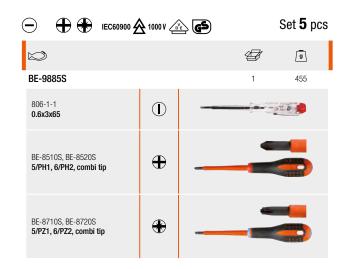








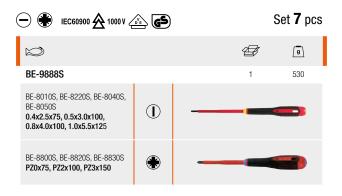




ERGO™ INSULATED

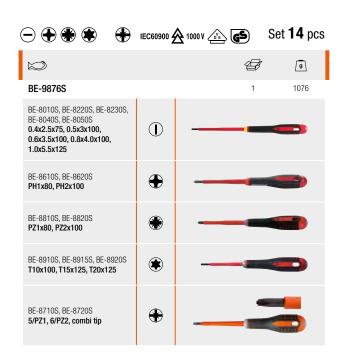














808060 Ratcheting Screwdriver

The 808060 is an insulated ratcheting screwdriver combined with interchangeable slim blades, a revolutionary **new innovation**, made in one of Bahco's own factories in **Europe**. The blade release system built in the comfortable handle makes it easy and safe to change the slim blades without the blades falling out.

The blades are 30% slimmer than the blade of a regular insulated screwdriver for better accessibility and more applications (e.g. sunken screws and spring elements).

A must have tool for electricians and maintenance professionals.



INSULATED RATCHETING SCREWDRIVER WITH INTERCHANGEABLE BLADES

Loose handle and spare blades 100 mm



		← L mm		g
808060	Handle	100	1	115
8610SL-2P	PH1	100	2	40
8620SL-2P	PZ1	100	2	55
8810SL-2P	PH2	100	2	40
8820SL-2P	PZ2	100	2	55
8010SL-2P	0.4x2.5	100	2	40
8220SL-2P	0.5x3.0	100	2	40
8040SL-2P	0.8x4.0	100	2	55
8050SL-2P	1x5.5	100	2	55
8910SL-2P	T10	100	2	40
8915SL-2P	T15	100	2	40
8920SL-2P	T20	100	2	40
8925SL-2P	T25	100	2	55
8930SL-2P	T30	100	2	55
8510SL-2P	combi-tip PH1/5.0x100	100	2	40
8520SL-2P	combi-tip PH2/6.0x100	100	2	55
8710SL-2P	combi-tip PZ1/5.0x100	100	2	40
8720SL-2P	combi-tip PZ2/6.0x100	100	2	55







		L mm		g
808061	6 blades set in a nylon pouch: PH1, PH2, 0.4x2.5, 0.5x3.0, 0.8x4.0, 1.0x5.5 + handle	85x220	5	475
808062	6 blades set in a nylon pouch: PZ1, PZ2, 0.4x2.5, 0.5x3.0, 0.8x4.0, 1.0x5.5 + handle	85x220	5	475





\bowtie		L mm		g	ı
808061	6 blades set in a nylon pouch: PH1, PH2, 0.4x2.5, 0.5x3.0, 0.8x4.0, 1.0x5.5 + handle	85x220	5	475	
808062	6 blades set in a nylon pouch: PZ1, PZ2, 0.4x2.5, 0.5x3.0, 0.8x4.0, 1 0x5 5 + bandle	85x220	5	475	

INSULATED







The 808060 is certified according IEC 60900 and is suited for working on live equipment.

RATCHETING



The 808060 has a 48 tooth non-conductive ratcheting mechanism.

SLIM BLADES



The blades are 30% slimmer than regular insulated blades for better accessibility (e.g. sunken screws and spring elements).

INTERCHANGEABLE BLADES



Patented blade release system to easily and safely change blades without the blade falling out.







ERGOTM Stainless Steel

Stainless Steel Screwdrivers

Stainless steel is a leading material for maximum quality requirements in both the interior design and building construction sectors. Stainless steel is corrosion and antacid-resistant, weather-resistant, hygienic and easy to clean. Non-rusting stainless steel plays an important role in sectors such as the food industry, medical industry, offshore applications and automotive engineering.

However, rust can also be created even on non-rusting stainless steel through contact with a contaminated tool. This leaves foreign particles upon the stainless steel surface that then rust. This "extraneous rust" is not only a aesthetic problem but a safety threat.





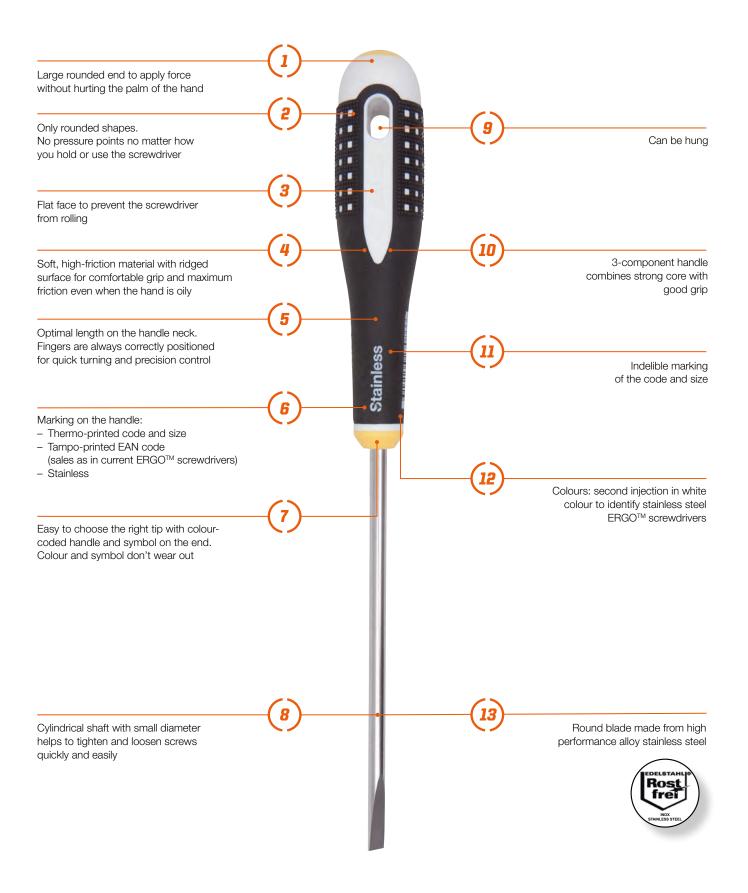
That's why non-rusting stainless steel needs non-rusting stainless steel tools.

The stainless steel protects against the formation of rust that can occur when screwdriving jobs on stainless steel are performed with non-stainless steel tools.

STAINLESS STEEL TOOLS CAN BE USED WITH NON STAINLESS STEEL SCREWS

However stainless steel screws need stainless steel tools. The reason is that the contact with conventional tool creates «foreign» particles upon the stainless steel surface and start rusting when exposed to oxygen.

ERGO™ STAINLESS STEEL

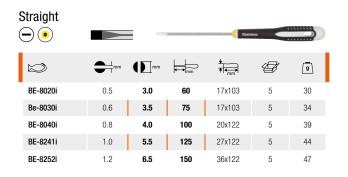


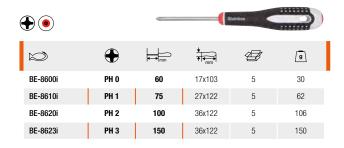


ERGO™ STAINLESS STEEL

Slotted

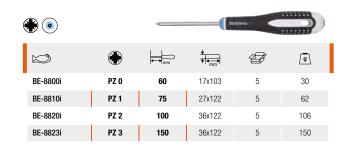






Pozidriv









Screwdriver Sets









Non Sparking Tools

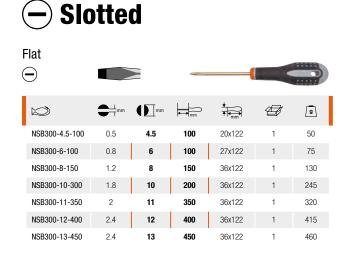
Bahco has a non sparking tool range which fits the stringent safety demands of different segments such as Oil & Gas, Mining and other industries where there is a risk of fire or explosion due to sparks, the so called ATEX zone ("Atmosphères Explosibles") dust. The risk of explosion is related to combustible or easily ignitable vapors.

Using non sparking tools helps to protect the user and the workplace and provides a higher safety.

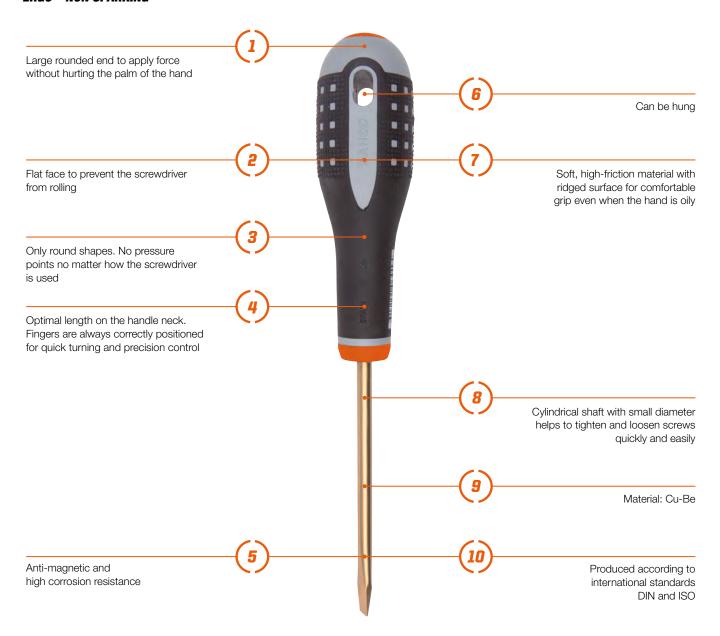
As regulations develop, more and more companies, in various industries, see a demand for non sparking tools in order to assure a higher safety.



NON SPARKING TOOLS ARE COMMONLY USED IN PETROCHEMICALS/CHEMICALS, **OIL AND GAS GENERATION, GAS** TRANSPORTATION AND REFINERIES. **CERTIFIED BY THE BAM INSTITUTE**



ERGO™ NON SPARKING





NSB302-4-300

PH 4



36x122

230

300

Pozidriv

