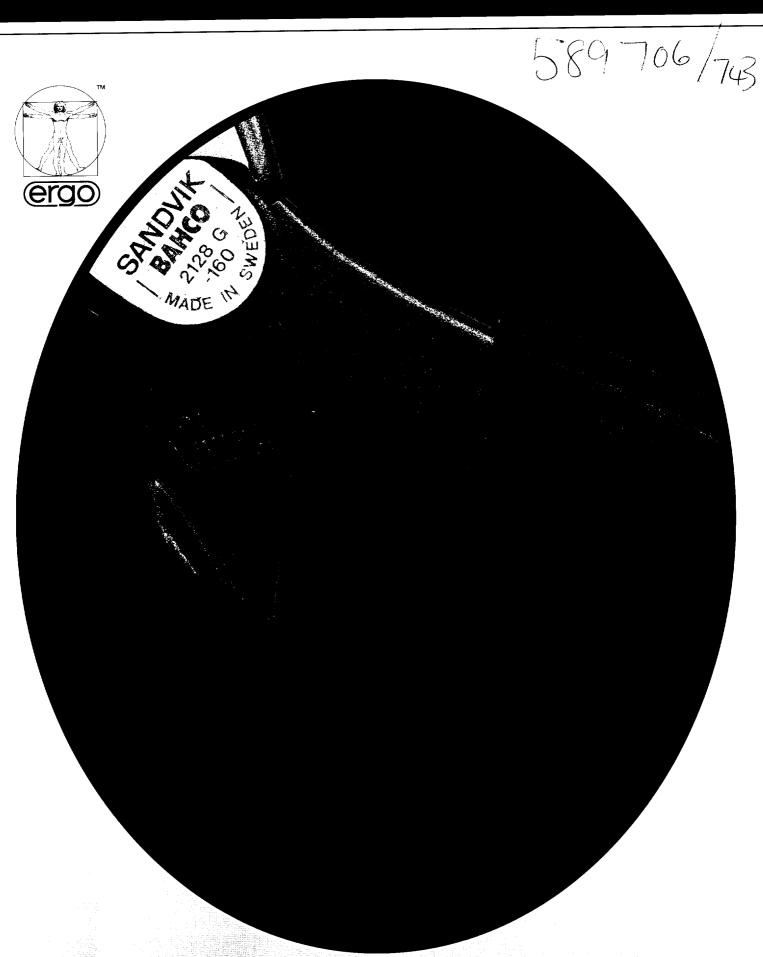
Ergonomic cutters & pliers





The grip

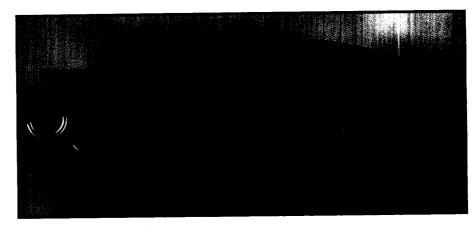


n many professions good pliers are just as essential as nimble fingers.

It is not unusual for an electronics assembly worker to make thousands of cuts in an 8 hour shift. Therefore it is easy to understand how important it is that the plier's handles and sleeves are correctly designed ergonomically, and that the cutting edges work efficiently. This reduces the risk for work related injuries to the muscles and tendons in the lower arm with lifelong disablement as a result.

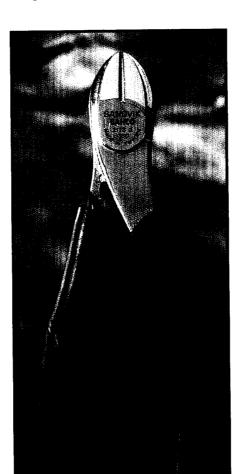
The best grip in all situations
Ergo-pliers are the result of a long
scientific study of how professionals use
pliers. The handles and sleeves on an
ergo-plier are constructed to give the
hand the best possible grip in many
different working situations. In some
situations it may be for example preferable to hold the pliers very near the
jaws. Ergo-pliers are therefore constructed so that they can be held in
many different ways and still have a

good ergonomic effect.



The ergo-sleeve reduces strain on the hand

Ergo-pliers have sleeves with a soft outer covering over a hard core. They are designed to spread the workload over a larger area to avoid tiring pressure. The soft surface is kind to the hand and gives a safe non-slip grip.



The handle design makes use of the hand's strength

The way in which the handles of an ergo plier are designed is adapted to the work to be done with the plier. They are designed to evenly spread the hand's strength and to give maximum control over the work being done. All ergopliers make maximum use of the leverage effect to reduce strain on the hand.

Return spring eases work

All ergo-pliers are fitted with a return spring which automatically opens the jaws when the handle is released. The return spring allows faster work and a more relxed grip on the plier with all the fingers on the outside of the handles. On some pliers the return spring can be easily engaged or disengaged according to the work to be done.

The function



The range

Combination pliers 2628G 2628GC Side cutters 2191G 2191GC 2128G

Standard pliers

	EAN-code Dimensions in mm Max.cutting								_	
Type	731415+	A	men: B	C	in min D	G		acity	Oga	.4724
Combination pliers for piano wire										_
2628G-160 Black 2628G-180 Black	0042999 0042678	167 187,5	33 36	23 25	10,5 11	16 14	1,8 2,0	mm P mm P	200 245	5 5
2628G-160IP Black 2628G-180IP Black 2628G-200IP Black	0055357 0044030 0101085	167 187,5 200	33 36 39	23 25 27,5	10,5 11 12,5	16 14 16	1,8 2,0 2,5	mm P mm P mm P	200 245 275	10 15 5
2628GC-160IPChrome 2628GC-180IPChrome 2628GC-200IPChrome	0101863 0101870 0101887	167 187,5 200	33 36 39	23 25 27,5	10,5 11 12,5	16 14 16	1,8 2,0 2,5	mm P mm P mm P	200 245 275	5 5 5
Side cutters for copper wire and hard	d ata al wira									
2191G-140 Black 2191G-160 Black	0038626 0038633	147 167	17 18	18 20	9 10		1,75 2,0	mm H mm H	155 195	5 5
2191G-125IP Black 2191G-140IP Black 2191G-160IP Black	0101894 0044009 0044016	131 147 167,5	16,5 17 18	16 18 20	8 9 10		1,5 1,75 2,0	mm H mm H mm H	120 155 195	5 15 15
2191GC-125IPChrome 2191GC-140IPChrome 2191GC-160IPChrome	0101900 0101740 0101917	131 147 167,5	16,5 17 18	16 18 20	8 9 1 0		1,5 1,75 2,0	mm H mm H mm H	120 155 195	5 5 5
Side cutters for piano wire 2128G-140 Black 2128G-160 Black	0042623 0042630	147 167,5	16 18,5	20 23	9,5 10,5		1,8 2,0	mm P mm P	1 6 5	5 5
2128G-125IP Black 2128G-140IP Black 2128G-160IP Black	0102471 0043927 0043934	131 147 167,5	13,5 16 18,5	18 20	8 9,5 10,5		1,6 1,8 2,0	mm P mm P mm P	115 165 225	10 15 15
2128GC-125IPChrome 2128GC-140IPChrome 2128GC-160IPChrome	0102358 0102365 0102372	131 147 167,5	13,5 16 18,5	20	8 9,5 10,5		1,6 1,8 2,0	mm P mm P mm P	115 165 225	5 5 5
Round nose pliers with serrated jaws 2521G-140 Black	0100293	152	39	14	7				140	5
2521G-140IP Black	0100613	152	39	14	7				140	5
2521GC-140IPChrome	0102044	152	39	14	7				140	5

The pliers are delivered in either industial or consumer packs

IP = Industrial packs (without consumer packs)

G = Phosphated GC = Chromiumplated

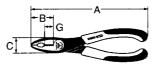
H = Hard steel wire

P = Piano wire

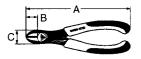


2128 GC

Round nose pliers



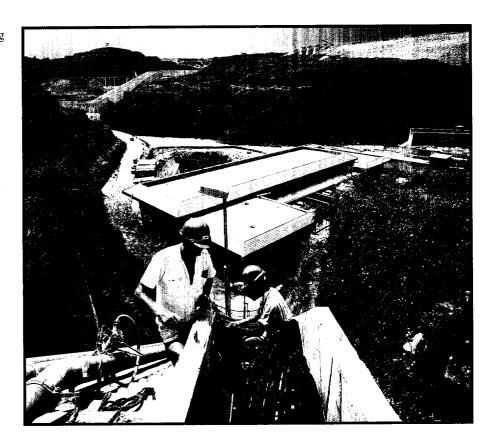




Ergo products are design protected Ergo is a protected trade mark

here is nothing more irritating for a professional than a tool that breaks, doesn't work or wears out. Of course this always seems to happen at a critical moment, for example when the job has to be finished by a certain time, when you are at the top of a ladder or when you are 50 miles from the nearest hardware store. That's why you need pliers of top professional quality - just like those from Sandvik Bahco! Thousands of cuts can be made with our cutting pliers before any signs of wear appear.

Our quality control system guarantees that every ergo-plier you buy is of the same high even quality.



100 years of development work behind today's ergo handtools

Sandvik Bahco has more than a century of experience from heat treatment of special steel and manufacturing hand tools. By consolidating, using and developing these reserves of knowledge, we have become world leaders in producing new generations of quality hand tools that combine good ergonomics with top performance.



The right finish ensures maximum life

Ergo-pliers are available with different finishes according to the type of rust protection required. The phosphated pliers are suitable for all normal use. The chromiumplated pliers can be used in working environments that demand better protection against rust.

First in Europe with the ISO 9001 quality system

Our quality system covers all stages of manufacture from development to delivery. Sandvik Bahco was the first manufacturer of hand tools in Europe to be internationally approved according to the ISO 9001 quality system. This guarantees that every stage of the manufacturing process is right and that our tools live up to your expectations.



Quality



Sandvik Bahco plier has more functions and advantages than any other plier on the market. The idea behind all these finesses is of course to make work easier, more effortless, safer and more enjoyable.

The ergo-range comprises a large choice of combination pliers, side cutters and holding pliers with round, flat and snipe-nose jaws. They are available in two different series – for normal workshop and installation work and electronics and fine mechanical work.



Edges and jaws suited to different work situations

Sandvik Bahco's side cutters for copper and steel wire have a special type of extremely sharp edge. For cutting extremely hard material - such as piano wire – there are ergo-pliers with a slightly rounded cutting edge more suitable for tougher work.

The Compact ergo-series of electronic pliers is available with different cutting edge bevels to give the exact cut required for soldering. They are also available with angled jaws for easy access in confined spaces.

The diversity of the ergo-range means that you can always find a plier to suit the job in hand.

Rounded shape makes work easier

The contours of the jaws is also an important point. All ergo-pliers have jaws with softer rounded contours. This makes them easier to use in confined spaces and more comfortable to work with, even if you hold your hand over the jaws. There are no sharp edges or abrupt corners to make holes in your pocket, cause blisters in the hand or damage electronics components.

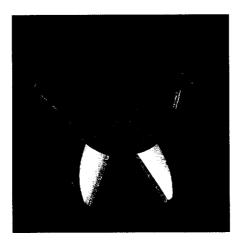


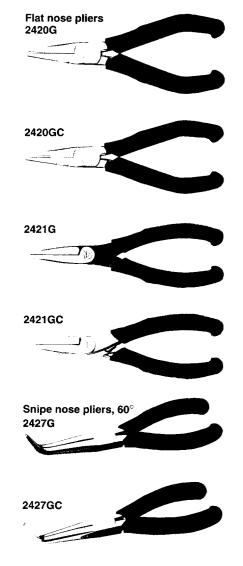
The world's fastest slip-joint plier

The jaw width of the ergo slip-joint plier can quickly and easily be changed with one hand as opposed to other makes which need two. The slip-joint plier has jaws of tempered steel which never lose their grip. They also have extra large jaw width and long slim jaws for easy access in confined spaces.

Better cutting capacity with less force

The greatest possible cutting capacity using as little force as possible is often a wish when using cutting pliers. Ergopliers have a special joint design which gives better leverage than other pliers of the same size. The sharpest possible cutting edges also help minimise the force required.





Turne	Type EAN-code Dimensions in mm Max.cutting									
Туре		EAN-code 731415+	A	imens B	C	in mr D	n G	Max.cutting capacity	Og/	
Flat nose pliers with serrated jaw 2420G-125		0102525	136	23	14				400	_
						7			130	5
	Black	0101955	136	23	14	7			130	5
2420GC-125IP C	Chrome	0101962	136	23	14	7			80	5
2421G-160 E	Black Black Black	0102532 0102549 0102556	152 174 189	39 49,5 64	14 16 16	7 8 8			140 165 175	5 5 5
2421G-160IP E	Black Black Black	0102006 0100576 0100583	152 174 189	39 49,5 64	14 16 16	7 8 8			140 165 175	5 5 5
2421GC-140IP C 2421GC-160IP C 2421GC-180IP C	Chrome		152 174 189	39 49,5 64	14 16 16	7 8 8			140 165 175	5 5 5
		0° angled tip 0100408 0100415	s 174 190	49,5 66	16 16	8 8	12 12	1,5 mm H 1,5 mm H	155 170	5 5
	Black Black	0100743 0100750	174 190	49,5 66	16 16	8 8	12 12	1,5 mm H 1,5 mm H	155 170	5 5
2427GC-160IP C 2427GC-200IP C		0102051 0102075	174 190	49,5 66	16 16	8 8	12 12	1,5 mm H 1,5 mm H	155 170	5 5
Snipe nose plies with cutting edge 2430G-140 B	and se		150	00		-	10	105	400	_
2430G-160 B	Black Black Black	0102563 0024070 0100422	152 174 198	39 49,5 73,5	14 16 16	7 8 8	12 12 12	1,25 mm H 1,5 mm H 1,5 mm H	130 155 170	5 5 5
2430G-160IP B	Black Black Black	0102143 0100811 0100835	152 174 198	39 49,5 73,5	14 16 16	7 8 8	12 12 12	1,25 mm H 1,5 mm H 1,5 mm H	130 155 170	5 5 5
2430GC-140IP C 2430GC-160IP C 2430GC-200IP C	hrome	0102167	152 174 198	39 49,5 73,5	14 16 16	7 8 8	12 12 12	1,25 mm H 1,5 mm H 1,5 mm H	130 155 170	5 5 5

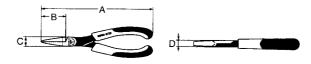
The pliers are delivered in either industrial or consumer packs

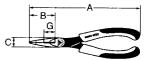
IP = Industrial packs (without consumer packs)
 G = Phosphated
 GC = Chromiumplated

H = Hard steel wire



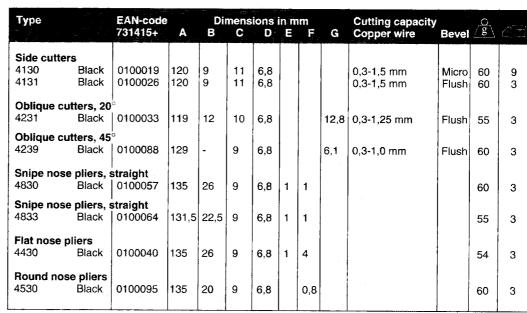
Snipe nose pliers, straight 2430G





Ergo products are design protected Ergo is a protected trade mark

Compact ergo – pliers for precision engineering and electronics



The pliers are delivered in consumer packs.







Side cutters 4130 / 4131

Oblique cutters 20°

Oblique cutters 45°

Snipe nose pliers

straight

4830

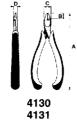
4231

4239



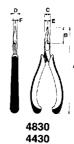
Round nose pliers

4530









4530

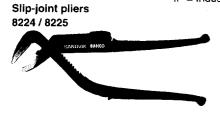


Slip-joint pliers

	EAN-code		Din	nensions i	n mm		0		
	731415+	A	В	С	D	E	g		
ers								-	
Black	0000012	250	45	40	53	7,5	350	5	
Black	0000029	315	55	52	67	9	560	3	
Black	0101757	250	45	40	53	7.5	350	5	
Black	0101764	315	44	52	67	9	560	5	
	Black Black	731415+ iers Black 0000012 Black 0000029 Black 0101757	731415+ A iers Black 0000012 250 Black 0000029 315 Black 0101757 250	731415+ A B iers Black 0000012 250 45 Black 0000029 315 55 Black 0101757 250 45	731415+ A B C iers Black 0000012 250 45 40 Black 0000029 315 55 52 Black 0101757 250 45 40	731415+ A B C D iers Black 0000012 250 45 40 53 Black 0000029 315 55 52 67 Black 0101757 250 45 40 53	731415+ A B C D E iers Black 0000012 250 45 40 53 7,5 Black 0000029 315 55 52 67 9 Black 0101757 250 45 40 53 7,5	731415+ A B C D E g iers Black 0000012 250 45 40 53 7,5 350 Black 0000029 315 55 52 67 9 560 Black 0101757 250 45 40 53 7,5 350	

The slip-joint plier is delivered in either industrial or consumer packs

IP = Industrial packs (without consumer packing)







Ergo products are design protected Ergo is a protected trade mark

ergo – for your own safety

A research approach to ergonomic hand tools

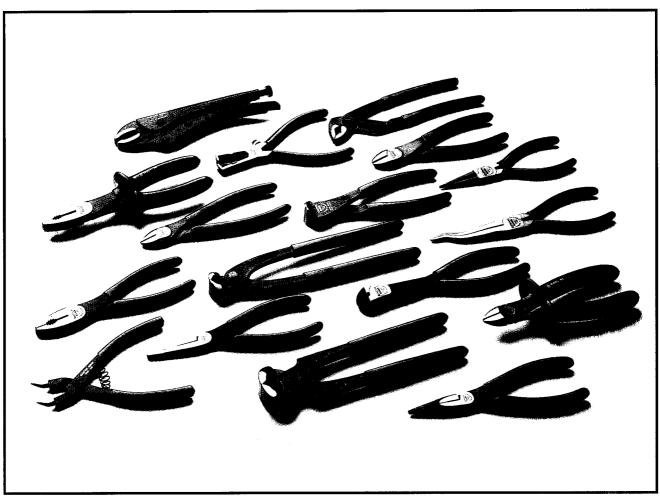
Sandvik Bahco guarantees that every handtool that carries the ergo marking has been subjected to a unique scientific, 11 point test programme for ergonomics and function.

The testing programme includes exhaustive tests with users from different professions and trades. The test group's

task is to test a prototype series of the new tool in normal working day conditions. The test results are then carefully analysed by experts in medicine, ergonomics and industrial design. After adjustments, another user test is carried out before the design is finally trade mark protected and the tool is approved for manufacture. The testing programme ensures that each ergo tool has several unique qualities which increase its usefulness and the pleasure of using it while radically reducing the risk for painful and costly work related injuries.







Apart from the ergo products shown in this brochure, Sandvik Bahco has about 500 other types of pliers for electronics and precision engineering. Please contact your nearest dealer for further information.

