

Performance by design





The Bahco Success Story

Once upon a time ...

there was a blacksmith in a small town in a small country in northern Europe. He earned his living by helping farmers in the surroundings to keep their machinery in good shape.

In those days ...

both tools and bolts were made by hand, and there were no standardised sizes and dimensions. For every bolt he tackled he had to find a spanner to fit amongst the many tools he carried.

The blacksmith ...

got the brilliant idea to replace all his spanners with just one – and the adjustable wrench was born and patented.

The year was 1892 ...

the town was Enköping in Sweden and the man's name was Johan Petter Johansson. He started a factory for the new wrench and many other inventions. In cooperation with a tool and machinery company in Stockholm, B. A. Hjorth & Co., the products became a sales success all over the world under the trademark Bahco.

This was the start ...

of something really big – The Bahco Group – today with more than 2,500 employees in more than 40 countries.

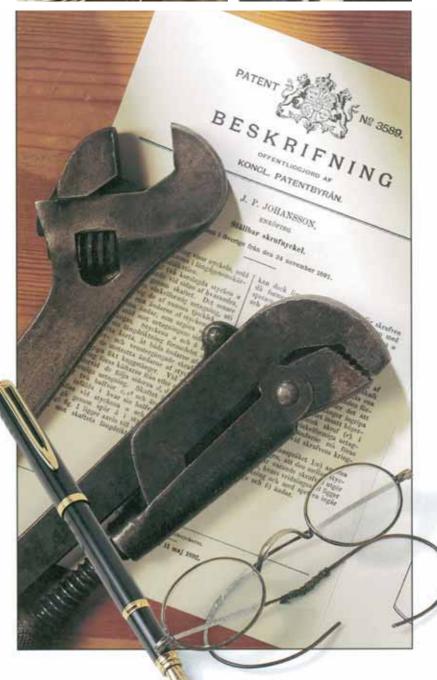
So more often than not, it is the simplest ideas that are best at solving problems!

J. P. Johansson – the inventor of the adjustable wrench and the pipe wrench.



B. A. Hjorth – the founder of B. A. Hjorth & Co. (Bahco).





Bahco was the first in the world to introduce the adjustable wrench. It was patented as early as 1892.



We design our adjustable wrenches together with professionals



Professionals of many kinds in many countries are involved in the testing of prototypes during the three user tests included in the Bahco ergonomic test programme.

Tools ergonomically designed after scientific studies

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

The test programme includes exhaustive tests with users from different professions and trades. The group's task is to test a prototype series of the new tool under normal working conditions. The test results are then carefully analysed by experts in medicine, ergonomics and industrial design.

After modifications, another user test is carried out before the design is finally patented and the tool is approved for manufacture.

The test 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 of painful and costly work-related injuries.

Each point in the programme is very extensive. Below is a brief description. If you would like to know more, please visit our website www.bahco.com.



Each tool developed according to the 11-point programme is marked with the Ergo symbol. The Ergo series is design registered.



The 11 points of the unique scientific Bahco ergonomic test programme

1. Market analysis

Which tools are most popular and why?

2. Preliminary specifications

Factors that we take into consideration.

3. Background research

We investigate and learn from our own experiences and external sources.

4. Prototype design

A dozen prototypes, all ergonomically designed according to the latest findings.

5. User test No.1

We select, measure and film hundreds of hands at work.

6. Prototype evaluation and modification

User preferences give us the clues we need.

7. User test No. 2

The new prototypes are tested by an even wider selection of users.

8. Final design recommendations

Manufacturing of the true-to-life prototype.

9. Product specifications

Bahco produces manufacturing specifications.

10. User test No. 3

Preparation for launch. The new tool is approved and marked with the Ergo symbol.

11. Follow-up

Five years later – what do users think?



Ergonomic design improves human safety, health, comfort and efficiency.



The Bahco Ergo 90 series

The Ergo 90 series has more functions and advantages than any other adjustable wrench. The ergonomic design of the handle, jaws and grip

- makes it possible to use the hand strength in its best and most efficient way.
- gives the best and safest grip in different work positions.
- protects against unnecessary and costly work injuries.

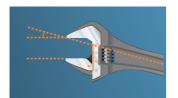


Parallel jaw faces for safer grip

Stronger than the demands set by ISO standards – whichever drive direction is used

Slim line design with narrow, thin jaws combining accessibility with strength

The Ergo series is design registered



Jaws angled at 15° to give good access in confined spaces

Improved accessibility as the adjustable moving jaw does not fall out, even at maximum opening Scale for pre-setting jaw opening and for measuring bolt heads and nuts, metal thickness, etc.

BAHCO 9072 10"

Combination adjustable wrenches

This wrench can not only be used for ordinary nuts, but also for pipes, rounded nuts and bolts The toothed jaw is induction hardened and will bite into even the hardest material

One-piece forged steel handle for extra strength

With the pipe centered in the notch you can measure the pipe diameter

By reversing the movable jaw you can use the tool as a standard adjustable wrench for nuts and bolts



Extra coarse serration and a generous opening for the adjustable knurl makes it easy to set the jaw width, even when gloves are worn

This will make the work easier and safer for tradesmen who want to do a good job with the highest precision even for the most demanding jobs.

Behind the ergonomic design lies the unique Bahco 11-point test programme, including scientific studies of tests made by professional users.

Read more about ergonomics on pages 6-7. If you would like to know more, please visit our website www.bahco.com.

The grip sleeve material is a thermoplastic isomer, which gives the best hold under all working conditions

The sleeve is suited to the way in which the hand works and strain can therefore be reduced



The grip sleeve is very resistant to a wide range of temperatures – from -40 °C to +100 °C

The grip sleeve gives a warm grip when it's cold and a cool grip at high temperatures

The sleeve is designed to distribute the pressure evenly in the hand, thus reducing the risk of work-related injuries The wrenches are available as:

- black phosphated for normal use
- chromium-plated when better rust protection is needed



Good balance between head and handle makes the adjustable wrenches very comfortable and easy to work with

No sharp edges that can injure the hand The soft, high-friction surface of the sleeve offers a firm grip even when the handle is oily and dirty

Our big invention just got bigger – the Ergo 9029 and 9031!

The Ergo type 9029 and 9031 are new big inventions from Bahco. They have already been a success with many tradesmen in countries all over the world. They are both big inventions but still small enough to fit in a back pocket. Only 6 inches/170 mm and 8 inches/218 mm long but with extraordinary jaw widths!

And of course the same ergonomic design features as the rest of the Ergo series.

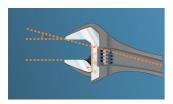


The Bahco 80 series

The 80 series represents our traditional adjustable wrenches – all classic best-sellers and a must in every well-equipped professional's toolbox.

Behind the design lie scientific studies of tests made by professional users. Bahco adjustable wrenches are

Adjustable wrenches



Jaws angled at 15° to give good access in confined spaces

Stronger than the demands set by ISO standards whichever drive direction is used

Slim line design with narrow, thin jaws combining accessibility with strength

> Parallel jaw faces for safer grip

> > Scale for pre-setting jaw opening and for measuring bolt heads and nuts, metal thickness, etc.

Improved accessibility as the adjustable moving jaw does not fall out, even at maximum opening



Combination adjustable wrenches

This wrench can not only be used for ordinary nuts, but also for pipes, rounded nuts and bolts

> With the pipe centered in the notch you can measure the pipe diameter

By reversing the movable jaw you can use the tool as a standard adjustable wrench for nuts and bolts





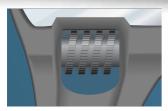
hardened and will bite into even the hardest material

designed to use the hand strength in the best way, give a good and safe grip and protect against work injuries. This makes the work easier and safer for professionals who want to do a good job with high precision.

The handle is extra wide and rounded to distribute pressure evenly in the hand, thus reducing the risk of workrelated injuries

Smooth and rounded forging with no sharp edges that can injure the hand

BAHCO 8072 MADE IN SWEDEN



Extra coarse serration and a generous opening for the adjustable knurl makes it easy to set the jaw width, even when gloves are worn

BAHCO

The wrenches are available as:

- black phosphated for normal use
- chromium-plated when better rust protection is needed

8072 MADE IN SWEDEN

Good balance between head and handle makes the adjustable wrenches very comfortable and easy to work with One-piece forged steel handle for extra strength

Special adjustable wrenches

Bahco 10

Stronger than the demands set by ISO standards – whichever drive direction is used Coarse serration and a generous opening for the adjustable knurl makes it easy to set the jaw width, even when gloves are worn

Scale for pre-setting jaw opening and for measuring bolt heads and nuts, metal thickness, etc.

Parallel jaw faces for safer grip



Improved accessibility as the adjustable moving jaw does not fall out, even at maximum opening

Jaws angled at 15° to give good access in confined spaces

Bahco 31

Narrow, thin jaws for better access

Large jaw opening in relation to the length







The wrenches are available as black phosphated for normal use



A thin, flat end to ease tyre removal



One end shaped with toothed jaws for loosening rounded nuts and bolts, working with round objects, etc.



The toothed jaw is induction hardened and will bite into even the hardest material

614 mm long wrench gives maximum leverage





Adjustable wrenches for large size nuts and bolts and really tough work.

770 mm long wrench gives maximum leverage

BARCO 87 MADE IN SWEDEN



The wrenches are available as black phosphated for normal use

The forged handle of special steel gives the maximum strength, max. torque 300 Nm $\,$

Selection tables

The Bahco Ergo 90 series

Design	Туре	Dimensions A A		В	С	D	Weight	Spare parts	Set ²⁾
	Code	in.	mm	mm	mm	mm	g	Code	Code
Black (phosphated) in consumer packaging									
(ergo)®	9029 9031 9070 9071 9072 9073	6 8 6 8 10 12	170 218 158 208 257 308	32 38 20 27 31 34	5.0 6.0 4.9 6.0 8.7 11.9	12.8 13.0 11.3 12.9 15.2 17.6	220 340 139 272 425 730	9029-2 9031-2 8070-2 8071-2 8072-2 8073-2	9029-95 9031-95 8070-95 8071-95 8072-95 8073-95
Chromium-plated (C) in consumer packaging									
ergo®	9029 C 9031 C 9070 C 9071 C 9072 C 9073 C	6 8 6 8 10 12	170 218 158 208 257 308	32 38 20 27 31 34	5.0 6.0 4.9 6.0 8.7 11.9	12.8 13.0 11.3 12.9 15.2 17.6	220 340 139 272 425 730	9029 C-2 9031 C-2 8070 C-2 8071 C-2 8072 C-2 8073 C-2	9029-95 9031-95 8070-95 8071-95 8072-95 8073-95
Black (phosphated) with reversible sliding jaw (P) in consumer packaging									
(ergo)®	9070 P 9071 P 9072 P 9073 P	6 8 10 12	158 208 257 308	21 28 33 35	4.9 6.0 8.7 11.9	11.3 12.9 15.2 17.6	139 272 430 745	9070 P-2 9071 P-2 9072 P-2 9073 P-2	8070-95 8071-95 8072-95 8073 95
Chromium-plated (C) with reversible sliding jaw (P) in consumer packaging									
(ergo)®	9070 P C 9071 P C 9072 P C 9073 P C	8 10	158 208 257 308	21 28 33 35	4.9 6.0 8.7 11.9	11.3 12.9 15.2 17.6	139 272 430 745	9070 PC-2 9071 PC-2 9072 PC-2 9073 PC-2	8070-95 8071-95 8072-95 8073-95

C = Chromium-plated P = Combination adjustable wrenches

The special series

Black (phosphated) with flat end for tyre removal in consumer packaging									
	10	6	155	19	4.9	11.0	120	10-2	10-95
Black (phosphated) with toothed jaw in consumer or industrial packaging (IP)									
	31 31 IP	8	205 205	32 32	5.5 5.5	13.5 13.5	270 270	31-2 31-2	31-95 31-95
Black (phosphated) for large size nuts and bolts and really tough work									
	86 87	24 30	614 770	63 85	27.5 31.0	29.0 33.0	3165 5700	86-2 87-2	86-95 87-95

IP= Bulk packaging, without header cards

The Bahco 80 series

Design	Туре	Dimer A	isions A	В	С	D	Weight	Spare parts	Set ²⁾
	Code	in.	mm	mm	mm	mm	g	Code	Code
Black (phosphated) in consumer packaging	8069 8070 8071 8072 8073 8074 8075	4 6 8 10 12 15 18	110 155 205 255 305 380 455	13 20 27 30 34 44 53	4.0 4.9 6.0 8.6 11.9 14.0 17.7	9.0 11.3 12.9 15.5 18.0 20.0 22.5	60 135 255 400 665 1035 1665	8069-2 8070-2 8071-2 8072-2 8073-2 8074-2 8075-2	8069-95 8070-95 8071-95 8072-95 8073-95 8074-95 8075-95
Black (phosphated) in industrial packaging	8069 IP 8070 IP 8071 IP 8072 IP 8073 IP 8074 IP 8075 IP	4 6 8 10 12 15 18	110 155 205 255 305 380 455	13 20 27 30 34 44 53	4.0 4.9 6.0 8.6 11.9 14.0 17.7	9.0 11.3 12.9 15.5 18.0 20.0 22.5	60 135 255 400 665 1035 1665	8069-2 8070-2 8071-2 8072-2 8073-2 8074-2 8075-2	8069-95 8070-95 8071-95 8072-95 8073-95 8074-95 8075-95
Chromium-plated (C) in consumer packaging	8069 C 8070 C 8071 C 8072 C 8073 C 8074 C 8075 C	4 6 8 10 12 15 18	110 155 205 255 305 380 455	13 20 27 30 34 44 53	4.0 4.9 6.0 8.6 11.9 14.0 17.7	9.0 11.5 13.0 15.5 18.0 20.0 22.5	60 132 255 400 665 1035 1665	8069 C-2 8070 C-2 8071 C-2 8072 C-2 8073 C-2 8074 C-2 8075 C-2	8069-95 8070-95 8071-95 8072-95 8073-95 8074-95 8075-95
Chromium-plated (C) in industrial packaging (IP) 8069 C IP 4 110 13 4.0 9.0 60 8069 C-2 8069-95									
SOLECUE MAZIN MADE DE COMMUNE.	8070 C IF 8071 C IF 8071 C IF 8072 C IF 8073 C IF 8074 C IF	P 6 P 8 P 10 P 12 P 15	110 155 205 255 305 380 455	13 20 27 30 34 44 53	4.0 4.9 6.0 8.6 11.9 14.0 17.7	9.0 11.5 13.0 15.5 18.0 20.0 22.5	60 132 255 400 665 1035 1665	8069 C-2 8070 C-2 8071 C-2 8072 C-2 8073 C-2 8074 C-2 8075 C-2	8069-95 8070-95 8071-95 8072-95 8073-95 8074-95 8075-95
Black (phosphated) with reversible sliding jaw (P) in consumer packaging									
	8072 P 8073 P	10 12	255 305	33 35	8.6 11.9	15.5 18.0	400 680	9072 P-2 9073 P-2	8072-95 8073-95
Black (phosphated) with reversible sliding jaw (P) in industrial packaging (IP)									
	8072 P IF	P 10	255	33	8.6	15.5	400	9072 P-2	8072-95
Chromium-plated (C) with reversible sliding yaw (P) in consumer packaging									
DOUTE SAZZ NAM OF DEPTH	8072 P C 8073 P C	10 12	255 305	33 35	8.6 11.9	15.5 18.0	400 680	9072 PC-2 9073 PC-2	8072-95 8073-95

C = Chromium-plated IP= Bulk packaging, without header cards P = Combination adjustable wrenches

Dimensions



Spare Parts

1) Sliding jaws, black/chrome

2) Adjustable knurl, pin and spring







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