The fully adjustable modular stock system

EvoComp
Wilfried Nill (born 1965 in Tübingen)

- Active in sport shooting (air/sport pistol, shotguns in large caliber, skeet) since 1975
- Working in the Karl Nill company since 1978
  - in the production sector until 1987
  - in the sector of product development and design since 1987
  - technical manager and associate from 1987 to 2000
  - managing partner since 2000 (continuation of the family-owned enterprise in 2nd generation)
- Foundation of Ergosign in 1998

Decades of experience as an active sport shooter, the development and fabrication of ergonomic grips for pistols and revolvers and of many accessories as well as the involved mechanical understanding for production processes and their transformation with CAD/CAM and CNC technologies are the basis for the realization of innovative products.

Many well-known manufacturers of firearms (like Heckler & Koch, Hämmerli, Walther, Sig Sauer) were able to successfully realize numerous projects in direct cooperation with Wilfried Nill.

Wilfried Nill – a life for sport shooting.
**EvoComp – a story of success**

Owing to his personal enthusiasm for clay target shooting, Wilfried Nill set himself the goal of designing an ergonomically perfect fitting shotgun stock. The result of this experience and development is presented to you in detail on the following pages.

National and international top shooters have very quickly recognized the advantages of the modular stocks and are convinced by the improved control of the shotguns provided by ergonomic optimization and individual possibilities of adjustment. The worldwide success since the introduction of the Ergosign EvoComp stock system in summer 2009 speaks for itself – we are presenting you a short list of references on page 12.

With the Ergosign EvoComp, Wilfried Nill is continuing the estimated family tradition to support our customers by offering them the optimal combination of man and sporting tool.

**EvoComp – Advantages of the modular stock system**

**Ergonomic grips in different sizes for left and right handed shooters**

One significant advantage compared to conventional stocks lies in the anatomical moulding of the pistol grip, which gives the stock an absolutely unique, comfortable and secure hold. Due to its optimal ergonomic design, the position of the trigger finger (with respect to the trigger) remains constant, thus reducing the recoil effects tremendously.

**Individual adjustability to body/anatomy and shooting position**

A basic requirement for a steady mount position and therefore successful shooting is a personalized adjustment of the stock depending on the shooter’s anatomy and shooting stance. These preferences change with time and can be corrected with ease by resetting the stock.

**Modular construction allows the interchangeability of all components**

All stock parts can be tuned to different requirements if changes occur. If you are going to switch guns, you will only need to purchase a new grip (and maybe a different comb, if using a different rib height) which your authorized dealer will gladly install for you.

The gross weight is only 850 grams [30 oz.] for the standard version. All settings are reproducible via scales on the system.
**EvoComp - the basis for success**

**Ergonomic grips with beavertail, small thumb rest and slight palm swell**

With finger grooves and Rhomlas® surface structure in four different sizes (XL, L, M and S) or with stippled surface without finger grooves in the sizes L and S, as an individual custom-made fabrication according to a hand outline sketch or after a personal orthopaedic adjustment: all our grips are produced for personal fitting to all different kinds of possible hand shapes.

Please find our detailed description on page 9.

**Pitch adjustment**

The pitch is fully adjustable by approx. 90° - 82°. Once it has been fitted correctly, the gun will remain in exactly the same position after a shot. This greatly increases the hit ratio on the second shot of the target pair.

**Drop of the butt plate**

Depending on the length of the shooter’s neck and the mounting position, the level of the butt plate can be individually adjusted within a range of 40 mm [1.575 in] to 58 mm [2.285 in]. By mounting a higher clamping collar between the comb and the middle section (see page 7/8) the height of the butt plate rises proportionally.

**Cast**

For up to 8 mm [0.315 in] by adjusting the butt plate. Additionally the butt plate is rotatable by ± 10°. A special version of the telescopic tube provides a higher cast of approx. 4 mm for shooters with a strong chest measurement and a short neck (of about 6-12 mm).
EvoComp - the basis for success

Comb
The correct position of the head to the rib is essential for a precise point of impact. For this reason, the standard comb of 33 mm can be fully adjusted in height (drop) from approx. 42/46 to 36/36 (with a comb of 38 mm from approx. 37/41 to 28/28) and approx. 4 mm in width (cast 0 to + 4 mm).

Picture: Beretta DT11 with grip in size L, comb R33, butt plate in grenadille

Stock length
Having a range of adjustment from approx. 340 mm [13.4 in] to approx. 390 mm [15.4 in], it is simple to fit the stock with the telescopic tube to the individual body size. Additionally, a shorter version for smaller shooters or for shooters with short arms of approx. 320 to 360 mm as well as a long version for very tall shooters with an adjustment range of approx. 360 to 430 mm are available.
Standard version

The standard version of our stocks comprises the following configuration:

• Grip with finger grooves, Rhomlas® surface structure in the sizes XL/L/M/S for right hand or left hand shooters
• Stock length adjustment of approx. 340-390 mm
• Adjustable comb R33 (36/36 – 42/46 mm) for skeet/sporting
• Alternatively comb R38 (28/28 – 37/41 mm) for trap or for a very small distance between cheek-bone and eye
• Fully adjustable stock ending with a butt plate made of walnut wood and a partial rubber pad, alternatively with a butt plate made of elastomere (for trap or sporting)
• Grip and comb made of walnut
• Aluminium parts with black coloured or titanium coloured coating

Picture: Perazzi MX8 with grip in size XL, comb R38, butt plate for sporting

Skeleton version

Compared to the standard version the middle section of the stock is skeletal. This provides the stock with an even more technical appearance and reduces its weight by approx. 15 grams. The skeleton version is available for a stock length of 340-390 mm and 360-430 mm.

Picture: Renato Gamba Daytona with a grip in size L, comb R33, butt plate in walnut
**Shortened version of 20 mm**

For smaller shooters or for shooters with short arms a shortened version is additionally available with an adjustment range of 320 to approx. 360 mm in length. This version can only be delivered with aluminium parts in black colour (not in skeleton). Moreover, the combs are 20 mm shorter.

Picture: Beretta 682 Gold E with grip in size S, comb RS33, butt plate in grenadille

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**Clamping collar for heightened ribs of approx. 10 mm**

By mounting a heightened clamping collar of approx. 10 mm between the middle section and the comb the drop can be adapted to the heightened rib (e.g. Perazzi MX2000/3, MX10, Beretta X-Trap etc.).

Picture: Beretta DT10 with grip in size M, comb R38, clamping collar +10, butt plate in elastomere (for trap)
Clamping collar for heightened ribs of approx. 20 mm

The most common shotgun with a heightened rib of 25 mm is the Perazzi MX2005. Our clamping collars offer the best possible flexibility in adjustment for this and other shotguns which also need a modified drop (even after the additional mounting of heightened ribs). Further differences in height can be balanced through the possibility of choosing heightened combs with its range of adjustment.

Picture: Blaser F3 with special barrel rib or e.g. F3 Super Trap, grip in size M, comb R38, butt plate in elastomere (for trap)

Clamping collar for heightened ribs of approx. 30 mm

See above description, but 30 mm higher.

Picture: Krieghoff K-80 with sighting rib, double trap special, grip in size L, comb R38, butt plate in elastomere (for trap)

Special version Perazzi MX2005 + 20 0°

On request of various top shooters of double trap we have developed further stock configurations for the Perazzi production series with removable trigger. In this special version the complete back stock part is raised to the level of the barrel rib on MX2005, so that the drop is correspondingly adjusted. The result is that the recoil of the shotgun is straighter to the shoulder and that the muzzle jump is considerably more influenced by the pitch adjustment (in comparison to stocks in standard version).

Picture: Perazzi MX2005 with orthopedic grip, comb R43 0°, butt plate in elastomere (for trap)

Special version Perazzi MX2008 +30 0°

See above description, but adapted to the MX2008.

Picture: Perazzi MX2008 with orthopedic grip, comb R43 0°, butt plate in elastomere (for trap)
Rhomlas® surface structure
Another high point of the development is the integration of Rhomlas® surface structure which is well-proven for many years and is appreciated by international top shooters. With much attention to detail, non-slip segments are incorporated at crucial points in a complex process. A dynamic design – but "Ergosign" is also created for practical use.

Ergonomic grip without finger grooves
The version without finger grooves is exactly the right choice, if the shotgun is used by multiple shooters (for example as a training-, rental- or club gun) or if a plain moulding is preferred.

Individual grips – fabricated according to your hand outline sketch
Shooters whose hands highly differ from the standard measurement (for instance very short/thick or very long/slim hands) have the possibility to order individual grips fabricated according to an exact hand outline sketch for an additional fee. Thus the shooter gets individually fabricated grips with stippled surface in the palm area which are specially adjusted to his shooting hand.

Orthopaedic grip customized according to a plastic moulding
During a personal fitting appointment an exact wood/plastic moulding is made from the shooter's hand by using a grip blank. All the contour elements of the grip are adjusted in detail to the shooter's hand and his shooting position. The result is a grip which fits "like a glove" and which always guarantees the same hand position on the stock. Thus the exact consistent position and steady distance to the trigger can be guaranteed (which is decisive for skeet and sporting).
Butt plates
The correct butt plate for each discipline:
- Walnut (standard), ideal for Skeet & Sporting, 50 grams [1.75 oz.]
- Rosewood (option), ideal for Skeet & Sporting, 65 grams [2.3 oz.]
- Grenadille (option), ideal for Skeet & Sporting, 95 grams [3.35 oz.]
- Elastomere (alternatively), ideal for Trap/Double Trap/American Skeet, 120 grams [4.23 oz.]

Heightened combs & clamping collars
For shotguns with heightened ribs our different combs and clamping collars (the holder between middle section and comb) allow one to raise the standard ratio of the drop in proportion to the rib. For widely varying head positions we offer the possibility of lengthening the comb. Combs are available with a height of 33, 38, 43 and 48 mm, the corresponding clamping collars are available with a height of +10, +20 and +30 mm. For combs R33 the height adjustment pins are 14/17 mm high (for R38 17/20 mm). Additionally height adjustment pins of 23 mm are available.

Balancer
The balancer offers the possibility to balance the weight of the shotgun (approx. 68 to 240 grams). The longer the size of the barrel, the more weight is needed on the stock.

Wood qualities
All wooden parts can be ordered in the following wood qualities for an additional fee according to the fore end: selected wood, fancy grained wood, selected grained wood, top grained wood, burled grained wood.

Colour of the aluminium parts
Aluminium parts in the standard version are supplied with black coloured coating. For stocks in standard length of 340 – 390 mm the aluminium parts can alternatively be supplied with titanium coloured coating.

Accessories
Each stock system is supplied with:
- A tin of special hard oil for wood preservation
- A towel
- Mounting instructions and tools (without picture)
Construction

What is hidden in a fully adjustable stock system? The modular construction of the patented system is identified on the basis of the exploded drawing, whose detailed design serves as simplification for orders of accessories and spare parts (e.g. higher clamping collar for high ribs, balancer, screws etc.).

Available for:
• Beretta: DT10, DT11, 682/686, ASE 90, ASE Gold
• Blaser: F3
• Krieghoff: K-32/K-80
• Renato Gamba: Daytona/Carrera/Star Cup

In progress:
• FN: B25 and more (please ask for further information)
The shooter in the focus of attention

Satisfied and successful customers are the best reference. Please find below a short excerpt from the list of the national and international top shooters who have decided to actively use our fully adjustable Ergosign EvoComp stock system.

Vasily Mosin (RUS), Double Trap
Shan Zhang (CHN), Skeet
Håkan Dahlby (SWE), Double Trap, Trap
Richard Bognar (HUN), Double Trap
Ahmed Al Maktoum (UAE), Double Trap
Claus Koch (GER), Sporting
Peter Robert Russell Wilson (GBR), Double Trap
Vincent Hancock (USA), Skeet
Andreas Löw (GER), Double Trap
Diego Duarte Delgado (COL), Skeet

Ahmed Al Maktoum (UAE), Double Trap
Peter Robert Russell Wilson (GBR), Double Trap
Vincent Hancock (USA), Skeet
Claus Koch (GER), Sporting
Richard Bognar (HUN), Double Trap
Andreas Löw (GER), Double Trap
Håkan Dahlby (SWE), Double Trap, Trap
Diego Duarte Delgado (COL), Skeet