

SUPPRESSOR STGW 90

OPERATOR MANUAL



B&T AG 3608 Thun • Switzerland Tel +41 33 334 67 00 info@bt-ag.ch www.bt-ag.ch The directions in this document are intended to be in the direction of the shot. For a simplified understanding of the direction of rotation, the two perspectives are shown below.

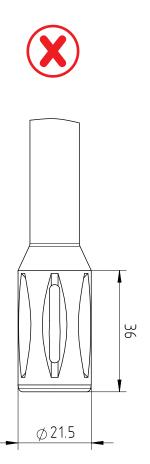
	Horizontally oriented	Vertically oriented
Clockwise		
Counterclockwise		

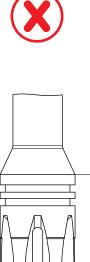
WARNING!

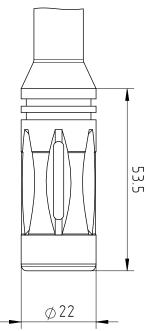


The suppressor shown here in this manual fit only on the STGW90 muzzles.

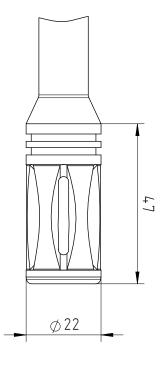
The muzzles of the SIG55x series can deviate from the STGW90 mouths, where these suppressors cannot be used.

















WARNING!

Suppressed firearms produce less noise than non-suppressed firearms, but it should still be remembered that it is a firearm. It is essential to follow the same safety rules as for a non-silenced firearm.



Failure to follow the operating instructions may result in serious injury to the user and damage to the firearm. Suppressors are devices that are attached to a muzzle, a flash hider or a compensator.

A requirement for safe operation is the mounting of the suppressor as described in these operating instructions.

Under normal conditions any suppressor will become very hot. This is especially true when fired in full automatic mode. For your safety it is important to allow the suppressor to cool down before touching it in any way, this includes removing the suppressor from the weapon. It is also important not to let the suppressor touch any material or equipment while hot, such as nylon webbing or ammunition pouches.

EYE PROTECTION MUST BE WORN!



SAFETY GOGGLES MUST BE WORN WHEN DISASSEMBLING AND REASSEMBLING THE GUN. PARTS CAN GET INTO THE EYES IF HANDLED INCORRECTLY.

EAR PROTECTION MUST BE WORN!



SUITABLE HEARING PROTECTION MUST ALWAYS BE WORN WHEN SHOOTING WITH A FIREARM.

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1. General rules

READ MANUAL BEFORE USE.

1.1 Safety rules

- 1. Consider every weapon loaded until checked personally by the individual operator.
- 2. User installation or removal of the suppressor must be accomplished in accordance with the instructions contained in this operator manual.
- 3. Serious injury to the user may result from an improperly installed suppressor.
- 4. Always wear eye and ear protection when shooting.
- 5. Check the suppressor for tightness before each use.
- 6. Do not touch the suppressor directly after shooting.

1.2 Restrictions when operating with serial fire

Suppressors designed for automatic firearms can be used in fully automatic fire mode. However, it must be taken into account that there is an enormous heat effect when shooting in the fully automatic fire mode. Therefore, it is recommended to shoot with the suppressor in short bursts and not to fire more than 90 rounds (30 x 30 round magazines). Afterwards, stop shooting if possible and let the suppressor cool down to prevent permanent damage to the suppressor. Eventual further restrictions by the weapon manufacturer must be followed.

1.3 Influence on point of impact

The additional weight of the suppressor at the muzzle and the different gas conditions directly after the muzzle can change the ballistics of the weapon and thus the point of impact. It is therefore important that the point of impact is always checked with the suppressor and the ammunition before a mission and adjusted if necessary.

2. Technical specifications

2.1 Technical data

Designation	Univ. Stgw90	Univ. Stgw90 Compact
Manufacturer	B&T AG, Switzerland	
Product ID	SD-124022	SD-124024
Interface	Safety quick release for Stgw90	
Caliber	GP90 (5.56x45/.223 Remington)	
Length	198 mm	179 mm
Length past barrel	141 mm	122 mm
Tube diameter	39 mm	
Weight	~487 g	~452 g
Material	Stainless steel, Thermax/Inconel, steel	
Color	Black/Gray - Cerakote coating on request	
Surface treatment	Teniferated QPQ	
Sound reduction	~ 33 dB A	~ 31 dB A
Service life	Min. 5.000 rounds	
Full auto capable	Yes	
Ambient temperature for use	-45°C70°C	

Designation	RBS Stgw90	RBS Stgw90 Compact
Manufacturer	B&T AG, Switzerland	
Product ID	SD-124026	SD-124027
Interface	Safety quick release for Stgw90	
Caliber	GP90 (5.56x45/.223 Remington)	
Length	213 mm	183 mm
Length past barrel	155 mm	125 mm
Tube diameter	52 mm	
Weight	~693 g	~610 g
Material	Stainless steel, Thermax/Inconel, steel	
Color	Black/Gray - Cerakote coating on request	
Surface treatment	Teniferated QPQ	
Sound reduction	~ 31 dB A	~ 26 dB A
Service life	Min. 5.000 rounds	
Full auto capable	Yes	
Ambient temperature for use	-45°C70°C	

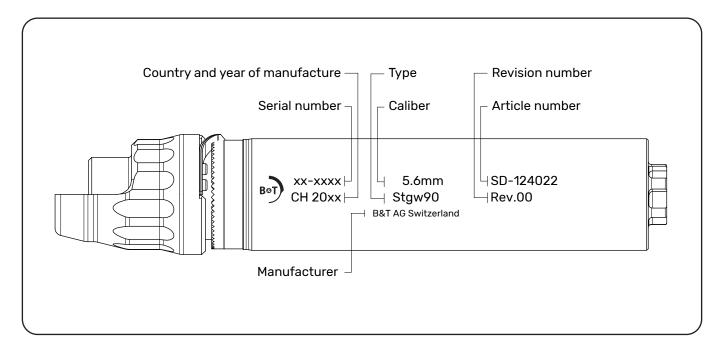
All product specifications are subject to change without notice.

Published data are mean values and therefore not suitable acceptance criteria.

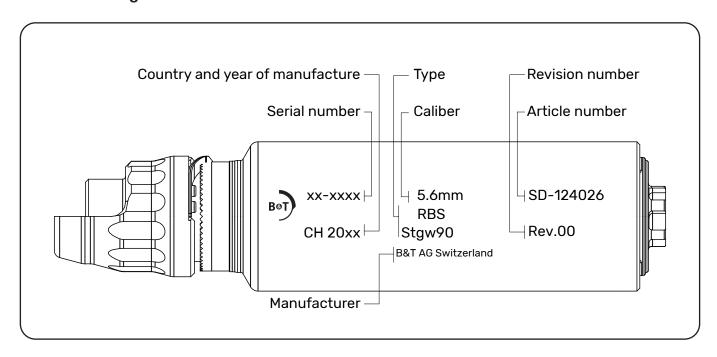
Specific technical data can be found in the data sheet of the respective suppressor. The data sheet name corresponds to the article number (see section "2.2 Type description" on page 8)

2.2 Type description

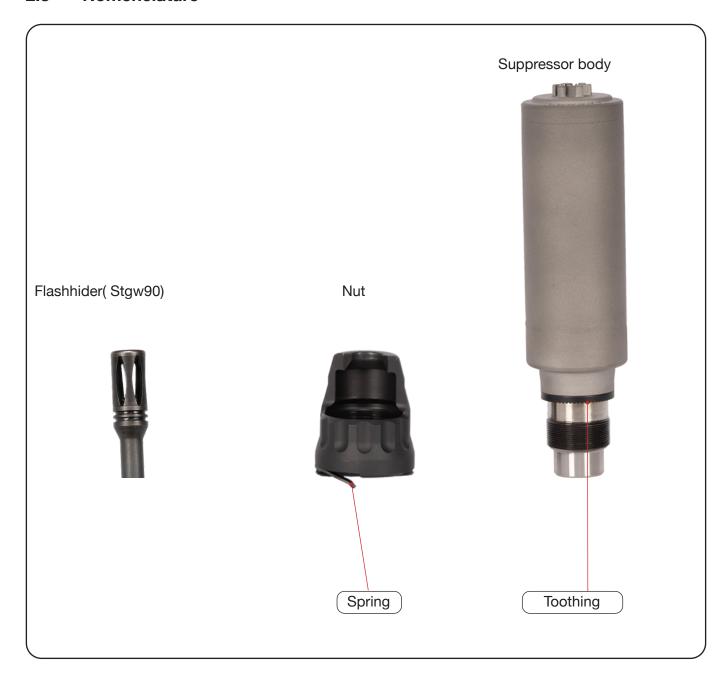
2.2.1 Universal Stgw90 - SD-124022/SD-124024



2.2.2 RBS Stgw90 - SD-124026/SD-124027



2.3 Nomenclature



2.4 Suppressors

2.4.1 Universal Stgw90

The Universal Stgw90 was developed on the basis of the B&T ROTEX-X suppressors, making it one of the lightest and most compact Inconel suppressors produced. The Universal Stgw90 suppressor is compatible with the Stgw90 and PE90 suppressor.



2.4.2 RBS Stgw90

The RBS (Reduced Backpressure Suppressor) suppressor feature an optimized design that maximally reduces backflow effects on the weapon while still achieving high suppressor performance.

The RBS Stgw90 suppressor is compatible with the Stgw90 and PE90 flashhider.



3. Mounting & Dismounting

3.1 Mounting the suppressor

a. Unscrew the nut from the suppressor body.



- b. Slide the nut over the flashhider.
- c. Slide the suppressor body over the flashhider.



- d. Tighten the suppressor body counterclockwise while holding the nut. Tighten the suppressor by hand.
 - » There must be no more motion in the direction of the barrel.

Advice



Initially, the suppressor can be rotated almost without resistance. As soon as the spring hits the toothing, a stronger resistance is felt.

e. Check that the suppressor body is firmly seated on the weapon.





3.2 Dismounting the suppressor

a. Rotate the suppressor body clockwise while holding the nut.

Advice



As long as the spring touches the toothing, resistance is felt. Then the resistance decreases and the rotation is almost silent.



b. Remove the suppressor body from the barrel.



c. Remove the nut from the barrel.



4. Maintenance procedures

4.1 Storage

Store weapons with the suppressor installed upside down so that the barrel faces down to prevent any residual cleaning agents or condensation from flowing into the barrel.



4.2 Field maintenance

Field maintenance shall be performed in the following sequence:

- » Before use and after a longer period of non-use.
- » Daily for regular use.
- » Immediately after any impact on the suppressor.



Regular maintenance in the field includes the following measures:

- 1. Visual inspection of the inside for foreign bodies and cracks.
- 2. Visual inspection of the external surfaces for cracks and dents, especially in the muzzle area.
- 3. Shake the suppressor to detect broken or detached inner parts.
- 4. Check that the assembly and disassembly are correct.
- 5. Lubricate the threads of the flashhider with a film of oil.
- 6. Check suppressor for tight fit.

SAFETY ADVICE!



If the suppressor has cracks, dents, damage in the muzzle area, loose parts, excessive contamination by carbon particles or other irregularities, it may no longer be used and must be presented to the firearms technician or manufacturer immediately.

4.3 Workshop maintenance

Perform periodic maintenance in the workshop if one or more of the following criteria are met:

- » If sand, mud, water or other liquids got inside the suppressor and then had to be fired without being able to remove the residue from the inside.
- » Immediately after any impact on the suppressor.
- » 1500 rounds have been fired or every 2 years at the latest
- » The sound reduction declines noticeably.

To carry out a correct inspection of the suppressor, it must be removed from the weapon in any case (see section "3. Mounting & Dismounting" on page 11).

Periodic maintenance in the workshop includes the following measures:

- 1. Visual inspection of the inside for foreign bodies and cracks.
- 2. Visually inspect the suppressor elements for loose parts, damage and blocked bores.
- 3. Visual inspection of the external surfaces for cracks and dents, especially in the muzzle area.
- 4. Shake the suppressor to detect broken or detached inner parts.
- 5. Check the threads on the muzzle and on the flashhider for damage, clean them with a small brush and remove any grease/oil.
- 6. Close the suppressor with a plug and fill it with «SchleTek Suppressor-Cleaner Evolution» (or another suitable solvent) for at least 8 hours.
- 7. If a QD fire flashhider is installed, insert it in a container filled with SchleTek Suppressor-Cleaner Evolution for at least 8 hours.
- 8. Flush the suppressor and, if necessary, the flashhider with warm water.
- 9. Blow out the suppressor and, if necessary, the flashhider with compressed air.
- 10. Apply a film of oil to the muzzle thread, the flashhider, the thread, if necessary, and the outside of the suppressor.

SAFETY ADVICE!



If the suppressor has cracks, dents, damage in the muzzle area, loose parts, excessive contamination by carbon particles or other irregularities, it may no longer be used and must be presented to the firearms technician or manufacturer immediately.

4.3.1 Avoiding corrosion in the suppressor

Moisture inside a suppressor can occur if it is exposed to high humidity (e.g. water, rain...) or if a change in temperature causes condensation inside the suppressor. This moisture is not visible, but can never be completely excluded, even if you did not actually shoot at all and the suppressor was only mounted on the weapon for some time.

This moisture or condensed water, in combination with powder residues, can form a corrosive substance that can damage the suppressor. If this corrosive substance enters the weapon, it can also be damaged. Strong corrosion, including pitting, is hardly to be expected with appropriate care of the suppressor, but in extreme cases could lead to a structural weakening of the suppressor, which is why it must be avoided.

To prevent damage to the suppressor and the weapon due to corrosion, it is important to observe some safety rules:

- a. Always store and transport the weapon and suppressor separately from each other, i.e. do not leave the suppressor on the weapon after use; remove it whenever possible.
- b. If it is not possible to remove the suppressor from the weapon after use, the weapon should be temporarily stored with the muzzle or suppressor down to avoid that corrosive substances from the suppressor enter the muzzle thread and the weapon.
- c. Always keep the inside and outside of the suppressor dry; in case of doubt dry the suppressor before storing it, e.g. putting it in upright position on a radiator (please note weapon legislation!).
- d. When cleaning the weapon and suppressor, always remove the suppressor from the weapon first.
- e. Clean the suppressor regularly with a suitable cleaning agent (e.g. SchleTek Evolution).

SAFETY ADVICE!



If these rules are not followed, the suppressor can be structurally weakened by corrosion and, in extreme cases, burst when the shot is fired!

If these rules are not followed, the weapon may become corroded on the muzzle thread, the compensator or the flashhider, inside the barrel as well as in the weapon itself!

SAFETY ADVICE!



If there is any uncertainty as to whether the suppressor is still to be shot, present it to the firearms technician or manufacturer for inspection.

5. Accessories

5.1 Cleaning agent

Pos.	Item no.	Description
SCHOOL STATE OF THE PARTY OF TH	SCT-1986	SchleTek Suppressor-Cleaner Evolution

6. Warranty statement

Warranty claims on behalf of the client are to be explicitly declared as such. During the legal warranty period, B&T provides warranty cover solely for defects that arise as a result of faulty materials, construction errors or poor workmanship. If a warranty claim is justified, B&T will, at its own discretion, either repair or replace the defective good. Costs incurred in transporting the defective good to B&T are borne by the Client. Spare parts fitted and replaced become the property of B&T.

Inasmuch as is legally permitted, any other liability of B&T is excluded, in particular liability for damages arising either directly or indirectly from the delivered good itself, from its use or from its defects.

Merchandise is covered by the warranty provisions of the manufacturer. Parts that are naturally subject to wear and tear, damage arising from insufficient maintenance work, noncompliance with operating regulations and cases of force majeure are all excluded from warranty cover. Warranty claims lapse if the Client itself or third parties alter or repair the delivered good without the prior written consent of B&T. All product specifications are subject to change without prior notice. Published data are mean values and therefore not suitable acceptance criteria.

The manufacturer:

B&T AG - 3608 Thun - Switzerland

Phone +41 33 334 67 00

e-mail: info@bt-ag.ch