

THE HOME OF INNOVATION









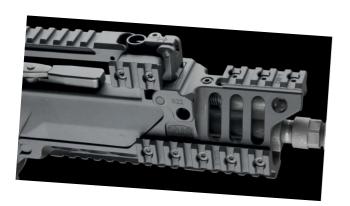


What we do

Our mission is to produce innovative solutions containing a minimum of parts. We never copy the designs of other manufacturers as there is always a need for improvement. Our ISMS™ scope mounts is a perfect example of our innovative designs. For more than a hundred years scope mounts have looked basically the same - with the same limitations - regardless of the manufacturer. That is, until our ISMS™ came on the market in 2010. We have taken the scope mount from just being a way of attaching the scope to a firearm to a platform with a system for mounting the scope as well as accessories such as back-up sights, NV, lasers and cosine meters. At the same time we made our scope mount sturdier than any competing product, invented a new system for aligning the scope's rotation and constructed it so that the adjustment knobs are more visible than on

probably any other mount. This means that you can check your adjustments almost without moving your head. Convenient on the range for sure, but a life-saver if you are a deployed sniper who is checking your values when in hide.

Another good example of our innovative products is our 40 mm grenade launcher sight mount. Most sights have the readings on the side, whereby the soldier is unable to read the distance settings while aiming. We have made a sight mount where the soldier can see and adjust the range setting while still in the shooting position. Tritium inserts or luminous paint ensures that any adjustments can be done in low-light conditions as well. Our humble experience tells us that combat environments have a tendency not to be optimally lit. Our many customers at the tip of the spear around the world tell us that we are right.









The company started in 2007 when Håkan worked as a gunsmith and created some solutions for Aimpoint.

The *Twist mount* and the *MPS mount* are the results from that collaboration. Words spread about the gunsmith with the extraordinary solutions, and soon some military units asked for Håkan´s help, one thing leading to another.

Today we work with a number of armed forces around the world as well as various manufacturers. Some products are the results of military needs for new solutions, while other products such as the ISMS™ scope mount are the results of our own shooting and hunting experience.

As much of our products as possible are manufactured locally in Sweden. This gives us maximum control over the production to achieve the highest precision and quality.



Using the very best materials and coatings ensure the products a very long life and that *little extra* that is needed to perform under the worst conditions.

All products featuring the Spuhr[™] name are intended for the most difficult missions and severe circumstances.







add night capacity to your 40 mm?

GRENADE LAUNCHER SIGHT MOUNT

Patent pending

Easy-to-use and accurate grenade launcher sight mount for use with Red Dot Sight and/or laser. Speeds up target acquisition. Fully ambidextrous. Tritium inserts or luminous paint for low light situations. Precision-made and rattle-free.

Red Dot Sights

Mount for using a Red Dot Sight and/or laser on a 40 mm grenade launcher. The mount can be set up to carry most brands of small Red Dot Sights, such as Aimpoint Micro, Trijicon RMR, Docter, or what the customer prefers.

Laser Sights

The mount can be fitted with most small or medium-sized Laser Sights, either on Picatinny rail or direct mount (both optional).

Accuracy

A well-trained soldier with a fair estimate of distance can without difficulty hit a normal window at up to 100 meters (110 yards). The speed of target acquisition is also greatly enhanced.

Ambidextrous

The sight is fully ambidextrous and can within minutes be mounted on either side of the rifle/launcher. The sight does not require any extra parts for changing the mounting side.

Low Light Situations

For low light situations the rear scale is fitted with luminous paint or tritium inserts (optional) at the 100-/200-/300-meter/yard settings so the user can easily adjust for range even in darkness. Attaching a laser sight is also a great asset in low light situations.

Models

Available for HK GLM and AG36. We have both side Picatinny mount and direct mounts. We also have mounts for top Picatinny to adapt double sights.

Spin drift compensation

The mount has a built-in spin drift compensation based on customer specification and desired ammunition.

Flexibility Of Design

We are extremely flexible and will tailor any product to match the customers' requirements and ideas.

SPECIFICATION

"dual or mono? - 2 seconds away

LIGHTWEIGHT FLEXIBLE NVG MOUNT

Patent pending

The NV Monoculars can within seconds be mounted or dismounted, all depending on the users needs. The user can choose to use one or two monoculars, and change instantly when he needs to.

The monocular can very quickly be moved from head to gun.

This innovative product allows the user to change from having one to two monoculars mounted, and back again, as the need arises. The mount is very stable and quiet, with no rattling or shaking parts. The mount is very flexible with multiple adjustments and settings, and can be adjusted for tilt, eye width and/or eye-relief within seconds.

For the user who likes to use his right-eye monocular mounted on his firearm, the monocular can be securely moved from the head to the gun or back again within seconds.

The Head Mount/Helmet Mount has a quick interface with adjustment memory, giving the user the possibility to quickly transfer the whole system with goggles from his helmet to his head (or back) if the situation warrants it.

Some operators prefer to parachute without goggles mounted, opting to mount them only after releasing the parachute, as to prevent the goggles from getting tangled in the risers. With the Light-weight Flexible NVG Mount the operator can keep a clean helmet during descent and within seconds of releasing the parachute have the goggles securely mounted without any need to readjust any settings!

Strap system

The strap system for the Head Mount is developed by the company Snigel Design and is probably the best designed strap system on the market, providing the highest comfort for the greatest variety of head shapes possible.

The Head Mount stays in place without any strain or

the Head Mount stays in place without any strain or excessive pressure, preventing the commonly experienced headaches and neck pains associated with extended wearing of head-mounted NVG's.

Goggle fit

The Light-weight Flexible NVG Mount is ideally used with Insight MUM-14 or Vectronix TARSIUS16, but other monoculars such as the ITT PVS-14 and the Theon can easily be mounted as well.

Flexibility of design

We are extremely flexible and will tailor any product to match the customers' requirements and ideas.

SPECIFICATION

Weight: Depending on version
Material:
Surface treatment: Hard coated sealed surface

ISMS[™] - IDEAL SCOPE MOUNT SYSTEM[™]

Patent pending

Extremely sturdy scope mount, with possibility to attach multiple optical accessories directly to the mount. Built-in level. 45-degree split of the rings provides unobstructed view of the knobs.

Durability

Prevents damage on scope due to flexing during heavy recoil or rough handling. The snipers rifle and the spotter's carbine can have the same mount, enabling the use of the same or shared equipment and accessories. The rings are grooved on the inside for a better grip of the scope and to enable gluing of the scope. The mount base is milled from a single billet of aluminum.

Scope rotation

Innovative solution for indexing the rotation of the scope, using the included tool/gauge to index the scope correctly to the mount and gun. This is very important since if the scope is not properly indexed there will be an unintended lateral shift of the point of impact whenever the elevation is adjusted.

Mounting placements

Traditionally lasers have been mounted on the forend of the rifle, a solution with drawbacks. For the same reasons you don't want your barrel to touch the forend you don't want the sights to be mounted on the forend. Our mounting system have a minimum of seven interfaces for accessories, and the laser can easily be attached to the scope mount, providing the advantage of undisturbed laser and having the weight close to the centre of the gun instead of forward.

Tilt

Mounts can be delivered in various tilts. The tilt is clearly engraved on the mount, in both MIL and MOA.

Accessible and readable dials

The rings are cut at 45 degrees instead of horizontaly, providing several advantages; the screws holding the parts together are not obscuring the knobs, thus the shooter can quickly determine the settings of the knobs.

It also gives the shooter a horizontal reference line helping the shooter subconsciously to avoid canting the rifle to the side. The rings have index marks on the top and right side, making low knobs more easily readable.

Accessories

Provides use of various accessories such as angle cosine indicator (ACI), back up sights, lasers, illuminators, night vision mounts etc. with a minimized "footprint". With traditional mounts this can only be achieved if there is sufficient space on the middle tube for additional rings, which there rarely is. The "Ideal Scope Mount System"™ have interface surfaces directly on the mount, making it possible to mount accessories either by Picatinny rails or as direct interfaces.

A selection of interfaces for popular accessories are available, and others can be made to customer specifications.

Level

The sight mount have a level included in the rear of the mount.

SPECIFICATION

Rail Interface:	Picatinny rail, AI & Sako TRG dovetail Sig Sauer SSG 3000 rail
Ring diam:	30, 34, 35 mm, 36 mm
Tilt:	Delivered in various tilts (see price list)
Weight:	200-275 gram depending on model
Height:	Customer specified depending on the NV or Thermal clip on system that is used
Material:	7075 Aluminum, Stainless steel screws
Surface treatment:	Hard coated sealed surface



SEPARATE RINGS

Patent pending

We make separate rings for those who prefers them, the main reason would be because they are somewhat lower than the unimounts.

The rings are available in one height only - 1" (25,4mm).

They have a built-in level, that is somewhat smaller and not as visible as on the unimount. Dual vials allow the rings to be mounted for a left handed shooter.

The separate rings do not come with any tilt.

Our system for leveling the scope works for separate rings as well; the leveling kit A-0080/0081 is included with the rings.



Special made "Leveling kit" for Separate rings. (Also sold separately art.nr: A-0080/81)



SPECIFICATION

Rail Interface:...

. Picatinny rail.

Surface treatment:...... Hard coated sealed surface.

Picatinny rail

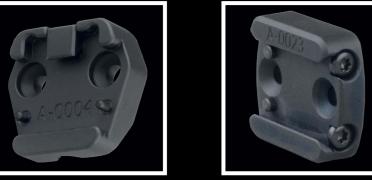
ENNANTE P

A-0032

Simrad Interface

A-0017

ACI Interface



Non-QD A-0023

Secondary sights



DELTA POINT A-0009

Secondary sights

QD A-0004

A-0003



RMR A-0010



DR-BURRIS A-0011



AIMPOINT A-0025

ACCESSORIES FOR SCOPE MOUNTS

Spacers

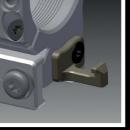


A-0001



A-0015





A-0046

DR-BURRIS A-0011b



Accessory kit



We produce Accessory kit's to customer specifications

Why use Red Dot Sights on Sniper Rifles?

There are three basic reasons why:

- 1. As a fast acquisition sight for short distances. For example when engaging a target at 500 meters and a new target appears at 50 meters. It is faster to engage the new target with the red dot sight than with the main sight cranked up at High magnification (or to adjust the latter).
- 2. You are engaging or spotting through your rifle scope set at 12x magnification and you have to quickly engage another target at 400 meters. It might be difficult to find the new target at 12x but using the red dot and as a finder-scope, you can then easily transition back to your primary optics and be on target.
- 3. As a back-up optical sight if your primary optics fail.

We produce Tri-Rails in various sizes and designs



A-0090

HOW TO CHOOSE THE RIGHT MOUNT

We have the worlds most comprehensive line of tactical scope mounts; it currently spans about 60 different models of various heights, tilts, lengths and ring dimensions. Here is a short guide to help you choose the right one for your needs.

Picatinny or direct mount?

The first obvious question is if the mount should be a Picatinny mount or a direct attachment mount such as our line of ISMS™ mounts for Accuracy International, Sako TRG and Sauer SSG.

The main purpose for using a direct mount is to allow a stronger and lower positioning of the rifle scope. If there's no need for Picatinny we generally recommend direct mounts on these rifles.

Tilt.

Tilted mounts are necessary when shooting at very long distances. We generally recommend as little tilt as possible as the tilt really does nothing to improve the picture quality. In most cases 6-9 MIL (20-30 MOA) will have no negative impact on picture quality while a greater tilt can lead to problems.

To allow for the greatest available range of adjustment choose a mount with a tilt that is half of the scope's range of elevation.

For example Schmidt & Bender 5-25x56 have a maximum 26 MIL (93 MOA) in elevation, then choose a mount with 13 MIL (45 MOA) in tilt. Doing so assures that you are able to adjust the sight out to very long distances.

However when mounted in this extreme elevation it's common to experience optical defects such as an oval picture etc.

We therefore recommend that when fitting a large elevation scope (such as 26 MIL/93 MOA) on a .308 rifle that will only be used out to 1000 meters, to choose a 6 MIL/20 MOA tilt as it's more than sufficient for that use.

Height

The height of a mount is always measured from the top of the rail to the center of the scope. In the case of a tilted mount the measurement is made at the rear of the mount.



Night vision/thermal compatible

When combining the scope with a clip-on system such as PVS22, NSV 80 or NSV 1000, to name a few, the height of the mount is not important. Also the instrument doesn't have to be perfectly in line with the scope.

If we have an offset of 10mm in height betwen the primary optic and the NV clip-on the change in point of impact will be 10 mm on 100 meters as well as 10 mm on 300 and 1000 meters; thus the point of impact change is fully parallell.

Therefore it's often unneccesary to have extremely high mounts just to facilitate in-line mounting of a clip-on systems. Various systems allow varying degrees of angular difference. A common maximum angular difference is 2 degrees.

Please consult the manufacturer of the thermal device before you make expensive alterations to your gear.

EXPLAINING THE MODEL MARKING - ISMSTM

Most items from Spuhr[™] are marked with a model number and a batchnumber. When ordering please refer to the model numbers.

The model number is often one or two letters followed by one to four numbers; for example SP-4601.

The batch number is a single letter followed by four numbers. For example M-1204 or M12/04 the numbers indicate year and month.

SP-4601

(see explanation in the text below)

Scope mounts are always marked with a model number consisting of two letters followed by four numbers.

¹The letters means:

- SA Scope mount Accuracy International (11mm dovetail)
- ST Scope mount TRG (17 mm dovetail)
- SP Scope mount Picatinny
- SS Scope mount Sauer (for Sauer SSG and STR rifles)
- SR Scope Rings (separate rings for Picatinny rail)

The first number identifies the scope diameter.

² The first number means:

- 3 30 mm tube
- 4 34 mm tube
- 5 35 mm tube
- 6 36 mm tube

The second & third number identifies tilt.

34 The second & third number means:

- 0 0 MIL/0 MOA
- 6 6 MIL/20,6 MOA
- 7 7 MIL/24 MOA tilt
- 8 13 MIL/44.4 MOA and 11 MIL/40 MOA
- 9 9 MIL/31 MOA
- 16 16 MIL/55 MOA









HK G36 / SL8 UPGRADES

For the past couple of year we have worked on an upgrade kit for the G36. With the Spuhr[™] upgrade kit this well-functioning weapon gets a modern touch and readies it for additional years in service.

The project goals were to lower the weight, add professional back-up iron sights, and a lower top-rail, and of course add the capability of using standard M4/M16 magazines.

Magwell for M4/M16 magazines.

This is an ambidextrous magwell for the G36 that converts the G36 as to accept readily available M4/M16 magazines. Easy installation by removing the original magcatch parts and dropping in the magwell into the gun. Includes a compartment for spare batteries (2032 type). We also manufacture a new bolt stop that is needed to replace the original boltstop.

Top Rail

The top rail is manufactured from 7075 aluminium and is very strong even though it only weighs 200 grams. Our top rail lowers the otherwise very high line of sight of the G36. It's fitted with back-up iron sights that are fully adjustable with tools. The sights are fitted with tritium inserts.

The rear part of the rail is lowered to accommodate a low mounting of NV equipment. For those who prefer a full length rail without the lowered portion, there is a Picatinny spacer included (see picture below).

Please note that the Picatinny rail is heavily dehorned to prevent burrs etc. after heavy use. Also a way of saving the hands and fingers of the users.



Accessories, such as the Oerlikon LLM laser can be mounted on the top rail, rather than on the forend as to ensure that the point of aim will remain true even as the forend flexes and moves.



Lightweight & Adaptable forend

Our forend has very low weight and perfect ergonomics. It gives the user the choice to put picatinny rails were he needs them. We think it's "old fashioned" to run around with half a meter of Picatinny rails if you don't need them.

With our interface system the user gets a flexible lightweight system with only advantages. The rest of the equipment is heavy enough.

SPECIFICATION







HK417 / MR308A1 UPGRADES

Along with the G36 upgrades we have also made an upgrade kit for the HK417. With the Spuhr upgrade kit the HK417 is lighter and more user friendly. The project goals were to lower the weight, add a new forend, and of course add the capability to use standard SR25-pattern magazines.

Spuhr[™] HK 417 lower - receiver

Our new HK417 lower has a number of features that provide an advantage on the battlefield. The lower comes in two versions; semi and full auto.

Our enhancements:

- 1. Uses standard SR25-pattern magazines. With the more compact magazines there is a greater selection of accessories such as magpouches available.
- 2. Low-profile protected magazine catch. Lessens the risk of accidently dropping the magazine without sacrificing ease of access.
- 3. Ambidextrous magazine catch. Same low-profile design on both sides.
- 4. Non-rotating hammer and trigger pins. Prevents elongation of pin holes from rotating pins.
- 5. Built-in QD sling swivel cups. Allows the use of other sling systems than the original "cheese cutter" style.
- 6.Reinforced receiver. The rear of the receiver has been reinforced for greater stability.
- 7. Built-in Spuhr™ interfaces. Both sides of the receiver has been fitted with Spuhr™ interfaces for future use. Maybe for a brass catcher, cosine indicator, a holder for extra magazine or whatever.

Spuhr[™] forends

We have made different length forends that are lighter than the original; 25-33%; depending on length. Our forends are slimmer and the Picatinny sides have been replaced with Spuhr™ interfaces - which unlike Picatinny actually have a negative weight.





HK G3 UPGRADES

We made this project for the HK G3 because we thought this weapon has the potential to remain in service and relevancy for years to come. With a few changes the precision is very good. The project goals were to give the user better ergonomics, a new handguard, Picatinny rail on the top, and prepare a standard interface for a new stock.

The HK G3 is one of the western world's great battle rifles, and it has proven itself to be very reliable and very accurate. Unfortunately most users feel that the G3 is old and has passed its prime.

But with many thousand of G3s still in use around the world we wanted to see if we could adapt the G3 for today's standards.

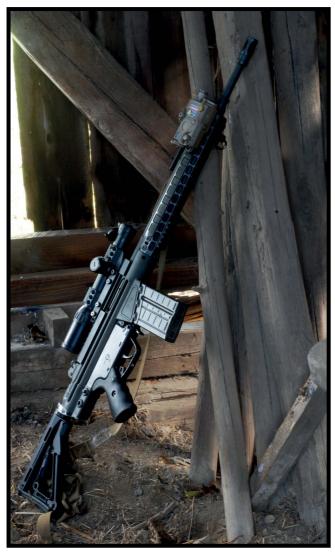
We feel that we have succeeded and in many aspects the G3 with our modifications is as usable and serviceable as the AR10's or HK 417's of today, but with a strong favour to the G3 as to reliability and price.

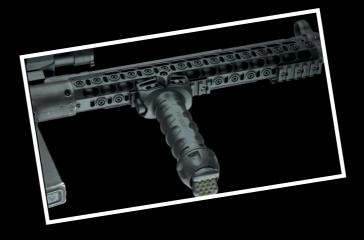
Forend

We made a new forend that have allmost the same outline as the original with the same weight as the HK plastic forend (190 gram/6,7oz). It is very well ventilated so the barrel cools quickly and gives the user the option to add sections of Picatinny where he needs it at 3-6-9 or 12 o'clock.

The forend is also very comfortable and gives the advantage of allowing the shooter to grab around the forend with a modern grip to manage the recoil, which is hard to do with a Picatinny forend.

As our forend have Spuhr™ interfaces on 3-6-9 o'clock it offers you the convenience of using the same rail sections as on our scope mount or our G36 forend.











Stockdesign

The main disadvantage of the G3 Rifle is the stock design tailored for the low iron sights. Due to the design with the long receiver the low ironsight forced the stock to have a "hump" just behind the action.

This "hump" is also known as the "cheek bone chrusher" for reasons that become painfully obvious to most.

To prevent a collision betwen the "hump" and the shooter's face they made the stock terribly long.

It's almost 75mm/3" longer than an M16-A2 stock.

This was not a positive thing in the old pre-body armour days, but today it's a huge problem and it makes the G3 cumbersome, heavy and difficult to control.

We have therefore created our own solution with a buttstock that is much shorter and have the comb about 25mm/1" higher which alligns the shooter with the optics.

The gun feel lighter as it's closer to the shooter, it's shorter and is easier and faster to mount to the shoulder, and the recoil is easier to absorb as the boreline is lower - now it's actually controllable in full auto!

"Optimized for optical sights"

HK MP5/HK53 UPGRADES

The HK roller delayed series of firearms all suffers from far too long stocks. This is especially apparent when it comes to short users and the use of body armor.

To make the situation better we have made a stock adaptor for those guns to accept M4 type stocks.

The stock adapter will make the stocks adjustable in length from 50 mm (2") shorter to about 40 mm (1,6") longer and also raise the cheek piece and butt plate around 20 mm (0,8").

That way the LOP (Length of Pull) can be adjusted to the current clothing or the current user of the gun.

It will make the gun more controllable as the stock is more optimized after the user and also because of the raised butt plate.

The total stock weight will be lower than the original retractable stock solution that weighs 700 gr/24,7 oz. Our solution weighs 495 gr/17,5 oz, nearly 30% lower weight.

The stock adapter also has QD sling interfaces included so either a single point or a dual point sling conveniently can be used.

The stockadapter is optimized for medium height optical sights and the use of the original open sights is impossible.

The forend is of lower weight and smaller dimensions than the original plastic one and is filled with Spuhr™ Interfaces 3, 6 and 9 o'clock so any desired picatinny or other accessories can be added easily.







TESTIMONIAL

I have been utilizing Spuhr™ mounts for over two years on multiple long-range precision rifles. I spend countless hours and money training for various matches throughout the year and I only use the best equipment. I compete every weekend and Spuhr™ mounts have proven to hold zero consistently day in and day out.

While winning the 2012 Competition Dynamics/Thunderbeast Team Challenge, which is a long range precision race, I took a hard fall on a bed of rocks. I protected the scope the best I could, but the scope still hit hard. I was worried the zero would be off and the long weekend and expensive math would be ruined. We continued shooting and won that stage, which is a huge testament to the strength of the Spuhr™ mount.



I also use the auxiliary red dot mounts to get on target quickly while using high-powered optics. This is critical in saving time on a stage and insuring you are shooting your target. Spuhr[™] mounts are functional art and I wouldn't shoot my long-range precision rifles without one.

RJ Dussart Team Steiner Military Optics



TEAM SPONSOR

Spuhr is supporting a couple of shooting teams in USA.

We wish the teams success for the coming years.



spotting scopes. Spotting scopes are often very limited in the ability of attaching various add-ons, and we have therefore made an accessory ring for selected models. Our accessory ring has 8 interfaces all around the scope so the user can choose where he wants to attach the

accessories.

Some available features for the accessory ring:

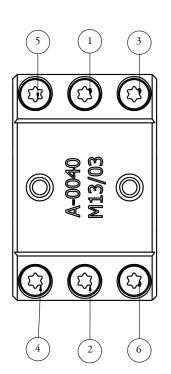
- 1. Attaching red dot sights for quickly finding objects, especially in low light conditions.
- 2. Attaching lasers for pointing out targets.
- 3. Attaching Cosine Indicators so a spotter can see the angle to the target.
- 4 . Attaching night vision for obvious reasons.
- 5. Attaching IR illuminators to identify and illuminate targets.
- 6. Attaching a rangefinder increase the accuracy when aiming the rangefinder.

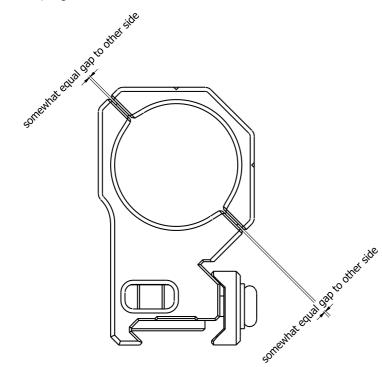


MOUNTING THE SCOPE

Instructions for mounting the scope

- A. Screws are waxed to give correct torque to ring when screw is torqued.
- B. Ring screws should be torqued 15-25 in/lbs, where 25 in/lbs is fine but some scopemanufacturers recommend 15.
- C. Please attach the screws in the order shown in the picture.
- D. First loosely attach them in this order, then torque them to the correct amount in the same order.
- E. After being torqued to the correct amount, please repeat the torqueing once more.
- F. After first shooting session check torque and if needed after torque the screws.
- G. For higher recoiling guns like .300 WM, .338 etc we do highly recommend the use of powdered rosin between the scope and the mount/rings. The powdered rosin has extremely high friction.









THE SPUHR™ INTERFACE

A chain is no stronger than its weakest link. The Spuhr[™] Interface is a light weight solution that enables the user to mount accessories absolutely rattle-free with perfect fit.

Instead of fitting our products with meters of Picatinny rails adding a lot of space and undesired weight while making them less comfortable to hold onto, we decided to make a small interface that has no weight – in fact, it has a negative weight as we remove material to create the interface.

The interface consists of two threaded holes with dual conical parts that will hold the items very securely with excellent repeatability. We manufacture a broad range of accessories for the Spuhr™ Interface, such as Picatinny parts, direct mounts for various sights such as Aimpoint Micro, Trijicon RMR, Docter, Delta Point, and other

special items. The direct mount has the advantage of being stronger and sturdier than if using a Picatinny in between, with lower profile and tighter mounting, and most importantly - lower weight.

We have decided to make our interface "open source", and to help those manufacturers who want to use it. If any manufacturer wishes to use the Spuhr™ interface please contact us.



HK G3 with Spuhr™ forend and Aimpoint laser



Mount with Flir 3-rail



Mount with new Hensoldt 3.5-26x56





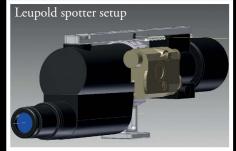


MP5/HK53





ONGOING AND FUTURE PROJECTS













Tikka T3 with Aimpoint T1





















DR-BURRIS A-0011b





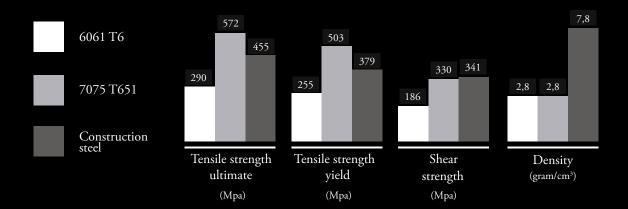
MP5/HK53 with Spuhr™ forend & Top rail



Mount with ACI interface



A FEW WORDS ABOUT MATERIALS – 7075 ALUMINUM



We primarily use 7075 T651 aluminum for our products. It has some disadvantages: it is expensive and tricky to surface treat amongst others. But once it is finished and the mount or sight is on your gun or helmet there is nothing but advantages. It is lighter than titanium and steel, and better suited for our applications. It is stronger and has far better fatigue strength than the 6061 aluminum used by most of our competitors. The tensile strength of the 7075 T651 is about 80% higher than

6061 T6. It is compared to normal or lower grades of steel. In fact the 7075 T651 is so good that we stopped using Helicoil thread inserts as the threads are more than sufficiently strong.

In short: it is the best possible material for our products as it is the best possible material if you are looking for advantages.

And who isn't?



Phone: +46 733 926 770 · Fax: +46 46 200 575 · www.spuhr.com