

norma[®]

DEDICATED SINCE 1902

**HUNTING & SPORTS
AMMUNITION**



2020
Update
New Products



DEDICATED TO PERFECTION

We are Norma, and to us the pursuit of perfection is an everyday commitment. An eternal strive for a better, more precise, and more reliable shot, no matter if it's about hunting, competition, or training.

In the small Swedish village of Åmotfors, in a northern forest region called Värmland, we've been developing and manufacturing absolutely top-notch ammunition for over 110 years. We continuously work to improve our products. At our ballistics department alone, 200,000 shots are fired every year, all in order to further improve quality and stay ahead of the game. Our gunsmith manufactures more than 200 rifle barrels a year in our workshop, for extensive testing of our ammunition. It's a never-ending endeavor for perfection, barrel by barrel and bullet by bullet.

Our promise to you rests on all of this. Every time you squeeze the trigger, you should feel confident the product always delivers. Your skills and high demands are what triggers us to keep pursuing perfection.

Welcome to the world of Norma!



NORMA – ALWAYS THE BEST CHOICE

Norma's news in brief: 2020 sees us tapping into the big trend towards silencers, as we release our popular ORYX bullet in a range of ammunition tailored for short barrels – the NORMA SILENCER SERIES. ORYX Silencer flies as fast and strikes as true as our standard-barrel ammunition, while making muzzle flash a thing of the past.

Our long-range hunting bullet, Bondstrike Extreme, gets a new addition this year. We're introducing a new 6.5mm bullet in the most popular calibers.

This year Norma takes a huge step forward in our rimfire category with four new and innovative novelties that immediately puts us in the front of the competition. Two new 100% lead-free hunting cartridges with astonishing velocity, where one comes with a fragmenting bullet that supercedes competition in terms of delivered energy. We also introduce two new competition cartridges for biathlon shooting which delivers the same consistently accurate results even down to very cold temperatures in winter time. Join us for an exciting new year with Norma!

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WELCOME TO THE WORLD OF NORMA

Our color code system on product packs makes it easier for you to find the right product for your specific needs and challenges.



Our sand-colored Dedicated Hunting lineup features the latest technologies in advanced hunting ammunition development that you need. No matter the caliber, size of game, weather conditions, we know a shot well placed with Norma is a successful hunt. Starting 2019, this is not only very true for centerfire rifle ammo, but also for shot shells, rimfire ammo as well as airgun pellets.



Our red-colored Dedicated Precision line offers the finest components and highly-designed factory loads for the most challenging competitions and intense trainings. Whether you're racing through one of the toughest stages of the weekend, or focusing your cross-hairs on the x-ring, Norma has the right ammo for centerfire rifle, shotgun, rimfire as well as airgun.



Our steel-colored Dedicated Components range offers you a wide array of highest-quality components for reloading. Actually, Norma's ability to produce the finest ammunition begins with the finest components – covering some of the best bullets in the world as well as the most consistent brass cases and powder for off-the-shelf performance to handloaders everywhere.

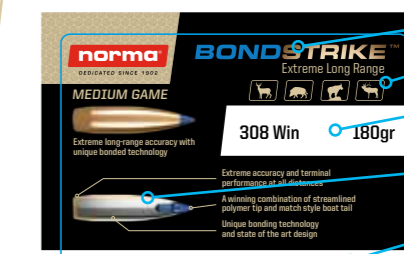
FIND THE INFORMATION

HUNTING PACKS



- WINDOW DISPLAY
- GAME RECOMMENDATION
- QUANTITY
- USAGE CATEGORY

HUNTING LABEL ON THE SIDE PANEL



- PRODUCT BRAND
- GAME PICTOGRAMS
- CALIBER AND BULLET WEIGHT
- BULLET ILLUSTRATION WITH EXPLANATIONS
- BALLISTIC DATA

WWW.NORMA-AMMUNITION.COM



FROM TRADITION TO INNOVATION

Tradition and innovation are often seen as each other's opposites. At Norma we harvest our history and almost 120 years of craftsmanship experience to continuously develop new products, innovative solutions and relevant adaptations to an ever changing market of shooters.

Our company has largely been built on the achievements of persons with unique skills, who have dedicated their time and efforts to develop ammunition and components for the benefit of quality conscious hunters and shooters worldwide. The Norma brand is the magnet that brings together knowledgeable bullet designers, creative ballisticians, Olympic shooters, avid hunters and devoted advocates for our way of life to further develop one of the most prestigious brands in global premium hunting and shooting.

ROY WEATHERBY AND NILS KVALE



In **1902** the production of target ammunition started in Åmotfors with three employees and a production of 225,000 projectiles. The first year of Norma's history went by.

In the **1950's Roy Weatherby** challenged Norma to manufacture ammunition according to the same principle as ladies shoes. To make them bigger on the inside than on the outside, to fit a lot of gunpowder inside.

In **1959, Nils Kvale**, former Ballistics Manager, created Norma's own Magnum Calibers 308 Norma Magnum and 358 Norma Magnum. Four years later, 1963, he wrote the well renowned book "Bullets, Gunpowder and Moose" which is today considered a bible for hunters and target shooters.

In **1955** Norma introduced 6,5x55 calibre match cartridges like the **Silvertorped** and **Silvermatch**. The pioneering spirit of Norma during these years is one of the reasons Norma today is a world-class match cartridge producer.



ORYX

In **1995** Norma develops **Oryx**, one of the world's most well known hunting bullets today. Through a unique bonding technique the jacket and the lead core are merged together to produce an extremely diverse hunting bullet performing best in class on various hunting distances in terms of precision, retention weight, energy transfer and expansion upon impact.

In **2014** Norma set a new standard in terms of the packaging of the **cartridges** when constructing it to become a useful companion for the hunt. It's made of an environmentally friendly wooden composite which you can start your fire with. The cartridges are safely fixed in modules of five which you can easily separate and bring in your pocket when hunting so they don't make any noise in your pocket.

With **Bondstrike** we set the highest standard in **long range hunting** on the market. It is a bullet which kills effectively on distances over



BONDSTRIKE

1000 meters, but still performs well when hitting an animal at 100 meters. It has superior precision on long ranges and a market leading BC.

In 2019 we **started extending** Norma's product categories with the return of the state of the art Norma pistol and revolver ammunition **that are available** in selected markets only. Same applies to the launch of a brand new shot shell, airgun pellets as well as rimfire line in both hunting and sport shooting categories with highest quality and precision standards.

To underline our high ambitions and excel our customers' expectations, we **also (r)evolutionized** the look & feel of our Norma brand.

OLD LOGO



NEW LOGO

OLD AND NEW. OLD MEASURING CLOCKS IN THE FOREGROUND STILL USED IN PRODUCTION, MEASURING TO 1 HUNDREDTH OF A MILLIMETER.

IN THE BACKGROUND A CMM (COORDINATING MEASURING MACHINE) MEASURING COMPLICATED GEOMETRIES TO A THOUSANDTH OF A MILLIMETER.



NORMA HAS THREE FACTORY RANGES INDOORS AND WE TEST IN ALL POSSIBLE CONDITIONS

CRAFTSMANSHIP IN EVERY STEP

Without skilled and capable people, the most modern and sophisticated machine and inspection instrument cannot produce quality cartridges.

Following a cartridge's journey from a lump of metal to a finished high performing projectile is an exciting event that takes place every day in the factory in Värmland. Behind this process are years and years of development and craftsman skills together with a fine tuned machinery park and the finest selection of raw material.

LAB

All raw materials that arrive at Norma are inspected before they become available in production. Some products are inspected by the specific production departments, but nothing reaches production that hasn't been checked against Norma's high quality standards.

BULLET

The production of bullets requires tools with high precision in order for all bullets to turn out the same. To achieve top precision, the smallest possible deviations in balance, jacket wall thickness, diameter, weight and length are crucial to the results. Therefore, it is important to both perform a careful inspection of the jacket production and a final inspection of the bullet. The final proof of good precision will come at the test

shooting. All bullet batches are test shot for precision continuously through production. Hunting bullets are also expansion tested.

CASES

The most important factor in the case production is quality control and we make 15-20 measurements in total through the whole process depending on the case. In production, five of every 300 cases are taken out for inspection. In addition to this, a final inspection is made where the cases are put through a measuring device and visually inspected.

TOOLS AND MAINTENANCE

All tools for the production are manufactured at Norma by Norma's own toolmakers and all tools are inspected according to fixed routines. We measure all production tools with a measuring device that has an accuracy of up to 1/10000 mm, and which in turn is regularly calibrated. In Norma's production there are as many as 2517 measuring instruments used – all are inspected and calibrated at fixed intervals.

LOADING

Loading is the final stage when the components are assembled. It is important that a bullet has the right extraction force and that the primer is correctly placed in the primer

pocket. The cartridge must be loaded with powder that is optimal for the caliber, the case volume and the bullet weight, in order to achieve the desired muzzle velocity and the best precision that the cartridge can perform. To find the best powder, all powder batches are tested for velocity and pressure. At Norma, all cartridges comply to the CIP standards.

BALLISTICS

The ballistics department is the competence hub of the factory where cartridges are tested for precision, pressure and velocity before manufacturing can start. Tests are run several times a day during production and each product is pushed to its absolute limit, far beyond the industry standards. Norma has three factory ranges indoors and we test in all possible conditions simulating wind, temperature conditions and even air pressure.





MIKAEL KARLSSON IS HEAD OF THE BALLISTICS DEPARTMENT AT NORMA AND INVOLVED IN ALL R&D AND QUALITY CONTROL OF THE PRODUCTS.

FIVE BALLISTIC MYTHS

Nothing creates as much discussion as the field of ballistics. “What caliber should I use?”, “Which bullet is the best for hunting a certain game?”, “How do I determine which ammunition performs the best?”. There are many questions and often even more answers. However, here are some “old truths” that you should at least look out for. Our ballistic leader, Mikael Karlsson, with an enormous amount of knowledge in the ballistics field, answers some of the most frequent ballistics myths.

It is always better to be “on the safe side” when choosing caliber so I always choose a Magnum.

At relatively short distances up to 200 meters, the bullet path is quite similar in any case. But there is a big difference in the accuracy of the first and second shot, depending on how big caliber you are using. In the choice of caliber I would choose the smallest possible caliber for the game I want to shoot instead of thinking that I want to be “on the safe side”. You want to be sure that you kill the animal, but if you miss, you want to have the best conditions possible for a second shot. Think two good shots instead of one perfect.

In long-range shooting, the most important thing is to bring down ES (Extreme spread) when reloading.

No, at distances above 600-800 meters, the wind drift is the single largest factor that affects the precision. In other words, there are strong arguments for shooting a lot with factory-loaded ammunition in order to be able to practice much on the actual shooting so that you learn to master, for example, wind drift.

BC is the most important thing to look at in the choice of bullet.

No, at a distance of less than 300 meters, BC is not as important a factor in the choice of bullet. The most important factor, at least in hunting contexts, is the impact energy and the

stability of the bullet when it hits the target. The impact energy is the ratio of the velocity to the weight of the bullet. The stability comes from the construction of the bullet and the riflings of the barrel. A longer and heavier bullet needs a higher rotation in order not to risk damaging the animal or lose its penetration capability when hitting the target.

Bigger momentum gives greater stopping power.

No, momentum is simply the product of mass times velocity and doesn't give you the full picture of what happens when a hunting bullet hits a target.

To understand stopping power you need to take into account the design of the bullet, the diameter of the bullet, expansion capabilities as well as mass and velocity. Therefore we sometimes present the energy delivered in different depths of ballistic gelatin. All our bullets have different qualities in their design depending on how fast you want the energy to deliver upon impact. Sometimes you need the bullet to be able to penetrate deep through hard tissue before delivering its energy. Sometimes you want it to deliver its energy very quickly upon impact.

If I knew I was to shoot through bushes, I would choose a certain kind of bullet.

Yes, theoretically, round tipped bullets are more stable than tipped bullets if they go through something.





*Dedicated
Hunting*



DEDICATED HUNTING A PRODUCT LINEUP FOR ALL TYPES OF HUNTING

Whether stalking deer in your neighbourhood or on the hunting trip of a lifetime in Alaska, Norma has what you need. We've based our offering not just on what we can do, but on your needs. Our Dedicated Hunting family brings you the latest in advanced hunting ammunition. Regardless of calibre, game size or weather, you can be certain that a well-placed Norma shot means a successful hunt.



PRODUCT FACTS: You'll find all our ballistic data at the back of the catalogue. There's also loads of great information on our website – scan the QR code to go there now.



HUNTING FOR THE DREAM TROPHY

In the company of Norma's new BONDSTRIKE bullet and a fellow hunter, Staffan Johansson went hunting for the majestic red deer. This is the story of one of the great challenges.

The air is fresh as the sun rises and slowly finds its way through the treetops. It's mid-December, a little below zero, and the leaves on the ground crackle from frost. Me and my friend Klas have taken to the woods to see about some game. These woods are known for fallow deer and wild boars, but also for a fair amount of red deer. We have our minds set on one specific red deer male that has been spotted during the fall, always getting away. The imposing red deer has been an object of fascination and mystique to myself and many others, and therefore something of a dream trophy.

Long-range precision

Well aware we have a difficult task ahead of us, our rifles are loaded with a new ammo from the Norma factory in Åmotfors. I'm one of only a few being trusted to try the new bullet in the STRIKE series, the blue-tip BONDSTRIKE. Following TIPSTRIKE and ECOSTRIKE, it's the third installation in the series. The precision is flawless and the bullet works perfectly with my rifle.

This is a good thing, since the red deer is a tough adversary. Its sensitive hearing means the frozen ground is not in our favor. The red deer also has a great sense of smell and very good eyesight. The question is, have we got what it takes?

The trails are fresh

All of a sudden we hear it, a creaking sound from a bit above us. Is it our red deer? The creaking continues, and we're lucky enough to find a spot with moss to keep us silent. It becomes apparent that this must be more than just one animal. Klas picks up his binoculars and holds his breath. He has something in his view. Frozen like a statue, it's a fallow hind, looking right at us. She's dark and not easy to distinguish from the surrounding forest, but there she is. And then she's gone again in a blink. Soon after, a parade of fallows passes before our eyes. It's a magical moment in time.

Crouching and moving

The suspicious fallow hind is long gone, but what we have found is the game's path in these woods. We follow the fresh trails and find ourselves moving steadily upwards, with the hope of letting the fallows guide us to other game. Our premonition is that the red deer might well have passed along the same path a little bit earlier.

READ MORE ABOUT BONDSTRIKE AT PAGE 22-23.





While it's important to be silent, we still try to move fast. Halfway up the ridge I spot something that makes my heart stop. Something brown is moving a bit further ahead. Another fallow deer? No, this is a different type of brown. Klas gets his binoculars up again and realizes this is a small group of red deer. As I sneak up my range finder, he's suddenly there. The red deer male, the one I have dreamt about. Not necessarily with the biggest antler, but with a sturdy and majestic body.

We watch him disappear among the fir-trees. Klas knows these woods better than me and takes the lead as we hurry on up. Crouching and moving, we start a steep descent through the dense forest. It turns out to be the right move. One after the other, we see them appear far away. They behave as though they have sensed our presence, moving restlessly with eyes and ears on alert. The red deer male is not among them. Have we missed him? Did he take another route? My hunting pulse is high now. Estimating the distance is hard out here, but I tap 200 meters on my ballistic turret to be prepared if the opportunity reveals itself.

A minute passes. It feels like ten. Then, from the right side of my field of vision, I catch a glimpse in the corner of my eye. It's a majestic revelation entering my telescopic sight. It's the male red deer we have been looking for. The patches of light in the dark woods are tiny, and the chance will soon be gone. The very next moment, everything falls into place.

Magic in the making

One shot! I hear the muffled sound of a hit before I can tell if it's from the deer. The distance is too small to tell. I load another bullet and look in my sight again, only to watch the red deer fall. It's a magical feeling. As we approach the deer, we are curious about where the shot hit him to have such a powerful impact. As it turns out, he was hit behind the shoulder. We contemplate the scene for a while; it's a beautiful moment.



We can't find the exit hole, because there isn't one. I can feel the bullet under the skin behind the other shoulder. The bullet has passed through the ribs on both sides, and even though it hasn't had to go through the muscular shoulder, the bullet has released its full energy and expanded with force.

Memory of a lifetime

Later in the slaughterhouse I understand why the red deer fell as fast as he did. The damage to the vital organs is extensive. With a hit in the middle of the shoulder, we would probably have seen a bigger meat spoilage. Here, it's minimal. Still the impact on the big animal has been powerful. The expanded bullet was weighed to 9,3 grams, a proportionate weight retention of 80%.

We return home with nothing but warm feelings. I have seared yet another unique hunting memory onto my retina, and BONDSTRIKE has made me feel confident all through the experience—in spite of the somewhat long striking distance of 200 meters. The suspense, the nature, and the euphoric ending made the red deer adventure a memory for life, a memory further silver lined by Norma's BONDSTRIKE.



READ MORE ABOUT
BONDSTRIKE AT PAGE 22-23.

“It’s all about eco and precision”

“As a chef, I think I have a different view of the hunt. Its not about the kill. Its all about the meat.” Henrik Norström is a well-renowned chef, and also the president of Bocuse d’Or in Sweden. He is the perfect representative for Norma’s new, lead-free bullet ECOSTRIKE™ which is designed for the highest precision and the environment and the meat quality in focus.

“To me, the meat is the finest trophy. It’s a noble commodity, running past me while hunting in the woods. This approach means I never take the unnecessary shots. I play it safe. And when I do shoot, what I bring down will not just be something to eat, it will be something I present to my guests with pride. Transforming my buck into a plate of braised venison shoulder with green juniper berries, pickled chanterelles and artichoke puree is my way of honoring the animal.”

What Henrik Norström does, he does with absolute precision, no matter if it’s cooking or hunting. The silver medal in the Bocuse d’Or says it all. It’s the Formula 1 of gastronomy - the most excellent anyone can do when it comes to cooking. Henrik knows what it takes in terms of precision to participate. He is one of very few Swedes to make it in the international contest, and he now works with sifting out new Swedish candidates.

“Precision to me as a chef is about having solid knowledge about the raw material I work with. When I hunt, I go about it with that same precision, and with ammunition that yields as little meat spoilage as possible.”

“Game is a truly great, local commodity, the finest, most tender, most flavorful meat our country has to offer. That’s why the meat

itself was my own reason to start hunting”, Henrik says. He had been working with game on his menus for many years, but felt he knew too little about the meat.

“I bought my game and could only note how much variation there was when it came to the quality. Why was that? It wasn’t until I started hunting that I fully understood all the factors involved in affecting the flavor and tenderness of the game. The most vital detail for the meat quality is of course where the shot is placed. But I have also learned with what precision the game must be treated after the shot, because everything has an impact on the flavor. The hygiene at the evisceration, the temperature, the hanging, the tenderizing.” Henrik has also explored how the flavor varies with the season. “A roe deer brought down in the early fall, after having eaten grass, nutritious herbs, and built a layer of fat, tastes far better than the meat from a lean roe deer brought down during a hard winter, after fighting for its survival and losing much of its energy. This kind of deep knowledge is only attainable by someone who actually hunts, Henrik states. “Among hunters there’s a lot of talk about equipment, but very little about commodity and meat quality.”

At Lux Dag för Dag the methods for game are sustainable. The restaurant takes care

of the whole animal, nose to tail. The meat is tenderized in the restaurant’s own meat hanging fridge for the best possible result. In addition there is always a story to tell about the commodity the guest is devouring. On the menu, it might say:

Tender roasted elk brisket with carrot, truffle emulsion, and gravy. Cow elk 4 years, hunted in Sörmland, tenderized in our meat hanging fridge to 72 degree days.

“Our goal is to be able to serve game dishes to our guests, with pride and love, everyday.” In Henrik Nordström’s opinion, chefs in general know very little about game. “Usually the menu just says deer. The natural thing would be to actually tell if it’s fallow or red game that’s being served, the two being totally different kinds of game with different properties. Plus it’s interesting on the menu to talk about whether it’s a hind, a buck, or a calf you’re eating. The flavor is so different.”

READ MORE ABOUT ECOSTRIKE AT PAGE 28-29.



PHOTO: PER-ERIK BERGLUND

FACTS

Henrik Norström has won the silver medal in the most prestigious international gastronomic competition, the Bocuse D’or. He is now president of the Swedish Bocuse d’Or Academy, leading the work with sifting out Bocuse d’Or candidates and coach them for the competition.

Henrik is a jury member at Bocuse d’Or, which is the world championships of cooking. He is also a jury member at Chef of the Year, Sweden.

Henrik was in charge of the dinner at the wedding of H.R.H. Prince Carl Philip and princess Sophia at the Royal Castle.

Henrik’s restaurant Lux in Stockholm had a Michelin star, but a few years back he decided to transform the restaurant into Lux Dag för Dag, with a focus on seasonal produce. Here, Henrik’s own game is often on the menu.

Lux Dag för Dag was dubbed This Year’s Game Restaurant 2018 by the Game Academy.

Henrik’s personal favorite commodity: Red deer calf.



STRIKE™ FAMILY FOR THE MODERN HUNTER

STRIKE™ is Norma's next generation bullets for the modern hunter with high quality standards and specific hunting needs. With these new sets of bullets, the engineers at Norma have once again pushed the boundaries of modern projectile technology. Superb precision and devastating terminal ballistic effect makes the STRIKE™ family the perfect choice for the modern hunter.

BONDSTRIKE™

TIPSTRIKE™

ECOSTRIKE™





BONDSTRIKE™ EXTREME



BONDSTRIKE™ EXTREME
AVAILABLE IN FOLLOWING
CALIBERS:

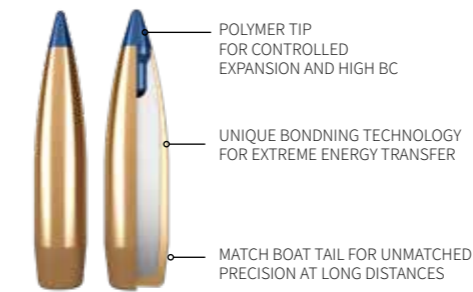
- 308 Win.
- 30-06 Spring.
- 300 WSM
- 300 Win. Mag.
- 300 RUM
- 6,5x55 SE **NEW**
- 6,5 Creedmoor **NEW**
- 6,5-284 Norma **NEW**

LONG-RANGE HUNTING BULLET WITH AN IMPRESSIVE BC

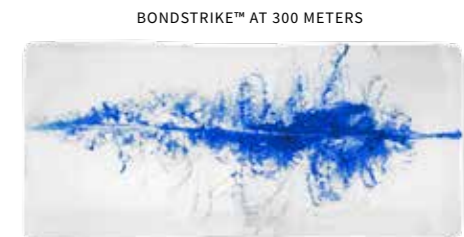
BONDSTRIKE™ Extreme is designed for long-range accuracy and excellent performance on game at all distances. With a state-of-the-art polymer tip, proprietary bonding and a match-style boat tail, BONDSTRIKE™ Extreme delivers an unmatched combination of long-range precision, penetration and terminal ballistics. Norma's engineers developed a unique bonding technology to maximize weight retention and ensure a devastating wound channel through controlled expansion at all velocities. Combined with the inherent accuracy of Norma's sophisticated boat tail bullet design, BONDSTRIKE™ Extreme is the ideal cartridge for hunting whitetail deer, elk, antelope or any other medium to large-sized game.



PRODUCT FACTS: You'll find all our ballistic data at the back of the catalogue. There's also loads of great information on our website – scan the QR code to read more about BONDSTRIKE™.



6,5 MM AND .30 CAL



EXPANSION AT DIFFERENT SHOOTING DISTANCES



100 M



500 M



800 M

norma[®]

DEDICATED SINCE 1902

NEW 2020

BONDSTRIKE[™]
EXTREME

NOW IN LONG-AWAITED 6,5 CALIBER

Following the success of BONDSTRIKE .30, we're now launching BONDSTRIKE 6,5. A bullet perfect for long-range hunting at up to 900m. Good flight properties bring maximum precision to your shot and Norma's unique bonding technology gives a controlled and deadly expansion on various ranges from medium to long distance.



We shot Bondstrike 6,5 Creedmoor at 1000 m with a perfect hit. Have a look at our video from the shot.

DH Dedicated Hunting



TIPSTRIKE™ AVAILABLE IN FOLLOWING CALIBERS:

- 222 Rem. Varmint
- 223 Rem. Varmint
- 22-250 Rem. Varmint
- 243 Win. Varmint
- 270 Win.
- 270 WSM
- 7x57R
- 7x64
- 7mm-08 Rem.
- 7mm Rem. Mag.
- 7x65R
- 280 Rem.
- 308 Win.
- 30-06 Spring.
- 300 WSM
- 300 Win. Mag.
- 300 RUM

FOR FAST AND CHALLENGING HUNTS

TIPSTRIKE™ has been developed for maximum impact and stopping power, combined with outstanding energy transfer and penetration deep enough to reach the vital organs of game. The polymer tip ensures expansion and a devastating shock effect, mediated through the thin jacket construction. The jacket is reinforced with a mechanical lead lock, to maintain high penetrating power when hitting bone or passing through thick skin or heavy muscle tissue. This makes TIPSTRIKE™ an outstanding bullet for driven hunts, when you need an instant knockdown.

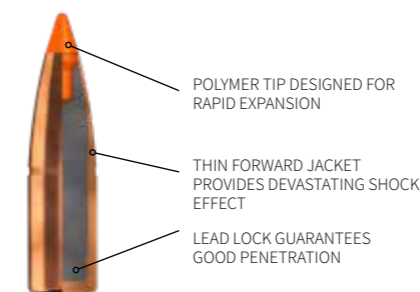


PRODUCT FACTS: You'll find all our ballistic data at the back of the catalogue. There's also loads of great information on our website – scan the QR code to read more about TIPSTRIKE™.



TIPSTRIKE VARMINT - HIGHLY EFFECTIVE

A cartridge based on our successful TIPSTRIKE™ bullet but with a few other properties adapted for hunting with smaller calibres, such as 223 Remington. Varmint is used mainly for smaller species such as fox and badger; animals that need a rapid knockdown. With its polymer tip and thin jacket, this bullet expands rapidly and transfers much of its energy upon impact.



DH **ECOSTRIKE™**



ECOSTRIKE™
AVAILABLE
IN FOLLOWING
CALIBERS:
7x64
7mm Rem. Mag.
7x65R
308 Win.
30-06 Spring.
300 WSM
300 Win. Mag.
8x57 IRS (JRS)
8x57 IS (JS)
9,3x62
9,3x74R
375 H&H Mag. **NEW**

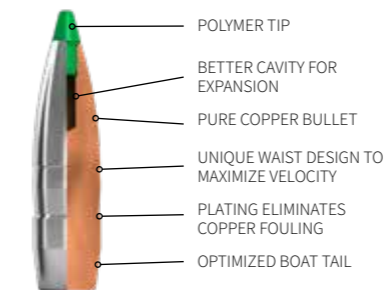
PRODUCT FACTS: You'll find all our ballistic data at the back of the catalogue. There's also loads of great information on our website – scan the QR code to read more about ECOSTRIKE™.



LEAD-FREE FOR THE MODERN HUNTER



ECOSTRIKE™ brings the latest in bullet technology to a lead-free projectile. ECOSTRIKE™ features a lead-free, copper bullet design for quality penetration and an almost 100% weight retention. The polymer tip assists with bullet expansion and decreases drag, while its boat tail design increases its ballistic coefficient and maximizes wind resistance. The ECOSTRIKE™ projectile is engineered with a cavity to guarantee optimal expansion, even at low velocities. Its proprietary plating also increases barrel life. ECOSTRIKE™ is a great choice for hunting medium and large game because of its ability to expand at both low and high velocities.



EXPANSION AT DIFFERENT SHOOTING DISTANCES





**ORYX™
AVAILABLE
IN FOLLOWING
CALIBERS:**

- 222 Rem.
- 22-250 Rem.
- 223 Rem.
- 243 Win.
- 6,5x55 SE
- 270 Win.
- 270 WSM
- 270 Wby. Mag.
- 7x57
- 7x57 R
- 7x64
- 7 mm Blaser Mag.
- 7 mm Rem. Mag.
- 7x65 R
- 7 mm Wby. Mag.
- 280 Rem.
- 7,5x55 Swiss
- 308 Win.
- 30-06 Spring.
- 300 WSM
- 300 Norma Mag.
- 300 Win. Mag.
- 300 Wby. Mag.
- 300 RUM
- 30-378 Wby. Mag.
- 308 Norma Mag
- 8x57 IRS (JRS)
- 8x57 IS (JS)
- 8,5x55 Blaser **NEW**
- 338 Win. Mag.
- 340 Wby. Mag.
- 35 Whelen
- 358 Norma Mag.
- 9,3x57
- 9,3x62
- 9,3x74 R
- 375 H&H Mag

**ORYX™
SILENCER
AVAILABLE IN
FOLLOWING
CALIBERS:**

- 6,5x55 SE **NEW**
- 308 Win. **NEW**
- 30-06 Spring. **NEW**
- 8x57 JS **NEW**
- 9,3x62 **NEW**

OUR ALL-TIME CLASSIC

Oryx is our most popular cartridge family, offering a wealth of variants.

This is a 'bonded bullet', meaning that the bullet's jacket and core are fused together to give strength and prevent jacket separation under significant stress. The result is a unique combination of rapid expansion for kill-shots and high weight retention (97 per cent!), plus deep penetration for those more demanding shots. Oryx penetrates the animal deeply and cleanly without disintegrating in the meat. It's suitable for all types of hunting but especially large game, like elk.



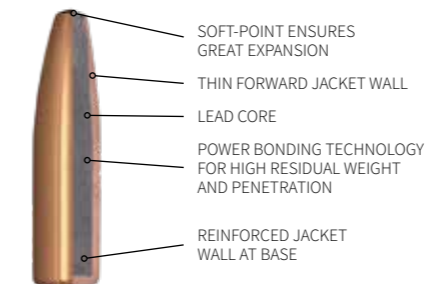
PRODUCT FACTS: You'll find all our ballistic data at the back of the catalogue. There's also loads of great information on our website – scan the QR code to read more about ORYX™.



ORYX™ **NEW
SILENCER**

Did you know a shorter barrel impacts speed negatively by 2,5 m/s per centimeter shorter barrel? Norma's new ORYX™ Silencer ammunition of the NORMA SILENCER SERIES takes care of this and much more in a new optimized product for 2020.

- Loaded with ORYX™, our toughest and most all-round bullet on the market
- Reduced muzzle flash
- Optimized speed and effect for shorter barrels
- Lower muzzle pressure extends the lifetime of your silencer



norma[®]

DEDICATED SINCE 1902

NEW 2020



DRYX[™]
SILENCER

OPTIMIZED FOR SILENCERS

Using silencers is becoming increasingly popular. There are various advantages; chiefly lower recoil and a quieter hunting environment. DRYX[™] Silencer of the new NORMA SILENCER SERIES is specially developed for the shorter barrels often preferred when shooting with suppressors. It means that muzzle velocity can be maintained with less muzzle pressure and minimal muzzle flash. All this without compromising any of the DRYX[™] family's best properties; instant deep penetration and deadly expansion, regardless of range.



DH RIMFIRE



RIMFIRE AVAILABLE IN
FOLLOWING CALIBERS:

- .17 HMR
- .22 WMR
- .22 LR SUBSONIC-22
- .22 LR JAKTMATCH
- .22 LR ECO SPEED 22 **NEW**
- .22 LR ECO POWER 22 **NEW**

SMALL GAME, BIG ADVENTURE

Our rimfire series covers every need that hunters of vermin or small game might have. We're proud to present a complete product range for discerning hunters. From high-fragmentation polymer-tipped bullets to hollowpoints with superior kinetic energy transfer and, from this year, a unique range of lead-free bullets with unrivalled penetration properties.

A UNIQUE LEAD-FREE OPTION WITH UNRIVALLED PERFORMANCE

New for this year is our lead-free ECO Speed-22, with a muzzle velocity exceeding all others on the market. The cartridge is 100% lead-free, including the primer, making it quite unique on the market.

Why unleaded primers? Well, if you do a lot of semi-auto shooting, all those harmful lead particles get into the air you're inhaling and can harm your internal organs.

Our second piece of lead-free news is the ECO Power-22, with its astonishing penetration - twice as much as the lead options out there. The bullet is a frangible product with high impact energy and thus ideally suited to hunts where power is all-important. This product is also 100% lead-free.





AFRICAN PH™



AFRICAN PH™
 AVAILABLE IN
 FOLLOWING
 CALIBERS:
 375 Fl. Mag. N.E.
 375 H&H Mag.
 404 Jeffery
 416 Rem. Mag.
 416 Rigby
 416 Taylor
 450 Rigby
 458 Lott
 458 Win. Mag.
 470 N.E.
 500 Jeffery
 500 N.E. 3"
 500/416 N.E.
 3"1/4
 505 Mag. Gibbs
 9,3 x 62

ONE SHOT, ONE KILL IS ALL THAT COUNTS

Norma's cooperation with Woodleigh bullets offers the finest dangerous game ammunition available. Tried and tested steel-jacketed solids and bonded-core soft points are coupled with high quality Norma brass and powder and loaded under the most rigorous inspection standards in the industry. Nickered cases are used to ensure the most reliable feeding and ejection from rifles whose metal work is too hot to touch or full of the inevitable African dust. The Woodleigh FMJ bullets use a steel jacket twice as thick as any other in the industry. Cases are all hand inspected both before and after loading.

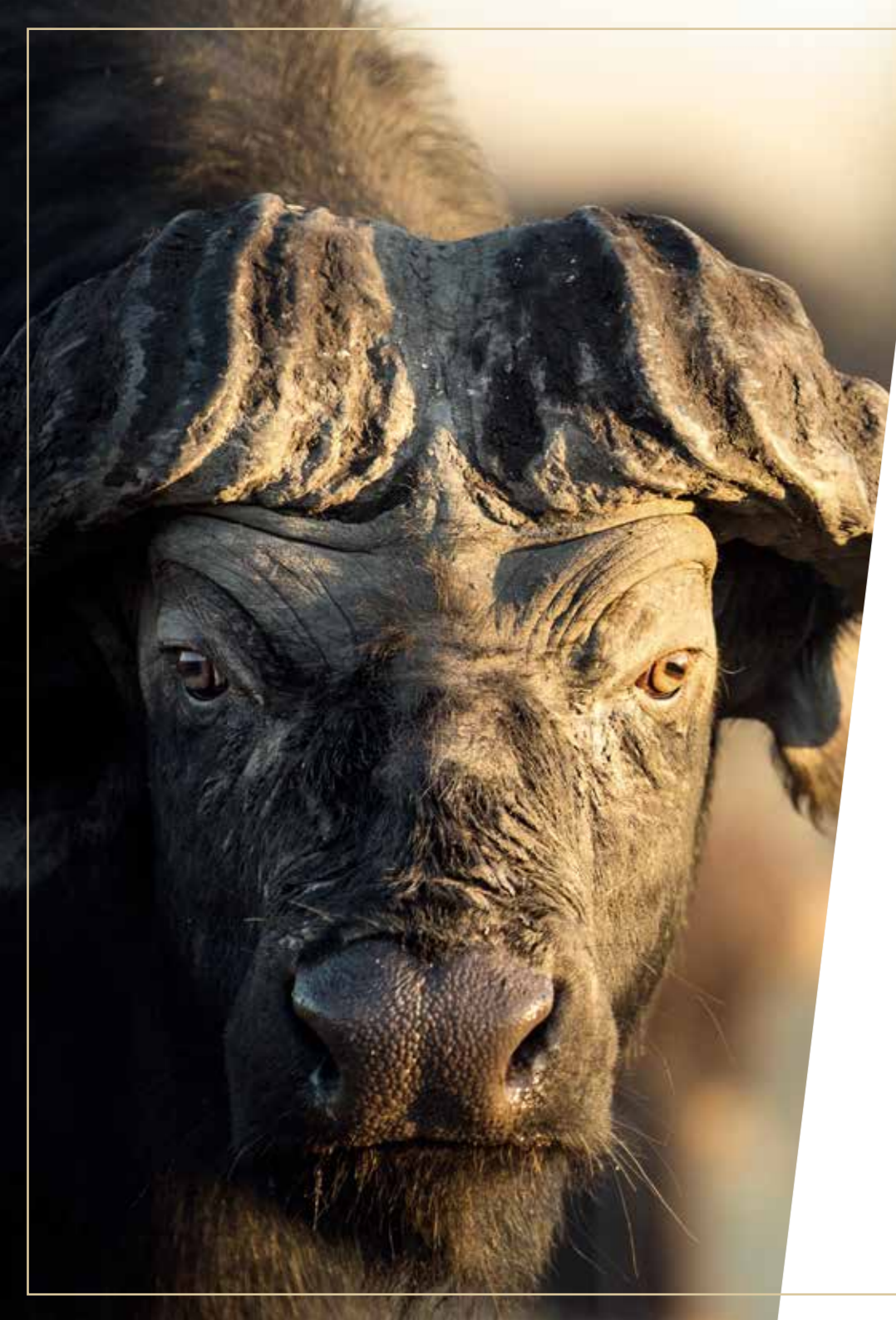
NORMA SOLIDS

For the working guide, there are three considerations for ammunition: reliable feeding, reliable ignition and reliable straight-line penetration. Many guides like to carry their rifles with an empty chamber and only load when danger threatens. The Norma Solids are designed to ensure reliable feeding in just about any make of rifle, including old, well-worn ones. The law often forces a guide to allow a charging animal to get very close before he may fire the rifle so every shot must count. Being made from a proprietary brass alloy, Norma Solids are guaranteed not to break up, turn or deviate. All African PH ammunition is inspected and loaded at our Åmotfors factory.



PRODUCT FACTS: You'll find all our ballistic data at the back of the catalogue. There's also loads of great information on our website – scan the QR code to read more about AFRICAN PH™.





375 HOLLAND & HOLLAND MAGNUM
22,7 g / 350 gr

The 375 H&H Magnum is often seen as the queen of African mediums. And this versatile cartridge introduced by Holland & Holland in 1912 is an African Queen. The 375 H&H Magnum is probably the most used big game cartridge through history, and has taken its share of all African big game. And the 375 H&H Magnum is just getting better with the newest loadings.



404 RIMLESS NITRO EXPRESS JEFFERY
29,2 g / 450 gr

Introduced in 1909 and chambered in a Mauser action, the 404 became the workhorse of several African game departments. Not nearly as famous as other cartridges for African big game, it was still much more widely used. The 10.75x73 in modern loadings is better than ever, and will remain one of the greatest cartridges for big game in Africa.



375 FLANGED MAGNUM NITRO EXPRESS
19,4 g / 300 gr

In 1912, the most famous pair of big game cartridges came along: the belted 375 H&H Magnum for bolt action rifles and the 375 H&H Flanged Magnum for double rifles. They soon established themselves as the standard cartridges for the safari industry. The decline in popularity of double rifles after WWII reduced demand for 375 Flanged Magnum ammunition, and with the closure of Kynoch in 1967 supplies of factory-loaded 375 Flanged dried up – until Norma reintroduced it as part of the premium African PH line in 2008.



416 RIGBY
29,2 g / 450 gr

The 416 Rigby is one of the most famous cartridges for Africa. It was introduced in 1911 and with strong bullets and low pressures it was always reliable when hunting dangerous game. Following renewed interest in classic African cartridges, the 416 Rigby is seeing a new dawn, and more 416 Rigby rifles are being built than ever before.



416 REMINGTON MAGNUM
29,2 g / 450 gr

The 416 Remington Magnum is the first American-made 416, introduced in 1988 because of growing interest in the 416 calibre for hunting in Africa. The 416 Remington Magnum has the advantage of fitting into many common magnum actions that can take the 375 H&H, yet it delivers more or less the same ballistics and energy as the old 416 Rigby. That's enough for the whole game.



470 NITRO EXPRESS
32,4 g / 500 gr

Introduced in 1900, it became popular after 1907 with the banning of 45 calibre cartridges in India and Sudan. The 470 NE is the most popular cartridge in new double rifles for big game hunting in Africa, and in modern loadings, the classic 470 NE is better than ever.



500 JEFFERY
36,9 g / 570 gr

The 500 Jeffery cartridge was first introduced around 1920 as the 12.7x70mm Schuler, and some Krieghoff-Schuler magnum rifles were chambered for it. The 500 Jeffery/12.7x70 Schuler was the most powerful rifle cartridge before WWII, loaded to higher pressures than the better known 505 Gibbs. By offering a factory loaded 500 Jeffery, Norma is achieving its ambition to meet the demands of hunters. The interest in old, large-bore African cartridges is steadily increasing.



500/416 NITRO EXPRESS
26,6 g / 410 gr

Most of the classic Nitro Express cartridges are about a hundred years old. The 500/416 NE only goes back a few years and was developed by Krieghoff, who wanted a rimmed round with performance equalling that of the 416 Rigby. The 500/416 NE is a big game cartridge for double rifles using the 500 NE case and the classic 416 calibre bullet.



450 RIGBY RIMLESS
35,6 g / 550 gr

It's said that all Rigby cartridges are made with Africa in mind. The newest one is the 450 Rimless and it was introduced in 1995. Based on the famous 416 Rigby, this big 45 can give strong, heavy bullets higher velocities than smaller 458 Lott cases. The 450 Rigby Rimless is still new, but it is already famous in Africa.



500 NITRO EXPRESS 3"
36,9 g / 570 gr

The 500 Nitro Express 3" was developed from black powder cartridges, and the first smokeless 500 came in the 1890s. The big 500 NE-Double became a favourite among elephant hunters, and is now in a time of renewed interest. More and more double rifles in 500 NE are being built and the time-honoured classic with new bullets will hunt in Africa again.



458 LOTT
35,6 g / 550 gr

The 458 Lott was introduced by Jack Lott in 1971. After having been injured by a buffalo in Mozambique, Lott wanted more than a 458 Winchester Magnum. To improve the 458 WM the Lott case was made three-tenths of an inch longer for more case capacity. The 458 WM cartridge can be used in firearms chambered for the 458 Lott, and many African Professional Hunters now use the 458 Lott as their preferred round.



505 MAGNUM GIBBS
39,0 g / 600 gr

Developed by George Gibbs in 1911, the 505 was made famous by Ernest Hemingway's story, 'The Short Happy Life of Francis Macomber'. The big 505 Magnum Gibbs is enough cartridge for all African hunting, and is a formidable performer with modern bullets in a big rifle.



JAKTMATCH™



JAKTMATCH
AVAILABLE
IN FOLLOWING
CALIBERS:

- 222 Rem.
- 22-250 Rem.
- 223 Rem.
- 243 Win.
- 270 Win.
- 270 Win. WSM
- 300 Win. Mag.
- 300 WSM
- 30-06 Spring
- 308 Win.
- 338 Win. Mag.
- 358 Norma Mag.
- 6XC
- 6,5x55 SE
- 7 mm Rem. Mag.
- 7x57 R
- 7x65 R
- 8x57 JRS
- 8x57 JS
- 9,3x57
- 9,3x62

TO PERFORM THE BEST YOU NEED TO PRACTICE WITH THE BEST

Practicing shooting on a regular basis is the only way to be a responsible hunter. Ideally, you should use the gun you hunt with and ammunition that performs consistently and is close to your hunting ammunition.

For many years, Norma Jaktmatch has been the hunter's first-hand choice of practice ammunition.

The full metal jacket and the superior precision also makes it perfect for peak hunting forest birds on long distances in the winter.

All components in the Jaktmatch cartridges are of the highest quality.

The fired cases provide the reloader with a top quality product for reloading.

- Perfect for capercaillie hunting
- Consistent flight from shot to shot
- The market-leading practice ammunition for hunting



DH AIRGUN PELLETS

HIGH KNOCK-DOWN POWER AND EXCELLENT PENETRATION

With the goal to fulfil all needs in the ammunition world and become your unique supplier, Norma is proud to announce our new line of airgun pellets. With an understanding of the new trends and new fields of application together with our cutting-edge technologies, we have streamlined the range to fit a broad range of purposes.

Airgun rifles and airgun pistols have also experienced advances in technologies such as PCP systems, different power levels and repeating magazines for instance. To find the right airgun pellet for your gun and for your specific purposes, just let yourself be guided by the icons on the packages. Our line of hunting pellets offers excellent precision and high knock-down power as well as superior penetration for a successful hunt.



GOLDEN TROPHY FT
Golden trophy FT has twice knock-down power than standard pellets and excellent precision at long ranges.

- Field target and hunting pellet
- Airguns up to 24J.
- Ideal for field target and hunting (below 25 meters)
- Knock-down and precision

GOLDEN TROPHY FT HEAVY
Golden trophy FT heavy is developed to perform on high powered airguns. Astonishing precision at distances up to 50 meters.

- Field target and hunting pellet
- Airguns above 24 J (high powered)
- Ideal for field target and hunting (up to 50 meters)
- Knock-down and precision

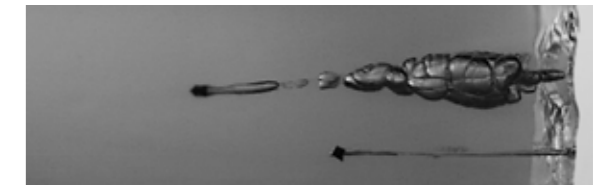
SUPERPOINT STRIKE
Superpoint strike has 70% more penetration than standard pellets, perfect combination for hunting or pest control.

- Hunting and plinking pellet
- Airguns below 24J.
- Ideal for hunting and plinking
- Penetration

GOLDEN TROPHY EXPANSION



SUPERPOINT VS HOBBY





Dedicated Precision



DEDICATED TO PRECISION

We are proud of our sponsored shooters that fill the podiums all over the world with their rifles loaded with Norma's factory loads.

Working with shooters, improving our products and ensuring that we always deliver precision are important parts in our research and development to match the high standards of elite shooters around the world.

Our task is to deliver precision in every shot so that your ammunition is just an extension of your own capacity as a shooter. Our Dedicated Precision™ line features the finest components and highly designed factory loads for the most intense competitions. Whether you're racing through one of the toughest stages of the weekend, or focusing your crosshairs on the x-ring, Norma has the ammunition for you.



PRODUCT FACTS: You'll find all our ballistic data at the back of the catalogue. There's also loads of great information on our website – scan the QR code to go there now.





BULLSEYE AND LONG-RANGE SHOOTING AS CLOSE TO IDEAL AS YOU'LL GET

The ammunition you use should be an extension of you as a competitive shooter. Norma has a long and vibrant relationship with bullseye shooting and competition shooting and has spent decades developing products with repeatable precision and performance.

"It's a matter of composition and the interaction between all parts of the cartridge. Thousands of hours go into each box. In making our ammunition, we quality-test, research and improve in order to find optimum loads," says Anders Brolund, Key Account Manager at Norma and former elite-level competition shooter.

When it comes to moving with the times in ammunition development, Norma has always been a world-leader. In competition shooting, the biggest changes have been on the weapons side; from how the guns look to how shooters can adjust and optimise their specific settings.

"The most important thing for shooters is reliability. When you get a box of cartridges, you want to know you're as close to ideal as you can be. That's what Norma stands for. Many competitive shooters prefer to load their own. I've tried developing my own loads too, but haven't found any that perform better or more reliably than Norma's factory ammo," says Brolund. "When you find a round that performs with total precision in your rifle, you don't change it. That's the relationship many of the world's elite shooters have had with Norma over the years and we're proud of it."



ANDERS BROLUND, SWEDEN,
NORMA EMPLOYEE AND FORMER EUROPEAN CHAMPION

FACTORY LOADING ENABLES HIGH QUALITY CONSISTENCY

Anders Brolund is International Key Account Manager at Norma. Alongside his past work in many stages of Norma's production line, his background is as an elite marksman in 300m long-range shooting. He knows what's required, of both shooter and ammunition.

"Ninety per cent of shooting is psychological, and everyone reacts differently when they're about to do well in a major championship. You need to be able to maintain considerable focus and repeat the same shot and routine over and over again. If you miss a shot, you could be out. That's both the joy and the challenge of the sport," says Anders.

From the beginning, shooting was a way for Anders to spend more time with his father, who was Sweden's best marksman in the 60s, 70s and 80s. As a fifteen-year-old, Anders himself became the youngest person ever to represent the Swedish youth national team. After a life spent on shooting ranges around the world and medals in many national and international championships, one particular competition stands out.

"The European Shooting Championships 2013. I'd dropped a shot and had a chance at 599. My last shot in that competition was the hardest I've experienced, but it was also the moment that best describes what's so captivat-

ing about competition shooting. You're under such extreme psychological pressure that your body wants to run away, but I managed to pull myself together and maintain my plan and focus. Afterwards, when the tension dissipated, I broke down and cried," says Anders.

Testing your limits

Long-range shooting has become increasingly popular, largely because the discipline is dynamic and challenging. Shooting at 300 meters without magnification is demanding – not just on your aim, your psyche and the interaction between the shooter and rifle – you also have to be able to read wind and mirage to estimate the bullet trajectory. A competition shooter is driven by constantly testing their limits. Since today's guns and factory-loaded ammunition are of such high quality, the shooter can focus even more on developing their abilities and focusing on variables such as breathing, position and pulse. Being able to use a factory-loaded charge that gives repeatable results time and time again produces an extremely high degree of confidence and even greater opportunities for the shooter to test their real limits. So, what distinguishes the out-and-out world elite from everyone else?

"Training, trust and experience. A lot of the world's best shooters have a background in policing or the military. They've trained and learned to perform and focus in difficult conditions. The more you practice, the better you become. Believing in yourself is also a basic requirement for being able to perform under pressure and enjoy what you do," says Anders Brolund, International Key Account Manager at Norma and former elite marksman.



DIAMOND LINE™



PRODUCT FACTS: You'll find all our ballistic data at the back of the catalogue. There's also loads of great information on our website – scan the QR code to read more about DIAMOND LINE™.

THE OBVIOUS CHOICE FOR THE ELITE MATCH SHOOTER

Diamond Line is our bullet range for the most demanding competitive shooters. The molybdenum-coated bullet gives unmatched precision at long distances and minimal barrel-wear. All bullets are carefully designed for the best

flight properties, with a boat tail for a high BC and a very slender profile. Diamond Line is the obvious choice for the top tier elite and countless gold medals have been won using this well-designed range of ammunition.

INTERNATIONAL SHOOTING



6XC
The task of improving on the 6 BR is not at all easy, but we feel that the 6XC is at great contender. Many shooters claim they shoot better with the 6XC than anything under heaven. Whenever wind is an issue, the 6XC should be your choice..



308 Win MATCH
This is the classic cartridge for international match competitions using standard and free rifles. It is loaded with a 10,9 g molycoated hollowpoint bullet.



6MM NORMA BR
For ten years, this has been the dominant cartridge in international Match events. The 6mm Norma BR is the perfect combination of extreme accuracy, minimal drift and light recoil. It is the most frequently used round for major international championships, and uses a molycoated hollowpoint weighing 6,8 g.

NATIONAL SHOOTING



6,5x55 BANA
Superior ammunition for National Match Shooting, this load gives perfect muzzle velocity. The high BC gives low drift and maximum accuracy. Recoil is low, and the molycoated 130-grain hollow point makes for long barrel life.



6,5x55 FÄLT
A top field shooters' favourite, loaded for maximum accuracy at long ranges. High muzzle velocity and BC give low trajectory and minimal drift, and the moly-coated 130-grain hollowpoint provides long barrel life.



DPR Dedicated Precision



GOLDEN TARGET™



PRODUCT FACTS: You'll find all our ballistic data at the back of the catalogue. There's also loads of great information on our website – scan the QR code to read more about GOLDEN TARGET™.

TOP PRECISION FOR LONG AND SHORT-RANGE SHOOTERS

Golden Target has been designed for discerning, high-level competitive shooters who shoot volume when training. These bullets are designed for the best flight properties. They have a very high BC, with a match boat tail and a price to suit most pockets.

NATIONAL SHOOTING



6,5x55 BANA & FÄLT

This is an all-round cartridge for match and field shooting competition, loaded with a 130-grain uncoated hollowpoint. It exhibits top accuracy but costs less.



6,5x55 BANSKYTTE/REKRUTT

This is an accurate training and competition round with low recoil and excellent results at a low price. It is loaded with a 100-grain uncoated hollow point.



30-06

A 30-06 match cartridge with very good accuracy, the Golden Target is loaded with an uncoated 150-grain full metal jacket projectile.



308 Win

This new 308 Winchester Match cartridge is loaded with a 150-grain uncoated full metal jacket bullet and exhibits match accuracy at a lower price than the 308 Diamond Line.

LONG-RANGE SHOOTING



300 NORMA MAGNUM

The .300 Norma Mag. .30 caliber round, making use of the 14,9 g and 15,6 g match bullets, was designed so that the same set of headspace gauges and magazines could be used for rifles chambering the .300 NM as the .338 NM. This .30 caliber cartridge, offers long-range shooting and good barrel life with high velocities.



338 NORMA MAGNUM

Jimmie Sloan was given a clean slate to design the ideal .338 cartridge for shooting a 19,4 g Sierra Match King bullets with the best accuracy and highest possible velocity within a maximum load cartridge length of 93,5 mm (3.68"). The result is the .338 Norma Magnum.



DPR RIMFIRE



TOP PERFORMANCE WITH OUR RIMFIRE SERIES

We offer the highest standards of quality and the best performance out there. Our rimfire products maintain the most stringent production controls in the industry.

Having our own production process means we can monitor every stage of production, ensuring that every one of our batches meets our high standards.

Our rimfire cartridges are made for perfect performance in every category. Whether you're competing, practising or shooting at various targets with a semi-auto, single-action or repeating rifle, Norma's rimfire series will deliver what you need.

2020 Norma returns to the competition scene in Biathlon with a new and updated line of high quality rimfire cartridges in 22 lr.

Norma Biathlon Match-22 and Biathlon Sport-22 offers consistent accuracy and precision even below - 20°C. The products are carefully tested in Norma's own cold tunnel up in Åmotfors where we can simulate both arctic conditions and quick temperature changes.

The new ammunition comes with both newly developed primers and powder and we give the shooter a product with much better flying capabilities than the rest of the market.

The velocity is higher than the rest of the market, averaging ~325 m/s.



MATCH-22
Consistent performance and the best option for competition and training.



TAC-22
One of the best proven training cartridges with unbeatable quality.



BIATHLON MATCH-22 NEW
The new standard of accuracy for Biathlon competitors.



BIATHLON SPORT-22 NEW
Match quality training ammunition for Biathlon shooters.

DPR

AIRGUN PELLETS

FOCUS ON MAXIMUM PRECISION

Norma has expanded its product range with a new airgun pellets line for competition target shooting. At Norma we are continuously searching ways to provide the proper ammunition to sport shooters and plinkers. As the market is changing, it is very important for us to evolve and be flexible without losing our heritage.

In our search of the cutting-edge technologies and products for every category, we have developed different pellets with outstanding results in each field.

With our own manufacturing process we control every step in the production line in order to warranty that every batch accomplish our standards.



S-TARGET MATCH is the ideal pellet for competition and training with tested grouping of 7mm at 10 meters.

- Competition and training pellet
- Airguns below 16J.
- Ideal for indoor shooting range
- Outstanding accuracy

TIN

Desription	Caliber	Weight	Ctg./box [pcs]
S-TARGET MATCH	4,5MM	0,53G	300ER
S-TARGET MATCH	5,5MM	0,91G	200ER

BLISTER

Desription	Caliber	Weight	Ctg./box [pcs]
S-TARGET MATCH	4,5MM	0,53G	300ER
S-TARGET MATCH	5,5MM	0,91G	200ER



Dedicated
Components

HIGHEST QUALITY RELOADING COMPONENTS MADE IN SWEDEN

Our Dedicated Components line comprises brass, bullets and powder. Mix and match to suit, according to your needs and personal preferences.

In many ways, reloading is more science than art. In its most basic form, it's about following step-by-step instructions, using a handful of tools and components. As time goes by, you learn the basics and can then expand your hobby endlessly.

Norma's components are the first choice for ammunition manufacturers and reloaders the world over. With over a century's experience of loading ammunition at our factories, we understand what it takes to give reloaders everything they need to succeed.



PRODUCT FACTS: You'll find all our ballistic data at the back of the catalogue. There's also loads of great information on our website - scan the QR code to go there now.



"A BIT LIKE BREWING YOUR OWN BEER"

There are different reasons for reloading, control and cost being two and, of course, as a pastime in itself. We look at some of the concepts with Anton Brask, Category Manager at Norma.

"Lots of people shoot handloads. These are meticulous people, keen to find their own combination of brass, bullet and powder, tailored to their particular gun and discipline. Our brass is known for its high quality, so it often starts when they buy cases from us," explains Anton Brask, sporting shot, hunter and Category Manager at Norma.


"Of course, hunters also load their own and this is where the demands on powder are stiffest. Above all, its properties need to be extremely consistent, regardless of batch. This means repeatable performance. Our hunting bullets are also designed for maximum performance."

Norma's brass is world-renowned for its quality. Each case is consistent in weight, volume and dimensions. Shooters and hunters can reload them and use them again.

"Reloading is also a hobby in itself, albeit a bit of a nerdy one. You might compare reloaders to people who like beer and then go on to brew their own. That way you can do it exactly the way you want it," concludes Anton.



DC COMPONENTS

 **PRODUCT FACTS:** You'll find all our ballistic data at the back of the catalogue. There's also loads of great information on our website – scan the QR code to read more about our components.

NORMA BULLETS HALL OF FAME

ORYX

Oryx is one of our most reliable and well-known hunting bullets. At Norma we have developed a unique bonding method fusing the core and the jacket giving the bullet unique characteristics. A carefully engineered jacket, combined with a bonded core, yields a bullet that will not fragment even if heavy bone is hit, but will fully expand to a large diameter even when only soft tissue is encountered. The construction of the Oryx bullet allows a relatively thin jacket. Stringent demands on the material, measurement and weight combined with the construction and manufacturing process, ensures superior accuracy.

VULKAN

The Vulkan was an evolution of the Norma Cup handgun ammunition. The construction is a hollow point with the jacket folded over the walls at the nose to delay the explosive expansion of the bullet upon impact. A locking ring is incorporated in the design to minimize jacket and core separation. Internal scoring guides the fragmentation of the front half of the bullet into six major pieces. The bullet has found a particular group of users amongst wild boar hunters who want to ensure that the bullet has reached the lungs before expanding so as to minimize meat loss and yet guarantee a quick kill.

ALASKA









The Norma Alaska is the result of a century of evolution of Paul Mauser's original expanding bullet designs. Given the level of technology in the 1880's when Mauser first introduced modern style ammunition, production tolerances were decidedly 'sloppy' by current standards. Mauser and his team needed a bullet that would shoot just as well in a rifle with an oversized muzzle or a worn bore as in a new rifle. The final step was to accommodate it to Scandinavian hunting conditions. It needed to open reliably and not over penetrate on moose to endanger the dog or other hunters. At the same time, most hunters were actually hunting for food, and minimizing meat damage was an important consideration. The thickness of the jacket walls has changed slowly over time to cope with higher modern velocities but one of the key points has been the use of pure lead for the core so that it doesn't fragment and contaminate the surrounding meat.

STRIKE FAMILY

See page 20-29.














DC NORMA BULLETS









		BULLET TYPE BULLET WEIGHT GRAMS/GRAINS PRODUCT NUMBER	QTY/BOX
5,7 mm (.224)		FULL METAL JACKET 3,6g/55gr #20657081	100
		ORYX 3,6g/55gr #20657131	100
		SOFT POINT 3,4g/53gr #20657041	100
		SOFT POINT 3,2g/50gr #20657011	100
		SOFT POINT 4g/62gr #20657051	100
		TIPSTRIKE VARMINT 3,6g/55gr #20657001	100
6 mm (.243)		DIAMOND LINE 6,8g/105gr #10660162	500
		FULL METAL JACKET 6,2g/95gr #20660701	100
		ORYX 6,5g/100gr #20660501	100
		SOFT POINT 6,5g/100gr #20660031	100
		TIPSTRIKE VARMINT 4,9g/76gr #20660141	100








		BULLET TYPE BULLET WEIGHT GRAMS/GRAINS PRODUCT NUMBER	QTY/BOX
6,5 mm (.264)		GOLDEN TARGET 8,4g/130gr #10665091	500
		HOLLOW POINT BOAT TAIL 6,5g/100gr #10665201	500
		DIAMOND LINE 8,4g/130gr #10665081	500
		ALASKA 10,1g/156gr #20665321	100
		HOLLOW POINT BOAT TAIL 6,5g/100gr #20665201	100
		HOLLOW POINT BOAT TAIL 6,5g/100gr #20665202	500
		ORYX 10,1g/156gr #20665241	100
		FULL METAL JACKET 7,8g/120gr #20665141	100
		NYHET! BONDSTRIKE EXTREME 9,27g/143gr #20665651	100
		VULKAN 10,1g/156gr #20665351	100

		BULLET TYPE BULLET WEIGHT GRAMS/GRAINS PRODUCT NUMBER	QTY/BOX
.270		FULL METAL JACKET 8,4g/130gr #20669311	100
		ORYX 9,7g/150gr #20669501	100
		ORYX 10,7g/165gr #20669601	100
		TIPSTRIKE 9,1g/140gr #20669241	100
		VULKAN 10,1g/156gr #20669351	100
7 mm (.284)		FULL METAL JACKET BT 9,72g/150gr #20670031	100
		ORYX 10,1g/156gr #20670041	100
		ORYX 11g/170gr #20670051	100
		TIPSTRIKE 10,4g/160gr #20670141	100
	VULKAN 11g/170gr #20670061	100	

DC NORMA BULLETS

		BULLET TYPE BULLET WEIGHT GRAMS/GRAINS PRODUCT NUMBER	QTY/BOX
.30 (.308)		DIAMOND LINE HPBT 10,9g/168gr #10676351	100
		DIAMOND LINE HPBT 12g/190gr #10676361	100
		ALASKA 11,7g/180gr #20676481	100
		FULL METAL JACKET BT 9,45g/146gr #20676511	100
		FULL METAL JACKET BT 9,45g/146gr #20676512	500
		ORYX 10,7g/165gr #20676161	100
		ORYX 11,7g/180gr #20676441	100
		ORYX 12,96g/200gr #20676391	100
		BONDSTRIKE EXTREME 11,7g/180gr #20676871	100
		TIPSTRIKE 11g/170gr #20676891	100
	VULKAN 11,7g/180gr #20676531	100	

		BULLET TYPE BULLET WEIGHT GRAMS/GRAINS PRODUCT NUMBER	QTY/BOX
8 mm (.323)		ALASKA 12,7g/196gr #20680031	100
		FULL METAL JACKET 8g/123gr #20680141	100
		ORYX 12,7g/196gr #20680011	100
		VULKAN 12,7g/196gr #20680201	100
.338		FULL METAL JACKET BT 14,6g/225gr #20686101	100
		ORYX 14,9g/230gr #20686161	50
.358		ORYX 16,2g/250gr #20690071	50
		FULL METAL JACKET 15g/232gr #20690091	100

		BULLET TYPE BULLET WEIGHT GRAMS/GRAINS PRODUCT NUMBER	QTY/BOX
9,3 mm (.366)		ALASKA 18,5g/285gr #20693161	50
		FULL METAL JACKET 15g/232gr #20693061	100
		ORYX 15g/232gr #20693071	100
		ORYX 18,5g/285gr #20693081	50
		ORYX 21,1g/325gr #20693121	50
		VULKAN 15g/232gr #20693051	100
.375		ORYX 19,4g/300gr #20695071	50

NORMA'S SUPERIOR BRASS CASES

Norma products are known worldwide for high quality. Cartridge cases are an important factor in this reputation. Superior quality ensures a long life and many reloads. Norma cases are made of the best possible raw materials with the narrowest tolerances, and they deliver accuracy round after round.

The case neck is annealed to become softer. This prevents gas leaks and enables the case to hold the bullet firmly for at least 10 years without cracking as a result of aging material.

Further down the case body, the hardness increase to avoid unnecessary stretching. If it is too hard, it would bring the risk of cracks. Furthest down, around the primer pocket, the brass should be firm. Here, the hardness is nearly twice that of around the neck.

The structure of the material reveals the hardness. During processing the large, soft grains are broken down into smaller ones, which makes for a harder material. At the annealing, small grains become bigger and the hardness decreases.

CALIBRE	PRODUCT#
17 Rem.	# 20243011
204 Ruger	# 20255101
5,6x52R	# 20256041
220 Swift	# 20257011
221 Rem. Fireball	# 20256026
300 AAC Blackout	# 20275061
222 Rem.	# 20257111
223 Rem.	# 20257211
22-250 Rem.	# 20257311
22 PPC USA	# 10257101
243 Win.	# 20260011
6 PPC USA	# 10260101
6mm Norma BR	# 10260151
6mm Dasher	# 20260251
6mm XC	# 10260181
25-06	# 20264111
6,5-284	# 20265281
6,5 Jap.	# 20265311
6,5 Carcano	# 20265351
6,5x54 MS	# 20265451
6,5 Creedmoor	# 20265131
6,5 Grendel	# 20265111
6,5x55	# 20265511
260 Rem.	# 20266021
264 Win. Mag.	# 20268021
270 Win.	# 20269011
270 WSM	# 20269071
7x57	# 20270011
7x57R	# 20270041
7x61 Super	# 20270111
7x64	# 20270121
7x65R	# 20270181
7mm Rem. Mag.	# 20270211

CALIBRE	PRODUCT#
7mm RUM	# 20270251
7mm Blaser	# 20270451
7mm-08 Rem.	# 20270221
280 Rem.	# 20270501
7,5x55 Swiss	# 20275111
300 Norma Mag.	# 20275611
300 SAUM	# 20276111
300 RUM	# 20276861
300 Blaser Mag.	# 20276821
308 Win.	# 20276231
7,62x54R	# 20276341
308 Norma Mag.	# 20276371
30-06 Spring.	# 20276401
300 H&H	# 20276531
300 Win. Mag.	# 20276661
300 WSM	# 20276761
7,65 Arg.	# 20277011
7,7 Jap.	# 20277211
8x57JS	# 20280011
8x57 JRS	# 20280141
338 Win. Mag.	# 20285041
338-06 A-Square	# 20285111
338 Lapua Mag.	# 10285071
338 Norma Mag.	# 10285201
338 Blaser Mag.	# 20285251
358 Norma Mag.	# 20290011
35 Whelen	# 20290021
9,3x57	# 20293011
9,3x62	# 20293111
9,3x74R	# 20293211
375 H&H Mag.	# 20295011
375 Blaser Mag.	# 20295211
375 Flanged Mag. NE	# 20295151

CALIBRE	PRODUCT#
404 Rimless NE	# 20210431
416 Rigby	# 20210601
416 Taylor	# 20210671
416 Rem. Mag.	# 20210691
500/416 NE	# 20210701
45 Basic	# 20211231
45-120	# 20211251
450 Rigby	# 20211401
458 Win. Mag.	# 20211551
458 Lott	# 20211571
470 NE	# 20211631
500 Jeffery	# 20213151
500 NE	# 20213001
505 Magnum Gibbs	# 20213101

WEATHERBY MAGNUM

224 Wby. Mag.	# 20257401
240 Wby. Mag.	# 20260201
257 Wby. Mag.	# 20265021
270 Wby. Mag.	# 20269121
7 mm Wby. Mag.	# 20270321
300 Wby. Mag.	# 20276601
30-378 Wby. Mag.	# 20276771
338-378 Wby. Mag.	# 20285161
340 Wby. Mag.	# 20286021
375 Wby. Mag.	# 20295131
378 Wby. Mag.	# 20295121
416 Wby. Mag.	# 20210651
460 Wby. Mag.	# 20211601

NORMA CASES FOR RELOADING COMES IN PACKS OF 50 OR 100.

FLEXIBLE RANGE OF POWDERS

The shooter using Norma powder can safely trust that loading data, pressure, velocity and accuracy are maintained at the same high level from lot to lot. A flexible range of powders offers the handloader many opportunities to load the best possible cartridges in any calibre choice.

Many manufacturers use Norma gunpowder in their factory loads today which is the best proof of Norma's high quality gun powder.



NORMA 200 POWDER

Our fastest-burning propellant is suitable for smaller cartridges such as the 222 Remington and 22 Hornet. It can also be used to shoot lightweight, low velocity bullets in medium calibres such as the 308 Win. 500 g/canister. Product # 20902005

NORMA 201 POWDER

This is very suitable for calibres with small case volume in relation to the bore size, such as 9,3x57 and 45-70. It's also the right choice for shooting lightweight bullets in medium-sized cases such as the 30-06. 500 g/canister. Product # 20902015

NORMA 202 POWDER

Specially developed to provide maximum performance in the 308 Winchester, 202 is a very useful powder for cases with medium capacity compared to calibre, such as the 8x57, 9,3x62 and 9,3x74R. 500 g/canister. Product # 20902025

NORMA 203B POWDER

Specifications for 203B differ slightly from the previous 203 powder. It is flexible, and is useful from 22-250 to 358 Norma Mag. It is very suitable for 6 mm Norma BR and 308 Winchester loaded with heavier bullets. 500 g/canister. Product # 20902035

NORMA 204 POWDER

A slow-burning propellant, 204 provides good performance and quite good accuracy in calibres such as 6,5x55 and 30-06. 500 g/canister. Product # 20902045

NORMA MRP POWDER

A very flexible magnum powder, MRP is suitable for calibres with relatively large case volume in relation to the calibre. It has been well-known for many years as a high performance powder in all magnum calibres. 500 g/canister. Product # 20902155

NORMA 217 POWDER

This is a very flexible magnum powder, suitable where there is relatively large case volume in relation to the bore size. It has been well-known for many years as a high performance powder in all magnum calibres. 500 g/canister. Product # 20902175

NORMA URP POWDER

A high-energy, mid-range propellant, URP is an excellent choice for medium-sized cartridges such as 7x64 and 30-06. 500 g/canister. Product # 20902195

NORMA MATCH POWDER 1211

500 g/canister. Product # 10902117

NORMA MATCH POWDER 1214

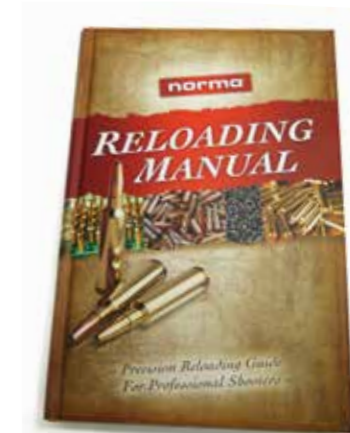
500 g/canister. Product # 10902147

Reloading data for sports and hunting cartridges are available at www.norma-ammunition.com or in Norma's Reloading Manual. Please note that for the match powders 1211 and 1214 data may be found only on the cans.

Norma reloading manual

Our history of loading the best ammunition in the world has helped us become experts on powder, recipes and other details that ensure a successful hunt, a great showing in competition or just some fun on the range. That's why the Norma Reloading manual is a must for beginners or seasoned veterans of reloading.

It contains up-to-date information, important know-how and information to keep you and your reloads at the top of your game. Log on to www.norma-ammunition.com to learn more and track down your copy today.



WE MANUFACTURE MORE THAN 200 RIFLE BARRELS A YEAR IN OUR WORKSHOP

BALLISTIC DATA

BALLISTICS – WHAT’S WHAT?

Some details are straightforward but there are certain technical terms, which can be a bit difficult to fully grasp. These are fleshed out a bit below.

BULLET TYPE BULLET WEIGHT G/GR PRODUCT NUMBER	BC	VELOCITY M/S				ENERGY JOULE				ZERO RANGE	HEIGHT OF TRAJECTORY ABOVE LINE OF SIGHT IN AT METERS FOR SIGHT 40 MM ABOVE BORE						WIND DRIFT IN MM FOR A 5 M/S CROSS WIND		
		V ₀	V ₁₀₀	V ₂₀₀	V ₃₀₀	E ₀	E ₁₀₀	E ₂₀₀	E ₃₀₀		50	80	100	150	200	300	100	200	300

Fully jacketed or semi-jacketed bullets depending on the type of hunting. And bullet weight.

Ballistic coefficient. This term describes a bullet's capacity to maintain its velocity. It's a relative value, taken in comparison to an imaginary "standard projectile" with a BC of 1.0.

The bullet's velocity at various distances after it leaves the muzzle.

The bullet's kinetic energy at various distances after it leaves the muzzle.


















Starting point for calculating bullet trajectory height relative to line-of-sight.

Bullet trajectory height in relation to line-of-sight at different distances.

Windage of 11 mph straight crosswind, at different distances.




















DH BALLISTIC DATA / CFR













	BULLET TYPE BULLET WEIGHT G/GR PRODUCT NUMBER	BC	VELOCITY M/S				ENERGY JOULE				ZERO RANGE	HEIGHT OF TRAJECTORY ABOVE LINE OF SIGHTED IN AT METERS FOR SIGHT 40 MM ABOVE BORE						WIND DRIFT IN MM FOR A 5 M/S CROSS WIND				
			V ₀	V ₁₀₀	V ₂₀₀	V ₃₀₀	E ₀	E ₁₀₀	E ₂₀₀	E ₃₀₀		50	80	100	150	200	300	100	200	300		
6,5 Creedmoor			SCIROCCO II 8,4g/130gr #20166302	0,571	850	797	746	697	3036	2669	2338	2040	80	-4	⊕	-5	-44	-124	-420	19	80	185
			BONDSTRIKE EXTREME 9,27g/143gr #20166402	0,629	835	786	739	694	3232	2863	2531	2232	80	-4	⊕	-5	-46	-128	-430	18	75	174
6,5x55 SE			ALASKA 10,1g/156gr #20165522	0,276	780	677	583	497	3074	2319	1717	1250	80	-1	⊕	-9	-70	-194	-670	47	202	490
			ORYX 10,1g/156gr #20165622	0,348	780	698	621	550	3074	2463	1951	1527	80	-2	⊕	-8	-65	-176	-602	37	155	369
			ORYX SILENCER 10,1g/156gr #20166432	0,348	780	698	621	550	3072	2460	1947	1528	80	-2	⊕	-8	-65	-176	-602	37	155	369
			BALLISTIC TIP 7,8g/120gr #20165222	0,458	860	789	722	658	2886	2431	2035	1691	80	-4	⊕	-5	-44	-125	-430	24	99	232
			PARTITION 9,1g/140gr #20165592	0,490	820	760	702	647	3061	2627	2243	1905	80	-3	⊕	-6	-51	-142	-478	24	99	231
			BONDSTRIKE EXTREME 9,27g/143gr #20166382	0,629	830	782	735	690	3193	2834	2504	2207	80	-4	⊕	-5	-47	-131	-437	18	76	176
			VULKAN 10,1g/156gr #20165562	0,354	780	700	624	554	3074	2473	1967	1548	80	-2	⊕	-8	-65	-178	-601	36	152	361
6,5-284 Norma			ORYX 10,1g/156gr #20166062	0,348	850	764	683	607	3650	2949	2359	1864	80	-4	⊕	-5	-49	-140	-485	33	136	324
			BONDSTRIKE EXTREME 9,27g/143gr #20166422	0,629	880	830	781	735	3589	3193	2827	2504	80	-5	⊕	-3	-37	-109	-375	17	70	161
270 Win.			V-MAX® 7,1g/110gr #20169402	0,370	980	891	808	729	3425	2831	2326	1895	80	-7	⊕	-1	-27	-87	-323	25	104	246

V-MAX® is a registered trademark of Hornady Manufacturing Company














DH BALLISTIC DATA / CFR

	BULLET TYPE BULLET WEIGHT G/GR PRODUCT NUMBER	BC	VELOCITY M/S				ENERGY JOULE				ZERO RANGE	HEIGHT OF TRAJECTORY ABOVE LINE OF SIGHTED IN AT METERS FOR SIGHT 40 MM ABOVE BORE						WIND DRIFT IN MM FOR A 5 M/S CROSS WIND				
			V ₀	V ₁₀₀	V ₂₀₀	V ₃₀₀	E ₀	E ₁₀₀	E ₂₀₀	E ₃₀₀		50	80	100	150	200	300	100	200	300		
270 Win.			SOFT POINT 8,4g/130gr #20169022	0,359	957	867	782	702	3848	3155	2569	2073	80	-6	⊕	-2	-31	-95	-349	27	118	264
			ORYX 9,7g/150gr #20169012	0,373	870	788	711	639	3673	3015	2455	1979	80	-4	⊕	-5	-46	-131	-451	29	122	289
			VULKAN 10,1g/156gr #20169412	0,340	870	781	697	619	3824	3080	2456	1934	80	-5	⊕	-5	-45	-130	-458	32	135	322
			TIPSTRIKE 9,1g/140gr #20169292	0,480	940	873	809	748	4022	3468	2979	2546	80	-6	⊕	-2	-30	-93	-335	20	83	194
270 WSM			ORYX 9,7g/150gr #20169322	0,373	950	863	782	705	4379	3617	2968	2415	80	-5	⊕	-3	-33	-99	-357	26	108	255
			BALLISTIC TIP 8,4g/130gr #20169252	0,433	1000	922	849	779	4202	3573	3027	2551	80	-6	⊕	-1	-25	-80	-296	20	86	200
			TIPSTRIKE 9,1g/140gr #20169532	0,480	965	897	832	770	4239	3659	3148	2696	80	-7	⊕	-2	-27	-85	-311	19	80	187
270 Wby. Mag			SOFT POINT 8,4g/130gr #20169502	0,359	1000	907	821	739	4202	3458	2829	2295	80	-7	⊕	-1	-25	-82	-309	25	105	247
			ORYX 9,7g/150gr #20169512	0,373	970	882	800	722	4556	3771	3102	2532	80	-6	⊕	-2	-28	-90	-332	20	84	197
7x57			ORYX 10,1g/156g #20170012	0,330	805	717	635	558	3274	2598	2036	1595	80	-3	⊕	-7	-60	-167	-570	30	126	301
7x57 R			ORYX 10,1g/156gr #20170032	0,330	795	708	626	550	3193	2531	1981	1530	80	-2	⊕	-8	-63	-173	-589	30	128	306
			TIPSTRIKE 10,4g/160gr #20170742	0,510	800	743	688	636	3329	2871	2463	2102	80	-3	⊕	-7	-55	-152	-504	24	98	229

DH BALLISTIC DATA / CFR

	BULLET TYPE BULLET WEIGHT G/GR PRODUCT NUMBER	BC	VELOCITY M/S				ENERGY JOULE				ZERO RANGE	HEIGHT OF TRAJECTORY ABOVE LINE OF SIGHTED IN AT METERS FOR SIGHT 40 MM ABOVE BORE						WIND DRIFT IN MM FOR A 5 M/S CROSS WIND										
			V ₀	V ₁₀₀	V ₂₀₀	V ₃₀₀	E ₀	E ₁₀₀	E ₂₀₀	E ₃₀₀		50	80	100	150	200	300	100	200	300								
7x64		ECOSTRIKE 9,1g/140gr #20171182	0,443	910	839	772	707	3770	3204	2710	2277	80	-6	⊕	-3	-35	-104	-371	100	-4	⊕	-2	-30	-99	-363	23	95	222
		ORYX 10,1g/156gr #20170532	0,330	850	759	674	595	3650	2912	2297	1788	80	-4	⊕	-6	-50	-142	-496	100	-1	⊕	-4	-42	-131	-490	27	116	277
		ORYX 11g/170gr #20170202	0,324	840	749	663	583	3883	3083	2419	1872	80	-4	⊕	-6	-52	-148	-514	100	-1	⊕	-5	-43	-136	-497	35	150	359
		PLASTIC POINT 11g/170gr #20170192	0,378	840	761	687	617	3883	3189	2596	2093	80	-4	⊕	-6	-50	-141	-486	100	-1	⊕	-4	-41	-130	-469	30	126	299
		VULKAN 11g/170gr #20170182	0,353	840	756	677	602	3883	3143	2519	1996	80	-4	⊕	-6	-51	-144	-498	100	-1	⊕	-5	-42	-132	-480	32	136	324
		TIPSTRIKE 10,4g/160gr #20171152	0,510	890	829	771	715	4121	3575	3090	2658	80	-5	⊕	-3	-37	-110	-382	100	-3	⊕	-3	-32	-103	-371	20	84	196
7 mm-08 Rem.		BALLISTIC TIP 9,1g/140gr #20170682	0,485	860	797	737	680	3367	2893	2474	2104	80	-4	⊕	-5	-45	-127	-429	100	-1	⊕	-4	-38	-118	-414	23	93	301
		TIPSTRIKE 10,4g/160gr #20170362	0,510	820	762	706	653	3498	3021	2596	2220	80	-3	⊕	-6	-51	-141	-473	100	0	⊕	-5	-42	-129	-456	23	95	221
7 mm Blaser Mag.		ORYX 10,1g/156gr #20170872	0,330	925	829	740	657	4323	3476	2769	2179	80	-6	⊕	-3	-36	-109	-396	100	-4	⊕	-3	-32	-103	-384	30	128	305
7 mm Rem. Mag.		TSX 9,1g/140gr #20170542	0,394	950	868	791	718	4108	3430	2847	2346	80	-6	⊕	-2	-31	-95	-345	100	-5	⊕	-2	-27	-91	-339	24	102	240
		ECOSTRIKE 9,1g/140gr #20171172	0,443	950	877	808	742	4108	3500	2969	2504	80	-7	⊕	-2	-29	-90	-330	100	-6	⊕	-1	-26	-87	-325	22	90	210
		ORYX 10,1g/156gr #20170472	0,330	900	806	718	636	4092	3281	2605	2041	80	-5	⊕	-4	-40	-119	-426	100	-3	⊕	-3	-35	-112	-415	25	107	254

DH BALLISTIC DATA / CFR

	BULLET TYPE BULLET WEIGHT G/GR PRODUCT NUMBER	BC	VELOCITY M/S				ENERGY JOULE				ZERO RANGE	HEIGHT OF TRAJECTORY ABOVE LINE OF SIGHTED IN AT METERS FOR SIGHT 40 MM ABOVE BORE						WIND DRIFT IN MM FOR A 5 M/S CROSS WIND										
			V ₀	V ₁₀₀	V ₂₀₀	V ₃₀₀	E ₀	E ₁₀₀	E ₂₀₀	E ₃₀₀		50	80	100	150	200	300	100	200	300								
7 mm Rem. Mag.		ORYX 11g/170gr #20170232	0,324	880	786	698	616	4261	3398	2680	2086	80	-5	⊕	-5	-44	-129	-455	100	-2	⊕	-4	-38	-120	-442	33	140	335
		PLASTIC POINT 11g/170gr #20170272	0,378	900	818	740	666	4457	3677	3012	2444	80	-5	⊕	-4	-39	-114	-405	100	-3	⊕	-3	-33	-107	-394	22	92	217
		VULKAN 11g/170gr #20170242	0,353	900	812	729	651	4457	3627	2925	2334	80	-5	⊕	-4	-40	-117	-415	100	-3	⊕	-3	-34	-109	-404	24	99	235
		TIPSTRIKE 10,4g/160gr #20170142	0,510	920	858	798	741	4403	3827	3314	2857	80	-6	⊕	-3	-33	-99	-349	100	-5	⊕	-2	-29	-94	-342	19	80	187
		ECOSTRIKE 9,1g/140gr #20171192	0,443	860	792	726	664	3367	2852	2402	2009	80	-5	⊕	-4	-43	-125	-432	100	-3	⊕	-4	-37	-116	-418	25	103	241
7 x 65 R		ORYX 10,1g/156gr #20170632	0,330	830	741	657	579	3480	2771	2179	1691	80	-3	⊕	-6	-54	-152	-527	100	-1	⊕	-5	-45	-140	-508	28	120	287
		ORYX 11g/170gr #20170222	0,324	810	720	637	559	3610	2856	2231	1719	80	-3	⊕	-7	-59	-164	-565	100	1	⊕	-6	-48	-150	-544	37	158	379
		PLASTIC POINT 11g/170gr #20170282	0,378	800	722	649	580	3522	2872	2319	1853	80	-3	⊕	-7	-58	-162	-550	100	1	⊕	-6	-48	-148	-529	33	138	328
7 x 65 R		VULKAN 11g/170gr #20170292	0,353	810	728	650	578	3610	2913	2326	1836	80	-3	⊕	-7	-58	-160	-547	100	1	⊕	-6	-47	-146	-526	34	144	343
		TIPSTRIKE 10,4g/160gr #20171212	0,510	850	791	734	680	3759	3253	2803	2403	80	-4	⊕	-5	-45	-127	-431	100	-2	⊕	-4	-38	-117	-417	30	126	301
7 mm Wby. Mag.		ORYX 10,1g/156gr #20171062	0,330	940	798	754	670	4464	3596	2871	2266	80	-7	⊕	-3	-34	-104	-378	100	-4	⊕	-2	-30	-98	-370	30	125	296
		ORYX 11g/170gr #20171072	0,324	910	814	725	641	4557	3647	2889	2260	80	-5	⊕	-3	-39	-116	-416	100	-3	⊕	-3	-34	-109	-405	31	133	317
		ECOSTRIKE 9,1g/140gr #20171172	0,443	950	877	808	742	4108	3500	2969	2504	80	-7	⊕	-2	-29	-90	-330	100	-6	⊕	-1	-26	-87	-325	22	90	210



BALLISTIC DATA / CFR

	BULLET TYPE BULLET WEIGHT G/GR PRODUCT NUMBER	BC	VELOCITY M/S				ENERGY JOULE				ZERO RANGE	HEIGHT OF TRAJECTORY ABOVE LINE OF SIGHTED IN AT METERS FOR SIGHT 40 MM ABOVE BORE						WIND DRIFT IN MM FOR A 5 M/S CROSS WIND				
			V ₀	V ₁₀₀	V ₂₀₀	V ₃₀₀	E ₀	E ₁₀₀	E ₂₀₀	E ₃₀₀		50	80	100	150	200	300	100	200	300		
7 mm Wby. Mag			TIPSTRIKE 10,4g/160gr #20171232	0,510	950	886	826	768	4695	4088	3547	3066	80	-6	⊕	-2	-28	-89	-320	19	78	178
													100	-5	⊕	1	-26	-85	-314			
													150	3	⊕	15	17	-51	-263			
													200	16	⊕	35	42	38	-239			
280 Rem.			DRYX 10,1g/156gr #20171052	0,330	850	759	674	595	3650	2912	2297	1788	80	-4	⊕	-6	-50	-142	-496	27	116	277
													100	-1	⊕	4	-42	-131	-479			
													150	13	⊕	27	28	-76	-396			
													200	32	⊕	57	66	57	-282			
			PLASTIC POINT 11g/170gr #20170602	0,378	825	867	782	702	3848	3155	2569	2073	80	-4	⊕	-6	-53	-148	-508	31	132	313
													100	-1	⊕	5	-44	-136	-490			
													150	14	⊕	28	29	-78	-403			
													200	33	⊕	59	68	58	-286			
			VULKAN 11g/170gr #20170512	0,353	790	709	632	561	3434	2764	2201	1733	80	-2	⊕	-8	-63	-172	-583	35	149	356
													100	2	⊕	6	-51	-156	-559			
													150	19	⊕	33	34	-89	-457			
													200	41	⊕	69	78	66	-325			
			TIPSTRIKE 10,4g/160gr #20171222	0,510	850	759	734	680	3759	3253	2803	2403	80	-4	⊕	-5	-45	-127	-431	22	90	210
													100	-2	⊕	4	-38	-117	-417			
													150	11	⊕	24	25	67	-342			
													200	28	⊕	51	59	50	-241			
7,5x55 Swiss			DRYX 11,7g/180gr #20174722	0,354	820	737	659	586	3935	3181	2545	2013	80	-3	⊕	-7	-55	-154	-529	33	141	335
													100	0	⊕	5	-45	-141	-509			
													150	15	⊕	30	30	-81	-418			
													200	36	⊕	62	71	61	-297			
7,62x54 R (Russian)			ALASKA 11,7g/180gr #20175552	0,257	785	675	574	484	3606	2666	1929	1371	80	-1	⊕	-10	-73	-199	-688	50	217	529
													100	4	⊕	8	-58	-179	-660			
													150	24	⊕	37	39	-102	-544			
													200	49	⊕	76	90	77	-391			
.308 Win.			ALASKA 11,7g/180gr #20176362	0,257	796	685	583	492	3708	2746	1990	1415	80	-2	⊕	-9	-68	-189	-660	49	212	519
													100	4	⊕	7	-56	-173	-637			
													150	21	⊕	36	37	-98	-524			
													200	45	⊕	75	86	73	-378			
			BONDSTRIKE EXTREME 11,7g/180gr #20176412	0,615	800	752	707	662	3746	3314	2922	2566	80	-3	⊕	-6	-53	-146	-483	19	80	186
													100	0	⊕	5	-44	-133	-464			
													150	15	⊕	28	29	-75	-376			
													200	34	⊕	59	67	56	-263			
			ECOSTRIKE 9,7g/150gr #20174212	0,420	860	788	719	654	3589	3012	2511	2078	80	-5	⊕	-5	-49	-126	-439	26	109	256
													100	-2	⊕	4	-37	-118	-425			
													150	10	⊕	23	25	-68	-351			
													200	27	⊕	51	59	51	-249			
			DRYX 10,7g/165gr #20174712	0,333	835	746	663	585	3728	2978	2351	1833	80	-3	⊕	-7	-55	-152	-522	35	147	351
													100	1	⊕	5	-45	-139	-503			
													150	14	⊕	28	29	-78	-411			
													200	35	⊕	61	70	60	-294			
DRYX 11,7g/180gr #20174732	0,354	796	715	638	567	3708	2989	2384	1879	80	-2	⊕	-8	-61	-168	-571	35	147	351			
										100	2	⊕	6	-50	-153	-548						
										150	18	⊕	33	33	-87	-449						
										200	40	⊕	67	77	65	-319						



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	BULLET TYPE BULLET WEIGHT G/GR PRODUCT NUMBER	BC	VELOCITY M/S				ENERGY JOULE				ZERO RANGE	HEIGHT OF TRAJECTORY ABOVE LINE OF SIGHTED IN AT METERS FOR SIGHT 40 MM ABOVE BORE						WIND DRIFT IN MM FOR A 5 M/S CROSS WIND				
			V ₀	V ₁₀₀	V ₂₀₀	V ₃₀₀	E ₀	E ₁₀₀	E ₂₀₀	E ₃₀₀		50	80	100	150	200	300	100	200	300		
308 Win.			NEW! DRYX SILENCER 10,7g/165gr #20177302	0,333	820	731	647	569	3597	2859	2240	1732	80	-3	⊕	-7	-56	-157	-543	36	154	368
													100	0	⊕	5	-46	-144	-523			
			TIPSTRIKE 11g/170gr #20174352	0,454	800	736	675	617	3522	2981	2507	2093	80	-3	⊕	-7	-56	-154	-517	27	111	261
													100	0	⊕	5	-46	-141	-497			
			VULKAN 11,7g/180gr #20176602	0,315	796	705	620	541	3708	2908	2250	1716	80	-2	⊕	-8	-63	-174	-598	39	168	403
													100	2	⊕	6	-51	-159	-574			
A-FRAME 10,7g/165gr #20176122	0,367	823	743	667	596	3622	2951	2381	1901	80	-4	⊕	-6	-53	-150	-515	32	135	320			
										100	-1	⊕	5	-44	-138	-496						
PLASTIC POINT 11,7g/180gr #20176282	0,366	796	717	643	573	3708	3011	2420	1925	80	-2	⊕	-8	-61	-167	-564	34	142	337			
										100	2	⊕	6	-49	-152	-541						
30-06 Spring.			ALASKA 11,7g/180gr #20176482	0,257	823	710	606	512	3964	2951	2152	1538	80	3	⊕	-7	-61	-171	-604	27	111	262
													100	1	⊕	6	-50	-156	-582			
													150	17	⊕	32	33	-90	-483			
													200	40	⊕	68	78	68	-348			
			BONDSTRIKE EXTREME 11,7g/180gr #20176422	0,615	840	791	744	698	4130	3662	3238	2853	80	-4	⊕	-5	-45	-127	-426	18	75	173
													100	-2	⊕	4	-38	-117	-411			
													150	11	⊕	24	25	-67	-336			
													200	28	⊕	51	58	50	-236			
			ECOSTRIKE 9,7g/150gr #20174242	0,42	900	826	755	689	3930	3309	2769	2300	80	-6	⊕	-3	-37	-110	-389	25	102	240
													100	-4	⊕	3	-32	-103	-379			
													150	7	⊕	20	21	-61	-315			
													200	22	⊕	44	52	46	-224			
			DRYX 10,7g/165gr #20174702	0,333	900	807	720	639	4331	3483	2772	2180	80	-4	⊕	-4	-42	-122	-430	25	105	251
													100	-2	⊕	3	-36	-113	-417			
													150	8	⊕	22	24	-66	-346			
													200	26	⊕	49	57	49	-247			
DRYX 11,7g/180gr #20174742	0,354	823	740	662	589	3964	3206	2565	2030	80	-3	⊕	-6	-55	-153	-524	33	140	332			
										100	0	⊕	5	-45	-140	-505						
										150	15	⊕	29	30	-80	-415						
										200	35	⊕	61	70	60	-295						
DRYX 13g/200gr #20176772	0,338	800	715	635	560	4162	3321	2618	2039	80	-3	⊕	-7	-60	-167	-571	36	154	368			
										100	1	⊕	6	-49	-152	-549						
										150	17	⊕	32	33	-87	-451						
										200	39	⊕	67	76	65	-321						
NEW! DRYX SILENCER 11,7g/180gr #20177282	0,354	820	736	657	582	3934	3169	2525	1982	80	-3	⊕	-7	-55	-154	-530	34	144	342			
										100	0	⊕	5	-45	-141	-510						
										150	15	⊕	29	30	-81	-420						
										200	36	⊕	62	71	61	-298						







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	BULLET TYPE BULLET WEIGHT G/GR PRODUCT NUMBER	BC	VELOCITY M/S				ENERGY JOULE				ZERO RANGE	HEIGHT OF TRAJECTORY ABOVE LINE OF SIGHTED IN AT METERS FOR SIGHT 40 MM ABOVE BORE						WIND DRIFT IN MM FOR A 5 M/S CROSS WIND						
			V ₀	V ₁₀₀	V ₂₀₀	V ₃₀₀	E ₀	E ₁₀₀	E ₂₀₀	E ₃₀₀		50	80	100	150	200	300	100	200	300				
300 RUM		ORYX 11,7g/180gr #20174782	0,354	990	896	809	727	5736	4702	3830	3092	80	-7	⊕	-1	-26	-85	-319	26	108	255			
			100	-6	⊕	1	-24	-82	-316	150	2	14	16	⊕	-50	-267	200	14				34	41	37
30-378 Wby. Mag.		ORYX 10,7g/165gr #20174652	0,330	1040	935	839	750	5778	4683	3771	3009	80	-7	⊕	0	-21	-73	-286	26	109	258			
			100	-7	⊕	0	-21	-73	-285	150	0	11	14	⊕	-45	-244	200	11				29	36	34
30-378 Wby. Mag.		ORYX 11,7g/180gr #20174642	0,354	1005	911	823	740	5911	4853	3959	3204	80	-7	⊕	-1	-24	-81	-306	20	84	199			
			100	-7	⊕	1	-23	-79	-303	150	1	13	15	⊕	-48	-257	200	13				32	39	36
30-378 Wby. Mag.		TIPSTRIKE 11g/170gr #20174162	0,454	1030	954	882	815	5838	5009	4285	3651	80	-7	⊕	0	-20	-68	-262	19	78	182			
			100	-7	⊕	1	-19	-68	-262	150	-1	10	13	⊕	-42	-223	200	9				27	34	31
308 Norma Mag		ORYX 11,7g/180gr #20174912	0,354	900	812	730	653	4741	3862	3119	2493	80	-5	⊕	-4	-39	-117	-414	29	123	292			
100	-3	⊕	3	-34	-109	-403	150	8	21	23	⊕	-64	-335	200	24	47	55	48				⊕	-239	
7,65x53 Arg.		SOFT POINT 11,3g/174gr #20177052	0,262	760	654	557	470	3265	2416	1751	1249	80	-1	⊕	-10	-78	-212	-735	41	178	434			
100	5	⊕	8	-62	-192	-704	150	25	41	41	⊕	-109	-579	200	53	85	96	82				⊕	-416	
7,7 x58 (Arisaka)		SOFT POINT 11,3g/174gr #20177252	0,262	760	654	557	470	3262	2416	1751	1249	80	-1	⊕	-10	-78	-212	-735	41	178	434			
100	5	⊕	8	-62	-192	-704	150	25	41	41	⊕	-109	-579	200	53	85	96	82				⊕	-416	
8x57 IRS (JRS)		ALASKA 12,7g/196gr #20180182	0,305	730	641	558	483	3385	2607	1977	1482	80	0	⊕	-12	-83	-224	-754	46	198	477			
			100	6	9	⊕	-66	-201	-719	150	28	45	44	⊕	-113	-587	200	56				90	100	85
			8x57 IRS (JRS)		ECOSTRIKE 10,4g/160gr #20180252	0,400	820	747	677	611	3498	2899	2384	1942	80	-3	⊕	-6	-53	-149	-507	29	123	291
						100	0	5	⊕	-44	-137	-488	150	15	29	29	⊕	-78	-400	200	34			
8x57 IRS (JRS)		ORYX 12,7g/196gr #20180102	0,331	730	647	570	500	3385	2662	2066	1585	80	1	⊕	-12	-83	-221	-734	43	181	433			
			100	7	9	⊕	-66	-198	-699	150	29	44	44	⊕	-110	-699	200	56				88	98	83
8x57 IRS (JRS)		VULKAN 12,7g/196gr #20180192	0,347	730	650	576	507	3385	2687	2108	1635	80	0	⊕	-11	-81	-215	-717	41	173	413			
			100	6	9	⊕	-64	-193	-684	150	27	43	43	⊕	-108	-556	200	54				86	97	81

DH BALLISTIC DATA / CFR




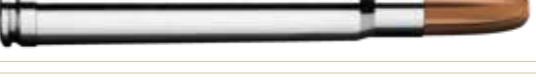








	BULLET TYPE BULLET WEIGHT G/GR PRODUCT NUMBER	BC	VELOCITY M/S				ENERGY JOULE				ZERO RANGE	HEIGHT OF TRAJECTORY ABOVE LINE OF SIGHTED IN AT METERS FOR SIGHT 40 MM ABOVE BORE						WIND DRIFT IN MM FOR A 5 M/S CROSS WIND						
			V ₀	V ₁₀₀	V ₂₀₀	V ₃₀₀	E ₀	E ₁₀₀	E ₂₀₀	E ₃₀₀		50	80	100	150	200	300	100	200	300				
8x57 IS (JS)		ALASKA 12,7g/196gr #20180032	0,305	770	678	592	513	3767	2918	2226	1675	80	0	⊕	-10	-73	-197	-665	43	183	441			
			100	5	8	⊕	-58	-177	-636	150	24	39	39	⊕	-100	-520	200	49				79	89	75
			8x57 IS (JS)		ECOSTRIKE 10,4g/160gr #20180262	0,400	860	784	713	645	3848	3201	2643	2164	80	-4	⊕	-5	-45	-130	-448	27	115	271
						100	-2	4	⊕	-38	-120	-434	150	11	24	25	⊕	-69	-358	200	28			
8x57 IS (JS)		ORYX 12,7g/196gr #20180042	0,331	770	685	605	531	3767	2979	2325	1793	80	-1	⊕	-10	-71	-191	-643	39	167	400			
			100	4	8	⊕	-57	-172	-614	150	23	38	38	⊕	-97	-501	200	47				77	86	73
			8x57 IS (JS)		ORYX SILENCER 12,7g/196gr #20180342	0,331	765	679	598	524	3716	2928	2271	1744	80	-1	⊕	-10	-71	-192	-649	40	172	412
						100	4	8	⊕	-57	-173	-622	150	23	38	38	⊕	-98	-508	200	47			
8x57 IS (JS)		VULKAN 12,7g/196gr #20180202	0,347	770	688	612	541	3767	3011	2378	1857	80	-1	⊕	-9	-68	-185	-626	37	159	379			
			100	3	7	⊕	-55	-168	-599	150	21	36	37	⊕	-95	-490	200	45				74	84	71
8x68 S		A-FRAME 13g/200gr #20180372	0,357	900	813	731	655	5267	4299	3481	2790	80	-5	⊕	-4	-39	-116	-413	29	122	289			
			100	-3	3	⊕	-34	-109	-402	150	8	21	23	⊕	-64	-334	200	24				47	55	48
8x68 S		VULKAN 12,7g/196gr #20180352	0,345	900	810	726	647	5146	4170	3348	2658	80	-5	⊕	-4	-40	-118	-419	30	127	301			
			100	-3	3	⊕	-34	-110	-407	150	8	21	23	⊕	-64	-339	200	24				47	55	48
338 Win. Mag.		ORYX 14,9g/230gr #20185112	0,370	840	759	683	612	5259	4299	3481	2790	80	-3	⊕	-6	-52	-145	-495	31	130	308			
100	0	5	⊕	-43	-133	-477	150	15	27	29	⊕	-76	-391	200	33	55	66	57				⊕	-277	
NEW! 8,5x55 Blaser		ORYX 14,9g/230gr #20185362	0,370	820	739	663	592	5009	4069	3275	2611	80	-3	⊕	-6	-55	-152	-521	32	137	325			
100	0	5	⊕	-45	-139	-502	150	15	29	30	⊕	-80	-412	200	35	61	70	60				⊕	-293	
340 Wby. Mag.		ORYX 14,9g/230gr #20186182	0,370	915	830	751	676	6240	5139	4201	3402	80	-5	⊕	-3	-36	-109	-390	27	114	270			
100	-4	2	⊕	-32	-103	-380	150	7	19	21	⊕	-60	-317	200	22	44	51	45				⊕	-226	
35 Whelen		ORYX 16,2g/250gr #20190092	0,340	740	659	583	513	4438	3518	2755	2133	80	0	⊕	-11	-78	-208	-697	40	172	410			
100	5	9	⊕	-62	-187	-665	150	26	41	41	⊕	-105	-541	200	52	83	94	79				⊕	-384	
358 Norma Mag.		ORYX 16,2g/250gr #20190072	0,340	840	753	670	594	5718	4589	3643	2856	80	-3	⊕	-6	-53	-149	-511	34	236	574			
100	0	5	⊕	-44	-136	-492	150	15	27	29	⊕	-78	-404	200	34	56	68	58				⊕	-287	

DH BALLISTIC DATA / RIMFIRE













	BULLET NAME PRODUCT NUMBER	BULLET	G	BARREL (MM)	VELOCITY M/S			ENERGY JOULE			UNITS	
					V ₀	V ₅₀	V ₁₀₀	E ₀	E ₅₀	E ₁₀₀		
.17 HMR		17 HMR #2409742	V-MAX®	1,1	600	777	667	568	332	245	177	50
.22 WMR		.22 WMR #2409746	JHP	2,6	600	572	472	390	424	289	198	50
.22LR		SUBSONIC-22 #2400065	LHP	2,6	650	315	285	264	129	106	89	50
.22LR		JAKTMATCH #2132990	LRN	2,6	650	330	294	270	142	113	95	50
NEW! .22LR		ECO SPEED-22 #2414038	Zinc copper-plated	1,6	650	520	396	313	210	122	76	50
NEW! .22LR		ECO POWER-22 #2414039	Zinc copper-plated fragmentation	1,6	650	520	396	313	210	122	76	50

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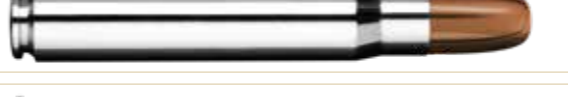





DH BALLISTIC DATA / AFRICAN PH

	BULLET TYPE BULLET WEIGHT G/GR PRODUCT NUMBER	BC SD	VELOCITY M/S					ENERGY JOULE					TRAJECTORY, MM					MOMENTUM, KG - M/S					
			V ₀	V ₅₀	V ₁₀₀	V ₁₅₀	V ₂₀₀	E ₀	E ₅₀	E ₁₀₀	E ₁₅₀	E ₂₀₀	0	50	100	150	200	0	50	100	150	200	
9,3x62		SOLID 17,8g/275gr #20193552	0,236 0,293	745	686	629	576	525	4942	4188	3526	2950	2455	-40	6	⊕	-68	-210	13,3	12,2	11,2	10,2	9,3
375 H&H Mag.		SOLID 19,4g/300gr #20195352	0,229 0,305	777	715	655	598	545	5871	4965	4172	3482	2887	-40	4	⊕	-61	-191	15,1	13,9	12,7	11,6	10,6
		SOFT POINT 22,7g/350gr #20195252	0,321 0,305	700	660	621	584	548	5559	4940	4376	3866	3407	-40	8	⊕	-72	-216	15,9	15	14,1	13,2	12,4
		FULL METAL JACKET 22,7g/350gr #20195262	0,307 0,356	700	658	618	579	542	5559	4913	4328	3800	3328	-40	8	⊕	-72	-218	15,9	14,9	14	13	12,3
375 Fl. Mag. N.E..		SOFT POINT 19,4g/300gr #20195222	0,276 0,305	730	680	631	585	541	5182	4493	3878	3331	2849	-40	8	⊕	-69	-210	14,2	13,2	12,3	11,4	10,5
		FULL METAL JACKET 19,4g/300gr #20195232	0,276 0,305	730	680	631	585	541	5182	4493	3878	3331	2849	-40	8	⊕	-69	-210	14,2	13,2	12,3	11,4	10,5
416 Rem. Mag.		SOLID 25,9g/400gr #20110752	0,247 0,33	730	674	620	569	521	6947	5924	5022	4233	3550	-40	6	0	-70	-215	19	17,5	16,1	14,8	13,6
		SOFT POINT 29,2g/450gr #20110722	0,338 0,371	655	618	583	549	516	6258	5576	4956	4395	3891	-40	12	⊕	-84	-250	19,1	18	17	16	15,1
		FULL METAL JACKET 29,2g/450gr #20110732	0,325 0,371	655	617	580	545	511	6258	5551	4909	4332	3815	-40	12	⊕	-85	-253	19,1	18	16,9	15,9	14,9
416 Rigby		SOLID 25,9g/400gr #20110762	0,247 0,330	725	669	616	565	518	6796	5791	4905	4131	3462	-40	7	⊕	-72	-221	18,8	17,3	15,9	14,6	13,4
		SOFT POINT 29,2g/450gr #20110702	0,338 0,371	655	618	583	549	516	6258	5576	4956	4395	3891	-40	12	⊕	-84	-250	19,1	18	17	16	15,1
		FULL METAL JACKET 29,2g/450gr #20110712	0,325 0,371	655	617	580	545	511	6258	5551	4909	4332	3815	-40	12	⊕	-85	-253	19,1	18	16,9	15,9	14,9












DH BALLISTIC DATA / AFRICAN PH

	BULLET TYPE BULLET WEIGHT G/GR PRODUCT NUMBER	BC SD	VELOCITY M/S					ENERGY JOULE					TRAJECTORY, MM					MOMENTUM, KG - M/S				
			V ₀	V ₅₀	V ₁₀₀	V ₁₅₀	V ₂₀₀	E ₀	E ₅₀	E ₁₀₀	E ₁₅₀	E ₂₀₀	0	50	100	150	200	0	50	100	150	200
416 Taylor	 SOLID 24,3g/375gr #20110542	0,245 0,310	715	659	606	555	508	6232	5298	4477	3762	3146	-40	8	⊕	-75	-228	17,4	16,1	14,7	13,5	12,4
500/416 N.E. 3 1/4	 SOFT POINT 26,6g/410gr #20110532	0,307 0,338	710	665	622	581	542	6700	5885	5150	4490	3901	-40	9	⊕	-72	-217	18,9	17,7	16,5	15,4	14,4
	 FULL METAL JACKET 26,6g/410gr #20110522	0,307 0,338	710	665	622	581	542	6700	5885	5150	4490	3901	-40	9	⊕	-72	-217	18,9	17,7	16,5	15,4	14,4
404 Jeffery (Riml. N.E. Jeffery)	 SOLID 25,9g/400gr #20110352	0,247 0,319	710	655	602	553	506	6518	5545	4689	3944	3302	-40	8	0	-76	-233	18,4	17,1	15,6	14,3	13,1
	 SOFT POINT 29,2g/450gr #20110302	0,360 0,359	655	621	588	556	526	6258	5625	5044	4515	4034	-40	11	⊕	-82	-244	19,1	18,1	17,1	16,2	15,3
	 FULL METAL JACKET 29,2g/450gr #20110312	0,360 0,359	655	621	587	555	524	6258	5616	5029	4494	4009	-40	11	⊕	-83	-245	19,4	18,1	17,1	16,2	15,3
450 Rigby	 SOLID 32,4g/500gr #20111042	0,269 0,340	760	707	657	608	562	9411	8153	7030	6032	5150	-40	4	⊕	-61	-189	24,7	23	21,3	19,8	18,3
	 SOFT POINT 35,6g/550gr #20111052	0,340 0,375	640	604	569	536	505	7302	6505	5780	5125	4538	-40	13	⊕	-89	-263	22,8	21,5	20,3	19,1	18
	 FULL METAL JACKET 35,6g/550gr #20111062	0,326 0,375	640	603	566	532	499	7302	6472	5721	5046	4444	-40	13	⊕	-90	-266	22,8	21,5	20,2	19	17,8
458 Lott	 SOLID 32,4g/500gr #20111172	0,269 0,340	700	650	601	555	512	7964	6862	5282	5019	4266	-40	9	⊕	-76	-232	22,7	21,1	19,5	18	16,6
	 SOFT POINT 35,6g/550gr #20111132	0,330 0,375	640	601	563	527	493	7302	6437	5657	4957	4335	-40	15	⊕	-92	-273	22,8	21,4	20,1	18,8	17,6
	 FULL METAL JACKET 35,6g/550gr #20111142	0,330 0,375	640	601	563	527	493	7302	6437	5657	4957	4335	-40	15	⊕	-92	-273	22,8	21,4	20,1	18,8	17,6











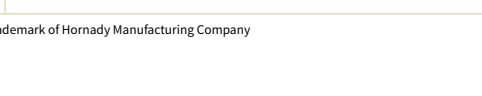
DH BALLISTIC DATA / AFRICAN PH

	BULLET TYPE BULLET WEIGHT G/GR PRODUCT NUMBER	BC SD	VELOCITY M/S					ENERGY JOULE					TRAJECTORY, MM					MOMENTUM, KG - M/S				
			V ₀	V ₅₀	V ₁₀₀	V ₁₅₀	V ₂₀₀	E ₀	E ₅₀	E ₁₀₀	E ₁₅₀	E ₂₀₀	0	50	100	150	200	0	50	100	150	200
458 Win. Mag.	 SOLID 32,4g/500gr #20111182	0,269 0,340	640	592	547	504	464	6638	5685	4846	4116	3489	-40	15	⊕	-97	-290	20,7	19,2	17,7	16,3	15
470 N.E.	 SOFT POINT 32,4g/500gr #20112052	0,374 0,318	640	607	575	544	515	6638	5970	5357	4798	4292	-40	13	⊕	-88	-258	20,7	19,7	18,6	17,6	16,7
	 FULL METAL JACKET 32,4g/500gr #20112062	0,338 0,318	640	607	575	544	515	6638	5970	5357	4798	4292	-40	13	⊕	-88	-258	20,7	19,7	18,6	17,6	16,7
500 Jeffery	 SOLID 35g/540gr #20113182	0,239 0,300	730	672	617	564	515	9381	7956	6705	5617	4680	-40	7	⊕	-71	-218	25,6	23,6	21,7	19,8	18,1
	 SOFT POINT 36,9g/570gr #20113162	0,350 0,313	670	636	603	571	540	8293	7467	6709	6016	5384	-40	10	⊕	-78	-231	24,7	23,5	22,3	21,1	19,9
	 FULL METAL JACKET 36,9g/570gr #20113152	0,350 0,313	670	634	599	566	534	8293	7427	6635	5914	5261	-40	11	⊕	-79	-234	24,7	23,4	22,1	20,9	19,7
500 N.E. 3"	 SOFT POINT 36,9g/570gr #20113012	0,368 0,313	640	607	575	544	514	7569	6802	6100	5461	4881	-40	13	⊕	-87	-257	23,6	22,4	21,2	20,1	19
	 FULL METAL JACKET 36,9g/570gr #20113022	0,350 0,313	640	605	571	539	508	7569	6764	6032	5367	4770	-40	13	⊕	-88	-261	23,6	22,4	21,1	19,9	18,8
505 Mag. Gibbs	 SOLID 35g/540gr #20113122	0,242 0,302	700	644	591	541	494	8603	7288	6136	5137	4282	-40	9	⊕	-79	-242	24,5	22,6	20,7	19,1	17,3
	 SOFT POINT 38,9g/600gr #20113102	0,360 0,336	640	606	573	542	511	7966	7142	6389	5705	5087	-40	13	⊕	-88	-259	24,9	23,6	22,3	21,1	19,9
	 FULL METAL JACKET 38,9g/600gr #20113112	0,360 0,336	640	606	573	542	511	7966	7142	6389	5705	5087	-40	13	⊕	-88	-259	24,9	23,6	22,3	21,1	19,9

DH BALLISTIC DATA / JAKTMATCH

	BULLET TYPE BULLET WEIGHT G/GR PRODUCT NUMBER	BC	VELOCITY M/S				ENERGY JOULE				ZERO RANGE	HEIGHT OF TRAJECTORY ABOVE LINE OF SIGHTED IN AT METERS FOR SIGHT 40 MM ABOVE BORE						WIND DRIFT IN MM FOR A 5 M/S CROSS WIND		
			V ₀	V ₁₀₀	V ₂₀₀	V ₃₀₀	E ₀	E ₁₀₀	E ₂₀₀	E ₃₀₀		50	80	100	150	200	300	100	200	300
222 Rem.	 FULL METAL JACKET 3,6g/55gr #20157210	0,209	940	791	656	536	1591	1125	775	518	80	-5	⊕	-4	-41	-126	-480	48	211	522
22-250 Rem.	 FULL METAL JACKET 3,6g/55gr #20157320	0,209	1100	932	783	650	2179	1565	1105	760	80	-7	⊕	0	-22	-77	-315	40	171	417
223 Rem.	 FULL METAL JACKET 3,6g/55gr #20157260	0,209	990	835	696	571	1765	1256	873	588	80	-6	⊕	-3	-35	-110	-423	45	196	484
243 Win.	 FULL METAL JACKET 6,2g/95gr #20160370	0,351	900	784	678	580	2496	1895	1415	1035	80	-5	⊕	-4	-44	-129	-470	40	170	413
6XC	 FULL METAL JACKET 6,2g/95gr #20160290	0,351	915	812	729	650	2512	2043	1647	1313	80	-4	⊕	-4	-41	-120	-421	30	124	295
6,5-284 Norma	 FULL METAL JACKET 7,8g/120gr #20165860	0,428	950	851	780	714	3338	2824	2376	1987	80	-6	⊕	-3	-33	-101	-361	23	96	226
6,5x55 SE	 HOLLOW POINT REKRUTT 6,5g/100gr #20165270	0,345	800	710	626	548	2081	1641	1276	980	80	-2	⊕	-8	-62	-171	-586	38	163	392
	 FULL METAL JACKET 7,8g/120gr #20165420	0,428	820	751	685	623	2624	2202	1835	1518	80	-3	⊕	-6	-53	-147	-497	27	115	270
270 Win.	 FULL METAL JACKET 8,4g/130gr #20169070	0,365	880	796	717	642	3254	2663	2161	1736	80	-4	⊕	-5	-44	-127	-441	29	123	292
7 mm Rem. Mag.	 FULL METAL JACKET 9,7g/150gr #20170260	0,443	913	842	774	709	4045	3439	2909	2445	80	-6	⊕	-3	-35	-105	-371	23	95	222
7x57 R	 FULL METAL JACKET 9,7g/150gr #20170062	0,441	805	739	676	616	3144	2648	2215	1839	80	-3	⊕	-7	-56	-154	-516	22	91	214




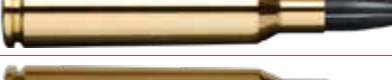
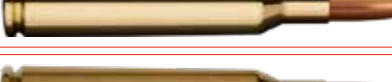
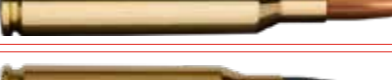

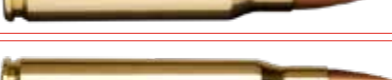
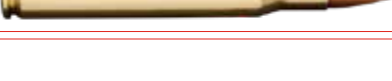


DH BALLISTIC DATA / JAKTMATCH

	BULLET TYPE BULLET WEIGHT G/GR PRODUCT NUMBER	BC	VELOCITY M/S				ENERGY JOULE				ZERO RANGE	HEIGHT OF TRAJECTORY ABOVE LINE OF SIGHTED IN AT METERS FOR SIGHT 40 MM ABOVE BORE						WIND DRIFT IN MM FOR A 5 M/S CROSS WIND		
			V ₀	V ₁₀₀	V ₂₀₀	V ₃₀₀	E ₀	E ₁₀₀	E ₂₀₀	E ₃₀₀		50	80	100	150	200	300	100	200	300
7x65 R	 FULL METAL JACKET 9,7g/150gr #20170642	0,441	840	772	707	646	3424	2892	2428	2024	80	-3	⊕	-6	-50	-139	-468	26	107	252
300 Win. Mag.	 FULL METAL JACKET 9,7g/150gr #20175450	0,423	935	859	787	719	4242	3583	3011	2514	80	-6	⊕	-3	-34	-101	-358	23	96	226
300 WSM	 FULL METAL JACKET 9,7g/150gr #20175730	0,423	900	826	756	690	3930	3313	2776	2310	80	-5	⊕	-4	-39	-114	-396	24	96	238
30-06 Spring.	 FULL METAL JACKET 9,7g/150gr #20176510	0,423	845	774	706	642	3465	2908	2424	2005	80	-3	⊕	-6	-49	-138	-467	27	111	262
308 Win.	 FULL METAL JACKET 9,7g/150gr #20176220	0,423	810	741	675	613	3183	2664	2212	1823	80	-3	⊕	-7	-55	-153	-514	28	118	278
8x57 JRS	 FULL METAL JACKET 8g/123gr #20180162	0,191	780	635	507	402	2435	1611	1027	647	80	0	⊕	-11	-84	-233	-843	70	311	781
8x57 JS	 FULL METAL JACKET 8g/123gr #20180090	0,191	860	706	569	451	2960	1996	1297	818	80	-3	⊕	-7	-60	-174	-652	61	269	231
338 Win. Mag.	 FULL METAL JACKET 14,6g/225gr #20185100	0,499	815	756	699	645	4851	4174	3573	3042	80	-3	⊕	-6	-52	-144	-483	23	98	228
358 Norma Mag.	 FULL METAL JACKET 15g/231gr #20190080	0,367	800	696	600	513	4802	3634	2700	1971	80	-2	⊕	-8	-6	-18	-628	45	194	471
9,3X57	 FULL METAL JACKET 15g/232gr #20193060	0,275	675	580	495	421	3419	2530	1842	1334	80	3	⊕	-16	-108	-285	-959	58	251	606
9,3x62	 FULL METAL JACKET 15g/232gr #20193180	0,275	765	663	570	486	4391	3304	2439	1773	80	-1	⊕	-10	-75	-205	-704	48	208	506









DH BALLISTIC DATA / AIRGUN

CALIBER	PRODUCT NAME	BULLET TYPE	PRODUCT NUMBER	WEIGHT G	WEIGHT GR	MATERIAL	UNITS
4.5mm/.177	GOLDEN TROPHY FT	Domed	#2411400	0,54	8,4	Ind. Tins	300
5,5mm/.22	GOLDEN TROPHY FT	Domed	#2411401	1,03	15,9	Ind. Tins	200
4.5mm/.177	GOLDEN TROPHY FT HEAVY	Domed	#2411403	0,59	9,1	Ind. Tins	300
5,5mm/.22	GOLDEN TROPHY FT HEAVY	Domed	#2411404	1,14	17,6	Ind. Tins	200
4.5mm/.177	SUPERPOINT STRIKE	Pointed	#2411405	0,53	8,2	Ind. Tins	300
5,5mm/.22	SUPERPOINT STRIKE	Pointed	#2411406	0,94	14,5	Ind. Tins	200
4.5mm/.177	GOLDEN TROPHY FT	Domed	#2411409	0,54	8,4	Blistered tins	300
5,5mm/.22	GOLDEN TROPHY FT	Domed	#2411410	1,03	15,9	Blistered tins	200
4.5mm/.177	GOLDEN TROPHY FT HEAVY	Domed	#2411411	0,59	9,1	Blistered tins	300
5,5mm/.22	GOLDEN TROPHY FT HEAVY	Domed	#2411412	1,14	17,6	Blistered tins	200
4.5mm/.177	SUPERPOINT STRIKE	Pointed	#2411413	0,53	8,2	Blistered tins	300
5,5mm/.22	SUPERPOINT STRIKE	Pointed	#2411414	0,94	14,5	Blistered tins	200





DPR BALLISTIC DATA / CFR

	BULLET NAME BULLET TYPE PRODUCT NUMBER	BC	BULLET WEIGHT		BARREL LENGTH mm	VELOCITY M/S V ₀	HEIGHT OF TRAJECTORY ABOVE LINE OF SIGHT IF SIGHTED IN AT METERS. FOR SIGHTS 40 MM ABOVE BORE						WINDDRIFT	
			Gram	Grain			100	200	300	400	500	600	300	600
223 Rem.	 MATCH KING HPBT #10157502	0,372	5	77	610	850	153	179	⊕	-433	-1188	-2358	300	1421
6 mm Norma BR	 DIAMOND LINE COATED HPBT #10160162	0,517	6,8	105	660	850	138	160	⊕	-372	-992	-1904	207	931
6XC	 DIAMOND LINE COATED HPBT #10160182	0,517	6,8	105	660	920	113	134	⊕	-312	-830	-1590	184	824
6,5 Creedmoor	 GOLDEN TARGET HPBT #10166312	0,548	8,4	130	610	869	129	150	⊕	-346	-919	-1757	187	835
6,5x55 SE	 HOLLOW POINT REKRUTT HP #10165230	0,345	6,5	100	740	810	182	212	⊕	-523	-1450	-2906	360	1727
	 DIAMOND LINE BANA COATED HPBT #10165000	0,548	8,4	130	670	830	144	166	⊕	-383	-1019	-1949	201	898
	 DIAMOND LINE FÄLT COATED HPBT #10165300	0,548	8,4	130	740	900	118	138	⊕	-320	-850	-1624	178	792
	 GOLDEN TARGET HPBT #10165130	0,548	8,4	130	740	830	144	166	⊕	-383	-1019	-1949	201	898
6,5-284 Norma	 GOLDEN TARGET HPBT #10166092	0,548	8,4	130	660	935	107	127	⊕	-294	-781	-1491	169	749
308 Win.	 DIAMOND LINE MATCH COATED HPBT #10176152	0,462	10,9	168	620	777	180	200	⊕	-470	-1270	-2470	239	1083
	 GOLDEN TARGET FMJ #10175230	0,423	9,7	150	740	830	154	178	⊕	-421	-1136	-2210	257	1188
30-06 Spring.	 GOLDEN TARGET FMJ #10175630	0,423	9,7	150	610	850	148	168	⊕	-399	-1076	-2092	248	1145
300 Norma Mag.	 HYBRID TARGET HPBT #20174602	0,743	14,9	230	660	910	108	126	⊕	-285	-747	-1404	126	543
	 HYBRID TARGET MATCH COATED HPBT #20174182	0,743	14,9	230	660	910	108	126	⊕	-285	-747	-1404	126	543

DPR BALLISTIC DATA / CFR

	BULLET NAME BULLET TYPE PRODUCT NUMBER	BC	BULLET WEIGHT		BARREL LENGTH mm	VELOCITY M/S V ₀	HEIGHT OF TRAJECTORY ABOVE LINE OF SIGHT IF SIGHTED IN AT METERS. FOR SIGHTS 40 MM ABOVE BORE						WINDDRIFT		
			Gram	Grain			100	200	300	400	500	600	300	600	
338 Norma Mag.	 	DIAMOND LINE MATCH COATED HPBT #20185012	0,768	19,4	300	660	810	144	163	⊕	-365	-953	-1791	144	621
	 	MATCH KING HPBT #20185272	0,768	19,4	300	660	810	144	163	⊕	-365	-953	-1791	144	621
338 Lapua Mag.	 	MATCH KING HPBT #10185192	0,587	16,2	250	685	890	131	151	⊕	-346	-915	-1742	176	780
	 	MATCH KING HPBT #10185212	0,768	19,4	300	685	820	144	163	⊕	-365	-953	-1791	144	621

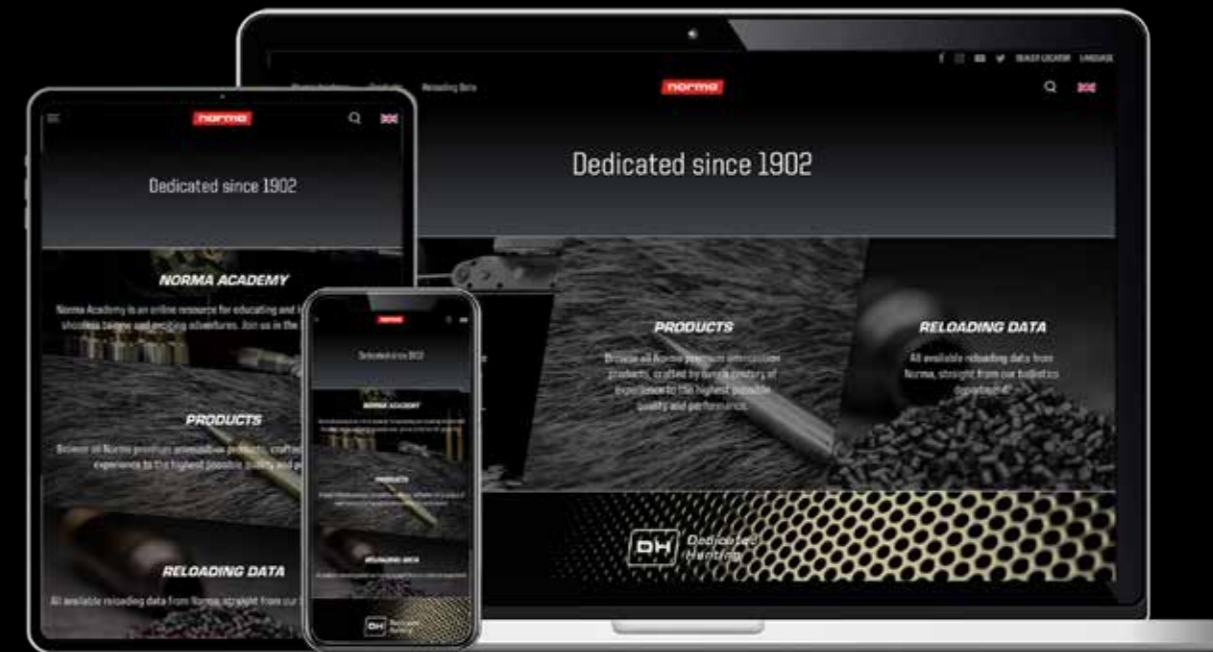
DPR BALLISTIC DATA / RIMFIRE

	BULLET NAME PRODUCT NUMBER	BULLET	G	BARREL (MM)	VELOCITY M/S			ENERGY JOULE			UNITS	
					V ₀	V ₁₀₀	V ₁₀₀	E ₀	E ₁₀₀	E ₁₀₀		
.22LR		MATCH-22 #2318980	LRN	2,6	650	330	294	270	142	113	95	50
.22LR		TAC-22 #2318716	LRN	2,6	650	330	294	270	142	113	95	50
NEW! .22LR		BIATHLON MATCH-22 #2414040	LRN	2,6	650*	320	294	275	137	115	101	50
NEW! .22LR		BIATHLON SPORT-22 #2414041	LRN	2,6	650*	320	294	275	137	115	101	50

*The BIATHLON MATCH-22 and BIATHLON SPORT-22 are tested in -20°C

DPR BALLISTIC DATA / AIRGUN

CALIBER	PRODUCT NAME	BULLET TYPE	PRODUCT NUMBER	WEIGHT G	WEIGHT GR	MATERIAL	UNITS
4,5mm/.177	S-TARGET MATCH	Wadcutter	#2411407	0,53	8,2	Ind. Tins	300
5,5mm/.22	S-TARGET MATCH	Wadcutter	#2411408	0,91	14	Ind. Tins	200
4,5mm/.177	S-TARGET MATCH	Wadcutter	#2411415	0,53	8,2	Blistered tins	300
5,5mm/.22	S-TARGET MATCH	Wadcutter	#2411416	0,91	14	Blistered tins	200



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