



# NORMA AMMUNITION — THE STANDARD FOR HUNTERS AND MARKSMEN WORLDWIDE







The manufacture of hunting and match ammunition is a question of insight, respect and confidence.

#### INSIGHT

We understand the practical demands of ammunition, in the forest as well as at the target range. So when you load your weapon with cartridges from Norma, you can rest assured that you've chosen the very best.

#### RESPECT

It doesn't matter whether you're standing before a huge buffalo in the African savannah, or you are stalking a Fallow Buck on a warm afternoon in May. We know that you expect highest standards for your ammunition, regardless of where you are. Maximum reliability, high accuracy and optimal performance of the cartridge are always of equal importance. There is a big difference between shooting in a world championship and just target practicing for the hunt. We place high demands on ourselves to make sure that your ammunition is of the highest quality available. No matter what task you ask of it.

#### CONFIDENCE

Norma is a world-leading producer with more than 100 years' experience in manufacturing ammunition for hunters and expert shooters. Our line includes more than 132 different types of cartridges in more than 45 calibers. We conduct continuous research and development using the knowledge and experience of hunters and expert shooters around the world as a base so that we can be even better.

IT'S OUR STYLE TO RESPECT YOUR CONFIDENCE IN US.

# CONTENTS: 02-03 Privileged 04-05 The demands of reality 06-07 Norma Oryx – the universal bullet 08 Hunting in Scandinavia with Norma 09 Hunting in Russia with Norma 10-11 Choose the right hunting bullet 12-13 Hunting in Europe with Norma 14 Norma – Always one step ahead 15 Safer hunting with support 16 Hunting with Norma's full metal jacket 17 Sighting in the firearm 18-19 Norma Jaktmatch 20 Hunting in Africa with Norma 21 Norma's OEM customers 22-27 Hunting line and ballistic data 28 Hunting in North America and Oceania with Norma 30-31 Norma handloading components 31 Norma Loading Manual 32-33 Norma Diamond Line 34 Norma's match line 35 Norma .22 Long Rifle - Pistol and **Revolver cartridges** 35 Norma's Promotional products 36 Norma's Representatives export

# **PRIVILEGED**

Quite a few times during the last several years, I've stopped, looked around me, pinched myself and said "You are one privileged guy, Torbjörn!". I remember, a cold clear winter morning with sparkling snow and radiant sunshine in the Nebraska hills, hunting buffalo, or lying in wait for wild boar and deer on a hunting stand in a beech wood forest along the shores of the Danube in Hungary. A meeting with eternity in Namibia.

It's an overwhelming feeling of peace, solitude, and closeness to nature where we all originated.

I think about all the people who have never had the opportunity to experience these things and I realize how fortunate that I am. Opportunities come and go and nothing lasts forever, so as long as I have the chance and am able, I'll continue to enjoy these unequalled opportunities.

When I joined Norma, I did not have the faintest idea about the joy of hunting. It has been eight years since I left the electronics industry, which is a marvel of high technology, super fast machines and progress. But it's hard to get excited over a green circuit board full of components, wired for some unknown purpose. What is exciting is a Sauer 202 rifle with a Schmidt & Bender scope at your side on the hunt. It makes me happy to think about it.

Our products are hi-tech, but hunting is based on feelings. You can discuss technology as long as you want to but in the end, you follow your heart when it comes to choosing a gun or ammunition. That's how hunters are wired, and they often choose Norma.

We're grateful for that!



TORBJÖRN LINDSKOG, CEO



www.okondura.c





From an international perspective, Sweden is a unique country to hunt. It offers a fantastic hunting experience.

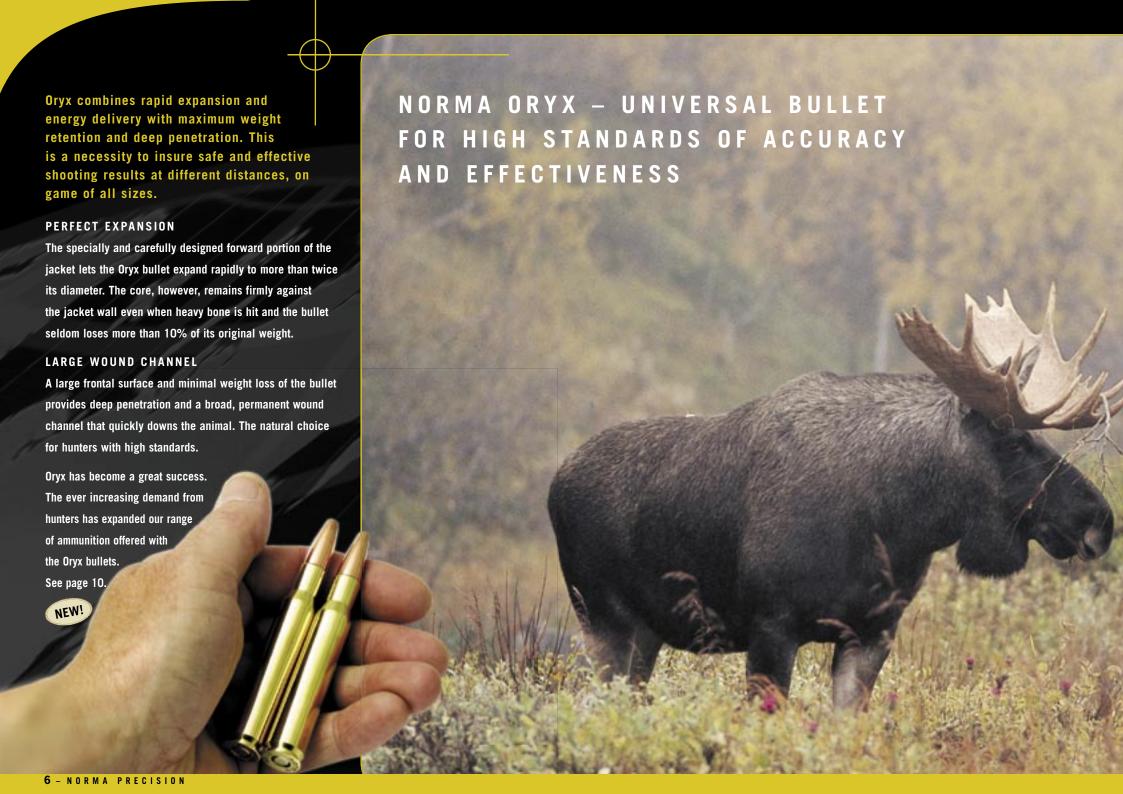
The concentration of moose is higher than in any other country in the world. Over the last 100 years 4.5 million moose have been harvested. At least 3 million of these were shot with Norma cartridges.

The use of Norma ammunition for hunting has provided us with the experience and awareness of the demands that our customers place on us.

Our awareness of what our customers demand, has created first-rate ammunition for both hunting and elite level competition shooting. The Norma team has the expertise and in-depth know how to provide the best.

Our key persons in production, development and sales are all skilled hunters, active shooters, or have a back-ground in high level shooting competition. We are proud of our people.

They settle only for the best, and this has made Norma a world leader in the manufacture of civilian ammunition.





# ORYX - BONDED SUCCESS

"Bonding" is when a bullet's jacket and core are soldered together to add strength and prevent jacket separation under high stress.

#### SUPERIOR ADHESION

For Oryx, Norma uses a very advanced bonding process that provides superior adhesion between the jacket and core. The forward jacket wall must be thinned and properly dimensioned to achieve perfectly controlled expansion even at low velocities or with soft-tissue hits.

#### INTERNAL SPLITTING ZONES

The Oryx tip has internal splitting zones and a special technique leaves the outermost part of the tip unbonded. These details distinguish Oryx from other bonded bullets and make it very versatile under the most diverse hunting conditions.

#### ORYX

The Oryx holds together even when there is a solid hit on heavy bone, and leaves few fragments in surrounding tissue. This also prevents the bullet from deviating from its course inside the body cavity.



This .30-06 caliber Oryx bullet was removed from a bull moose with a live weight of 350 kg. The bullet hit the ribs and lungs yet the retained weight is still 96%.

At the edge of the jacket, you can see the splitting zones and the non-bonded section of the tip.



Superior adhesion between jacket and lead core. A ground down Oryx bullet can easily tolerate being twisted 90 degrees without the jacket separating from the core.

#### SOFT POINT

A conventional soft point bullet often fragments when bone is hit.

In the worst case, there is total fragmentation or the core can separate entirely from the jacket.



Thin forward jacket wall with

splitting zones

Bonded jacket

and lead core

# HOW YOUR ORYX BULLET WORKS

The speed and extent of a bullet's expansion depends on the striking velocity and the resistance met. But it's not always possible to determine the shooting distance or size of the game beforehand. That is why Oryx is designed to work even in extreme cases. Low striking velocity and light game or heavy game at close range makes no difference – Oryx always performs properly.



Successful hunting is seldom due to luck or chance. More likely, it is because skillful and experienced hunters have the ability to use their skills properly, even under difficult circumstances.

They don't worry about details concerning the firearms and equipment either. Those can be prepared and checked in peace and quiet before the hunt.

When the opportunity arises, though, and the gun is lifted to the shoulder, it's not just your own abilities that are put to the test.

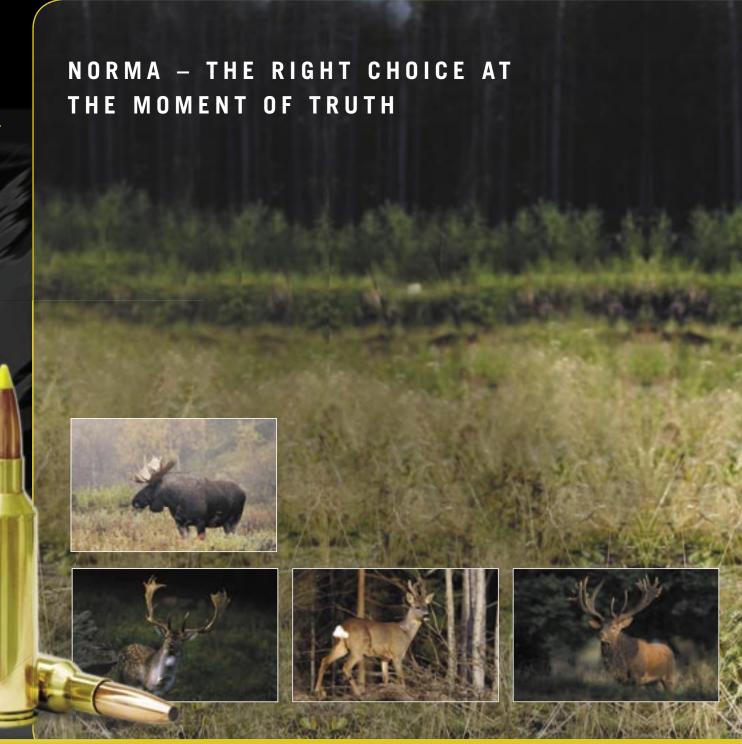
#### YOU CAN COUNT ON NORMA

You have to be able to count on the cartridge you've loaded and count on the bullet to do its job. Safe and effective regardless of how or what you're hunting.

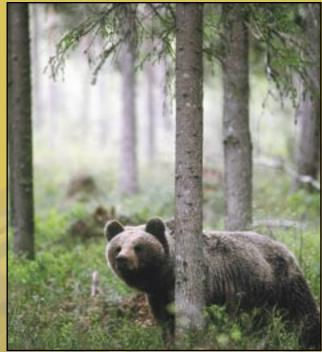
We know what's important when things get serious and we never leave anything to chance. The nature of Scandinavian hunting varies from the beech wood forests of Skåne to open cultivated lands with wild boar, red and roe deer, to pure taiga and tundra with moose, bear and game birds.

The span is huge, when it comes to surroundings, weather and hunting conditions.

We always consider this when we work on development so that we can create cartridges that you can always count on.







# HUNTING IN RUSSIA WITH NORMA

In Russia there are great challenges and a fantastic variety of species to be had. Huge maral deer, and the Marco Polo argali, the world's most magnificent mountain sheep with a trophy as hard to come by as it is coveted.

Russian wild boar in certain areas can reach an impressive size and Siberian roebuck make our largest European roebucks look like kids.

#### RUSSIA - A BEAR HUNTER'S PARADISE

From Moscow to the Ural region, you can find the European brown bear and they can be quite large. For those who want to continue the long journey eastward to Kamchatka and real adventure, the world's biggest brown bears are waiting. Weighing up to 600 kg and measuring nearly one and a half meters up to the shoulders, it is one of the world's most fantastic predators.

Your best hunting partner there is a gun with a caliber of at least .308 or .30-06 with cartridges from Norma.

# CHOOSE THE RIGHT HUNTING BULLET

Besides Oryx, Norma manufactures a line of other hunting bullets for a variety of uses. All of them have been developed with the help of hunters from around the world.

Norma works together with several of the world's most renowned manufacturers of hunting ammunition, which makes it possible for us to offer a wide range of hunting cartridges that meet most needs. You can see other hunting bullets on page 11.

# A BULLET'S PERFORMANCE WHEN IT HITS GAME DEPENDS ON SEVERAL FACTORS

The most important are striking velocity and the resistance the bullet meets when it makes a hit.

A general rule under normal circumstances is to use easily expandable bullets of moderate to low velocity calibers, and solid nose or bonded bullets of high velocity or magnum calibers.

If shooting distances are often long, however, and you use a magnum caliber to get a flat trajectory, you may need to use a bullet that expands easily to achieve good expansion at the lowest striking velocities, as may be the case at long distances.

If you often hunt game that is difficult to take down from short or moderate shooting distances, it may be wise to use thick jacketed and bonded bullets with low velocity calibers.

There can be extreme variations in hunting conditions throughout a single day, which is why it is impossible to make a bullet that is optimal for every hunting situation.



# Norma Oryx

Oryx is a bonded all-around bullet that can withstand extreme deformation without separation of the jacket from the lead core. The specially designed forward portion of the jacket lets the Oryx bullet expand rapidly to more than twice its diameter. Even when heavy bone is hit, the bullet holds together and seldom loses more than 10% of its original weight.

A large frontal surface makes for rapid energy delivery and the bullet's minimal weight loss allows deep penetration and a broad, permanent wound channel that quickly downs the animal.





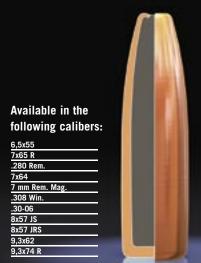
# Norma Vulkan

The Vulkan bullet does not have the traditional lead tip.

Instead, the forward portion of the jacket is inverted around the lead core to prevent deformation no matter how the bullet is treated.

The forward portion of the jacket wall is thin which allows rapid expansion and high energy delivery.

For high velocity calibers, Vulkan has an extra lead lock to prevent jacket/core separation.



# Norma Alaska

The Alaska bullet is a tried and true, semi round nose, traditional soft point bullet with a gilding metal jacket.

It is best suited for moderate to low velocity calibers for slow and even expansion. The 6.5 mm Alaska bullet, often used in slightly higher velocity areas, is equipped with an extra lead lock.



# **Norma Plastic Point**

The Plastic Point bullet is designed for high energy delivery and good penetration.

The lead core is somewhat set back into the jacket and the nose is equipped with a plastic tip.

This eliminates the problem of tip deformation in the magazine due to recoil or when quickly reloading.

The forward portion of the jacket has splitting zones to guarantee rapid expansion and the strongly reinforced base ensures good penetration.



# Available in the following calibers:

7x65 R
.280 Rem.
7x64
7 mm Rem. Mag.
.308 Win.
.30-06
.300 Win. Mag.
9,3x62
9,3x74 R



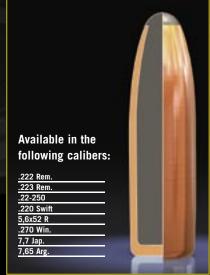


# **Norma Soft Point**

The Soft Point is a conventional half-iacketed bullet primarily intended for small to medium sized game.

The bullet opens quickly, and at high velocities it is suitable for smaller game where immediate shooting results are desirable.

It is also the right choice to use on smaller game at lower velocities





# Norma **Full Metal Jacket**

The Full Metal Jacket is a target bullet that is also excellent for bird and pelt hunting.

The semi-spitzer tip is very effective on small game.

## Available in the following calibers: 5.6x52 R .243 Win 6,5x55 7x57 R .270 Win. (NEW!) .270 WSM NEW! 7x65 R NEW! 7 mm Rem. Mag. .30-06 .300 WSM NEW! .300 Win. Mag. .338 Win. Mag. 8x57 JRS NEW! 8x57 JS 9,3x57 9.3x62

# **Barnes Solid**

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Barnes Solid is a solid copper/zinc alloy bullet.

It is designed for hunting large, tough game that requires high penetration power.

The bullet's shape and solid construction keep it on course, which prevents it from tipping if it meets tough resistance on impact.



# **Barnes Triple Shock**

A new hollow point bullet from Barnes made from solid copper.

The bullet has grooved rings that reduce pressure and increase muzzle velocity.

The all-metal construction results in maximum weight retention and deep penetra-

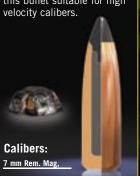


# Swift Scirocco

The Swift Scirocco is a polymer tipped, bonded bullet with a boat tail base and very thick jacket.

The polymer tip and design of the jacket's forward portion allow early expansion.

Bonding and a tapered shape designed to provide low aerodynamic drag make this bullet suitable for high



# Swift A-Frame

The A-Frame is a thick iacketed, bonded bullet with a solid partition in the middle. The construction guarantees high weight retention and deep penetra-

It is very suitable for tough and hard to penetrate game and high velocity calibers.



# Nosler **Partition**

The Nosler Partition has two separate lead cores with a solid partition between them.

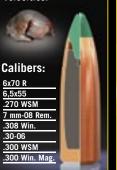
The forward portion expands rapidly and has high energy delivery. The base remains intact even when bone is hit and it ensures deep



# Nosler **Ballistic Tip**

The Ballistic Tip has been constructed to provide minimal aerodynamic drag and good flight properties.

The boat tail base and polycarbonate tip ensure very flat trajectories at all velocities.



# Nosler Accubond

A new bonded bullet from Nosler with a reinforced iacket base, tapered configuration and polymer tip.

Excellent flight properties and high accuracy are combined with deep penetration and controlled expansion.



# Woodleigh **Soft Nose**

Expanding big game bullet with the original Kynoch profile that enhances simultaneous shooting and eases regulation of double rifle barrels.



# Woodleigh **Full Metal** Jacket

Bullet with copper clad steel jacket and Kynoch profile. The forward portion of the bullet is reinforced to prevent deformation and ensure maximum penetration in the biggest and toughest game.



Hunting on the Continent is filled with traditions and rituals that can seem foreign to a Scandinavian hunter at first glance.

Where space has been limited for both game and people for a long time, it follows naturally that the original hunt to provide food on the table has evolved into a specific means of cultural expression that is surrounded by traditions.

## UPHOLD HUNTING

There is really only one way to uphold hunting as a phenomenon in a modern society, and that is by maintaining the view that game and hunting are resources that provide harmony for people in an ever more confusing and stressful cyber world that we are not made for.

From time immemorial, hunting has been one of the foundations for the progress and development of humanity. We also know that European hunting cultures respected and honored game animals since they were directly dependent on them for their own survival.

That's no longer the case today, which is all the more reason to avail ourselves of hunting traditions and respect game by improving ourselves as hunters.





# HUNTING IN THE HEART OF EUROPE

Where the mighty Danube flows through the lower Hungarian plains in the middle of the Carpathian basin, lies Gemenc.

At the western bank of the river is the largest area of connected flood-plains in Europe that often floods at high tide.

The fertile land and the marshlands of the low-lying areas with a rich variety of species, is about as close to a hunting paradise as you can get.

The biotope is ideal for red deer and wild boar and it is no coincidence that Gemenc has one of the world's finest stocks of antlered game.

More information: www.gemencrt.hu



Perfect biotopes and prudent, professional game management that promotes selective hunting is the basis for building up game stock of the highest quality.

Hunting is a timeless oasis in a technological world. Progress can involve high performance technical innovations as well as the revival of tried and true traditional products.

This is the charm and source of inspiration in our work.

# THREE NEW CALIBERS IN NORMA'S PRODUCT LINE

We have chosen two flat shooting and hard hitting modern cartridges and an ageless big game classic.

# Caliber .270 WSM NEW!



A short magnum cartridge that combines a flat trajectory with excellent shooting properties.

Loaded with:

Oryx, Nosler BST and Barnes Triple Shock.

# Caliber 7 mm-08 Rem. NEW!



A necked down version of .308 Win. Can be used in lightweight guns with short receivers.

Loaded with:

Nosler BST.

7 mm-08 Rem.

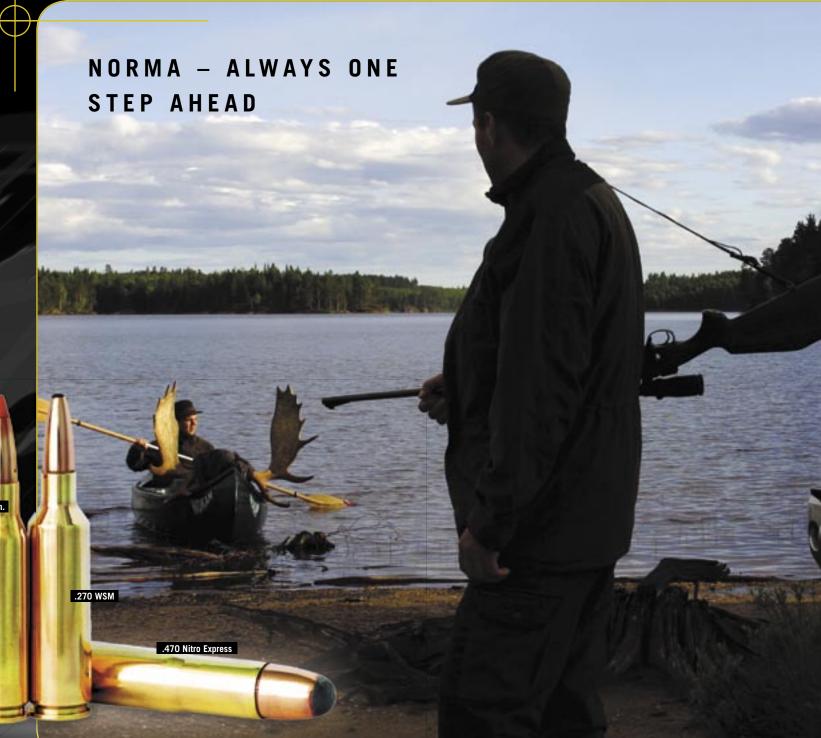


Classic big game cartridge introduced in 1907 by Joseph Lang. A powerful cartridge for really big game.

Loaded with:

Woodleigh soft nose and full metal jacket.

Refer to the ballistics pages to see other new additions to the product line.





#### **SURE-FIRE SUPPORT!**

A well-placed shot is more important than anything else to conclude a hunt successfully. Even the simplest support for your firearm or body makes shooting considerably easier and you come off the mark sooner.

A lot of major preparation is not usually necessary. It only takes a few seconds to cut a shooting stick that is very effective for firing in standing or sitting positions.

A good rule is to fire from the lowest possible position. If you can sit down, then sit and shoot. If you can lie down, lie down and shoot! With a little foresight, you can usually find some natural support whether you're stationed at a post or on the move.



You may have been waiting for hours in the cold and rain and then suddenly everything happens in just a few seconds. The adrenalin makes your pulse race. But do you have to be in a hurry?

You've practiced properly, you're sighted-in, and you can quickly come up with good support.

Then you can take it easy and wait for the right moment to fire that perfect stress-free shot.







The reason some hunters get off the mark sooner and safer depends on two things.

They target shoot often and have learned to improvise to find support quickly for their firearm when necessary.

A little foresight is all that's necessary to turn a difficult shot into a simple and sportsmanlike one.

Here are some examples of how you can make the best of a situation, depending on the circumstances.





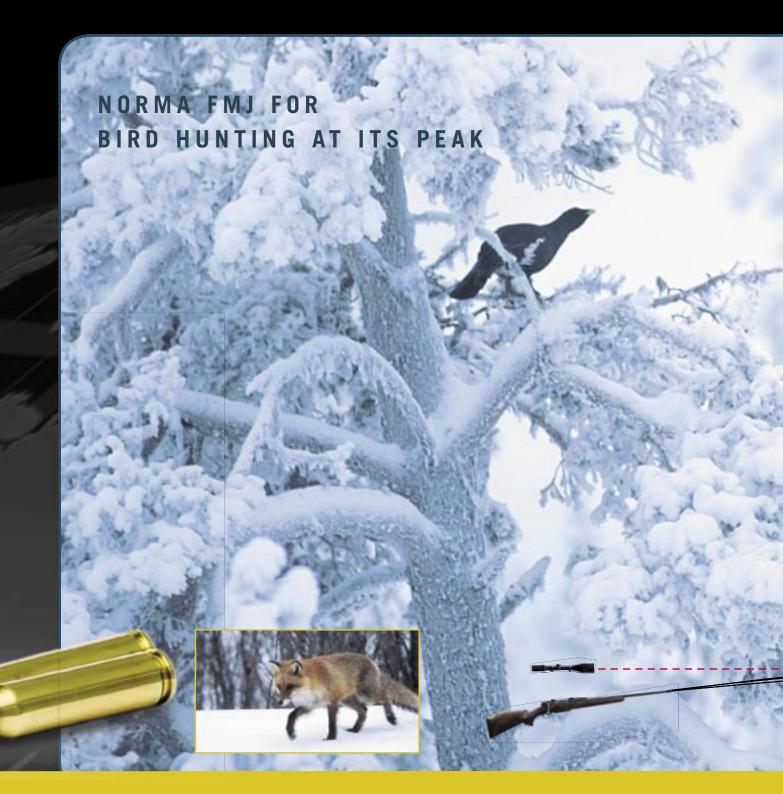
The typical Scandinavian Capercallie is a challenge for every bird hunter.
They are masters at hiding in the densest areas and cawing at the dogs during the autumn hunt.

The Capercallie is a difficult bird to hunt during the winter hunting season. Your shooting distances might be quite long and winter weather makes the shooting more difficult. Hunting for this bird is very strenuous, so you can not leave anything to chance.

#### A TRUE HUNTING CARTRIDGE

You can rely on Norma Jaktmatch. We have developed it into a true hunting cartridge for birds and small game that can be shot with a FMJ.

Norma's Jaktmatch cartridges have very high accuracy and a bullet designed for safe and effective shooting results. When the opportunity comes, it is you, your ammunition and your gun that will decide the final outcome.



# SIGHT-IN AT THE RIGHT DISTANCE Judging distances is difficult, so you should sight-in your gun so Go to www.norma.cc and type in your figures in the ballistics

that it hits 1-2 inches high at 100 yards.

Exactly how high the gun should hit depends on the caliber and bullet weight you use and from which direction you want the gun to hit the bullseye.

If you want to aim dead center from all possible hunting distances, you cannot have too much hold-over if you are hunting smaller game.

program. You can easily see the maximum acceptable shooting distance at that hold-over. Sight-in at several different distances so you know what will happen in a real situation!

The example in the picture below is for a 150 grains FMJ of caliber .30-06.

# www.norma.cc

There is an advanced ballistics program where you can find out what your trajectory will look like in a real situation using different combinations of bullet weights and velocities. At the click of a button, you can directly compare the trajectories of the various types of factory loaded ammunition bullets.

## SEE HOLD-OVER **IMMEDIATELY**

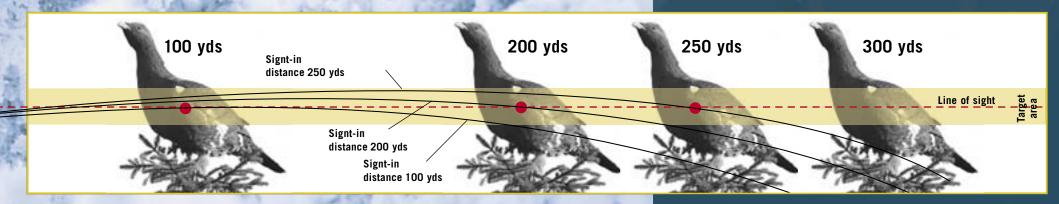
In the program, you can easily enter your own information on bullet weight, ballistic coefficient, muzzle velocity and the line of sight height. Then you



can adjust the zero range and immediately see the hold-over at each distance before the bullet hits dead on. Or how low it will hit at the chosen zero range.

You can also see what velocity and energy the bullet has at distances up to 600 yards. Wind drift is greater than you think even at moderate shooting distances. You can see how the bullet is affected by different wind speeds and directions, which is valuable to know when you are going to do a thorough sight-in of your gun.

On our web pages, you'll also find information about our products, loading data and ballistic coefficients for various bullets, how you can load your own cartridges and much more.



Target ammunition should have the same quality as your hunting cartridges. Many hunters also use Jaktmatch to hunt birds and small game so we have no reason to distinguish between hunting and target cartridges.

Take care of your hearing - always use hearing protection. See www.peltor.se

Practicing shooting on a regular basis is not only a way to be a responsible hunter, it is also a good-natured way to have fun and socialize with hunting friends and other like-minded people. Norma's sight-in targets are perfect for this. They are available at your firearms dealer or from our web site.

What's important is not how you practice, but that you do it regularly. Ideally, you should use the gun you hunt with and then it is important that your target and hunting ammunition are consistent (especially when practicing with moving targets). You need to lead in the same manner and accuracy should be just as good so you get a true idea of your ability.

All components in the Jaktmatch cartridges are the highest quality. The fired cases provide the reloader with a top quality product to reload.

The Jaktmatch serie has added three new calibers: .270 Win., .270 WSM and .300 WSM.





# SIGHT-IN WITH **HUNTING AMMUNITION!**

Always do a thorough sight-in with the ammunition you intend to use before you go hunting.

The differences in ballistic coefficient between different bullet types of the same weight and caliber can be quite large depending on the bullet's design.

That affects the point of impact, so never mix cartridges with different bullets even if the weight and velocity are identical.

A good way to check your sighting-in is to use a variant of the Norwegian shooting test.

Shoot now and then, using hunting ammunition and support, at a game silhouette from different distances.

This is partly to see if the point of impact corresponds to how you aim at an animal and partly to see if you have sufficient ability.

## Norwegian range test

To pass the annual, compulsory, Norwegian shooting test for Class 1 large game, the shooter must place five shots of five, using hunting ammunition, within 12 inch of the animal figure target area.



Before taking the test, you must first shoot 30 registered practice shots with a weapon and ammunition of your choice.

The shooting distance

is 110 yds and you can choose your shooting position. Support such as a hunting stick or pillow under the gun is not allowed.

# NORMA JAKTMATCH

Bullet vergly to Grey   Bull   Velocy   Search   Velocy   Search   Velocy   Search   Velocy	NOKWA		1 N I W A I	U	<u>'</u>
Full picket   150	Bullet type	coeffi		range,	in at ⊕ yards. For sight 1,6 inch. above bore. a 10 m.p.h. cross wind
Hollow property   Color   Hollow property   Ho	3,2 g/50 gr Full jacket	0.192	3199 2697 2247 1843	100 150	0,0 0,6 ⊕ -2,0 -11,7 0,5 1,6 1,5 ⊕ -8,6
The product	Hollow point # 20 <b>16527</b> 0	0.321	2625 2354 2100 1862	100 150 200	-0,1 ⊕ -1,5 -4,7 -17,3 1,1 4,8 11,3 0,4 1,0 ⊕ -2,7 -14,4 1,1 2,4 2,1 ⊕ -10,3
#20169070	<b>"Elektron/bird"</b> 7,8 g/120 gr Full jacket # 20 <b>16542</b> 0	0.428	2690 2238 1833 1482	100 150	-0,1 \( \oplus \) -1,7 -5,4 -21,4 \( 1,9 \) 8,3 20,8
Full jacket	Full jacket	0.365	2887 2634 2395 2169	100 1 <i>5</i> 0	0,2 0,7 ⊕ -2,1 -11,0
9,7 g/150 gr   0.443   2995   2780   2576   2380   100   -0.3   6   -0.9   -2.9   -1.1   0.7   2.8   6.5	8,4 g/130 gr Full jacket	0.365	3150 2882 2630 2391	100 150	
#20176220  30-06 9.7 g/150 gr Full jacket #20176510  #200 0,7 1,9 1,7 4 -0.3 -2.3 -10.6 -0.7 1.0 -0.2 -0.7 -1.0 -0.7 -0.9 -0.7 2.8 6.6 -0.8 -2.7 -10.5 -0.7 2.8 6.6 -0.8 -2.7 -10.5 -0.7 2.8 6.6 -0.8 -2.7 -10.5 -0.7 2.8 6.6 -0.8 -2.7 -10.5 -0.7 2.8 6.6 -0.8 -2.7 -10.5 -0.7 2.8 6.6 -0.8 -2.7 -10.5 -0.7 2.8 6.6 -0.8 -2.7 -10.5 -0.7 2.8 6.6 -0.8 -2.7 -10.5 -0.7 2.8 6.6 -0.8 -2.7 -10.5 -0.7 2.8 6.6 -0.8 -2.7 -10.5 -0.7 2.8 6.6 -0.8 -2.7 -10.5 -0.7 2.8 6.6 -0.8 -2.7 -10.5 -0.7 2.8 6.6 -0.8 -2.7 -10.5 -0.7 2.8 6.6 -0.8 -2.7 -10.5 -0.7 2.8 6.6 -0.8 -2.7 -10.5 -0.7 2.8 6.6 -0.8 -2.7 -10.5 -0.7 2.8 6.6 -0.8 -2.7 -10.5 -0.7 2.8 6.6 -0.8 -2.7 -10.5 -0.7 2.8 6.6 -0.8 -0.8 -0.7 -0.7 2.8 6.6 -0.8 -0.8 -0.7 -0.7 2.8 6.6 -0.8 -0.8 -0.8 -0.8 -0.8 -0.8 -0.8 -0.8	9,7 g/150 gr Full jacket		2995 2780 2576 2380	100 150	-0,3
Full jacket # 20175510	9,7 g/150 gr Full jacket	0.438	2657 2456 2263 2080	100 150	0.3 0.9 $\oplus$ -2.4 -12.5
# 20175730*  300 Win. Mag. 9.7 g/150 gr	9,7 g/150 gr Full jacket	0.423	2772 2558 2355 2160	100 150	0,2 0,8 \(\phi\) -2,2 -11,5
9.7 g/150 gr Full jacket #20175450* 0.423 3067 2839 2622 2416 100 0.0 0.3 6 0.7 2.8 6.6 200 0.4 1.4 1.3 6 0.4 0.4 1.4 1.3 6 0.4 0.4 1.4 1.3 6 0.4 0.4 1.4 1.3 6 0.4 0.4 1.4 1.3 6 0.4 0.4 1.4 1.3 6 0.4 0.4 1.4 1.3 6 0.4 0.4 1.4 1.3 6 0.4 0.4 1.4 1.3 6 0.4 0.4 1.4 1.3 6 0.4 0.4 1.4 1.3 6 0.4 0.4 1.4 1.3 6 0.4 0.4 1.4 1.8 0.8 1.5 0.3 1.0 0.4 1.4 1.8 0.8 1.5 0.3 1.0 0.4 0.4 1.4 0.4 0.4 0.3 1.0 0.4 0.4 0.4 1.8 0.4 1.	Full iacket	0.423	2953 2731 2519 2318	100 1 <i>5</i> 0	0,1 0,6 \( \phi \ -1,9 \ -9,9 \)
8.0 g/123 gr Full jacket # 20180090	.300 Win. Mag. 9,7 g/150 gr Full jacket # 20 <b>17545</b> 0*	0.423	3067 2839 2622 2416	100 150	-0,3
14.6 g/225 gr Full jacket # 20185100*  9,3x57 15,0 g/232 gr Full jacket # 20193180  9,3x62 150 g/232 gr Full jacket # 20193180  100 0.275 2510 2204 1920 1661 100 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	8,0 g/123 gr Full jacket	0.191	2822 2357 1939 1572	100 150	-0,2 \( \operatorname \) -1,4 \( -4,7 \) -18,9 \( 1,8 \) 7,8 \( 19,3 \) \( 0,3 \) \( 1,0 \) \( \operatorname \) -2,9 \( -16,1 \)
# 20193060 200 2,2 4,0 3,3 4 -16,5   9,3x62 15,0 g/232 gr Full jacket # 20193180 50 0,6 1,2 0,5 0,7 20,9 1,4 6,1 14,6 150 0,6 1,2 0,7 2,5 0,7 2,1 0,4 1,5 0,5 0,6 1,2 0,7 2,5 0,7 2,1 0,4 1,5 0,6 1,2 0,7 2,5 0,7 2,1 0,4 1,5 0,6 1,2 0,7 2,5 0,7 2,5 0,7 1,0 1,5 0,7 2,9 2,5 0,7 1,0 1,5 0,7 2,9 2,5 0,7 1,0 1,5 0,7 2,9 2,5 0,7 1,0 1,5 0,7 3,0 0,7 1,0 1,5 0,7	14.6 g/225 gr	0.499	2657 2480 2310 2146	100 150	-0,1
# 20 <b>19318</b> 0 200 1,5 2,9 2,5 ⊕ -12,4    Height of trajectory above line of sight   Wind drift   25 50 75 100 150 yds   100 yds	Full jacket	0.275	2215 1930 1670 1440	100 150	1.1 1.7
V <sub>0</sub> V <sub>25</sub> V <sub>50</sub> V <sub>100</sub> 25 50 75 100 150 yds 100 yds	15,0 g/232 gr Full jacket	0.275	2510 2204 1920 1661	100 150	⊕ -0,1 -1,9 -5,9 -21,1 0,0 ⊕ -1,8 -5,7 -20,9 1,4 6,1 14,6 0,6 1,2 ⊕ -3,3 -17,3 1,5 2,9 2,5 ⊕ -12,4
			Vo V25 V50 V100		
.22 Long Rifle Lead, Round nose 2,67 g/40 gr 0.15 1066 1025 989 930 50 0,2 ⊕ -2,4 -7,3 -24,5 3,8 # 87 <b>15612</b> 0	.22 Long Rifle L 2,67 g/40 gr # 87156120	ead, R		50	

50 cartridge/boxes. \*20 cartridge/boxes.

Africa is more than just "the big five". There are also countless species of antelopes and gazelles, from the smallest to the largest. Many of them are difficult to drop in relation to their body size.

Hunting in mountainous terrain, semi-deserts or on the savanna seldom allows for any easy shots from short distances. Hunting in typical bush also places its special demands on both hunter and equipment. Norma's line has everything you need for a successful hunt. Flat-shooting magnum cartridges loaded with bullets designed to give you a margin when it comes to muzzle energy and penetration ability.

You'll find everything from Barnes Solid bullets for the truly big game to the bonded Swift A-Frame with a reinforced jacket and partition for the toughest antelopes or bull buffalo.



Jan-Olof Swanteson, Sweden, with a kudu shot with Norma .375 H&H.





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For many years, Norma has manufactured cases for a large number of ammunition makers around the world.





































BALLISTIC DATA	Bullet type Bullet weight g/gr Product number	Ball coef.	Veocity feet per second	Energy foot pounds  Muzzle E <sub>100</sub> E <sub>200</sub> E <sub>300</sub>	Zero range, vards	Height of trajectory above line of sight if sig in at ⊕ yards. For sights 1,6 inch above 50 100 150 200 300	bore. 10 m.p.h cross wind.
	<b>Soft point</b> 3,2 g/50 gr # 20 <b>15711</b> 2		3199 2679 2215 1800	1136 797 545 360	100 150 200		
.222 Rem.	Full jacket 3,2 g/50 gr # 20 <b>15713</b> 2	0.198	2789 2344 1942 1587	864 610 419 280	50 100 150 200	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	1,7 7,6 18,7
	Soft point 4,0 g/62 gr # 20 <b>15716</b> 2	0.214	2887 2464 2078 1731	1148 836 595 413	50 100 150 200	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	1,5 6,6 16,1
.223 Rem.	Soft point 3,6 g/55 gr # 20 <b>15717</b> 2	0.235	3215 2800 2420 2072	1263 957 716 524	50 100 150 200	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	1,2 5,1 12,2
.22-250 Rem.	<b>Soft point</b> 3,4 g/53 gr # 20 <b>15733</b> 2	0.237	3707 3246 2830 2451	1618 1240 943 707	50 100 150 200		1,0 4,2 10,0
.220 Swift	Soft point 3,2 g/50 gr # 20 <b>15701</b> 2	0.185	4019 3394 2852 2369	1794 1279 903 623	50 100 150 200	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	1,2 5,0 12,2
5,6x52 R	# 20156042	0.268	2789 2456 2146 1860	1227 951 726 546	50 100 150 200		1,3 5,3 12,8
O,UAUZ II	Full jacket 4,6 g/71 gr # 20 <b>15605</b> 2	0.275	2789 2463 2160 1880	1227 957 736 557	50 100 150 200	⊕ 0,3 -0,8 -3,5 -14,8 -0,2 ⊕ -1,3 -4,2 -15,8 0,3 0,8 ⊕ -2,5 -13,3 0,9 2,1 1,9 ⊕ -9,6	1,2 5,2 12,5
6x70 R	Nosler BST 5,8 g/90 gr # 20160112	0.365	2461 2231 2013 1809	1211 995 810 654	50 100 150 200	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	1,1 4,5 10,8
.243 Win.	Full jacket 5,2 g/80 gr # 20160072	0.262	3117 2750 2412 2098	1726 1344 1034 782	50 100 150 200		1,1 4,7 11,2
	UIVX	0.257	3018 2653 2316 2004	2023 1563 1191 892	50 100 150 200	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	1,2 5,0 12,0
6,5 Jap.	Alaska 10,1 g/156 gr # 20 <b>16532</b> 2	0.326	2067 1835 1622 1431	1480 1167 911 710	50 100 150 200	⊕ -0.7 -4.0 -10.2 -32.9 0.4 ⊕ -2.9 -8.8 -30.8 1.3 2.0 ⊕ -4.9 -25.0 2.5 4.4 3.7 ⊕ -17.7	1,6 6,6 15,8
6,5 Carc.	# 20165352	0.326	2362 2111 1877 1660	1933 1544 1220 955	50 100 150 200	⊕ -0,2 -2,4 -6,8 -23,3 0,1 ⊕ -2,1 -6,3 -22,6 0,8 1,4 ⊕ -3,6 -18,5 1,7 3,2 2,7 ⊕ -13,1	
6,5x55	# 20165222			2123 1815 1544 1305	100 150 200	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	0,8 3,1 7,3
FACTS ABOUT THE BALLISTIC DATA	# 20165592	<b>n</b> 0.467	2690 2500 2317 2142	2250 1943 1669 1427	50 100 150 200		0,7 3,1 7,1
The velocity and energy data for Norma ammunitions is based on the use of a 24 inch barrel. If your barrel length is longer or shorter, then use the 20-25 fps/inch rule of	# 20165522	0.276	2559 2250 1964 1701	2269 1755 1336 1002	50 100 150 200	$egin{array}{cccccccc} & \oplus & 0,1 & -1,5 & -5,1 & -19,4 \\ -0,1 & \oplus & -1,7 & -5,3 & -19,7 \\ 0,5 & 1,1 & \oplus & 3,1 & -16,4 \\ 1,3 & 2,7 & 2,3 & \oplus & -11,7 \\ \end{array}$	1,4 5,9 14,1
thumb. Longer barrels will have higher velocity by this amount, shorter barrels, less by the same. Due to variations in the barrels material, length, wear, measurements etc.,	# 20165622	0.348	2559 2313 2081 1862	2267 1852 1499 1201	50 100 150 200		1,1 4,5 10,7
stated velocities should only be used as guidelines.  We recommend that you always sight-in your gun when changing type of ammunition.	Vulkan 10,1 g/156 gr # 20 <b>16556</b> 2	0.354	2644 2397 2164 1944	2421 1990 1622 1309	50 100 150 200		1,0 4,2 10,0

BALLISTIC DATA	Bullet type Bullet weight g/gr Product number	Ball coef.	Veocity feet per second  Muzzle V <sub>100</sub> V <sub>200</sub> V <sub>300</sub>	Energy foot pounds  Muzzle E <sub>100</sub> E <sub>200</sub> E <sub>300</sub>		in at ⊕ yards. For	above line of sight if sighted sights 1,6 inch above bore. 150 200 300 yds	10 m.p.h cross wind.
6,5-284 Norma	Nosler Partiti 9,1 g/140 gr # 20 <b>16565</b> 2	on 0.465		2712 2352 2032 1748	50 100 150 200	Ф 0,5 -0,3 Ф 0,0 0,6 0,5 1,5	-0.1 -1.9 -9.7 -0.9 -3.0 -11.3	0,7 2,7 6,3
.270 Win.	Soft point 8,4 g/130 gr # 20169022 Oryx		3140 2868 2612 2370		50 100 150 200 50	⊕ 0,6 -0,3 ⊕ -0,1 0,5 0,3 1,3 ⊕ -0,3	$\begin{array}{cccc} 0,2 & -1,4 & -8,5 \\ -0,7 & -2,6 & -10,4 \\ & & -1,7 & -8,9 \\ 1,2 & & & -6,4 \\ -0,6 & -3,0 & -12,4 \end{array}$	0,8 3,3 7,7
	Oryx 9,7 g/150 gr # 20 <b>16901</b> 2	0.373	2854 2608 2376 2155	2714 2267 1880 1547	50 100 150 200	⊕ -0,3 -0,2 ⊕ 0,2 0,7 0,7 1,8	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	0,9 3,6 8,4
NEW!	Nosler BST 8,4 g/130 gr # 20 <b>16925</b> 2		3281 3047 2825 2614	3108 2681 2305 1973	50 100 150 200	$\begin{array}{ccc} & \oplus & 0,6 \\ -0,3 & \oplus & \\ -0,1 & 0,4 \\ 0,3 & 1,1 \end{array}$	$\begin{array}{cccc} 0,3 & -1,0 & -7,0 \\ -0,6 & -2,3 & -8,9 \\ \oplus & -1,4 & -7,6 \\ 1,1 & \oplus & -5,5 \end{array}$	0,6 2,5 5,9
.270 WSM	<b>Barnes Triple</b> -9,1 g/140 gr # 20 <b>16933</b> 2	- <b>Shock</b> 0.497	3150 2952 2762 2580	3085 2709 2372 2070	50 100 150 200	$\begin{array}{ccc} & \oplus & 0,6 \\ -0,3 & & \oplus \\ 0,0 & 0,5 \\ 0,3 & 1,3 \end{array}$		0,6 2,3 5,3
NEW!	Oryx 9,7 g/150 gr # 20 <b>16932</b> 2	0.373	3117 2856 2611 2378	3237 2718 2271 1884	50 100 150 200	⊕ 0,5 -0,3 ⊕ 0,0 0,5 0,4 1,4	$\begin{array}{cccc} 0,0 & -1,7 & -9,1 \\ -0,8 & -2,8 & -10,7 \\ \oplus & -1,7 & -9,1 \\ 1,3 & \oplus & -6,5 \end{array}$	0,8 3,2 7,4
	Full jacket 9,7 g/150 gr # 20 <b>17006</b> 2	0.441	2641 2442 2251 2069	2324 1986 1689 1427	50 100 150 200	⊕ 0,3 -0,1 ⊕ 0,3 0,9 0,9 2,1	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	0,8 3,3 7,8
7x57 R	Oryx 10,1 g/156 gr # 20 <b>17003</b> 2	0.330	2608 2346 2099 1867	2357 1906 1526 1208	50 100 150 200	Ф 0,2 -0,1 Ф 0,4 1,0 1,1 2,4	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1,0 4,2 10,0
7x57	Oryx 10,1 g/156 gr # 20 <b>17001</b> 2	0.330	2641 2377 2128 1894	2417 1957 1569 1243	50 100 150 200	Ф 0,2 -0,1 Ф 0,4 1,0 1,0 2,3	-1,1 -4,2 -16,2 -1,4 -4,6 -16,9 ⊕ -2,7 -14,0 2,0 ⊕ -10,0	1,0 4,1 9,8
7 mm- 08 Rem.	<b>Nosier BST</b> 9,1 g/140 gr # 20 <b>17068</b> 2	0.485	2822 2633 2452 2278	2476 2156 1870 1614	50 100 150 200	Ф 0,3 -0,2 Ф 0,2 0,7 0,7 1,8	-0,6 -2,9 -11,8 -1,1 -3,5 -12,8 ⊕ -2,1 -10,7 1,6 ⊕ -7,6	0,7 2,7 6,4
7x65 R	Full jacket 9,7 g/150 gr # 20 <b>17064</b> 2	0.441	2756 2552 2357 2170	2530 2169 1850 1569	50 100 150 200	⊕ 0,3 -0,1 ⊕ 0,3 0,8 0,8 1,9	-0,8 -3,3 -13,2 -1,2 -3,9 -13,9 $\oplus$ -2,3 -11,6 1,7 $\oplus$ -8,2	0,8 3,1 7,3
	Oryx 10,1 g/156 gr # 20 <b>17063</b> 2	0.330	2723 2454 2200 1962	2569 2086 1678 1334	50 100 150 200	Ф 0,3 -0,2 Ф 0,3 0,9 0,9 2,1	-0,8 -3,6 -14,7 -1,3 -4,2 -15,6	0,9 3,9 9,4
	Plastic point 11,0 g/170 gr # 20 <b>17028</b> 2	0.373	2625 2392 2170 1961	2599 2157 1776 1450	50 100 150 200	⊕ 0,2 -0,1 ⊕ 0,4 0,9 1,0 2,3	-1,1 -4,1 -15,8 -1,4 -4,5 -16,4	1,0 4,0 9,5
	Vulkan	0.335	2657 2396 2150 1919	2662 2165 1743 1389	50 100 150 200		-1,0 -4,0 -15,8 -1,4 -4,5 -16,5 ⊕ -2,6 -13,7 2,0 ⊕ -9,8	1,1 4,5 10,6
.280 Rem.	Oryx 10,1 g/156 gr # 20 <b>17048</b> 2	0.330	2789 2516 2259 2017	2695 2193 1768 1410	50 100 150 200	⊕ 0,4 -0,2 ⊕ 0,2 0,8 0,8 2,0	-0,7 -3,2 -13,6 -1,2 -3,9 -14,7 $\oplus$ -2,3 -12,3 1,7 $\oplus$ -8,8	0,9 3,8 9,0
	Vulkan 11,0 g/170 gr # 20 <b>17051</b> 2	0.357	2592 2350 2121 1906	2534 2083 1697 1370	50 100 150 200	⊕ 0,2 -0,1 ⊕ 0,4 1,0 1,1 2,4	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1,0 4,3 10,2
		0.373	2707 2469 2244 2031	2764 2300 1899 1555	50 100 150 200	⊕ 0,3 -0,2 ⊕ 0,3 0,9 0,9 2,1	-0,8 -3,5 -14,3 -1,3 -4,1 -15,2	0,9 3,8 9,1

BALLISTIC DATA	Bullet type Ball Bullet weight g/gr coef. Product number		Energy foot pounds Muzzle E <sub>100</sub> E <sub>200</sub> E <sub>300</sub>			above line of sight if sighted sights 1,6 inch above bore 150 200 300 yds	e. 10 m.	ift in inches for a p.h cross wind. 200 300 yds
7x64	Nosler Accubond 9,1 g/140 gr 0.48 # 20 <b>17069</b> 2	5 2953 2759 2572 2394	2712 2366 2058 1782	50 100 150 200	⊕ 0,4 -0,2 ⊕ 0,1 0,6 0,6 1,5	$\begin{array}{ccccc} -0.3 & -2.2 & -10.1 \\ -0.9 & -3.1 & -11.4 \\ \oplus & -1.8 & -9.6 \\ 1.4 & \oplus & -6.8 \end{array}$	0,6	2,6 6,0
	# 20170532	0 2789 2516 2259 2017	2695 2193 1768 1410	50 100 150 200	⊕ 0,4 -0,2 ⊕ 0,2 0,8 0,8 2,0	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	0,9	3,8 9,0
	# 20170182	3 2756 2503 2263 2037	2865 2362 1931 1564	50 100 150 200 50	⊕ 0,3 -0,2 ⊕ 0,2 0,8 0,8 2,0 ⊕ 0,4	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		4,0 9,4
NEW!	# 20 <b>17019</b> 2  Barnes Triple-Shoc	8 2756 2519 2294 2081 k	2865 2393 1985 1632	50 100 150 200	⊕ 0,4 -0,2 ⊕ 0,2 0,8 0,8 2,0 ⊕ 0,5	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		3,7 8,7
7 mm Rem. Mag.	9,1 g/140 gr 0.47 # 20 <b>17054</b> 2 Swift Scirocco	7 3117 2912 2716 2529 6 3117 2934 2758 2589	3021 2637 2294 1988	50 100 150 200 50	⊕ 0,5 -0,3 ⊕ 0,0 0,5 0,4 1,3 ⊕ 0,7 -0,3 ⊕	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		2,4 5,6
	# 20 <b>17062</b> 2	0 2953 2670 2404 2153	3237 2869 2535 2234 3021 2470 2002 1607	50 100 150 200 50 100	-0,1 0,5 -0,3 1,2	1,2 ⊕ -5,8		2,1 5,0 3,5 8,3
	# 20 <b>17047</b> 2		2202 2720 2244 1220	50 100 150 200	⊕ 0,5 -0,3 ⊕ 0,1 0,6 0,6 1,7 ⊕ 0,5	1,5 ⊕ -/,/	Н	
	# 20170242	3 2953 2688 2438 2201	3293 2728 2244 1830	100 150 200	⊕ 0,5 -0,3 ⊕ 0,1 0,6 0,6 1,6 ⊕ 0.5	-0,2 -2,2 -10,8 -1,0 -3,2 -12,3 ⊕ -2,0 -10,4 1,5 ⊕ -7,5 -0,2 -2.1 -10.5	0,9	3,6 5,8
	11,0 g/170 gr 0.37 # 20 <b>17027</b> 2	8 2953 2705 2470 2247	3293 2763 2304 1907	100 150 200	⊕ 0,5 -0,3 ⊕ 0,1 0,6 0,5 1,6	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	0,8	3,4 7,9
7,5x55 Swiss	Oryx 11,7 g/180 gr 0.31 # 20 <b>17510</b> 2	1 2493 2222 1968 1734	2485 1974 1549 1201	50 100 150 200	⊕ 0,0 0,0 ⊕ 0,6 1,2 1,4 2,7	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	1,3	5,3 12,7
7,62 Russian	<b>Alaska</b> 11,7 g/180 gr 0.25 # 20 <b>17555</b> 2	7 2575 2244 1938 1660	2651 2013 1501 1101	50 100 150 200	⊕ 0,0 0,0 ⊕ 0,6 1,2 1,4 2,7	-1,7 -5,5 -20,3 -1,7 -5,5 -20,3	1,5	6,3 15,2
.308 Win.	<b>Nosler BST</b> 9,7 g/150 gr 0.38 # 20 <b>17625</b> 2	9 2822 2588 2365 2154	2653 2231 1864 1545	50 100 150 200	⊕ 0,4 -0,2 ⊕ 0,2 0,7 0,7 1,8	$\begin{array}{ccccc} -0.5 & -2.8 & -12.2 \\ -1.1 & -3.6 & -13.4 \\ \oplus & -2.2 & -11.3 \\ 1.6 & \oplus & -8.0 \end{array}$	0,8	3,5 8,2
	<b>Swift A-Frame</b> 10,7 g/165 gr 0.36 # 20 <b>17612</b> 2	7 2700 2459 2231 2014	2672 2216 1823 1487	50 100 150 200	$\begin{array}{ccc} & \oplus & 0,3 \\ -0,2 & & \oplus \\ 0,3 & 0,9 \\ 0,9 & 2,1 \end{array}$	$\begin{array}{cccccc} -0.9 & & -3.6 & -14.5 \\ -1.3 & & -4.2 & -15.3 \\ & \oplus & & -2.4 & -12.8 \\ 1.8 & & \oplus & -9.1 \end{array}$	0,9	3,9 9,3
	Plastic point 11,7 g/180 gr 0.35 # 20 <b>17628</b> 2	8 2612 2370 2141 1925	2737 2253 1838 1486	50 100 150 200	$\begin{array}{ccc} & \oplus & 0,1 \\ -0,1 & & \oplus \\ 0,5 & 1,0 \\ 1,1 & 2,4 \end{array}$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1,0	4,2 10,0
	<b>Nosler Partition</b> 11,7 g/180 gr 0.44 # 20 <b>17635</b> 2	2 2612 2415 2226 2046	2737 2339 1988 1679	50 100 150 200	$\begin{array}{ccc} & \oplus & 0,1 \\ -0,1 & & \oplus \\ 0,4 & 1,0 \\ 1,1 & 2,2 \end{array}$	$\begin{array}{cccccc} -1,2 & -4,2 & -15,6 \\ -1,4 & -4,5 & -16,0 \\ \oplus & -2,6 & -13,1 \\ 1,9 & \oplus & -9,3 \end{array}$	0,8	3,4 7,9
	<b>Alaska</b> 11,7 g/180 gr 0.25 # 20 <b>17636</b> 2	7 2612 2278 1968 1687	2728 2074 1549 1138	50 100 150 200	$\begin{array}{ccc} & \oplus & 0.1 \\ -0.1 & & \oplus \\ 0.5 & 1.1 \\ 1.2 & 2.6 \end{array}$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1,4	6,2 14,9
	# 20176602	5 2612 2329 2064 1817	2737 2176 1709 1325	50 100 150 200	$\begin{array}{ccc} & \oplus & 0,1 \\ 0,0 & & \oplus \\ 0,5 & 1,1 \\ 1,2 & 2,5 \end{array}$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1,2	5,1 12,1
	Oryx 11,7 g/180 gr 0.28 # 20 <b>17675</b> 2	8 2612 2313 2034 1776	2737 2146 1659 1265	50 100 150 200	$\begin{array}{ccc} & \oplus & 0,2 \\ 0,1 & & \oplus \\ 0,4 & 1,0 \\ 1,2 & 2,5 \end{array}$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1,3	5,4 13,0

BALI	ISTIC DATA	Bullet type Bullet weight g/gr	Ball coef.	Veocity feet per second	Energy foot pounds	Zero range,	in at ⊕ ya	rajectory above line of sight if sighte ards. For sights 1,6 inch above bor	e. 10 m.p.h cross wind.
DAL		Product number		Muzzle V <sub>100</sub> V <sub>200</sub> V <sub>300</sub>	Muzzle E <sub>100</sub> E <sub>200</sub> E <sub>300</sub>	yards	50	100 150 200 300 yd	s 100 200 300 yds
.30-06		Nosler BST 9,7 g/150 gr	0.421	2936 2713 2502 2300	2872 2453 2085 1762	150	⊕ -0,3 0,0 0,5	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	0,7 3,1 7,0
.50-00	NEW!	# 20 <b>17654</b> 2 Nosler Accubo	nd			200		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	
		11,7 g/180 gr # 20 <b>17563</b> 2	0.507	2674 2499 2331 2169	2859 2497 2172 1881	50 100 150 200	⊕ -0,1 0,3 0,9	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	0,7 2,8 6,6
		Swift A-Frame	0.400	2700 2478 2267 2067	2924 2464 2062 1713	50 100 150 200	0,3 -0,2 0,3 0,9	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	0,9 3,6 8,4
		# 20175182				150 200	0,3 0,9	0,8	
		<b>Alaska</b> 11,7 g/180 gr # 20 <b>17648</b> 2	0.257	2700 2359 2044 1755	2914 2225 1670 1231	50 100 150 200	⊕ -0,1 0,4 1,1	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1,4 5,9 14,2
		Nosler Partitio	0.438	2700 2497 2303 2118	2924 2501 2128 1800	50 100	+ + -0,1	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	0,8 3,2 7,6
		# 20176492				50 100 150 200		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	
			0.366	2700 2458 2229 2013	2914 2416 1987 1620	50 100 150 200	+0,1 0,4 1,0	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1,0 4,3 10,2
		# 20 <b>17653</b> 2 <b>Vulkan</b> 11,7 g/180 gr	0.215	2700 2420 2158 1912	2924 2350 1969 1466	200 50			11 47 111
		11,7 g/180 gr # 20 <b>17659</b> 2	0.515	2700 2420 2138 1912	2924 2350 1868 1466	150 200	-0,1 0,4 1,0	$\begin{array}{cccccc} 0.2 & -1.1 & -4.1 & -15.9 \\ \oplus & -1.4 & -4.5 & -16.4 \\ 0.9 & \oplus & -2.6 & -13.6 \\ 2.2 & 1.9 & \oplus & -9.7 \end{array}$	1,1 4,7 11,1
			0.288	2700 2395 2110 1846	2924 2301 1786 1367	50 100 150 200	⊕ -0,1 0,3 1,0	$\begin{array}{cccccc} 0.3 & -1.0 & -4.0 & -16.1 \\ \oplus & -1.4 & -4.5 & -16.8 \\ 0.9 & \oplus & -2.6 & -14.1 \\ 2.3 & 2.0 & \oplus & -10.1 \end{array}$	1,2 5,1 12,3
		# 20 <b>17674</b> 2 Oryx 13,0 g/200 gr	0.000	2025 2220 2425	2001 0400 2000	200 50		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	
		13,0 g/200 gr # 20 <b>17677</b> 2	0.338	2625 2368 2125 1897	3061 2490 2006 1599	50 100 150 200	-0,1 0,4 1,1	$\begin{array}{cccccc} 0.2 & -1.2 & -4.2 & -16.4 \\ \oplus & -1.5 & -4.6 & -17.0 \\ 1.0 & \oplus & -2.7 & -14.1 \\ 2.3 & 2.0 & \oplus & -10.0 \\ \end{array}$	1,1 4,5 10,7
200		Nosler BST	0.435	2215 2005 0707 0500	3/37 2002 25/7 017	50	<b>+</b>	0,7 0,4 -0,9 -7,1	0.7 -2.0
.300 WSM	NEW!	9,7 g/150 gr # 20 <b>17570</b> 2	0.435	3215 2985 2767 2560	3437 2963 2547 2179	150 200		$\begin{array}{cccccc} 0.7 & 0.4 & -0.9 & -7.1 \\ \oplus & -0.6 & -2.3 & -9.2 \\ 0.4 & \oplus & -1.5 & -7.9 \\ 1.2 & 1.1 & \oplus & -5.7 \end{array}$	0,7 2,8 6,6
			<b>Shock</b> 0.428	3215 2982 2761 2550	3444 2962 2539 2167	50 100 150 200		$\begin{array}{cccccc} 0.6 & 0.2 & -1.2 & -7.6 \\ \oplus & -0.7 & -2.4 & -9.4 \\ 0.5 & \oplus & -1.5 & -8.0 \end{array}$	0,6 2,6 6,1
		# 20 <b>17574</b> 2 <mark>Oryx</mark> 11,7 g/180 gr	0.00	0000 0540	2446 - 0501	200		1,2 1,1 ⊕ -5,8	
		11,7 g/180 gr # 20 <b>17571</b> 2	0.233	2936 2542 2181 1850	3446 2584 1901 1369	50 100 150 200	⊕ -0,2 0,2 0,8	$\begin{array}{cccccc} 0.3 & -0.7 & -3.3 & -14.2 \\ \oplus & -1.2 & -3.9 & -15.2 \\ 0.8 & \oplus & -2.4 & -12.9 \\ 2.0 & 1.8 & \oplus & -9.3 \end{array}$	1,4 5,8 14,1
.308									
Norma	NEWL	<b>Oryx</b> 11,7 g/180 gr	0.288	2953 2630 2330 2049	3486 2766 2170 1679	50 100 150 200	⊕ -0,2 0,2 0,7	$\begin{array}{cccccc} 0.4 & -0.5 & -2.8 & -12.4 \\ \oplus & -1.1 & -3.6 & -13.5 \\ 0.7 & \oplus & -2.1 & -11.4 \\ 1.8 & 1.6 & \oplus & -8.2 \end{array}$	1,1 4,5 10,8
Mag.		# 20 <b>17526</b> 2				200	0,7	1,8 1,6 $\oplus$ -8,2	
		Nosler BST 9,7 g/150 gr				50	<b>⊕</b>	0,7 0,5 -0,8 -6,8	
.300 Win. Mag.		9,7 g/150 gr # 20 <b>17551</b> 2	0.427	3250 3014 2791 2578	3519 3027 2595 2215	50 100 150 200	-0,4 -0,2 0,2	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	0,6 2,6 6,0
Will. Mag.	NEWS		Shock 0.428	3215 2982 2761 2550	3444 2962 2539 2167		Ф		0,6 2,6 6,1
		# 20 <b>17546</b> 2	0.420	0210 2302 2701 2300		50 100 150 200	-0,3 -0,1 0,3	$\begin{array}{ccccc} 0.6 & 0.2 & -1.2 & -7.6 \\ \oplus & -0.7 & -2.4 & -9.4 \\ 0.5 & \oplus & -1.5 & -8.0 \\ 1.2 & 1.1 & \oplus & -5.8 \end{array}$	0,0 2,0 0,1
	NEWI	Nosler Accubo 11,7 g/180 gr	nd 0.507	2953 2767 2588 2417	3486 3061 2678 2335	50 100 150 200	+ -0,2 0,1 0,5	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	0,6 2,4 5,7
		# 20175482					_		
		Swift A-Frame 11,7 g/180 gr # 20 <b>17519</b> 2	0.400	2920 2687 2466 2256	3420 2897 2440 2042	50 100 150 200	⊕ -0,3 0,1 0,6	$\begin{array}{cccccc} 0.5 & -0.2 & -2.2 & -10.7 \\ \oplus & -1.0 & -3.2 & -12.2 \\ 0.6 & \oplus & -2.0 & -10.3 \\ 1.6 & 1.5 & \oplus & -7.3 \end{array}$	0,8 3,2 7,5
			0.366	3018 2758 2513 2281	3641 3042 2525 2080		_		0,8 3,4 8,0
		# 20 <b>17687</b> 2	0.500	2730 -2313 2261	00 H	50 100 150 200	+0,3 0,0 0,5	$\begin{array}{cccccc} 0.6 & 0.0 & -1.9 & -9.8 \\ \oplus & -0.9 & -3.0 & -11.5 \\ 0.6 & \oplus & -1.8 & -9.8 \\ 1.5 & 1.4 & \oplus & -7.0 \end{array}$	0,0 0,4 0,0
	300 Win Mag continue see next nage								

BALLISTIC DATA	Bullet type Bullet weight g/gr Product number	Ball coef.	Veocity feet per second  Muzzle V <sub>100</sub> V <sub>200</sub> V <sub>300</sub>	Energy foot pounds  Muzzle E <sub>100</sub> E <sub>200</sub> E <sub>300</sub>	range,	in at ⊕ yaı	jectory above ds. For sights 100 150	ine of sight if sighted 1,6 inch above bore 200 300 yds	e. 10 m	drift in inches for a n.p.h cross wind. 200 300 yds
.300 Win. Mag.	# 20175472	0.288	2920 2600 2301 2023	3409 2702 2117 1636	50 100 150 200		0,4 -0,6 ⊕ -1,1 0,7 ⊕ 1,8 1,6	-3,0 -12,9 -3,7 -13,9 -2,2 -11,7 ⊕ -8,4	1,1	4,6 11,0
	Oryx 13,0 g/200 gr # 20 <b>17676</b> 2	0.323	2789 2510 2248 2002	3455 2799 2245 1780	50 100 150 200	0,2 0,2 0,8	0,4 -0,7 \( \operatorname{+} -1,2 0,8 \( \operatorname{+} \operatorname{+} 2,0  1,8 \end{array}	-3,2 -13,7 -3,9 -14,8 -2,3 -12,4 ⊕ -8,9	1,0	4,3 10,3
7,7 Jap.	Soft point 11,3 g/174 gr # 20 <b>17725</b> 2	0.262	2493 2174 1879 1612	2402 1826 1364 1004	50 100 150 200	⊕ - 0,1 0,7 1,5	0,1 -2,1 ⊕ -1,9 1,3 ⊕ 3,0 2,5	-6,1 -22,1 -5,9 -21,8 -3,4 -17,8 ⊕ -12,9	1,5	6,5 15,6
7,65 Arg.	<b>Soft point</b> 11,3 g/174 gr # 20 <b>17705</b> 2	0.262	2493 2174 1879 1612	2402 1826 1364 1004	50 100 150 200	⊕ - 0,1 0,7 1,5	0,1 -2,1 ⊕ -1,9 1,3 ⊕ 3,0 2,5	-6,1 -22,1 -5,9 -21,8 -3,4 -17,8 ⊕ -12,9	1,5	6,5 15,6
8x57 JRS	# 20180162	0.191	2559 2121 1729 1398	1789 1228 817 534	50 100 150 200		0,1 -2,1 ⊕ -2,0 1,3 ⊕ 3,2 2,8	-6,6 -24,8 -6,4 -24,5 -3,7 -20,5 ⊕ -15,0	2,0	9,0 22,4
	# 20180102	0.331	2395 2146 1912 1695	2497 2004 1591 1251	50 100 150 200	0,1 0,7 1,5	0,1 -2,1 ⊕ -1,9 1,3 ⊕ 3,0 2,6	-6,2 -21,8 -6,0 -21,5 -3,4 -17,6 ⊕ -12,6	1,3	5,3 12,6
	# 20180182	0.296	2395 2117 1859 1623	2497 1951 1504 1146	50 100 150 200	0,1 0,7 1,6	0,1 -2,2	-6,4 -22,9 -6,2 -22,5 -3,5 -18,5 ⊕ -13,2	1,4	6,0 14,3
	# 20180192	0.345	2395 2156 1930 1720	2497 2023 1622 1289	50 100 150 200	0,7 1,5	0,1 -2,0 ⊕ -1,9 1,3 ⊕ 3,0 2,5	-6,1 -21,4 -5,9 -21,2 -3,4 -17,4 ⊕ -12,3	1,2	5,0 12,0
8x57 JS	<b>Alaska</b> 12,7 g/196 gr # 20 <b>18003</b> 2	0.305	2526 2248 1988 1747	2778 2200 1720 1328	50 100 150 200	0,5 1,3	0,1 -1,6 ⊕ -1,7 1,1 ⊕ 2,7 2,3	-5,2 -19,3 -5,3 -19,5 -3,1 -16,1 ⊕ -11,5	1,3	5,3 12,8
	# 20180042	0.331	2526 2269 2027 1802	2778 2241 1789 1413	50 100 150 200	0,5 1,3	$ \begin{array}{ccc} 0,1 & -1,5 \\ \oplus & -1,7 \\ 1,1 & \oplus \\ 2,6 & 2,2 \end{array} $	-5,0 -18,6 -5,2 -18,9 -3,0 -15,6 ⊕ -11,1	1,2	4,9 11,6
	<b>Vulkan</b> 12,7 g/196 gr # 20 <b>18020</b> 2	0.347	2526 2281 2049 1832	2778 2264 1828 1461	50 100 150 200	-0.1	0,1 -1,5 ⊕ -1,6 1,1 ⊕ 2,6 2,2	-4,9 -18,3 -5,1 -18,5 -2,9 -15,3 ⊕ -10,9	1,1	4,6 11,0
.338 Win. Mag.	Oryx 14,9 g/230 gr # 20 <b>18511</b> 2	0.370	2756 2514 2284 2066	3880 3228 2665 2181	50 100 150 200	Ф -0,1 0,3 0,9	),3 -0,9 ⊕ -1,3 ),8 ⊕ 2,0 1,8	-3,5 -14,0 -4,0 -14,7 -2,4 -12,2 ⊕ -8,7	0,9	3,8 8,9
.358 Norma Mag.	Oryx 16,2 g/250 gr # 20 <b>19007</b> 2	0.340	2756 2493 2245 2011	4217 3451 2798 2245	50 100 150 200	⊕ -0,1 0,3 0,9	),2 -0,9 ⊕ -1,3 ),9 ⊕ 2,1 1,8	-3,6 -14,5 -4,1 -15,2 -2,4 -12,6 ⊕ -9,0	1,0	4,2 9,8
9,3x57	Oryx 15,0 g/232 gr # 20 <b>19309</b> 2	0.267	2362 2058 1778 1528	2875 2182 1630 1203	50 100 150 200	Ф - 0,1 0,9 1,8	0,3 -2,6 ⊕ -2,2 1,5 ⊕ 8,4 2,9	-7,4 -25,5 -6,8 -24,6 -3,8 -20,2 ⊕ -14,5	1,6	6,9 16,6
	<b>Alaska</b> 18,5 g/285 gr # 20 <b>19303</b> 2	0.365	2067 1859 1666 1490	2704 2188 1756 1404	50 100 150 200		0,7 -3,8 ⊕ -2,9 1,9 ⊕ 1,3 3,5		1,3	5,3 12,5
9,3x62	Vulkan 15,0 g/232 gr # 20 <b>19317</b> 2	0.278	2625 2314 2025 1758	3551 2759 2112 1593	50 100 150 200	Ф -0,1 0,4 1,2	0,2 -1,3	-4,6 -17,9 -4,9 -18,4 -2,9 -15,3 ⊕ -11,0	1,3	5,6 13,5
26 - NORMA PRECISION 9,3x62, continue see next page.	1111									

BALLISTIC DATA	Bullet type Bal Bullet weight g/gr Product number	f.	Energy foot pounds  Muzzle E <sub>100</sub> E <sub>200</sub> E <sub>300</sub>	Zero range, yards		ry above line of sight if si or sights 1,6 inch above 150 200 30	bore. 10	d drift in inches for the constant of the cons	nd.
9,3x62	<b>Oryx</b> 15,0 g/232 gr 0.26 # 20 <b>19307</b> 2	67 2625 2302 2002 1728	3551 2731 2066 1539	50 100 150 200	⊕ 0,1 0,0 ⊕ 0,5 1,1 1,3 2,6	-1,5 -5,0 -18 -1,6 -5,1 -19 + -3,0 -15 2,2 + -11	,8 ,0 1, ,7 ,3	4 5,9 14,	1
NEW!	Swift A-Frame 16,2 g/250 gr 0.28 # 20 <b>19311</b> 2	85 2625 2322 2039 1778	3826 2993 2309 1755	50 100 150 200	$\begin{array}{ccc} & \oplus & 0,1 \\ 0,0 & & \oplus \\ 0,5 & 1,1 \\ 1,2 & 2,5 \end{array}$	$\begin{array}{ccccc} -1,5 & -4,8 & -18 \\ -1,6 & -5,0 & -18 \\ \oplus & -2,9 & -15 \\ 2,2 & \oplus & -10 \end{array}$	,2 ,4 ,2 ,9	3 5,4 13,	1
	<b>Oryx</b> 18,5 g/285 gr 0.33 # 20 <b>19313</b> 2	30 2428 2176 1940 1721	3732 2998 2382 1874	50 100 150 200	$\begin{array}{ccc} & & & -0.1 \\ 0.1 & & \oplus \\ 0.7 & & 1.3 \\ 1.5 & & 2.9 \end{array}$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	,5 ,0 1, ,2 ,2	2 5,2 12,	.3
	Plastic point 18,5 g/285 gr 0.37 # 20 <b>19314</b> 2	76 2362 2143 1937 1743	3532 2908 2375 1924	50 100 150 200	$\begin{array}{ccc} & \oplus & -0,1 \\ 0,1 & & \oplus \\ 0,7 & 1,3 \\ 1,6 & 3,0 \\ \end{array}$	-2,1 -6,2 -21 -2,0 -6,0 -21 ⊕ -3,4 -17 2,5 ⊕ -12	,6 ,3 1, ,4 ,3	1 4,7 11,	1
	Alaska 18,5 g/285 gr 0.36 # 20 <b>19315</b> 2	65 2362 2137 1925 1727	3532 2891 2345 1887	50 100 150 200	$\begin{array}{ccc} & & & -0,1 \\ 0,1 & & \oplus \\ 0,7 & & 1,3 \\ 1,6 & & 3,0 \end{array}$	-2,2 -6,3 -21 -2,0 -6,0 -21 ⊕ -3,4 -17 2,6 ⊕ -12	,9 ,5 1, ,6 ,4	2 4,8 11,	.4
	<b>Vulkan</b> 15,0 g/232 gr 0.29 # 20 <b>19321</b> 2	94 2559 2269 1998 1747	3374 2652 2056 1573	50 100 150 200	$\begin{array}{ccc} & \oplus & 0,1 \\ -0,1 & & \oplus \\ 0,5 & 1,1 \\ 1,3 & 2,6 \end{array}$	-1,5 -5,0 -18 -1,6 -5,2 -19	,8 ,2 1, ,9 ,4	3 5,5 13,	1
9,3x74 R	<b>Alaska</b> 18,5 g/285 gr 0.36 # 20 <b>19320</b> 2	55 2362 2137 1925 1727	3532 2891 2345 1887	50 100 150 200	⊕ -0,1 0,1 ⊕ 0,7 1,3 1,6 3,0	-2,2 -6,3 -21 -2,0 -6,0 -21 ⊕ -3,4 -17 2,6 ⊕ -12	,9 ,5 1, ,6 ,4	2 4,8 11,	.4
	Plastic point 18,5 g/285 gr 0.36 # 20 <b>19325</b> 2	65 2362 2137 1925 1727	3532 2891 2345 1887	50 100 150 200	$\begin{array}{ccc} & & & -0,1 \\ 0,1 & & \oplus \\ 0,7 & & 1,3 \\ 1,6 & & 3,0 \end{array}$	-2,2 -6,3 -21 -2,0 -6,0 -21 ⊕ -3,4 -17 2,6 ⊕ -12	,9 ,5 1, ,6 ,4	2 4,8 11,	4
	<b>Oryx</b> 18,5 g/285 gr 0.33 # 20 <b>19332</b> 2	30 2362 2114 1881 1667	3532 2829 2241 1758	50 100 150 200	$\begin{array}{ccc} & & & -0,1 \\ 0,1 & & \oplus \\ 0,7 & & 1,3 \\ 1,6 & & 3,1 \end{array}$	-2,2 -6,5 -22 -2,0 -6,2 -22 ⊕ -3,5 -18 2,7 ⊕ -13	,7 ,3 ,3 ,0	2 4,9 11,	6
.375	<b>Barnes Solid</b> 19,4 g/300 gr 0.19 # 20 <b>19505</b> 2	91 2493 2061 1677 1356	4141 2829 1873 1224	50 100 150 200	$\begin{array}{ccc} & & & -0,1 \\ 0,1 & & & \oplus \\ 0,7 & & 1,4 \\ 1,7 & & 3,4 \end{array}$	-2,2 -6,9 -26 -2,1 -6,7 -26 \$\Delta\$ -3,9 -21 2,9 \$\Delta\$ -16	,3 ,1 2, ,8 ,0	1 9,4 23,	3
H&H Mag.	Oryx 19,4 g/300 gr 0.32 # 20 <b>19520</b> 2	20 2559 2292 2041 1807	4363 3500 2775 2176	50 100 150 200	⊕ 0,0 0,0 ⊕ 0,5 1,1 1,3 2,6	$\begin{array}{cccccc} -1,6 & -5,1 & -18 \\ -1,7 & -5,2 & -18 \\ & \oplus & -3,0 & -15 \\ 2,2 & & \oplus & -11 \end{array}$	,6 ,7 ,4 ,0	2 5,0 11,	8
.416 Rigby	<b>Barnes Solid</b> 25,9 g/400 gr 0.21 # 20 <b>11050</b> 2	16 2297 1930 1604 1330	4687 3310 2284 1571	50 100 150 200	⊕ -0,4 0,2 ⊕ 1,0 1,7 2,1 3,9	-3,1 -8,6 -30 -2,5 -7,9 -29 ⊕ -4,5 -24 3,4 ⊕ -17	,5 ,4 2, ,4 ,7	1 9,1 22,	4
mgoy Company of the c	Swift A-Frame 25,9 g/400 gr 0.36 # 20 <b>11069</b> 2	67 2349 2126 1916 1720	4902 4017 3262 2628	50 100 150 200	⊕ -0,1 0,1 ⊕ 0,7 1,3 1,6 3,1	-2,2 -6,4 -22 -2,0 -6,1 -21 ⊕ -3,5 -17 2,6 ⊕ -12	,2 ,7 ,8 ,6	2 4,8 11,	.4
A458 Win. Mag.	Barnes Solid 32,4 g/500 gr 0.23 # 20111102	35 2067 1750 1472 1245	4745 3401 2405 1721	50 100 150 200	⊕ -0,8 0,4 ⊕ 1,5 2,2 2,9 4,9	-4,5 -11,5 -38 -3,2 -9,9 -36 ⊕ -5,5 -29 4,2 ⊕ -21	,4 ,0 2, ,5 ,2	2 9,6 23,:	2
mag.	Swift A-Frame 32,4 g/500 gr 0.36 # 20 <b>11120</b> 2	61 2116 1903 1705 1523	4972 4022 3227 2577	50 100 150 200	⊕ -0,6 0,3 ⊕ 1,2 1,8 2,3 4,0	-3,5 -9,2 -29 -2,7 -8,0 -28	,8 ,1 ,7 ,0	4 5,7 13,1	6
NEW!	Woodleigh full jack 32,4 g/500 gr 0.41 # 20 <b>11201</b> 2	ket 10 2165 1974 1794 1626	5205 4328 3574 2936	50 100 150 200	⊕ -0,5 0,3 ⊕ 1,1 1,7 2,1 3,7	-3,3 -8,5 -27 -2,5 -7,5 -25 ⊕ -4,1 -20 3,1 ⊕ -14	,3 ,7 1, ,7 ,6	2 4,8 11,	4
.470 Nitro Express	<b>Woodleigh soft poi</b> 32,4 g/500 gr 0.41 # 20 <b>11202</b> 2	nt 11 2165 1975 1795 1627	5205 4330 3577 2940	50 100 150 200	Ф -0,5 0,3 Ф 1,1 1,7 2,1 3,7	-3,3 -8,5 -27 -2,5 -7,4 -25 ⊕ -4,1 -20 3,1 ⊕ -14	,3 ,7 ,7 ,6	2 4,8 11,	.3

A continent that stretches from Arctic expanses in the north to subtropical climates at the Tropic of Cancer in the south, has a fauna that includes almost everything a hunter could wish for.

There is space for most everything here, from tundra, the conifer belt, and majestic mountain chains to the prairie and ever green marshes. Hunting practices are therefore multi-faceted, and there are great differences when it comes to what firearms and ammunition are needed.

That is why Norma meets the customers demand for quality and flexibility in their ammunition. We hold a strong position in the world, for those reasons.

Throughout the years, we have also had the advantage of an intimate and fruitful partnership with well-known firearm manufacturers like Weatherby and bullet manufacturer Nosler.

The result of this is something that benefits hunters all across the world.







#### BUFFALO HUNTING IN NEBRASKA

As I crept in the snow up that hill in Nebraska with Bob, Jay and Bernhard, well aware that the buffalo we were after lay just over the hilltop, I wondered to myself in a moment of clarity, 'What are you doing here, you hopeless amateur?'. My American friends from Nosler and the No. 84 Ranch had told me to empty the magazine when I took the shot.

We worked our way over the top of the hill and I lay there in the snow with my .340 Weatherby Mark 5, with my feet high and my head low. I aimed at the buffalo, 50 yards further down. When it spotted us, I fired off my four rounds and the great animal fell. At the same time, Bernhard from Blaser fired his R93 and buffalo number two met the same fate as mine. Nosler's outstanding Accubond bullets had done their job.

At some point during all this, I stood up (unable to recall afterwards just when that was) and had an ugly cut on my forehead and blood running down to my nose. I hadn't even noticed the shot.

Of course, everyone was overjoyed at my little wound, and I think that long after they've forgotten what I shot, they will still remember my bloody face. My only consolation is that it happens to every hunter at some point.

Anyway, I stood up and looked around me in the glistening sunshine. Blue skies, rolling hills with light brown prairie grass sticking up from the snow, and a sweeping view. So beautiful!

It was a privilege to be there at just that moment!

Torbjörn Lindskog

# WITH NORMA IN NEW ZEALAND

"As the stag browsed towards the bush edge I rested my .308 Sauer against a tree trunk and followed him through my scope. Fading light and a cool 10kph wind coming off the snowline made for a difficult shot but I had complete confidence in my cartridge. I waited until the stag paused, then as it turned towards me and lifted its head I squeezed the trigger. Perhaps I imagined it, but I felt that I heard the impact of the bullet even from a distance. The stag turned as if to run but in a moment its legs folded and the animal dropped into the tussock.

My cartridge of choice was a Norma 150 grain Nosler BST. The bullet had struck the stag directly on the point of aim, expanded, passed right through the centre of its chest and exited on the off-side. I was impressed with the projectile's ability to buck the wind, and with its deep penetration. With a laser rangefinder my companions checked the distance from the tree to the fallen animal – 217 yards.

I have used Norma ammunition throughout my hunting career because of its accuracy and dependability. It has never let me down."

Nik Maxwell, Tauranga, New Zealand.



Handloading and customizing cartridges brings out new sides in many hunters and marksmen.

Just the feeling of being able to tailor your cartridges with the help of top quality components and influence the result is a big thing for many people. Shooting is less expensive and you acquire a lot of valuable knowledge.

It's easy to learn how to handload your own cartridges with the help of specifications worked out by powder and ammunition manufacturers.



#### THE HEART OF THE CARTRIDGE IS THE CASE

It should be used over and over again, maybe ten times or more before being replaced.

To handle the stress it is exposed to upon firing, you can't scrimp on anything.

Measurements must be perfect with close tolerances, and meticulous control throughout the entire manufacturing process is required to create a perfect product. Norma's cases are renowned throughout the world for their high and uniform quality.

That is one of the reasons many well-known ammunition manufacturers buy Norma cases for their own production.

#### NORMA BULLETS - A CENTURY OF **EXPERIENCE AND** DEVELOPMENT

For 100 years, the golden rule at Norma has been precision and quality. Continuous progress stretching from the days of steel-jacketed bullets to today's precision bullets with gilding metal jackets and bonded cores has given Norma a leading position in the world. The reason for that is simple – thoroughly planned production and tight control over everything from casting to the final product.

# **NORMA CASES**

Prod. no

.220 Swift		#	20 <b>25701</b> 3
.222 Rem.	Ħ	#	20 <b>25711</b> 3
.223 Rem.		#	20 <b>25721</b> 3
.22-250 Rem.		#	20 <b>25731</b> 3
.243 Win.		#	20 <b>26001</b> 3
6 mm Norma BR		#	10 <b>26015</b> 3
6,5-284 Norma		#	10 <b>26528</b> 3
6,5 Jap.		#	20 <b>26531</b> 3
6,5 Carcano		#	20 <b>26535</b> 3
6,5x55		#	20 <b>26551</b> 3
.270 Win.		#	20 <b>26901</b> 3
.270 WSM NEV	N.	#	20 <b>26907</b> 3
7 mm-08 Rem. NEV	N.	#	20 <b>27022</b> 3
7x57		#	20 <b>27001</b> 3
7x57 R		#	20 <b>27004</b> 3
7x64		#	20 <b>27012</b> 3
7x65 R		#	20 <b>27018</b> 3
7 mm Rem. Mag.	ı	#	20 <b>27021</b> 3
.280 Rem.		#	20 <b>27050</b> 3
7,5x55 Swiss		#	20 <b>27511</b> 3
.300 WSM		#	20 <b>27676</b> 3
.308 Win.		#	20 <b>27623</b> 3
7,62 Russian		#	20 <b>27634</b> 3
.308 Norma Mag.		#	20 <b>27637</b> 3
.30-06		#	20 <b>27640</b> 3
.300 Win. Mag.		#	20 <b>27666</b> 3
7,65 Arg.	7	#	20 <b>27701</b> 3
7,7 Jap		#	20 <b>27721</b> 3
8x57 JS		#	20 <b>28001</b> 3
8×57 JRS		#	20 <b>28014</b> 3
.338 Win. Mag.		#	20 <b>28504</b> 3

Caliber	Prod. no
.338 Lapua Mag.	# 10 <b>28507</b> 3
.358 Norma Mag.	# 20 <b>29001</b> 3
9,3x57	# 20 <b>29301</b> 3
9,3x62	# 20 <b>29311</b> 3
9,3x74 R	# 20 <b>29321</b> 3
.375 H&H Mag.	# 20 <b>29501</b> 3
.404 Jeffrey	# 20 <b>21043</b> 3
.416 Rigby	# 20 <b>21060</b> 3
.45 Basic	# 20 <b>21123</b> 3
.458 Win.	# 20 <b>21155</b> 3
.458 Lott NEW!	# 20 <b>21157</b> 3
.470 Nitro Express	# 20 <b>21163</b> 3

# Norma cases for the **Weatherby Magnum**

Caliber		Prod. no
.224 Wby. Mag.	#	20 <b>25740</b> 3
.240 Wby. Mag.	#	20 <b>26020</b> 3
.257 Wby. Mag.	#	20 <b>26502</b> 3
.270 Wby. Mag.	#	20 <b>26912</b> 3
7 mm Wby. Mag.	#	20 <b>27032</b> 3
.300 Wby. Mag.	#	20 <b>27660</b> 3
.30-378 Wby. Mag.	#	20 <b>27677</b> 3
.338-06 Wby. Mag.	#	20 <b>28511</b> 3
.338-378 Wby. Mag	.#	20 <b>28516</b> 3
.340 Wby. Mag.	#	20 <b>28602</b> 3
.378 Wby. Mag.	#	20 <b>29512</b> 3
.416 Wby. Mag.	#	20 <b>21065</b> 3
.460 Wby. Mag.	#	20 <b>21160</b> 3

# NORMA BULLETS \*Standard = 100 bullets/box \*-2 = Packed 2x500 bullets/box

Caliber 5,7 mm	Hunting
	Soft point 3,2 g/50 gr Product # 20 <b>65701</b> 1 (-2)*
	Full Jacket 3,2 g/50 gr Product # 20 <b>65702</b> 1 (-2)*
	Soft point 3,4 g/53 gr Product # 20 <b>65704</b> 1
	Soft point 4,0 g/62 gr Product # 20 <b>65705</b> 1
Caliber 6 mm	Hunting
	Oryx 6,5 g/100 gr Product # 20 <b>66050</b> 1
	Soft point 6,5 g/100 gr Product # 20 <b>66003</b> 1
Caliber 6,5 mm	Match
	Diamond Line 8,4 g/130 gr Product # 10 <b>66508</b> 1 (Packed 2x500 bullets/box)
	Hollow point 8,4 g/130 gr Product # 10 <b>66509</b> 1 (Packed 2x500 bullets/box) Hollow point 6,5 g/100 gr Product # 10 <b>66520</b> 1 (Packed 2x500 bullets/box)
Caliber 6,5 mm	Hunting
	Hollow point 6,5 g/100 gr Product # 20 <b>66520</b> 1 (-2)*
	Full Jacket 7,8 g/120 gr Product # 20 <b>66514</b> 1
	Oryx 10,1 g/156 gr Product # 20 <b>66524</b> 1
	Alaska 10,1 g/156 gr Product # 20 <b>66532</b> 1
	Vulkan 10,1 g/156 gr Product # 20 <b>66535</b> 1

#### **EURENCO BOFORS**

Alfred Nobel never received any prize for his pioneering inventions. The most important one for hunters and marksmen is without a doubt the smokeless double base powder. A powder made by mixing nitrocellulose with nitroglycerin diluted in ether. At the end of the 1800s, Alfred Nobel purchased the cannon maker, Bofors, and started production of his new, revolutionary powder. This made it possible to shoot jacketed, fine caliber bullets at high velocities, something that was previously not technically feasible. Norma has a long and successful tradition with Bofors as its supplier of top quality powder. More info: www.eurenco.com.







Alfred Nobel







# NORMA'S LOADING MANUAL

Loaded with 425 pages of information and everything you need to know for safe handloading.

In addition to loading data for 73 calibers from the .222 Rem to the .505 Gibbs, you'll find informative chapters on powder, detonators, and ballistics written by leading experts in the field.

For each caliber, there is information on dimensions according to the CIP standard and a full description of

the cartridge's background and its fields of application. Plus, information on barrel length and correct rate of twist for the cartridge type. Order it from your local hunting store!



# **NORMA POWDER**

#### NORMA 200 POWDER

Our fastest gunpowder is suitable for smaller cartridges such as .222 Rem and .22 Hornet.

It can also be used to shoot lightweight, low velocity bullets in medium calibers such as the .308 Win.

500 g/canister. Prod. # 20**93200**5

#### NORMA 201 POWDER

Very suitable for calibers with small case volume in relation to the caliber such as 9.3x57 and .45-70. It's also the right choice for shooting lightweight bullets in medium sized cases such as .30-06.

500 g/canister. Prod. # 20**93201**5

#### **NORMA 202 POWDER**

Specially developed to provide maximum performance in .308 Win.

A very useful powder for medium calibers such as 8x57, 9.3x62 and 9.3x74 R.

500 g/canister. Prod. # 20**93202**5

#### NORMA 203B POWDER

Specifications differ slightly from the previous 203 powder.

A flexible powder that is useful from .22-250 to .358 Norma Mag. Very suitable for 6 mm Norma BR and .308 Win. Loaded with heavier bullets.

500 g/canister. Prod. # 20**93203**5

#### NORMA 204 POWDER

A slow-burning powder that provides good performance and often quite good accuracy in calibers such as 6.5x55 and .30-06.

500 g/canister. Prod. # 20**93204**5

#### NORMA MRP POWDER

A very flexible "magnum powder". Suitable for a number of calibers with relatively large case volume in relation to the caliber.

Well-known for many years as a high performance powder in all magnum calibers.

500 g/canister. Prod. # 20**93205**5

#### NORMA MRP2 POWDER

The perfect choice for over bore calibers such as 6.5-284, 6.5-06 and Weatherby cartridges.

500 g/canister. Prod. # 20**93206**5

# NORMA URP POWDER NEW!

A vigorous, mid-range powder. Excellent choice for medium sized cartridges such as 7x64 and .30-06.

500 g/canister. Prod. # 20**93219**5

#### NORMA MATCH POWDER 1211 NORMA MATCH POWDER 1214

500 g/canister. # 10**93211**5 500 g/canister. # 10**93214**5 Loading data only at canister.

Norma has traditionally worked together with successful marksmen. We have created opportunities and developed ammunition with the aim of pushing the sport to the outer limits of human capability.

We have had plenty of success over the years, which we are proud of, but we are not resting on our laurels.

Strict monitoring of every step in the production process and careful balancing of charge and bullet weight yields optimal uniformity in muzzle velocity and provides maximum accuracy.

We continue to be inspired and with a combination of talent, creative thinking and technological innovations, more champions will be made.



Ola Tore Dokken, Norway
World champion Mil. standard
Rifle 3x20 Team, Nordic champion and winner of the Norwegian
royal trophy (Konge-pokalen) in
2004 with record high points.

Shoots with Diamond Line.



Per Sandberg, Sweden

Tied the world record in 2004 with 600 pts. in a 60 shot match, prone. Won European Cup Final in 2003 shooting a half-match. Shot 1180 pts. in whole match while qualifying for EC Final. (World record is 1178 points). Shoots with 6mm Norma BR Diamond





Norma Diamond Line

– for maximum accuracy

Norma's Diamond Line cartridges are loaded with specially chosen bullets that have a molybdenum disulfide and wax finish.

The black coating reduces friction and you get less barrel wear, more uniform velocity, lower gas pressure and maximum accuracy.





#### 6 mm Norma BR

Ten years' dominance in international rifle shooting actually says everything about the 6 mm Norma BR.

A perfect combination of accuracy, minimal wind drift, and light recoil makes it the natural choice for the big championships. Moly-coated bullet.

#### .308 Win. Match

Developed for international rifle shooting for free or standard rifles.

Moly-coated bullet.



# NORMA'S MATCH LINE FOR RANGE AND FIELD

Where medals and championships are won, you'll always find Norma.

We are leaders in the development of match cartridges and we have decided to continue along that road.

# **BALLISTIC DATA**

Caliber Product name	Product number	Coeffi- cient	Bullet type	Bullet weight	Barrel length inch	Velocity feet/sec. Muzzle	Height of trajectory above line of sight if sighted in at ⊕ yards. For sights 1.6 inches above bore. 100 200 300 400 500 600 yds	Wind drift in inches for a 10 m.p.h. cross wind 300 600 yds
6 mm Norma BR Diamond Line Berger	# 10 <b>16016</b> 2	.517	Coated hollow point	6,8 105	26	2789	4,2 5,0 ⊕ -11,4 -30,2 -57,5	5,5 24,3
6,5x55 Banskytte/Rekrutt Diamond Line Bana Diamond Line Bana Diamond Line Fält Golden Target	# 10165230 # 10165000 # 10165000 # 10165300 # 10165130	.345 .548 .548 .548	Hollow point Coated hollow point Coated hollow point Coated hollow point Hollow point	6,5 100 8,4 130 8,4 130 8,4 130 8,4 130	29 <b>26</b> <b>29</b> 29 29	2625 2723 2788 2986 2723	5,6 6,7 \(\phi\) -16,3 -44,9 -89,3 4,5 5,3 \(\phi\) -12,1 -32,2 -61,3 4,2 5,0 \(\phi\) -11,5 -30,5 -58,1 3,5 4,2 \(\phi\) -9,9 -26,2 -49,8 4,5 5,3 \(\phi\) -12,1 -32,2 -61,3	11,0 50,1 5,3 23,3 5,1 22,5 4,6 20,3 5,3 23,3
.308 Win. Diamond Line Sierra	# 10 <b>17615</b> 2	.470	Coated hollow point	10,9 168	26	2549	5,5 6,4 \(\phi\) -14,9 -39,8 -76,6	7,6 34,5
<b>7,5x55 Swiss Ma</b> Diamond Line Sierra		.470	Coated hollow point	10,9 168	26	2443	5,4 6,3 ⊕ -14,8 -39,4 -76,0	7,6 34,2

#### 6,5x55 Banskytte/Rekrutt

A cartridge used for practice and instruction that offers good performance at a reasonable price. The bullet is uncoated.



#### 6.5x55 Diamond Line Bana

Developed primarily for national match shooting. High muzzle velocity minimizes wind drift and maximizes accuracy. Light recoil and the moly-coated bullet reduce barrel wear.



#### 6.5x55 Diamond Line Fält

The champion cartridge for field shooting. Optimized for maximum accuracy from long distances. Flat trajectory and high wind drift resistance. Moly-coated bullet to increase barrel lifespan.



# 6,5x55 Golden Target

A cartridge that loads with bullets without moly-coating. Excellent accuracy and a great choice for either field or range shooting.



#### 7,5x55 Swiss Match

Specially developed for the Swiss market's standard and free rifle shooters.

50 catridges/box. \* = 20 catridges/box.

Moly-coated bullet for maximum accuracy and reduced barrel wear.



# NORMA .22 LONG RIFLE

Norma Match 1 is a choice cartridge of the highest quality intended for elite marksmen with exacting standards.

Norma Training 2 is an excellent cartridge for practice and for a wide range of activities in rifle sports.



# **BALLISTIC DATA**

Caliber Bullet weight	Bullet type	Product- number	Velocity feet/sec
.22 LR Match 1 2.6 g/40 gr .22 LR Training 2	Lead, round nose	# 87 <b>15613</b> 0	1066
2.6 g/40 gr	Lead, round nose	# 87 <b>15614</b> 0	1066

50 cartridge/boxes



# NORMA PISTOL AND REVOLVER CARTRIDGES

The 9 mm and .32 S&W pistol cartridges have been developed through close cooperation with the world's leading pistol shooters.

Norma's 9 mm security cartridge is loaded with a bullet developed to meet the high demands of performance and accuracy. It is intended primarily for police work and is used in many countries.



# BALLISTIC DATA

Caliber Bullet weight	Bullet type Product- number	Velocity feet per second in yards Muzzle V <sub>25</sub> V <sub>50</sub> V <sub>100</sub> yds	Energy foot pounds yards Muzzle E <sub>25</sub> E <sub>50</sub> E <sub>100 yds</sub>	Zero range yards	Height of trajectory abov line of sight if sighted in at ⊕ yards for sights 0.8 inch above bore 25 50 80 100 yds	Wind drift in inches for a 10 m.p.h. cross wind 25 50 80 100 yds
<b>.32 S&amp;W Long</b> 6,4 g/98 gr	Lead, wc # 37 <b>17810</b> 2	787 758 732 683	136 126 118 102	25 50	⊕ -3.0 -12.0 -21.4 1.4 ⊕ -7.1 -15.3	0.4 1.6 3.9 6.1
9 mm TC Luger 8,0 g/123 gr	Full jacket # 37 <b>19035</b> 2	1099 1032 980 899	331 292 263 221	25 50	⊕ -1.2 -5.8 -10.7 0.6 ⊕ -3.8 -8.2	0.5 1.8 4.5 6.7
9 mm TC K-pist 8,0 g/123 gr	Full jacket # 37 <b>19036</b> 2	1280 1170 1086 972	449 375 323 259	25 50	⊕ -0.8 -4.2 -8.1 0.4 ⊕ -2.9 -6.5	0.6 2.2 5.5 8.3

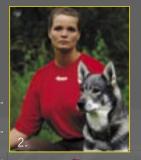
50 cartridge/boxes

# **PROMOTIONAL PRODUCTS**

Sold in retail stores:

- 1. Cap Prod. # 66040101
- 2. T-shirt Prod. # 66040100 ..... M, L, XL.
- 3. Vest Prod. # 66040116 ..... M, L, XL.
- 4. Denim shirt Prod. # 66040106 ..... M, L, XL.
- 5. Pique shirt Prod. # 66040107 ..... M, L, XL.

- 9. Bullet board ... Prod. # 66040111









9. Norma's exclusive bullet board displays 102 bullets and 36 cartridges, affixed to a velvet background with a gold colored frame. Size 75x55 cm.

#### NORMA REPRESENTATIVES

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#### Deobal S.A. **Buenos Aires** Phone +54 11 43 03 47 47 ventas@deobal.com

#### AUSTRALIA

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Rebel Gun Works Pty Ltd Woolloongabba QLD 4102 Phone +61 7 33 91 <u>67 44</u> rebel@corplink.com.au

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euroarms@busmail.net BULGARIA

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Norma has been the official supplier to the Swedish royal court for many years.

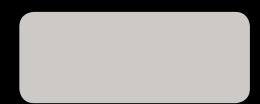


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Norma Precision AB



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