



RUAG Ammotec **Leading Ammunition Technology**

**Together
ahead. RUAG**

One target, one round, one choice. RUAG Ammotec.

RUAG Ammotec stands for a most sophisticated ammunition technology. Our professionals develop and manufacture high-performance, small-calibre standard and special ammunition for Hunting & Sports and Defence & Law Enforcement, as well as pyrotechnical elements and components for industry in general.



On the basis of our value system which is based on high performance, visionary thinking and collaboration, our enterprise ensures that you can fully rely on RUAG Ammotec and its products in any situation.

The mutual trust and satisfaction of our customers are the result of a precision job, high quality standards and last but not least a personal, honest relationship. More than 2,200 dedicated employees and 180 sales partners see to it that we are ready on the spot to satisfy your individual requirements. Together with you we work out solutions which meet future demands. We look forward with confidence, are flexible and ready to take new, even unusual approaches.

You aim at a target and we offer you the right ammunition to reach it. In the interest of your success we hope to be your first choice. We want you to assess us against the fulfilment of this daily promise and intend to achieve success together with you, our customer, partner or fellow worker. Welcome to RUAG Ammotec.

Christoph M. Eisenhardt
CEO RUAG Ammotec



Who we are



About RUAG Ammotec

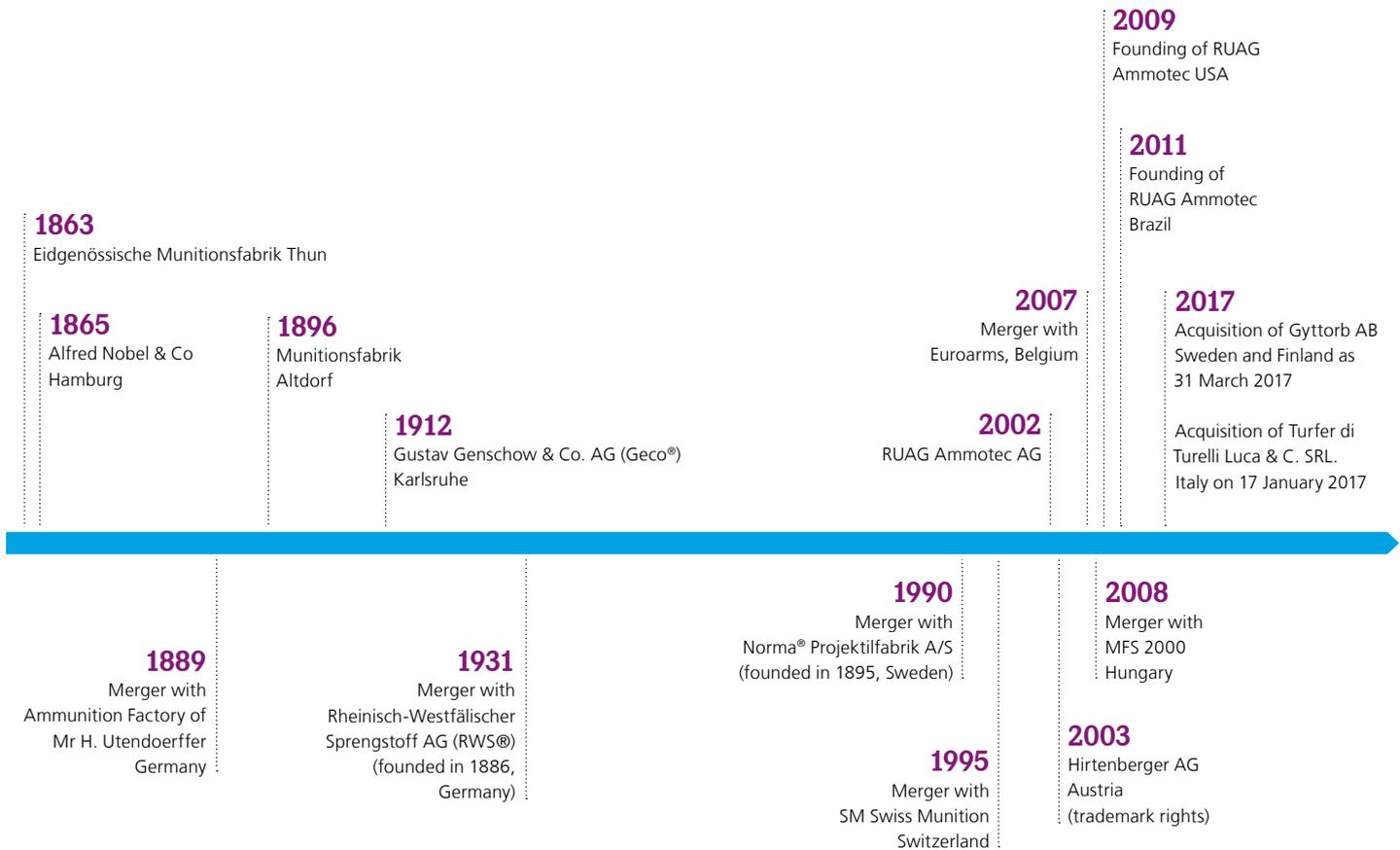
Based upon a 150-year heritage of quality and innovation, RUAG Ammotec has become a trusted technology leader and strategic partner in the global ammunition industry.

The company was formed by the merger of the small arms activities of the Swiss RUAG, the German Dynamit Nobel, the Hungarian MFS 2000 and the Swedish Norma® Precision AB. Distribution companies in France, Great Britain, Austria and the USA support sales to armed forces, law enforcement, private customers and the industry.

The history of RUAG Ammotec is characterized by a pioneering spirit and innovation. The result is one of the world's leading producers of ammunition. The experiences gained from generations of expertise and attention to detail have become a part of the RUAG culture and have seamlessly been integrated into today's modern manufacturing processes. This knowledge, coupled with the selection of the purest materials, form the foundation of developing a high quality cartridge. Our logo with the slogan "Together ahead. RUAG" communicates our daily promise to our customers, partners and employees in an active, clear manner. It means working together to ensure mutual success!

The products are renowned for their ultimate dependability, precision and optimally engineered effect. Environmentally safe disposal of pyrotechnic products also forms part of the service portfolio. Building on its ammunition expertise, RUAG Ammotec is the leader in heavy-metal-free primer technology, e.g. for actuator cartridges for the construction industry and special applications in automotive safety systems. With the continuous further development of its products the company satisfies the highest demands of its customers and is a dependable partner to them at all times.

History of RUAG Ammotec



Leading position in ammunition technology

To achieve our vision, to be the leader in high-class ammunition technology, we commit to best-in-class solutions:

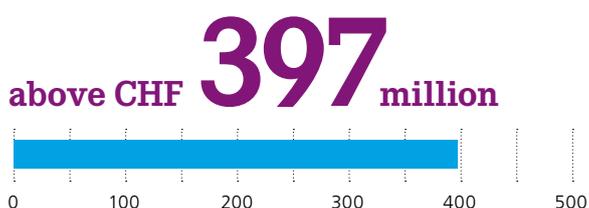
We aim to meet all our customers' needs, throughout the small-calibre ammunition segment, and achieve this by maintaining a dialogue with armed forces, police units and special forces. We identify their needs and evaluate them from an economic perspective, before following through with intensive research and development in the case of a positive decision. At the same time, however, we also take a proactive approach in presenting our customers with new technologies in order to show them what is conceivable and feasible.

What is more, we carry out extensive basic research with regard to material, efficacy and weapon capability, as called for by a specific order. For decades now we have been the leader in the area of heavy-metal-free primer technology, which is of particular benefit to the weapon user. Lead free ammunition is another challenge we have been tackling, and one for which we are already able to offer solutions. In this regard we can say that we meet our own requirement

to ensure that you can rely completely on RUAG Ammotec and its products, both now and in the future. Right in line with: "Focus on your mission. Rely on our ammunition."

We aim to have at least one type of ammunition in use in every state that can be supplied according to national legislation, international agreements and conventions. Our interactions with our customers are based on personal relationships, awareness of needs and clear values of integrity. Working together to ensure mutual success!

Net sales Ammotec



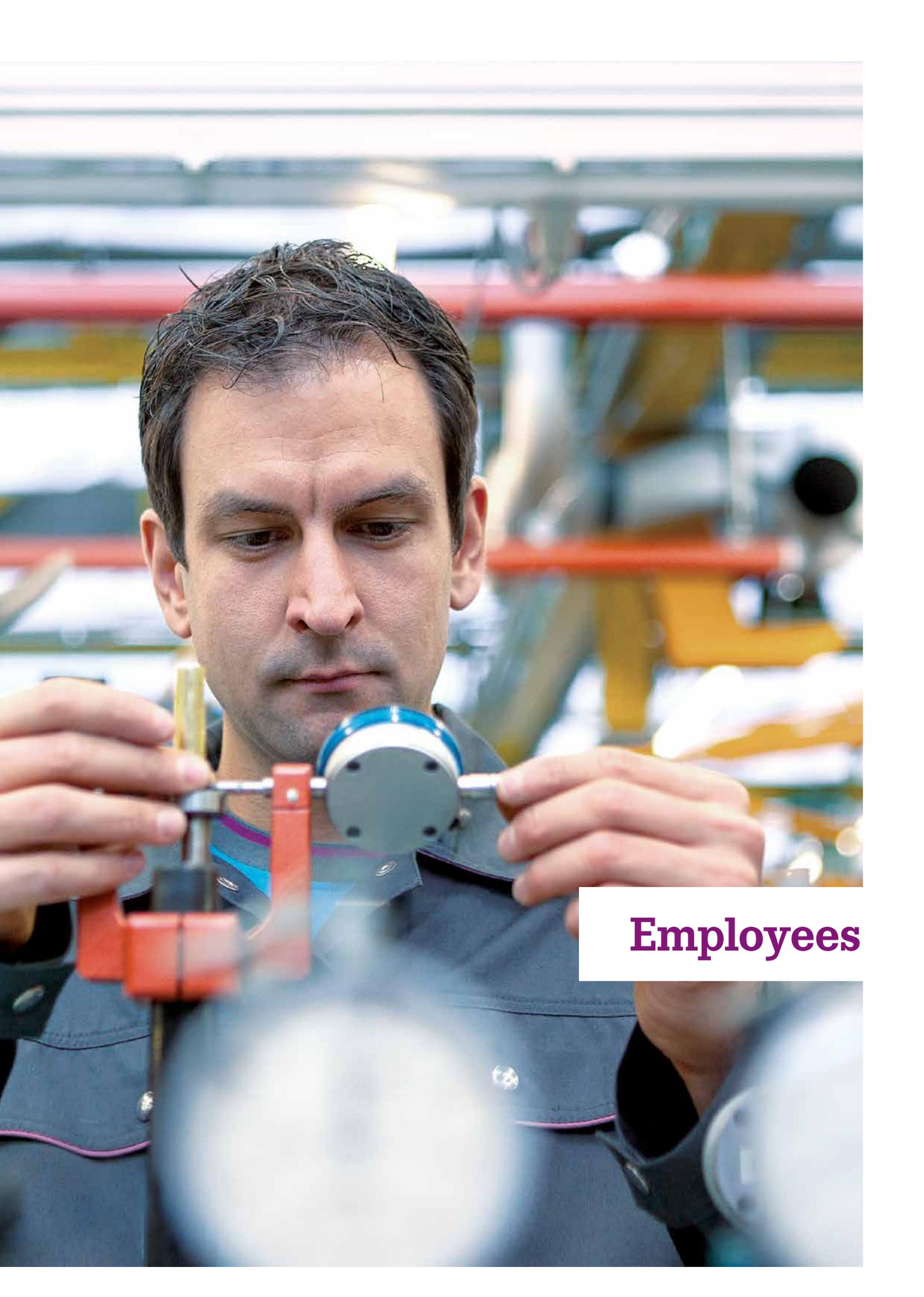
Percentage of Sales



58 % Hunting & Sports inclusive Industrial Components



EBITDA	CHF 43 million
EBIT	CHF 28 million
Employees	2,257
Based in	Belgium, Germany, France, UK, Austria, Sweden, Switzerland, Hungary, USA, Brazil, Finland and Italy



Employees

Employees – our driving force

Highly qualified employees, active teams and competent leaders are the foundation of our success. Thanks to our key values “collaboration, high performance and visionary thinking”, we are an internationally acclaimed technology partner.

A company’s success depends on many factors. One of the most important is committed, inspired and skilled staff. Provided that they have the right attitude and perform well, a momentum ensues that makes permanent ongoing development and efficient teamwork possible. Our consistent employee behaviour and a binding code of conduct lead to reach our goals.

Attractive jobs in a modern technological environment, coupled with interesting training and development opportunities, make RUAG an exciting employer. Thanks to its diverse fields of activity, people are fascinated and captivated of RUAG.

Innovative solutions for international success

To ensure qualitative products, we invest in innovative testing and simulation methods that require deep know-how and savoir faire. Equipped with modern, high-tech equipment, Ammotec quality control engineers carefully scrutinize the key specifications of each round, including the tolerances of components and the consistency of metallurgical properties. This prevents defects which will impact the accuracy.

In research and development, RUAG Ammotec focuses on specific performance enhancements in existing products and on developing low-pollutant variants and special ammunition optimized for particular applications, firearm types and country-specific requirements. Innovative pyrotechnic applications are also developed for industry. In the Hunting & Sports business area, work continued on developing lead free cartridges to meet the growing need for low-pollutant products. A further innovation is electric ignition elements that help prevent accidents by minimizing electromagnetic charges. Thanks to our experience and know-how we are able to create individual, custom-made solutions, tailored to exact requirements.





Quality and Performance



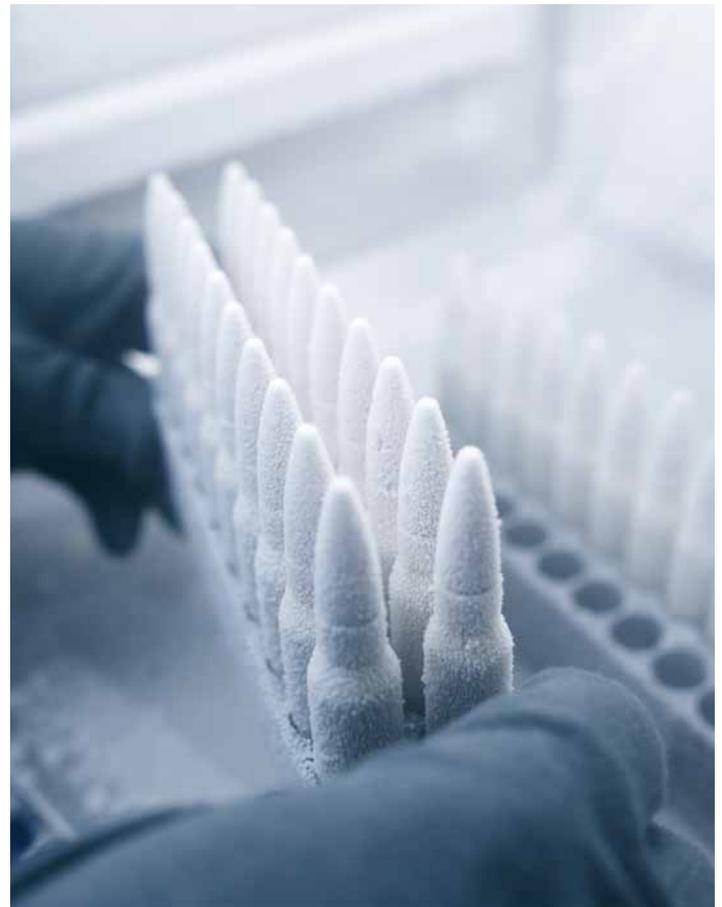
Constant quality control remains the key to success

RUAG Ammotec actively practices a quality, safety and environmental protection management system that governs all the company's processes, along the entire value chain.

Compliance with legal provisions is, of course, an absolute necessity for protecting the environment and ensuring safety. Furthermore, we also take appropriate measures proactively. Quality without compromise is what we believe in.

We constantly strive to improve the reliability, safety and environmental compatibility of our products and services, as well as keeping our customers well informed. We reliably implement customer requirements that are financially feasible.

All business processes along the added value chain, all governing management processes and also support processes are aligned with the targets of the owner, the market setting, the customer and the environment. Our system meets the requirements of international standards DIN EN ISO 9001:2000 and DIN EN ISO 14001, as well as NATO requirements AQAP 2110 over the entire life cycle of the products. Many of our products are NATO certified and thus satisfy the highest requirements. Our company is assessed by accredited auditors in line with these standards. The seals of quality "Made in Germany" and "Made in Switzerland" stand all over the world for sophisticated quality and precision.





Respect for People and Environment



Environmentally friendly technologies

We develop environmentally friendly technologies for new production processes, with the aim of preserving resources as far as possible. RUAG Ammotec is internationally leading in developing low-pollution ammunition and supports sustainable production to achieve minimal environmental pollution.

Lead free

Political pressures and social changes have led to the situation that armed forces and authorities increasingly specify lead free ammunition. This has spurred on the search for versatile solutions which range from encapsulated lead bullets to entirely lead free executions. RUAG is constantly expanding its range of low-pollutant small-calibre rounds across the entire spectrum of applications. Lead free ammunition relies on primers free of heavy metals, optimally laid out propellants and bullets completely without lead. Thanks to this it is possible to reduce the pollution with harmful substances to a minimum for both shooters and the environment. It allows for intensive training even in closed rooms.



SINTOX®

The most important argument for choosing a primer is its reliability. RUAG has been addressing this issue since 1928 with the invention of the most reliable and corrosion-free SINOXID primer. In the 1980s the first primer composition free of heavy metals followed under the brand name of SINTOX® and is still beyond comparison on the world market. Standard primers, however, contain lead styphnate, which shooters can get exposed to during the firing process. This may lead to hazardous overexposures. SINTOX® is a further development of the SINOXID technology and provides the same undisputed reliability, but doesn't use any heavy metals. The SINTOX® products are free of toxic heavy metals like barium and will not corrode or erode the barrel. The primers are used with several NATO-qualified cartridges.

Explosive disposal

To protect our environment and our employees to maximum extent we introduce the most modern equipment and processes. We offer environment-friendly technologies for our activities in the area of disposing: manual and automatic dismantling, armoured and tunnel furnaces for thermal disposal, water jet cutting and regeneration of TNT.



**Focus on your mission.
Rely on our ammunition.**





Armed Forces & Law Enforcement

RUAG Ammotec is highly competent in the area of ammunition for police, security and special forces. Highest reliability, best precision and optimally adapted effectiveness characterize our products and emphasize the innovative strength of the company in the global market. We provide the perfect equipment, mainly in the form of environmentally friendly ammunition for missions and manoeuvres using the standard NATO calibres. Our range comprises different ball, tracer and blank ammunition products for combat, training and simulation. RUAG is the first producer worldwide to achieve NATO approval for its environmentally compatible ammunition. Our products at a glance:

Armed Forces

In the course of the last years the operation areas of army and special units have changed considerably, and thereby also the demands imposed on weapons and ammunition. RUAG Ammotec meets the new requirements flexibly and reliably. Our consistent development work is aligned to satisfy the needs of the market and the basis for innovative ammunition technologies.

Rifle ammunition

RUAG's long experience in the production of top-quality Swiss ordnance ammunition (5.56) plays a fundamental role in the development of all products. The product range includes versatile solutions for machine-gun shooters and designated marksmen. Modern warfare has shown, that the current operations call for increased power and accuracy under extreme conditions. The calibre 7.62 enables effective operative ranges of more than half a kilometre, thanks to the excellent precision and penetration capacity of RUAG ammunition. The well-proven NATO calibre 12.7 for heavy machine guns enables operative ranges which clearly exceed those achieved with conventional rifle calibres. In modern warfare shots at long distances mean a higher safety for the shooter. This, however, calls for special ammunition.

Pistol and sub-machine gun ammunition

The full-metal-jacketed bullets of RUAG Ammotec work reliably in all common pistol types and comply with the specifications of C.I.P. or NATO. They are perfectly suitable for both training and combat. Our 9 mm Luger cartridges are widely used and perfectly proven with several armed forces.

Hand grenade

A hand grenade is expected to meet several and partly contradictory requirements at the same time. A high effect is wanted, but this only in a clearly defined, restricted area. Apart from this, the fuse must work reliably, but be so safe that the throwing person is never exposed to a danger. The complete top-grade product line of hand grenades satisfy these and further demands perfectly for armed forces now and in future.

Training systems for large calibres

The constant increases in the cost of materials and the shortage of sufficiently extensive firing ranges often have the result that, in particular, the necessary amount of training is not carried out by the soldiers. To overcome these restrictions, RUAG has developed sub-calibre firing training systems being in service meanwhile with many armed forces throughout the world as reliable, effective and low-cost training devices.

Law Enforcement

The expectations of police, security forces and special units from weapons and ammunition vary quite considerably. With its wide spectrum of ammunitions RUAG Ammotec offers solutions for the most varied issues and thereby underpins its technological leadership position in the world market. We invest, develop and manufacture products and brands that our customers need to better perform whatever their mission is.

Deformation cartridges

Effective and appropriate ammunition is required in the daily work of police and special forces. Our deformation projectiles have been developed for a universal deployment by law enforcement against hard, soft and combined targets. The six different brass or copper projectiles convince by their customized effect in the target and the minimum danger they present to the terrain behind it. The deformation ammunition is designed especially for use in all common police weapons and guarantees an extremely high functional safety.

RUAG SWISS P

RUAG's sniper ammunition is characterized by its outstanding precision, reliability under extreme conditions and a very good penetration capacity on hard targets. This family of rifle cartridges has been developed especially for snipers.

- Ball – The classic FMJ
- Target – For practice and deployment
- Styx Action – For soft targets
- Armour Piercing – For armoured targets
- Tactical – For targets behind glass
- Subsonic – For silent shooting
- Final – For immediate help for others

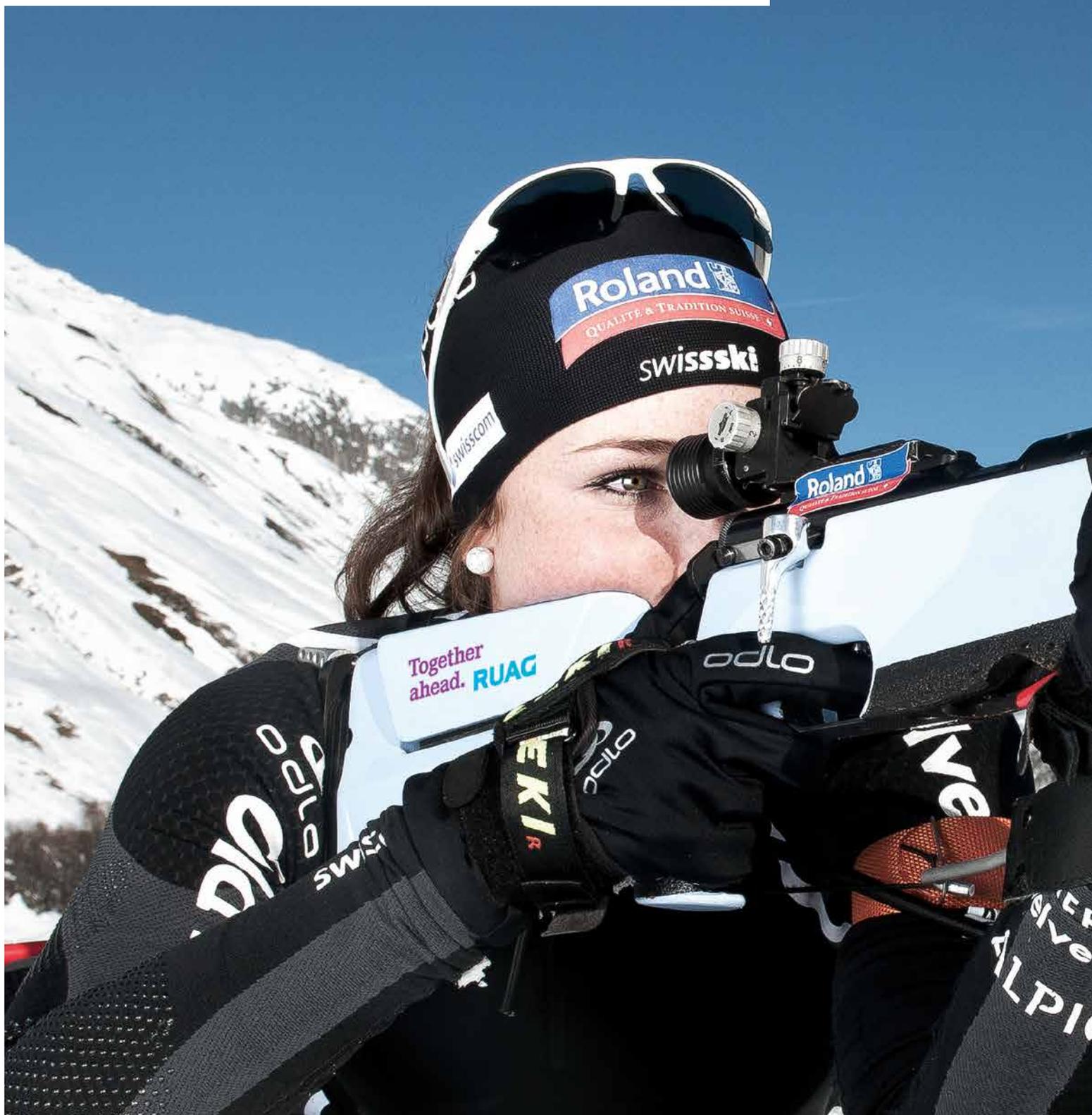
Personal defence weapon ammunition

The calibre 4.6 has been tailored to meet unique requirements of police and military special forces, combat-support soldiers and close personal protection. The system is light and compact enough to be carried on the body permanently, but also sufficiently accurate and powerful to enable effective action against unprotected and protected targets at an extended distance.

Frangible

The frangible COPPER-MATRIX has been developed especially for the dynamic training needs of police, military and security staff. The bullet is made from copper and polymer by injection moulding. It is completely lead free and fully recyclable. Frangible is particularly suitable for tactical close-range training, as the teams can train safely and effectively with maximum realism. The shooting distance can be reduced without risk of being hit by backsplashes or ricochets.

**Don't risk an extra round.
Rely on our precision.**





Hunting & Sports

RUAG Ammotec offers a unique, wide range of ammunition for the demanding hunter. The brands RWS[®], Rottweil[®], GECO[®] and Norma[®] cover all areas of application of shotshell, centrefire rifle and rimfire cartridges in more than 60 countries. For target sport shooters, the company offers a complete product range from hobby shooting, training, and competition right up to its use at the Olympic Games. All cartridges are specially performance-oriented and high-quality products. That's the reason why RUAG Ammotec is the undisputed market leader in Europe in this segment. Our products at a glance:

Hunting

Since time immemorial, hunting has been an important part of rural culture and tradition as well as one of mankind's oldest forms of land usage. Hunting and forestry influence game species and game populations and their habitats, but also have an effect on non-prey animal and plant species and their ecosystems. Sustainability of hunting means that the use of these natural resources must be assured not only in the present but also to future generations. As a reliable partner for hunting, RUAG Ammotec presents a unique range of hunting ammunitions, consisting of such traditional brands as RWS[®], Rottweil[®], GECO[®] and Norma[®]. Hunters worldwide trust our sound experience in developing and manufacturing accurate, reliable and fair hunting ammunition.

Shotshell cartridges

Thanks to sound experience, technical competence as well as excellent quality, Rottweil[®] shotshells are small technical masterpieces in which every component from powder to the shot load functions perfectly. The perfect internal design of each cartridge as well as carefully tuned and constantly inspected components ensure the required range, dispersion and effect on the game to be bagged. Millions of experienced hunters rely on the brand products from Rottweil[®]. It is not by chance that the Rottweil[®] Waidmannsheil black paper case has been the classical hunting cartridge in our product range for decades.

Rimfire cartridges

The RWS[®] rimfire cartridges are mainly used for hunting small game, trapping and as a "cartridge for a closed season". Numerous developers and engineers use their utmost care when composing the components of each cartridge, thus ensuring the invariably high quality of RWS[®] products. The popular small arms cartridges are available in many different designs. RWS[®] offers the perfect loading and precision for each calibre.

Centrefire cartridges

In terms of quality there can be no compromise when it comes to rifle cartridges. All our centrefire rifle cartridges are then submitted to a mechanical, laser-guided or manual quality check. There are over a 100 production stages, each with its associated quality assurance procedures, before an RWS[®] centrefire rifle cartridge is deemed to meet our requirements and released for distribution. RUAG Ammotec is the only major manufacturer of centrefire rifle cartridges worldwide exclusively offering hunting bullets from its own production. Moreover, RWS[®] probably has the largest range of bullets and calibres.

Sports

Each target shooting discipline requires a high degree of concentration and body control, and demands absolute reliability and accuracy from the ammunition. Whether they are used in international competition or for hobby shooting, the brand name products by RWS®, Rottweil®, GECO® and Norma® fulfil all requirements of the discerning marksman. These brands also satisfy the demands of air gun, rimfire gun, and pistol enthusiasts as well as reloading, trap, skeet shooting and various other shooting courses. Our close collaboration with top athletes and experts around the world allows us to continually extend and optimize our product range.

Air gun pellets

RWS® Match and Meisterkugeln carry the worldwide reputation as leading top-quality products. Decades of experience in the manufacture of airgun pellets are the basis for the impressive technical advance. Their high quality, consistency and reliability have ensured that numerous top athletes place their confidence in RWS®. Thanks to the unique accuracy of the RWS® Match pellet R 10, top places in international competitions are constantly achieved. The product range offers a comprehensive selection of high-accuracy pellets for competitions and training as well as numerous varieties for special applications.

Rimfire cartridges

In the competitive target-shooting segment, RWS® rimfire cartridges have already been a success for a long time and have helped to win Olympic medals. Athletes from numerous countries rely on the legendary performance of RWS® cartridges. 600 of 600 rings, world records, Olympic victories and numerous medals at international competitions prove the top quality of the rimfire cartridges of RWS®.

Pistol and revolver ammunition

The GECO® range of handgun cartridges is continually being expanded and consistently oriented to the needs of the handgun user. A wide-ranging palette of cartridges is available – for static shooting, dynamic shooting, hunting and self-defence.



**From 100 to 0 in 0.2 sec.
Rely on our pyrotechnics.**



Industrial Components

The industrial products of RUAG Ammotec are not only standard or mass-produced articles but are also customized solutions which meet the highest requirements imposed on products and systems of the ammunition industry, fastening technology, automotive industry and many other sectors. We manufacture a wide range of products which are used by other manufacturing companies.

Industrial products

Components for ammunition

Ammunition consists of four components: cartridge case, primer cap, propellant powder and projectile. As one of the most important ammunition manufacturers, RUAG Ammotec produces all the components for its ammunition, inclusive of intermediate products. Thanks to high quality standards for the manufactured components, RUAG is the preferred partner of other ammunition producers that willingly adopt the production know-how of RUAG.

Primers

Primer caps are applied not only to ignite ammunition, but also in other spheres which require a quick reaction and development of the process. In addition to open primer caps (Berdan) and the anvil ones (Boxer), RUAG Ammotec manufactures stab primers, friction primers, electric primers, primer mixtures and propellant primers. Actuators complete the listed range of products.

Blank cartridges

Cartridge ammunition is developed and produced for use in system applications, e.g. powder-actuated tools used in the mounting industry or stunning devices for animal slaughtering. Propellant cartridges are used in dynamic devices in which something is moved by means of gas pressure. Principally they are blank cartridges in which the propellant charge is converted into gas and further on into kinetic energy. In addition to the described cartridges for direct mounting or animal stunning there are also special cartridges for actuating ejection seats or defusing explosives.

Explosive mixtures

The manufacturing of non-toxic primary explosives is one of our core competencies. RUAG Ammotec consequently continues to manufacture the most non-toxic (free of lead and other heavy metals) priming compositions. Priming compositions of RUAG Ammotec are applied by the customers primarily in automobile safety systems (e.g. airbags and belt pretensioners etc.). There are also many other fields of their application, the aircraft and space industries inclusive.

Ammunition and explosive disposal

A part of our competences is also the expert and proper disposal of conventional ammunition, civil explosives and pyrotechnical products. This means that we offer environment-friendly solutions covering the complete life cycle of the ammunition, whereby much emphasis is placed on maintaining resources and reusing valuable raw materials.



First-class products and well-known brands



RWS® – the ammunition counts

The brand stems from the Rheinisch-Westfälischen Sprengstoff-Fabriken, which passed into the ownership of Dynamit Nobel in 1931 and then under the control of RUAG Ammotec. RWS® cartridges have a long history of experience in the development and production, therefore it is not surprising, that their market launch has had an unparalleled success all over the world. Every hunter appreciates deeply the RWS® brand and many Olympic victories in target shooting would not have been won without it. Due to top performance and absolute reliability every single RWS®-branded product proves its first-class quality every day. Weather for hunting or target shooting in competitions or training, RWS® ammunition offers ambitious hunters and target shooters the perfect cartridge for a successful shot.





Rottweil

Rottweil® – fascination of dynamics

The brand name refers to the former production site of shot-shell cartridges in the city of the same name located in the Black Forest region of Germany. According to old documents the foundation of the Pulverfabrik Rottweil am Neckar dates back to the 15th century. The brand name Rottweil® became famous thanks firstly to the red Waidmannsheil shot cartridge and since 1921 down to the present day thanks to the legendary "black Waidmannsheil" with its paper case. Rottweil® hunting and sport shot cartridges have always had a good reputation with regards to their quality and performance and are appreciated equally around the world by hunters and sporting shooters.



Norma® - dreams, passion, pride

Every cartridge of the Norma® brand is based on a hundred years of industrial tradition and witnesses first-class workmanship. And most important, hunters' and shooters' experience has always had a strong influence. A cartridge is put together using many variables, and they have to be tuned to perfection for each batch and each production run. It takes skill and experience to do this, as much as it takes superb engineering to keep the machines holding tolerances of thousands of a millimetre, day in and day out. At present the company manufactures about 100 calibres of 300 various assembly types for hunting and target shooting. Furthermore, Norma® has been an official purveyor to the Swedish Royal Court for many years, which gives the products an extra shine.

norma



GECO® - all you need

This is the abbreviation of Genschow & Co., subsidiary and former producer of pistol and revolver cartridges. Today GECO® represents a modern range of ammunition for all hunting and sporting applications. Over a century of experience in development and production goes into every cartridge. That is why active hunters and target shooters can find high-quality products from GECO®, with an attractive price-performance ratio. And since GECO® cartridges meet all the demands made on modern ammunition, you can understand why our new slogan says: GECO® – all you need!



RUAG SWISS

P – Precision

The precision of our cartridges is legendary, and this even under adverse conditions. It is a fact not only with the superior RUAG SWISS P Target, but applies to the entire RUAG SWISS P range.

P – Power

The performance is one of the outstanding characteristics of the RUAG SWISS P line. Our calibres in .338 LM and .50 Browning impress by their heavy bullets and the resulting minor drop in velocity. Even at long ranges these calibres still display high velocities for a maximum effect.

P – Premium

RUAG SWISS P sets new benchmarks: In RUAG's range of ammunition you will find an exclusive selection of hand-picked RUAG SWISS P quality products characterized by first-class performance specifications. Each RUAG SWISS P cartridge meets quality-oriented product standards and thus satisfies your highest expectations.

RUAG SWISS P

This family of rifle cartridges has been developed especially for snipers. They are refined down to the last detail for use by absolute professionals. Our RUAG SWISS P products are characterized by an outstanding accuracy, best target effects and perfectly matched ballistics. All cartridges provide the same point of impact over the operative range. No adjustment is required if the combat situation demands a change of cartridge. This enables the rifleman to focus entirely on his mission and to obtain the best first-shot effect in target at all times.

Reliable partner around the world

RUAG Ammotec develops relationships with partners to ensure deep understanding of customers and end-user needs. We see in customers true partners for the future. As a reliable partner our enterprise is integrated in the European system of rights and values.



5

Production sites
DE | CH | SE | HU | US

100

Distributors
Defence & Law Enforcement

6

Sales subsidiaries
AT | FR | GB | BE | BR | IT

80

Distributors
Hunting & Sports

Production sites

RUAG Ammotec AG

Headoffice/Sales

Defence & Law Enforcement

Uttigenstrasse 67

3602 Thun | Switzerland

Phone +41 33 854 44 00

Fax +41 33 854 44 04

RUAG Ammotec GmbH

Headoffice/Sales

Hunting & Sport and

Industrial Components

Kronacher Strasse 63

90765 Fürth | Germany

Phone +49 911 7930-116

Fax +49 911 7930-111

RUAG Hungarian Ammotec Inc.

P.O. Box 9

3332 Sirok | Hungary

Phone +36 36 561 303

Fax +36 36 561 027

Norma Precision AB

Järgatan

67040 Amotfors | Sweden

Phone +46 571 315 00

Fax +46 571 315 40

RUAG Ammotec USA, Inc.

5402 E. Diana Street

Tampa, FL 33610 | USA

Phone +1 813 626 0077

Fax +1 813 626 0078

Sales subsidiaries

RUAG Ammotec Austria GmbH

IZ NÖ - Süd Strasse 7 - Objekt 58 D

2355 Wiener Neudorf | Austria

Phone +43 2236 677 735 - 27

Fax +43 2236 677 736

RUAG Ammotec Benelux B.V.B.A

Kapelleveldstraat 18

2530 Boechout | Belgium

Phone +32 3 455 7508

Fax +32 3 454 0446

RUAG Ammotec France S.A.S.

47 Avenue des Genottes

BP 78307 Cergy

95803 Cergy Pontoise Cedex | France

Phone +33 134 35 15 91

Fax +33 134 35 15 99

RUAG Ammotec UK Ltd.

Upton Cross, Liskeard

PL 14 5BQ Cornwall | United Kingdom

Phone +44 15 79 36 23 19

Fax +44 15 79 36 40 33

RUAG Indústria e Comércio de Munições Ltda.

Rua Dr. Guilherme Cristoffel, 386

Santana - SP - CEP 02406-010 | Brazil

Phone +55 11 9 83 31 57 71

RUAG Ammotec Italia s.r.l.

Via Galileo Galilei, 56

25046 Cazzago San Martino - Brescia | Italy

Phone +39 030 725 53 23

Fax +39 030 725 53 23