



Manufacture du Haut Rhin  
*Hitting the target since 1919*



**MANURHIN**

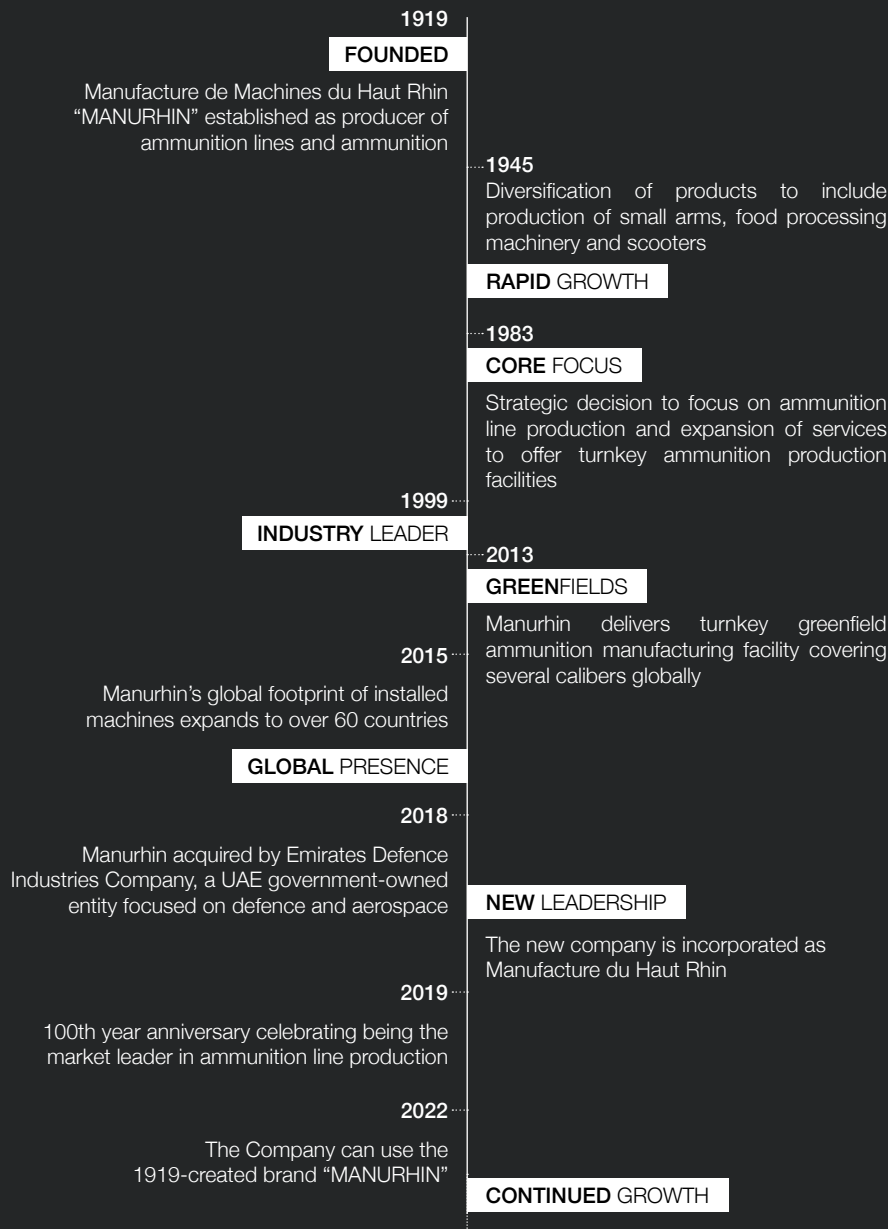
# OVER 100 YEARS OF EXCELLENCE

Manurhin (Manufacture du Haut Rhin) a French company founded in 1919, rose to fame for its production of small arms, before refocusing on ammunition production machinery in the beginning of the twentieth century.

For over a century, Manufacture du Haut Rhin has been a global leader in the design, development and manufacturing of ammunition line machinery and process.

Numerous Manurhin machines have been operating since the 1920s, demonstrating the engineering excellence and exceptional reliability of their design.

Manufacture du Haut Rhin produces both tailor-made individual machines and complete ammunition production lines.



Manufacture du Haut Rhin's engineering competence span the entire process of small & medium caliber ammunition production, from bullet and case manufacturing, through to final loading assembly and packing, with high quality control throughout ensuring compliance with international standards such as NATO.

Comprehensive MRO Services such as spare-parts, technical assistance & expertise ensure long-term support to Manufacture du Haut Rhin's customers.

Most major ammunition producers throughout the world are currently using Manurhin equipment, with over 13,000 machines supplied to over 60 countries globally.

# SMALL & MEDIUM CALIBER AMMUNITION PRODUCTION EQUIPMENT

Manufacture du Haut Rhin is a benchmark in providing ammunition production equipment and process, for small and medium caliber from 4.6mm up to 14.5mm.

## MILITARY STANDARD RIFLE

5.56x45mm  
7.62x51mm  
Blank, Armour Piercing, Tracer

## EASTERN RIFLE

5.45x39mm  
7.62x39mm  
7.62x54R  
FMJ / Lead sheathed steel core bullets  
Steel / brass case, Blank, Tracer

## SPORTS & HUNTING

4.6x30mm  
.223 Rem  
.308 Win  
.300 (blackout, Norma Magnum,...)  
.338 Lapua Magnum  
.277 (6.8x51mm)  
.30-06  
6.5 Creedmore  
HPBT, lead free bullets  
Blank  
Customization and development on demand

## PISTOL

9x19mm NATO  
9x18mm Makarov  
.357 Magnum  
.38 Special / Auto  
.45 ACP  
FMJ, Hollow Point, Blank  
Customization and development on demand

## 12.7 NATO

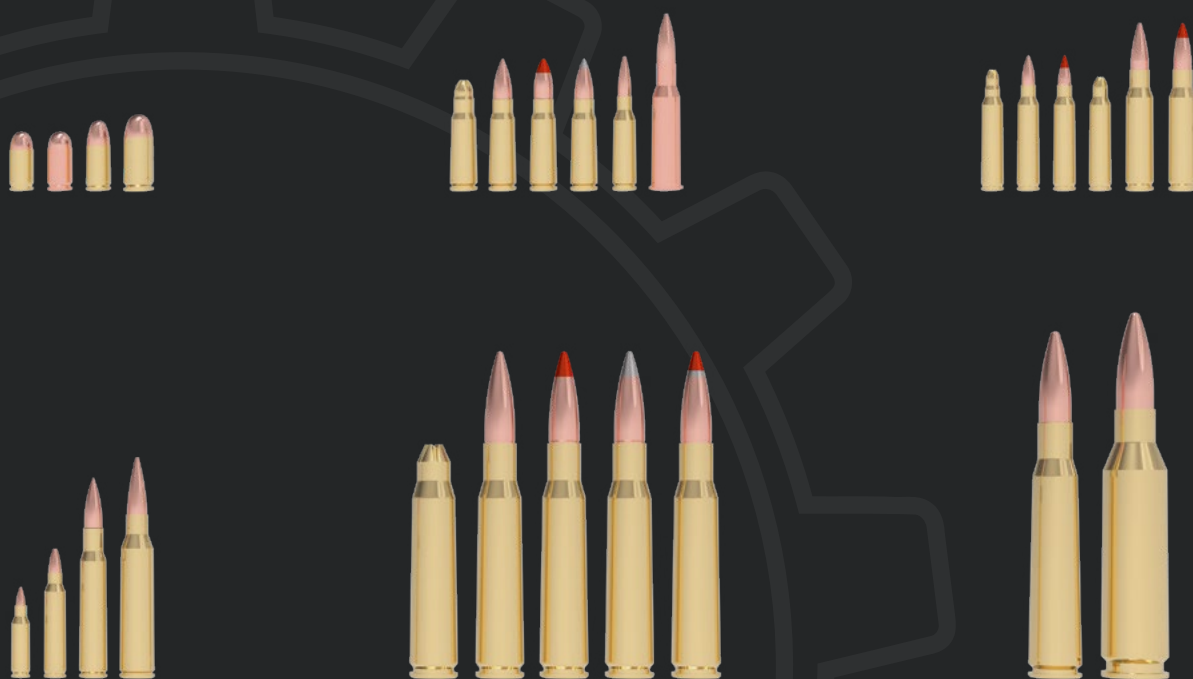
12.7x99mm (.50 BMG)  
Blank, Tracer, Armour Piercing, Incendiary

## EASTERN HEAVY GUN

12.7x108mm  
14.5x114mm  
Lead sheathed steel cores bullets  
Incendiary, Steel / brass case, Blank, Tracer,  
Armour Piercing

## MEDIUM CALIBER (>20mm)

Tailor-made on demand.



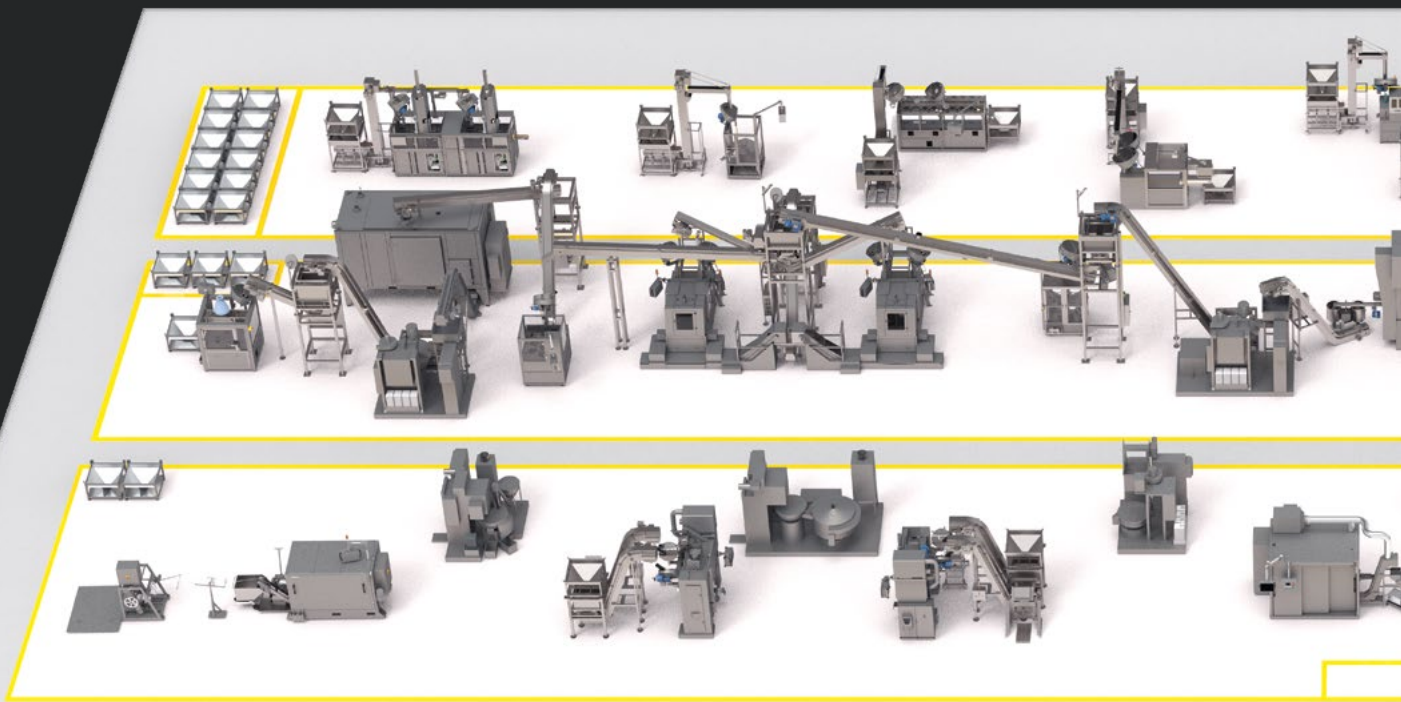
# SOLUTIONS, FROM INDIVIDUAL MACHINES TO GREEN

## INDIVIDUAL MACHINES FOR ALL CYCLES OF AMMUNITION PRODUCTION

Manurhin machines provide a solution for every manufacturing phase:

- Cold deformation processes for cases and bullets including 2<sup>nd</sup> and 3<sup>rd</sup> draw.
- Intermediate thermal and surface treatment (degreasing, pickling and annealing).
- Turning machine providing extraction head turning, length trimming and mouth chamfering.
- Automatic high-rate accurate quality control of finished case and bullet.
- Sourcing, supply, and integration of primers.
- Case mouth and primer varnishing.
- Bullet and cartridges assembly.
- Automatic packaging and linking operations, greatly reducing manpower requirements.

Machines such as the PD250 (case press), PD125 and PB31/14 (bullet press) have become norms within the ammunition production market.



## THROUGH-LIFE SUPPORT

Manufacture du Haut Rhin supplies a wide range of standard off-the-shelf, and in-house custom-manufactured spare parts, along with Original Equipment Manufacturer Tooling, with guaranteed quality.

Technical assistance, at distance or at your facility, will cover installation, maintenance, and refurbishment issues, for short-, medium- and long-term deployments.

The complete refurbishment process restores the machine to its original condition and upgrades its performances.

## BALISTIC

Being the only manufacturer of ammunition production machinery equipped with its in-house instrumented shooting range, Manufacture du Haut Rhin provides services in ballistics testing & shooting equipment; from an initial recommendation to a fully functional laboratory & shooting range.

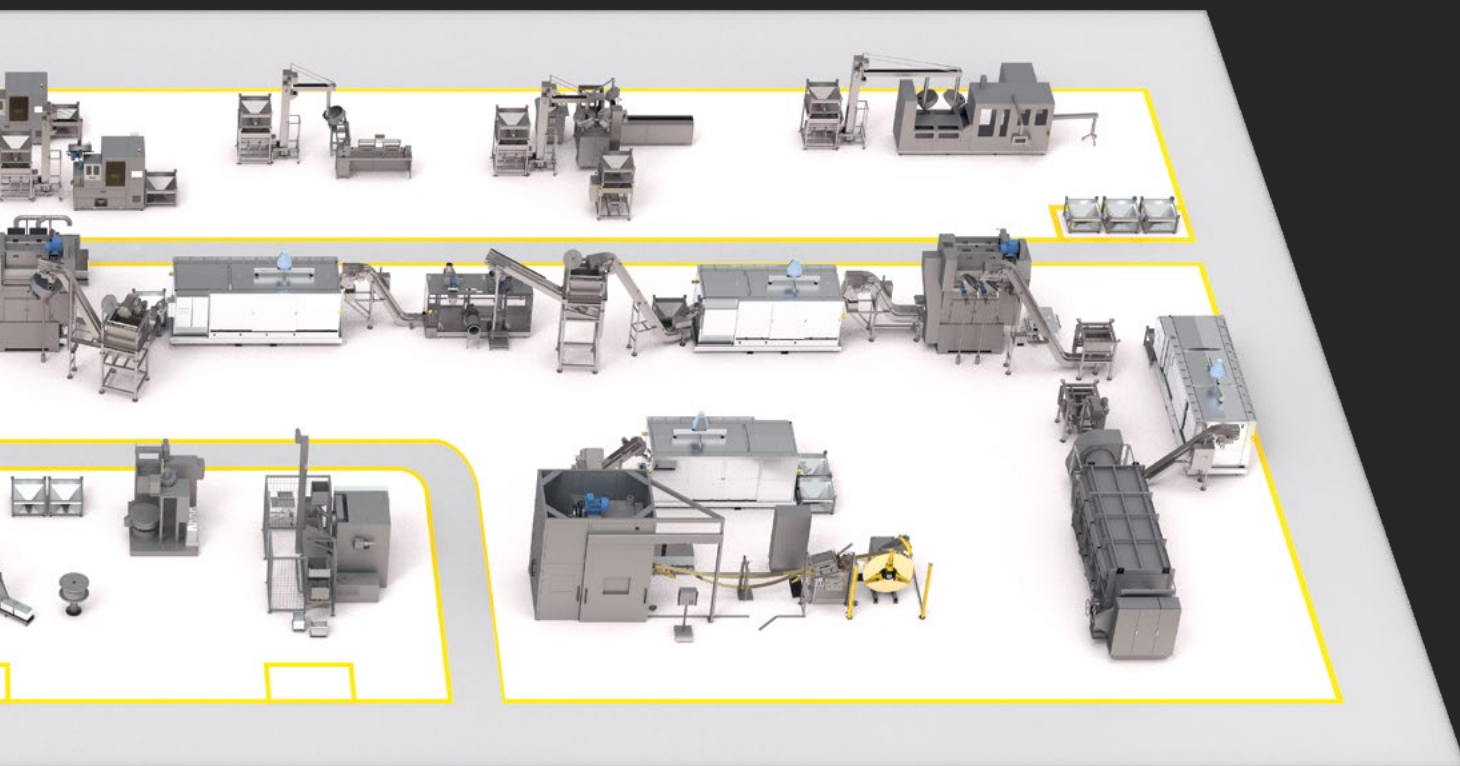
# N-FIELD APPROACH

## QUICK & EASY CONVERSIONS

Conversion process includes a complete evaluation of the machine and its components, enabling the customer to produce different calibers on the same machine, in a cost-effective manner.

## COMPLETE LINES / GREEN-FIELD APPROACH

Installation of new lines or a green-field manufacturing approach are also within Manufacture du Haut Rhin's capabilities: from the design of the factory's infrastructure to the installation of new lines or the adaptation of existing ones. For such turn-key long-term projects, a devoted team would accompany the client throughout all stages – and beyond! *References available upon request.*



## PROCESS MONITORING

Process monitoring performed by Manufacture du Haut Rhin teams cover the following:

- Raw material analysis
- Statistical process control
- In-process control
- In-house final product ballistic testing.

Process control enhances existing rates of production, to achieve improved margins and return on investment.



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