



DEFENSE

COATING SYSTEMS

The defense industry places high demands on coating quality and process reliability. Coated components must function reliably under the harshest conditions. With **more than 100 years of experience** in building coating machines, Sprimag has been supplying customized systems to all leading manufacturers in the market. To meet these stringent requirements, the coating sys-

tems and application technology must be perfectly synchronized. Sprimag offers **turnkey coating systems**: from the initial coating trial in its in-house technology center, through technical design, engineering, manufacturing, assembly, commissioning to the subsequent after-sales service.

CUSTOM-MADE COATING SYSTEMS FOR A WIDE RANGE OF PARTS

Sprimag coating systems are used in many sectors for internal coating, external coating, marking, and partial coating (with or without masking). Typical applications for Sprimag systems in the defense sector include:

- Coating of small-caliber ammunition, SCA (diameter < 20 mm)
- Coating of medium-caliber ammunition, MCA (diameter 20–50 mm)
- Coating of large-caliber ammunition / artillery ammunition, LCA (diameter 105–155 mm)
- Coating of combustible cartridge cases (CCC) and propellant charges
- Application of adhesives for track components: bolts and track pads
- Coating of hand grenades
- Coating of various components for weapon systems



COATING FOR VARIOUS REQUIREMENTS

Depending on the requirements of the component to be coated, different coating materials can be processed on the coating machines. The range extends from classic solvent-based coatings and water-based coatings to UV coating systems. The coatings primarily fulfill the following functions:

- Corrosion protection
- Adhesion between the coating material and the substrate (adhesion promoter)
- Improve anti-friction properties
- Identification and marking for identification (ring coating, Tip ID, etc.)
- Water and oil repellent properties
- Increased sealing and pull-out resistance (shell mouth coating)

COMPLETE SYSTEMS FROM A SINGLE SOURCE

The heart of every coating machine consists of the application technology manufactured in-house in Germany and the matching paint supply system. In addition to the coating process, Sprimag's core competency, a wide range of additional processes are offered. Depending on requirements, Sprimag integrates the following systems:

1

Pretreatment processes:

- Washing systems
- Laser structuring
- Phosphating
- Ionization

2

Testing processes:

- Layer thickness measurement
- Camera inspection of the coating areas

3

Component identification and tracking:

- Reading and / or labeling DMC codes, barcodes or QR codes
- Data transfer to process control systems

4

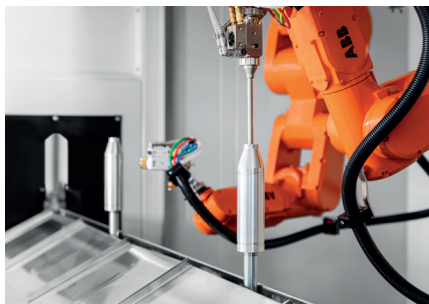
Handling systems for automatic loading and unloading:

- Axis systems with grippers
- Conveyor belts
- Robot-assisted component handling

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Comprehensive process technology:

- Ventilation technology (supply air, exhaust air, fresh air and exhaust air)
- Exhaust air purification systems
- Laser cleaning of component fixtures



CONTACT OUR TEAM!

Our team of experts will gladly work with you on your project and provide full support. More information on our website: www.sprimag.com/coating-defense



Sprimag Spritzmaschinenbau GmbH & Co. KG

Henriettenstrasse 90

D-73230 Kirchheim unter Teck · Germany

Tel. +49 (0) 7021 / 579 0 · Fax +49 (0) 7021 / 417 60

www.sprimag.com · info@sprimag.de

