



Automotive Series

English

Surface solutions by STI Group



Quality and Precision in Series



For many decades, the name STI Group has been synonymous with high quality and functional surface coatings. Successful industrial companies from all over the world rely on STI Group's leading technological competence and experience.

Automotive partnership

State-of-the-art infrastructure, highly qualified staff with many years experience, and electrolytes approved for the automotive industry are important factors for your success. STI Group will support you with sound technical advice and project-oriented research and development – for special applications as well as for the surface treatment of series components.

Consistant quality and short throughput times for large series

Several production lines for chrome surfacing and a fully automatic electroless nickel coating plant, which is one of the largest and most modern in the whole of Europe, guarantee short throughput times and maximum cost-effectiveness for your series.

STI Group controls each individual process parameter, thus ensuring top quality and precision, even for components with a complex geometry. Continuous monitoring of coating parameters and trackable recorded process steps are your guarantee of the consistently high and reproducible quality of your customized coating properties



Your benefits

- customized surface solutions for the most exacting demands regarding friction, wear, and corrosion
- production lines designed for large series production
- electrolytes approved for the automotive industry
- short throughput times and reliable on-time delivery
- excellent jigmaking facilities
- in-house Research & Development department
- constant quality and reproducibility
- recorded process steps ensure transparent production processes
- environmental certification to ISO 14001
- quality management to ISO 9001
- logistics service (on request)

Environmental management to ISO 14001

STI Group considers the protection of the environment a key issue. Complying with environmental criteria is a prerequisite for all our processes. Our production facilities are not only equipped with waste air and waste water treatment plants but are also designed for efficient re-use of process media in the production chain. As a pioneer in environmental protection, STI Group significantly improves on the minimum legally required limits in some areas.

Customized surface solutions

Our team of specialists at STI Group will define a customized surface solution to meet your requirements for the specific application of your components, for series production or special applications.



Treatments, dimensions and characteristics

Treatments	Dimensions	Characteristics
Hard chrome	Ø up to 1,200 mm length up to 4,500 mm weight up to 5,000 kg	high level of hardness (up to 1,100 HV), high level of corrosion protection, minimal adhesion, low friction coefficient, no warping of the base material
Electroless nickel Nitrag®	Ø up to 600 mm length up to 2,500 mm weight up to 2,000 kg	dimensionally correct coating with identical contours of components with complex forms, X-ray amorphous, non-magnetic coating, excellent ductility, high level of corrosion protection, phosphor content up to 12%, hardness up to approximately 550 HV, with thermal treatment up to 1,000 HV possible, non-porous coating, food-compatible, fulfills the requirements of EN ISO 4527, RAL-RG 660, MIL-C-26074B and AMS 2404B
Hard nickel Nicrodur®	Ø up to 600 mm length up to 2,500 mm weight up to 2,000 kg	dimensionally correct coating with identical contours of components with complex forms, high level of hardness (approximately 750 HV without thermal treatment), non-porous coating, high level of wear protection, ferromagnetic, phosphor content up to 4%
Nickel chrome	Ø up to 600 mm length up to 2,500 mm weight up to 2,000 kg	combination of the wear-resistant chrome coating and the corrosion-resistant nickel coating

Coatable base materials: steel, stainless steel, casting, non-ferrous metal, light metal and others

Larger dimensions and further procedures on request or at www.sti-surface.com

STI Group Surface solutions worldwide.



Individual Solutions	STI Group offers you individual overall solutions – from comprehensive analyses and consulting, development and innovation to the actual treatment process, mechanical processing, the final quality check and transport.
Industrial Areas	Automotive, Aviation, Defense Technology, Film, Foil, Food, General Industries, Hydraulics, Marine & Powertrain, Paper, Power Generation, Print, Textile, Tools etc.
Range of technologies	Hard chrome (including Triplex, structural chrome and Nanochrom), electroless nickel, galvanic nickel, hybrid layers, dispersion layers, thermal spraying (HVOF, plasma, wire flame spraying), Dry Coating (plasma nitriding, PVD, PACVD), painting, grinding, polishing, milling, turning, boring. Various special processes are available on request.
Quality and Precision	STI Group surface treatments stand for precision, functionality and quality. STI Group guarantees the required process safety to achieve the narrowest tolerance ranges and create tailor-made, reproducible surfaces.
S to XXL Components	STI Group develops innovative, tailor-made surface solutions for components up to 6,000 mm in diameter, 27,000 mm in length and 64 tons weight.
Complex Geometries	One of the core competencies of STI Group is the coating of components with complex geometries. STI freeform surfaces are renowned for their optimized characteristics, the highest level of quality and reproducibility.
Single Parts and Series	STI Group is your specialist for custom-designed surfaces, both for individual parts and series. Know-how, experience and modern infrastructure guarantee optimum results.
Research & Development	STI Group carries out systematic application-oriented and pure research and development. Our focus is on high-performance, individually optimized surface solutions for you and your success.

Your contact

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