

8<sup>TH</sup> INTERNATIONAL SURFACE TECHNOLOGY FAIR

## EQUIPMENT FOR CLEANING AND TREATMENT OF SURFACES

- 14.1.1 Tumbling machines**
- 14.1.2 Blasting machines**  
14.1.2.1 High-pressure water jet blasting machines
- 14.1.3 Brush machines**  
14.2.3.1 Equipment for electrolytic oxidation of aluminium
- 14.1.4 Degreasing and cleaning equipment**  
14.1.4.1 Degreasing and cleaning equipment using organic solutions  
14.1.4.2 Degreasing and cleaning equipment using aqueous solutions  
14.1.4.3 Vacuum degreasing plants  
14.1.4.4 Rust-removing equipment  
14.1.4.5 Laser equipment for cleaning  
14.1.4.6 Ultrasound equipment for cleaning  
14.1.4.7 Micro-organism based cleaning and degreasing equipment  
14.1.4.99 Degreasing and cleaning equipment, other
- 14.1.5 Pickling plants**
- 14.1.6 Passivating plants**
- 14.1.7 Phosphatizing plants**
- 14.1.8 Chromating plants**
- 14.1.9 Varnish layer stripping and devarnishing plants**
- 14.1.10 Agents and consumables for surface cleaning and treatment equipment**  
14.1.10.1 Abrasive media for tumblers and blasting machines  
14.1.10.2 Cleaning and degreasing agents  
14.1.10.3 Rust removers  
14.1.10.4 Varnish removers  
14.1.10.5 Antirust agents  
14.1.10.6 Pickling agents  
14.1.10.7 Chromating and phosphatizing agents  
14.1.10.99 Agents and consumables for surface cleaning and treatment equipment, other
- 14.1.99 Surface cleaning and treatment equipment, other**

## ELECTROPLATING EQUIPMENT

- 14.2.1 Electroplating equipment**
- 14.2.2 Equipment for galvanic cleaning and polishing**
- 14.2.3 Equipment for electrolytic oxidation and colouring**
- 14.2.4 Equipment for electroforming**
- 14.2.5 Electric etching equipment**
- 14.2.6 Electroplating systems for printed boards**
- 14.2.7 Strip galvanizing equipment**
- 14.2.8 Galvanizing lines**
- 14.2.9 Equipment for electroless (chemical) plating**
- 14.2.10 Attachments and accessories for electroplating equipment**  
14.2.10.1 Electric current sources for electroplating equipment  
14.2.10.2 Control and regulation devices for electroplating equipment  
14.2.10.3 Containers for electroplating  
14.2.10.4 Bath heaters for electrodeposition  
14.2.10.5 Baskets for electroplated products  
14.2.10.6 Centrifuge drums for electroplating equipment  
14.2.10.7 Filtering equipment for electroplating equipment  
14.2.10.8 Recycling equipment for electroplating  
14.2.10.99 Accessories for electroplating equipment, other
- 14.2.11 Anodes for electroplating equipment**
- 14.2.12 Chemicals for electroplating technology**
- 14.2.99 Electroplating equipment, other**

## LACQUERING SYSTEMS, ENAMELLING SYSTEMS, PLASTIC COATING SYSTEMS

- 14.3.1 Equipment for pneumatic spraying of coating materials**
- 14.3.2 Equipment for high-pressure spraying of coating materials**
- 14.3.3 Equipment for spraying of heated coating materials**
- 14.3.4 Equipment for dip coating**
- 14.3.5 Equipment for glazing**
- 14.3.6 Drum coating machines**
- 14.3.7 Roller coating equipment**
- 14.3.8 Electrostatic wet coating equipment**
- 14.3.9 Powder coating equipment**  
14.3.9.1 Spray guns for electrostatic powder coating  
14.3.9.2 Baking kilns for powder coating materials and their accessories
- 14.3.10 Equipment for electrophoretic coating**
- 14.3.11 Booths for lacquering, drying and coat baking**  
14.3.11.1 Fire protection for lacquering boots  
14.3.11.2 IR radiation baking of coating materials  
14.3.11.3 Induction baking of coating materials  
14.3.11.4 UV radiation curing of coating materials  
14.3.11.5 Electron-beam curing of coating materials
- 14.3.12 Equipment for enamelling**
- 14.3.13 Equipment for surface coating with plastics and rubber**
- 14.3.14 Conveyors for lacquering equipment**
- 14.3.15 Robots, manipulators and accessories for surface treatment**
- 14.3.16 Compressors and pumps for lacquering equipment**
- 14.3.17 Coating materials and putties**  
14.3.17.1 Synthetic coating materials  
14.3.17.2 Oil coating materials  
14.3.17.3 Bitumen coating materials  
14.3.17.4 Acrylate coating materials  
14.3.17.5 Acrylurethane coating materials  
14.3.17.6 Epoxy resin coating materials  
14.3.17.7 Epoxy ester coating materials  
14.3.17.8 Epoxy acrylate coating materials  
14.3.17.9 Polyurethane coating materials  
14.3.17.10 Water-soluble paints  
14.3.17.11 Powder coating materials  
14.3.17.12 Thinners and solvents  
14.3.17.13 Putties for surface finishing  
14.3.17.14 Masking materials for lacquering plants  
14.3.17.99 Coating materials and putties, other
- 14.3.18 Nano-varnishes**
- 14.3.19 Dyestuffs, pigments**
- 14.3.20 Enamels**
- 14.3.21 Foil for product surface finish**

## EQUIPMENT FOR CHEMICAL AND HEAT METAL TREATMENT

- 14.4.1 Equipment for diffusion saturation of steel surface**  
14.4.1.1 Case hardening equipment  
14.4.1.2 Nitriding equipment  
14.4.1.3 Nitrocarburizing equipment  
14.4.1.4 Equipment for carbonitriding  
14.4.1.5 Equipment for sulpho-nitriding  
14.4.1.6 Equipment for boriding  
14.4.1.7 Equipment for alitizing



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14.4.2	Furnaces for chemical and thermal treatment of surfaces and their accessories	<b>COMPUTER, MEASURING AND TESTING DEVICES FOR SURFACE TREATMENT</b>
14.4.3	Solid, liquid and gaseous substances for chemical and thermal treatment of surfaces	
14.4.99	Equipment for chemical and thermal treatment of surfaces, other	
<b>LASER AND PLASMA COATING TECHNOLOGIES</b>		
14.5.1	Laser coating technologies	
14.5.2	Physical Vapour Deposition (PVD) plants	
14.5.3	Chemical Vapour Deposition (CVD) plants	
14.5.4	Plasma technologies for ion beam coating	
14.5.5	Vacuum components and accessories for laser and plasma coating technologies	
14.5.99	Laser and plasma coating technologies, other	
14.6	<b>EQUIPMENT FOR THERMAL SPRAYING</b>	<b>14.9.1</b> Computer management systems for surface treatment enterprises <b>14.9.2</b> Software for support of quality assurance and management (CAQ) <b>14.9.3</b> CAD, CAM and CIM for surface treatment <b>14.9.4</b> Regulation and control equipment for surface treatment technologies  <b>14.9.5</b> Measuring and testing devices for surface treatment applications <b>14.9.5.1</b> Nano-technologies testing and measuring instruments  <b>14.9.99</b> Computer, measuring and testing devices for surface treatment, other
14.6.1	Flame metal spraying equipment	
14.6.2	Arc metal spraying equipment	
14.6.3	Plasma metal spraying equipment	
14.6.99	Plants for thermal spraying, other	
<b>SPECIAL SYSTEMS FOR SURFACE TREATMENT</b>		
14.7.1	<b>Thermal surface treatment systems</b>	
14.7.1.1	Annealing plants	
14.7.1.2	Hardening and tempering plants	
14.7.1.3	Annealing, hardening and tempering furnaces and their accessories	
14.7.1.4	Hardening baths and materials	
14.7.2	<b>Browning and black-finishing plants</b>	
14.7.3	<b>Equipment for metal spraying</b>	
14.7.4	<b>Hot galvanization plants</b>	
14.7.5	<b>Hot-dip tinning plants</b>	
14.7.6	<b>Polishing, grinding and lapping equipment and accessories</b>	
14.7.7	<b>Non-thermal surface hardening systems</b>	
14.7.8	<b>Tampon printing, silkscreen printing</b>	
14.7.9	<b>Industrial surface marking systems</b>	
14.7.9.1	Equipment for electro-chemical marking	
14.7.9.2	Micro-impact marking machines	
14.7.9.3	Equipment for surface marking by film application	
14.7.9.4	Self-adhesive materials	
14.7.9.5	Scribing and engraving machines and equipment	
14.7.9.5.1	Laser marking and scribing machines	
14.7.9.6	Marking printers	
14.7.9.7	Labelling devices	
14.7.9.8	Embossing dies	
14.7.9.9	Embossing guns	
14.7.9.10	Embossing presses	
14.7.9.99	Industrial equipment for surface marking, other	
14.7.99	<b>Special surface treatment systems, other</b>	
<b>ENVIRONMENTAL PROTECTION SYSTEMS FOR SURFACE TREATMENT TECHNOLOGIES</b>		<b>RESEARCH, SERVICES AND INSTITUTIONS IN SURFACE TREATMENT SECTOR</b>  <b>14.10.1</b> Research in surface treatment technologies  <b>14.10.2</b> Offers of production facilities in surface treatment sector <b>14.10.2.1</b> Custom cleaning and pre-treatment of surfaces <b>14.10.2.2</b> Custom electroplating  <b>14.10.2.3</b> Custom heat treatment of metals <b>14.10.2.3.1</b> Customized quenching and annealing  <b>14.10.2.4</b> Custom chemical and heat treatment of metals  <b>14.10.2.5</b> Custom technical coating applications <b>14.10.2.5.1</b> Custom PVD and CVD coating of tools  <b>14.10.2.6</b> Custom lacquering <b>14.10.2.7</b> Custom hexabasic chromium free corrosion protection <b>14.10.2.8</b> Custom metal spraying of surfaces <b>14.10.2.9</b> Customized hot galvanizing <b>14.10.2.10</b> Customized thermal coating <b>14.10.2.11</b> Customized cladding  <b>14.10.2.12</b> Custom application of plastic coatings <b>14.10.2.12.1</b> Custom fluoroplastic coating  <b>14.10.3</b> Consultancy in surface treatment technologies <b>14.10.4</b> Surface treatment engineering and design services <b>14.10.5</b> Service and repair of machines and equipment for surface treatment applications <b>14.10.6</b> Refurbished machines and equipment for surface treatment  <b>14.10.7</b> Manufacture of prototype and single-purpose equipment for surface treatment  <b>14.10.8</b> Surface treatment technologies <b>14.10.8.1</b> Surface treatment technology projects <b>14.10.8.2</b> Technological supplies for the surface treatment industry  <b>14.10.9</b> Execution of investment projects in surface treatment sector <b>14.10.10</b> Financial services and leasing in surface treatment sector  <b>14.10.11</b> Technical literature and publications for surface treatment applications <b>14.10.12</b> Institutions and organisations in surface treatment sector <b>14.10.13</b> Vocational training schools specializing in surface treatment systems <b>14.10.14</b> Specialist courses and education in surface treatment systems  <b>14.10.99</b> Research, services, institutions in surface treatment sector, other
14.8.1	Water treatment plants for surface technology	
14.8.2	Waste water treatment plants for surface technologies	
14.8.3	Waste gas cleaning plants for surface treatment technology	
14.8.4	Surface treatment waste disposal	
14.8.5	Consultancy in environmental protection systems for surface treatment technologies	
14.8.99	Environmental protection systems for surface treatment technologies, other	