

- 1. Raw Materials**
- 1.1 Chemicals
- 1.1.1 Resins
- 1.1.1.1 Epoxy
- 1.1.1.2 Polyester
- 1.1.1.3 Vinyl Ester
- 1.1.1.4 Phenolic
- 1.1.1.5 PUR
- 1.1.1.6 Silicone
- 1.1.1.7 Adhesive resins
- 1.1.1.8 Other resins
- 1.1.2 Hardeners
- 1.1.3 Gel Coats
- 1.1.4 Others Chemicals
- 1.2 Fillers
- 1.2.1 (Short) fibres
- 1.2.2 Powder
- 1.2.3 Pellets
- 1.2.4 Other fillers
- 1.3 Additives
- 1.3.1 Processing Aids
- 1.3.2 Modifiers
- 1.3.3 Accelerators
- 1.3.4 Dyes / Pigments
- 1.3.5 Nanoparticles
- 1.3.6 Dye Pastes
- 1.3.7 Other Additives
- 1.4 Thermoplastics
- 1.5 Core Materials
- 1.5.1 Foam structure
- 1.5.1.1 Thermoplastic Resin
- 1.5.1.2 Thermosetting Resin
- 1.5.2 Honeycomb Structures
- 1.5.3 Natural Materials
- 1.5.4 Laminate or Impregnable Core Materials
- 1.5.5 Other Core Materials
- 1.6 Bio-based plastics
- 1.7 Other Raw Materials
- 2. Fibres, Fibre Products, Intermediate and Semi-finished Products**
- 2.1 Reinforcements / Fibres
- 2.1.1 Glass Fibres
- 2.1.2 Carbon Fibres
- 2.1.2.1 Woven Tubes / Tapes
- 2.1.2.2 Braided Tubes / Wires
- 2.1.3 Aramid Fibres
- 2.1.4 Natural Fibres
- 2.1.5 Metal Fibres
- 2.1.6 Basalt Fibres
- 2.1.7 Others Reinforcements / Fibres
- 2.2 Chopped Fibres, Long Fibres
- 2.3 Rovings
- 2.4 Textiles (planar)
- 2.4.1 Fabrics
- 2.4.2 Non-crimp Fabrics
- 2.4.3 Non-wovens
- 2.4.4 Others Textiles (planar)
- 2.5 Textiles (tubular)
- 2.5.1 Meshwork
- 2.5.2 Knitted Fabrics
- 2.5.3 Glass Fibres - Woven Tubes / Tapes
- 2.5.4 Glass Fibres - Braided Tubes / Wires
- 2.5.5 Other Textiles (tubular)
- 2.6 Prepregs
- 2.6.1 Thermoset
- 2.6.2 Thermoplastic
- 2.7 Moulding Compounds
- 2.7.1 Thermoset
- 2.7.1.1 SMC
- 2.7.1.2 BMC
- 2.7.1.3 Other Thermosets
- 2.8 Thermoplastic
- 2.8.1 GMT
- 2.8.2 LFT
- 2.8.3 Organic Sheets
- 2.8.4 Other Thermoplastics
- 2.9 Other Fibres, Fibre Products, Intermediate and Semi-Finished Products
- 3. Manufacturing processes**
- 3.1 Autoclave
- 3.2 Closed Mould Processes
- 3.2.1 RTM
- 3.2.2 Resin Infusion
- 3.2.3 Other Closed Mould Processes
- 3.3 Open Mould Processes
- 3.3.1 Hand Lay-Up
- 3.3.2 Spray-Up
- 3.3.3 Other Open Mould Processes
- 3.4 Forming
- 3.5 Tape Laying
- 3.6 Filament Winding
- 3.7 Pultrusion
- 3.8 Press Processes
- 3.8.1 Wet Moulding
- 3.8.2 Compression Moulding
- 3.8.3 Cold Moulding
- 3.8.4 Hot Moulding
- 3.9 Injection Moulding
- 3.10 RIM
- 3.11 Recycling
- 3.12 Repair
- 3.13 Additive manufacturing/3d printing
- 3.14 Other manufacturing processes
- 4. Further processing/Refinement**
- 4.1 Surface Treatment
- 4.1.1 Cleaning
- 4.1.2 Painting
- 4.1.3 Modification
- 4.1.4 Other Surface Treatment
- 4.2 Joining
- 4.2.1 Positive Joints
- 4.2.2 Non-positive Joints
- 4.2.3 Adhesive Joining
- 4.2.4 Other
- 4.3 Cutting / Trimming
- 4.4 Mechanical Processing
- 4.5 Other Processors / Refiners
- 5. Machines, Equipment, Consumable Materials**
- 5.1 Machinery for Fibre Production and Preparation
- 5.1.1 Machinery for Fibre Production
- 5.1.2 Fibre Cutting
- 5.1.3 Other Machinery for Fibre Production and Preparation
- 5.2 Machinery for Production of Textile Structures
- 5.2.1 Machinery for Yarn Production
- 5.2.2 Machinery for Non-wovens Production
- 5.2.3 Filament-winding Machines
- 5.2.4 Braiding Machines
- 5.2.5 Fibre-placement Equipment
- 5.2.6 Tapelaying Machines
- 5.2.7 Warp Knitting Machines
- 5.2.8 Looms
- 5.2.9 Coating machines
- 5.2.10 Cutting machines
- 5.2.11 Tow/Preg und Prepreg machines
- 5.2.12 Other Machinery for Production of Textile Structures
- 5.3 Machinery for Make-up of Reinforcing Textiles
- 5.3.1 Machines for Cutting Preparation
- 5.3.2 Machines for cutting
- 5.3.3 Joining Technology
- 5.3.4 Other Machinery for Make-up of Reinforcing Textiles
- 5.4 Machines for Manufacture of Composites
- 5.4.1 Extruders
- 5.4.2 Planetary Roller Extruders
- 5.4.3 Compounders
- 5.4.4 Foam Systems
- 5.4.5 SMC (Sheet Moulding Compounds)
- 5.4.6 BMC (Bulk Moulding Compounds)
- 5.4.7 GMT (glass mat reinforced thermoplastics)
- 5.4.8 LFT (long-fibre reinforced thermoplastics)
- 5.4.9 Film Vacuum Injection
- 5.4.10 High-Pressure Injection
- 5.4.11 Gap Impregnation
- 5.4.12 Transfer Moulding
- 5.4.13 RTM (Resin Transfer Moulding)
- 5.4.14 High-pressure RTM (Resin Transfer Moulding)
- 5.4.15 RRIM (Reinforced Reaction Injection Moulding)
- 5.4.16 S-RIM (Structural Reaction Injection Moulding)
- 5.4.17 Injection Moulding
- 5.4.17.1 BMC (Bulk Moulding Compounds)
- 5.4.17.2 Thermosetting BMC (Bulk Moulding Compounds)
- 5.4.17.3 Short Glass Fibre Reinforced (SGF-IM)
- 5.4.17.4 Long Glass Fibre Reinforced (LGF-IMM)
- 5.4.17.5 Continuous Fibre Reinforced (D-LFT-IM)
- 5.4.17.6 Textile Reinforced
- 5.4.18 Centrifugal Casting Techniques
- 5.4.19 Pultrusion Techniques
- 5.4.20 Lamination Techniques
- 5.4.21 Compression Moulding
- 5.4.22 Continuous Moulding
- 5.4.23 Thermoform Machines (Organic Sheets)
- 5.4.24 Roll-forming Machines
- 5.4.25 Rolling
- 5.4.26 Autoclaves
- 5.4.27 Temperature control devices
- 5.4.28 Other Machinery for Manufacture of Composites
- 5.5 Machines for Material Preparation
- 5.5.1 Material Feed and Metering Systems
- 5.5.2 Mixers
- 5.5.3 Driers
- 5.5.4 Other Machines for Material Preparation
- 5.6 Machines for Processing Composites
- 5.6.1 Cutting and Splitting Machines
- 5.6.2 Machines for Surface Treatment
- 5.6.3 Other Machines for Processing Composites
- 5.7 Tool and Mould Making
- 5.7.1 Closed Impregnation Moulds
- 5.7.2 One-piece Tool Moulds
- 5.7.3 Mandrels
- 5.7.4 Pultrusion Tools
- 5.7.5 Extrusion Dies
- 5.7.5.1 High pressure
- 5.7.5.2 Low pressure
- 5.7.6 Composite Tools
- 5.7.7 Metal Tools
- 5.7.8 Diamond Tools
- 5.7.9 Machining Tools
- 5.7.10 Heating and Cooling Devices
- 5.7.11 Other Tool and Mould Making
- 5.8 Handling
- 5.8.1 Robots
- 5.8.2 Other Handling Equipment
- 5.8.3 Linking and Transporting Devices
- 5.9 Exhaust Air Systems
- 5.9.1 Exhaust Air Purification VOC
- 5.9.2 Exhaust Air Equipment / Vacuum Cleaning Systems
- 5.10 Measuring and Testing Technology
- 5.10.1 Non-destructive Testing
- 5.10.2 Measuring Instruments - Surface Structure
- 5.10.3 Measuring Instruments - Dimensional Accuracy
- 5.10.4 Measuring Instruments - Material Properties
- 5.10.4.1 Mechanical
- 5.10.4.2 Thermal
- 5.10.4.3 Chemical
- 5.10.4.4 Other Measuring Instruments - Material Properties
- 5.10.5 Image Processing and Optical Sensors
- 5.10.6 Other Measuring and Testing Techn.
- 5.11 Machines for Recycling
- 5.12 Consumables
- 5.12.1 Vacuum Bagging etc.
- 5.12.2 Mould Release Agents
- 5.12.3 Safety Products
- 5.12.4 Adhesives
- 5.12.5 Other Consumable Materials
- 6. Manufacture of products**
- 6.1 Panels
- 6.2 Sandwich Panels
- 6.3 Tubes
- 6.4 Profiles
- 6.5 Containers
- 6.6 Moulded Parts
- 6.6.1 Prototypes
- 6.6.2 Series Production
- 6.7 Other Manufacturers of Products
- 7. Composite Products**
- 7.1 Glass Fibre Reinforced Plastics
- 7.2 Carbon Fibre Reinforced Plastics
- 7.3 Aramid Fibre Reinforced Plastics
- 7.4 Natural Fibre Reinforced Plastics
- 7.5 Metal Fibre Polymer Composites
- 7.6 Metal Matrix Composites
- 7.7 Ceramic Matrix Composites
- 7.8 Thermal Ceramic Composites
- 7.9 Carbon Fibre Reinforced Carbon
- 7.10 Fibre Reinforced Concrete
- 7.11 Basalt Fibre Reinforced Composites
- 7.12 Other Composite Products
- 8. Components / Products for Application Industries**
- 8.1 Automotive (Cars and Trucks)
- 8.2 Building / Construction
- 8.3 Civil Engineering / Infrastructure
- 8.4 Railways / Buses / Mass Transportation
- 8.5 Electrical / Electronics
- 8.6 Aircraft / Aerospace
- 8.7 Industrial / General Engineering
- 8.8 Consumer Products
- 8.9 Corrosion Protection / Chemical Resistant Equipment
- 8.10 Agriculture
- 8.11 Marine / Shipbuilding
- 8.12 Medical
- 8.13 Offshore
- 8.14 Sports, Leisure
- 8.15 Defence
- 8.16 Water Testing / Sewage
- 8.17 Wind Energy
- 8.18 Other Parts/Products for Application Industries
- 9. Other Services**
- 9.1. Services
- 9.1.1 Distributors
- 9.1.2 Consultants
- 9.1.3 Research Institutes / Organisations
- 9.1.4 Educational / Training Institutions
- 9.1.5 Independent Testing Organisations
- 9.1.6 Publications / Publishers
- 9.1.7 Recycling Services
- 9.1.8 Standards Organizations
- 9.1.9 Trade Associations
- 9.1.10 CAD / CAM Services
- 9.1.11 Quality Assurance
- 9.1.12 Prototype Construction
- 9.1.13 Simulation / Dimensioning
- 9.1.14 Fire Protection Systems
- 9.1.15 Other Services
- 9.2 Software
- 9.2.1 Design
- 9.2.2 Cost Estimating
- 9.2.3 Materials Databases
- 9.2.4 Machine Control
- 9.2.5 Simulation
- 9.2.5.1 Finite Element Simulation
- 9.2.5.2 Process Simulation
- 10. Lightweight construction**
- 10.1 Material
- 10.1.1 Biogenic materials (bioplastics, biocomposites, wood)
- 10.1.2 Fibers (aramid, basalt, glass, ceramic, carbon, metal, and natural fibers)
- 10.1.3 Functional materials (electro-/magnetorheological, electro-/magnetostrictive, shape-memory, piezoelectric)
- 10.1.4 Ceramic (monolithic, oxide and non-oxide, ultra-high temperature)
- 10.1.5 Plastics (thermosetting polymers, thermoplastics, elastomers)
- 10.1.6 Metals (aluminum, magnesium, steel, titanium, intermediate alloys)
- 10.1.7 Technical textiles (yarns, braids, sheet fabrics, knitted fabrics, woven fabrics, nonwoven fabrics, mats)
- 10.1.8 Composite materials (e.g. CRP, GRP, NRP, AFP, CMC)
- 10.1.9 Cellular materials (closed- and open-pored, syntactical)
- 10.2 Production processes
- 10.2.1 Additive processes
- 10.2.2 Coating and surface technology
- 10.2.3 Fiber composite technology
- 10.2.4 Joining
- 10.2.5 Textile technology
- 10.2.6 Forming
- 10.2.7 Casting
- 10.3 Field of technology
- 10.3.1 Plant engineering and production automation
- 10.3.2 Design and construction
- 10.3.3 Functional integration
- 10.3.4 Measuring and testing technology
- 10.3.5 Modeling and simulation
- 10.3.6 Recycling technologies
- 10.4 Products
- 10.4.1 Parts and components
- 10.4.2 Semi-finished products
- 10.4.3 Machinery and plants
- 10.4.4 Software and databases
- 10.4.5 Systems and end products
- 10.4.6 Materials
- 10.4.7 Tools and molds
- 10.5 Services and consultation
- 10.5.1 Vocational and further training
- 10.5.2 Tests and trials
- 10.5.3 Design
- 10.5.4 Standardization
- 10.5.5 Prototyping
- 10.5.6 Testing
- 10.5.7 Simulation
- 10.5.8 Maintenance and repair
- 10.5.9 Approval