## **FRANCE**



## **Railcar Component Materials**

A French rail transport company is seeking a variety of materials that are used in the manufacturing of locomotive interiors. They are seeking US-based industrial material providers and machiners in the following areas:

- Insulation
- Gasket
- Powder Coating Raw Material
- Powder Coating Application
- Paint
- Paint Application
- Anodizing
- Aluminum Sheet
- Aluminum Extrusion

- SMC Raw material Manufacturer
- SMC Manufacturer
- Honeycomb Core
- Honeycomb Panel Manufacturer
- Polycarbonate
- Locks
- Sheet metal Bending
- Welding
- FRP Resin and Gelcoat
- FRP Parts

Manufacturing

- Die Manufacturer (Mould/ Pattern)
- CNC Machining
- Casting
- Tube bending
- Fasteners
- MDF Board
- HPL Laminate
- Sheet metal operation
- Film

Additional details and specifications for each product are provided in the attached document.

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If you are interested in this lead, please reach out to the trade lead POC and copy your local <u>U.S. Commercial Service (USCS) office specialist</u>, who is also available to answer any of your export questions.

Trade Lead Received July 2021

Product	Qty.	Unit	Description 1	Description 2
	6000 sq. meter minimu m		Thermal Insulating materials shall be fire-retardant, non-carcinogenic, non-hygroscopic, resistant to fungus, and provided with a vapor barrier as required to prevent the entry of moisture, oil, gases, and dust.  Urethane foam insulation is expressly prohibited	* Thermal conductivity < 13,000 J/hrm2-Co/cm (0.25 Btu/hr-ft2-Fo/in) as per ASTM C177.  * Fire resistance as per: - 49 CFR Part 238 requirements - NFPA 130 requirements - Additional tests for toxicity in accordance with SMP800C
Gasket			NBR Foam Gasket	
Gasket			Silicone Profile Gasket	
Powder Coating Raw Material			Supplied to Automobile/ Railway Application	Epoxy based (For Interior)  * Fire resistance as per:  - 49 CFR Part 238 requirements  - NFPA 130 requirements  - Additional tests for toxicity in accordance with SMP800C
Powder Coating Application			Finished film thickness shall be 3.5 mil (0.089mm) 2 1.0 mil (0.025mm) Experienced for Automobile/ Railway Application	Booth Size minimum 4,2 m x 3m x 3 m
Paint			two coats of synthetic enamel	The painted parts shall comply with corresponding §6.3 Parts localization according to
Paint Application			Supplied to Automobile/ Railway Application  two coats of synthetic enamel application  Experienced for Automobile/ Railway Application	DTRF 150608:2020 and DTRF 150611:2019.  Paint booth and Curing Oven Size minimum 4,2 m x 3m x 3 m
Anodizing			Anodizing Process application service provider	
Aluminum Sheet	-		Experienced for Automobile/ Railway Application Aluminum sheet manufacturer and supplier	Aluminum 5000 Grade and 6000 Grade
Aluminum Extrusion			Aluminum Extrusion manufacturer with Die diameter 40 mm to 400 mm	Auditiniani 3000 Grade and 0000 Grade
SMC Raw material Manufacturer			Sheet molding compound based on unsaturated polyester resin	
SMC Manufacturer			SMC Processed Parts Manufacturer Experienced for Automobile/ Railway Application Colored SMC Component possibility to check	5 mm Thick. 1,5 x 2,5 m Parts manufacturing Capacity
Honeycomb Core			Aluminum Honeycomb Core Manufacturer Supplied for Automobile/ Railway/ Aerospace Application	6,4 mm cell size, 0,07 mm foil thick., 20 mm Height

Honeycomb Panel Manufacturer	Aluminum Honeycomb Panel Manufacturer Experienced for Automobile/ Railway/ Aerospace Application	
Polycarbonate	Polycarbonate Extrusion manufacturer for Led Light unit Experienced for Automobile/ Railway Application	
Locks	unpainted white bronze Experienced for Automobile/ Railway Application	
Sheet metal Bending	Experienced for Automobile/ Railway Application	
Welding	Experienced for Automobile/ Railway Application	Preferably near to Hornell, NY
FRP - Resin and Gelcoat	Previously supplied for Automobile/ Railway Application	Fire-resistant polyester Resin
FRP Parts Manufacturing	Experienced for Automobile/ Railway Application Internal Tooling and Die Shop is preferred	For parts size 1,5 x 2 m
Die Manufacturer (Mold/ Pattern)	Experienced Mold/ Pattern Manufacturer for FRP/ RTM/ SMC Parts	For parts size 1,5 x 2 m
CNC Machining	3 Axis/ 4 Axis Router for aluminum Extrusion Machining	Preferably near to Hornell, NY
CNC Machining	3 Axis/ 4 Axis VMC CNC for Metallic Machining on Hourly rate basis	Preferably near to Hornell, NY
Casting	Aluminum Casting	Preferably near to Hornell, NY
Tube bending	Stainless Steel Casting  Tube Bending (3 Axis) to manufacture Railway Grab Rail etc.	Preferably near to Hornell, NY  Preferably near to Hornell, NY
Fasteners	Stainless steel, Carbon steel Nutcert, Threaded insert, Hex Nut, Bolt, Aluminum Rivet	
MDF Board	etcetera MDF Board 12/16/20 mm thick.	Preferably near to Hornell, NY
HPL Laminate	Supplied for Automobile/ Railway/ Aerospace Application	- Fire Compliant with NFPA 130 requirements
Sheet metal operation	For Interiors  Supplier doing Job work for LASER Cutting, Bending, Punching, Shearing etc. in Aluminum,  Carbon steel, Stainless Steel in 0.5 mm to 4 mm thickness	Preferably near to Hornell, NY
Film	Carbon steel, Stainless Steel in 0,5 mm to 4 mm thickness  Decorative Film for Metro / Automobile/ Aerospace interiors  Proven Solution	