



MOBILITY & INDUSTRIES



ADDEVMATERIALS

SUMMARY



SUMMARY – CORPORATE

-  CORPORATE ▶
-  MOBILITY & INDUSTRIES
-  RAILWAY MARKET
-  AUTOMOTIVE MARKET
-  POWER MARKET
-  CONSTRUCTION MARKET
-  INDUSTRIES MARKET
-  ANNEXES



PURPOSE

“**Converting industrial challenges into sustainable solutions**”



VISION

- ▶ Wherever innovative materials are key, we deliver solution design, converting and services.
- ▶ Our human values drive our entrepreneurial, international and responsible growth project.



United Nations
Global Compact



* AMC Pittsburgh Site



MISSION

- ▶ We combine our expertise in advanced materials (tapes, films, adhesives and chemicals) and our converting knowledge to enhance the industrial and supply chain performance of our customers
- ▶ As a partner of choice of world-class manufacturers, with the strength of our market knowledge, we design customized value-added solutions to satisfy our customers technical challenges



WHO ARE WE ?

650



180m



15 industrial
companies



We are member of **La French Fab**, **Coq Vert** (Eco label) and many other international expert professional networks



TIKEHAU Capital & BPI France are investors as partner of our transformation and development



STRATEGIC MARKETS

3 business groups to address our main strategic markets



AEROSPACE & DEFENSE

- ▶ Aeronautics
- ▶ Space
- ▶ Defense
- ▶ MRO



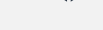
MOBILITY & INDUSTRIES

- ▶ Railway
- ▶ Automotive
- ▶ Power
- ▶ Construction
- ▶ Industries



HEALTHCARE & HYGIENE

- ▶ Medical supplies
- ▶ Medical devices
- ▶ Professional hygiene
- ▶ Personal care



EXPERTISE

ADDEd Value on MATERIALS

► EXPERT DISTRIBUTION

► CONVERTING OF FILMS
& ADHESIVE SOLUTIONS

► CUSTOM PACKAGING
OF CHEMICAL
PRODUCTS

► SPECIALTY
MANUFACTURING

ADHESIVE TAPES



FOAMS



TECHNICAL FILMS



PAPERS & FIBERS



ADHESIVES & SEALANTS



CHEMICALS



COATINGS



PAINTS



PROCESS

FUNCTIONALIZATION

- ▶ Lamination (Liquid adhesive) / Coating
- ▶ Lamination (Adhesive tapes)
- ▶ Surface treatment



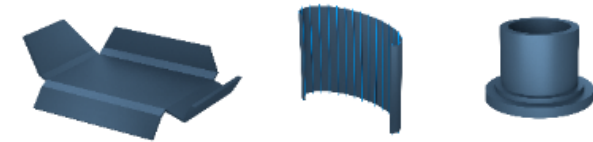
CUSTOM CUTTING

- ▶ Roll form cutting
- ▶ Die cutting
- ▶ Sheetings



SPECIAL PROCESS FOR MATERIALS

- ▶ Forming / Folding
- ▶ Ultrasonic welding
- ▶ Machining



FORMULATION

- ▶ Surface treatment products
- ▶ Cleaning products / disinfectants
- ▶ Other chemical products



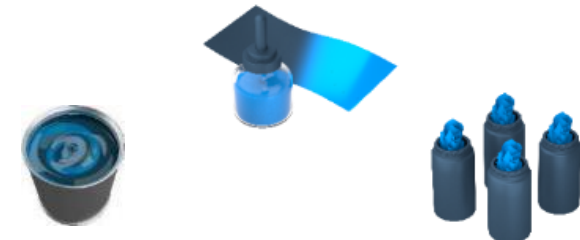
CUSTOM PACKAGING

- ▶ Chemical repackaging
- ▶ Custom packaging



SPECIAL PROCESS FOR LIQUIDS

- ▶ Premix
- ▶ Dyeing
- ▶ Impregnation



SUMMARY – MOBILITY & INDUSTRIES

& CORPORATE

& **MOBILITY & INDUSTRIES** ▶

🚆 RAILWAY MARKET

🚗 AUTOMOTIVE MARKET

⚡ POWER MARKET

🏗️ CONSTRUCTION MARKET

🏭 INDUSTRIES MARKET

📦 ANNEXES



M&I ORGANIZATION

- ADDEV Materials is specialized in the converting and distribution of high-performance materials for Mobility markets (Railway, Automotive) as well as Power, Construction & Industries markets.



RAILWAY

- EXTERNAL STRUCTURE
- ENGINE
- CABIN INTERIOR
- INFRASTRUCTURES & SIGNAGES



AUTOMOTIVE

- EXTERIOR & EXTERNAL STRUCTURE
- ENGINE
- INTERIOR & ELECTRONICS
- SPECIAL VEHICLES



POWER

- POWER GENERATION
- POWER TRANSPORT & STORAGE
- POWER DISTRIBUTION



CONSTRUCTION

- EXTERIOR STRUCTURE
- INTERIOR DESIGN
- ENERGY PERFORMANCE
- CONTROLLED ENVIRONMENTS



INDUSTRIES

- INDUSTRIAL EQUIPMENTS
- CONSUMER GOODS
- SPECIALTY INDUSTRIES



M&I SOLUTIONS:

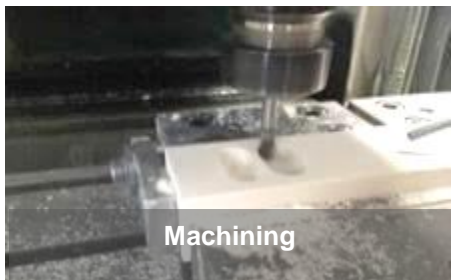
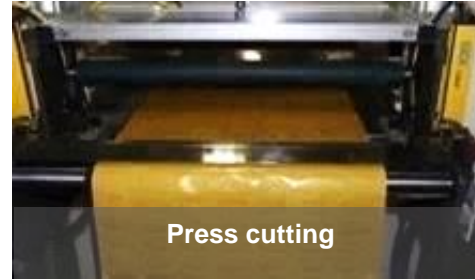
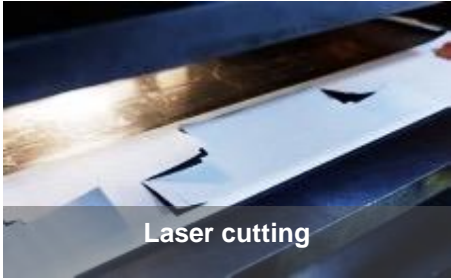
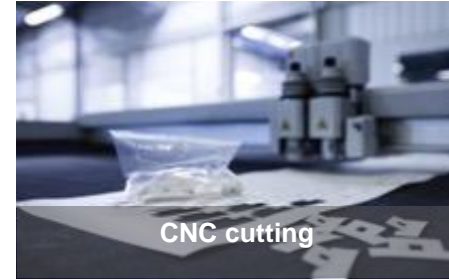
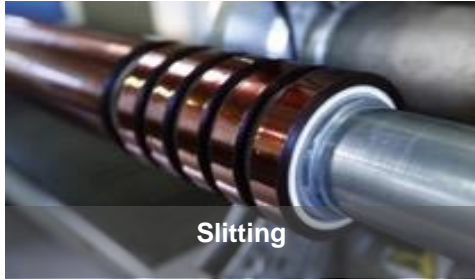
Combination of materials & converting expertise

- Thanks to our technical expertise in high performance materials, combined with our converting capabilities, we offer customized solutions to face industrial challenges of Mobility & Industries market players

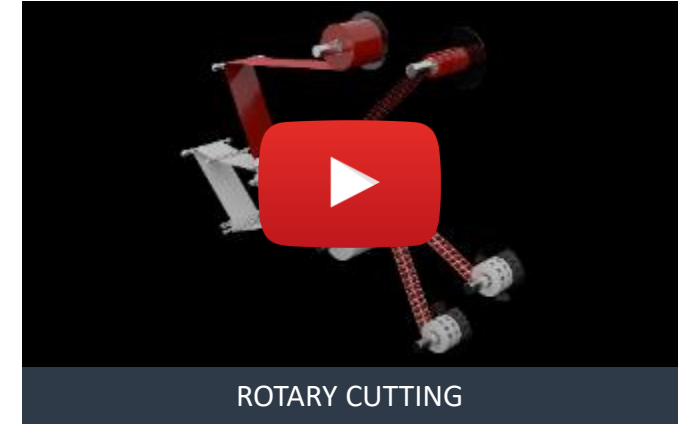
	FLEXIBLE MATERIALS			RIGIDE MATERIALS		LIQUID MATERIALS	
							
CORE RANGES	TECHNICAL FILMS, LAMINATES, PAPERS	ADHESIVE TAPES	FOAMS	COMPOSITES	SLEEVES & TUBES	RESINS & VARNISHES	ADHESIVES & SEALANTS
DEDICATED CONVERTING CAPACITIES							
	FUNCTIONALIZATION OF MATERIALS		CUSTOM CUTTING		SPECIAL PROCESS FOR MATERIALS		CUSTOM PACKAGING
		ADHESIVE COATING / COMPLEXING		ON-ROLL CUTTING		SKIVING <i>(for foams)</i>	 CUSTOM PACKAGING
		LAMINATING / COATING		DIE CUTTING		ULTRASONIC WELDING	
		SURFACE TREATMENTS		SHEETING		MACHINING	



OUR PROCESS



OUR PROCESS IN VIDEO



ADDED VALUE SERVICES

- We have developed a range of value-added services to better meet the needs of our market players across the value chain, from product development to supply chain optimization.



TECHNICAL EXPERTISE

CO-DEVELOPMENT

- Team of technical experts
- Selection of the appropriate materials & processes
- Elaboration of the best solution

INNOVATION & DEVELOPMENT

CO-DEVELOPMENT

- Study & testing
- Prototyping/proof of concepts
- Product development
- Collaborative projects

PROTOTYPING

TESTING

- Possibility to offer prototyping solutions
- Produce parts using the same materials as those used for the final product

KITTING

OPTIMIZATION

- Assembly & shipping kits of your various components
- Optimization of the supply flows of your production lines.

INTERNATIONAL FOOTPRINT

FOOTPRINT

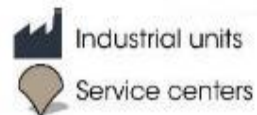
- Strong implementation in Europe & North America
- Proximity & delivery reactivity

CUSTOMERS PORTALS

DIGITAL

- Register into your customer order portal to optimize your internal process
- Orders follow-up from our own portal

INTERNATIONAL FOOTPRINT



KEY FACTS

Mobility & Industries centers of excellence

- 10 industrial sites EU & 5 industrial sites NA :
 - Technical films & laminates converting
 - Tapes converting
 - Foams converting
 - Non-woven converting
 - Custom packaging of chemicals

→ International presence ensuring performance & local services



SUMMARY – RAILWAY



CORPORATE



MOBILITY & INDUSTRIES



RAILWAY MARKET



AUTOMOTIVE MARKET



POWER MARKET



CONSTRUCTION MARKET














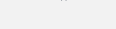
INDUSTRIES MARKET



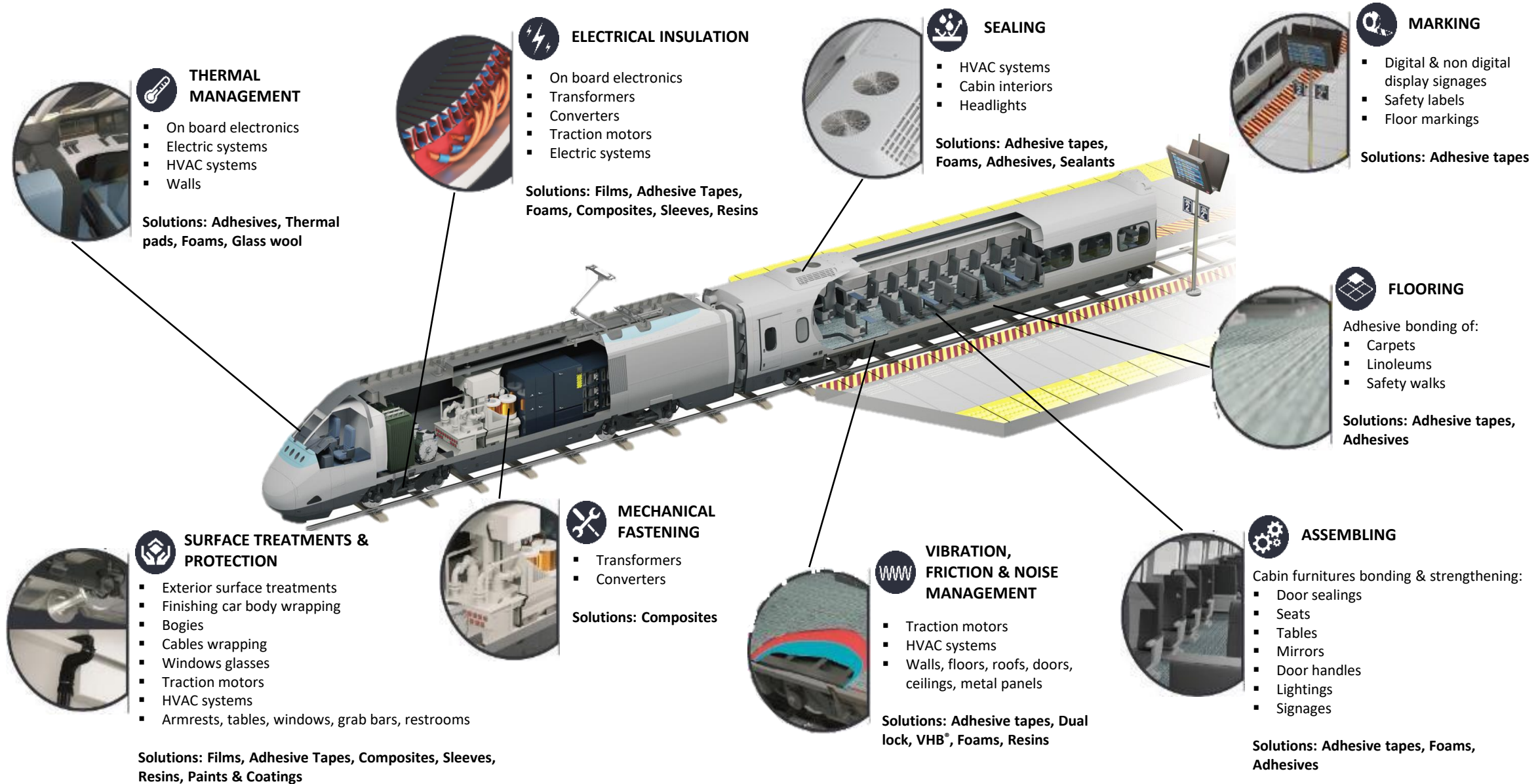
ANNEXES



RAILWAY – MATERIALS BY APPLICATION

										
	MATERIALS	ELECTRICAL INSULATION	SURFACE TREATMENTS & PROTECTION	ASSEMBLING	SEALING	MECHANICAL FASTENING	THERMAL MANAGEMENT	VIBRATION, FRICTION & NOISE MANAGEMENT	MARKING	
FLEXIBLE MATERIALS	Technical films, laminates & papers <i>Nomex®/Nomex® store, Presspahn ladders & stores, Meta aramid non-woven, Kapton®, Nokamex, Formex®, Tedlar®, PET, Kraft</i>	●	●				●			
	Adhesive tapes <i>Assembly tapes, Masking tapes, Electrical insulation tapes, Grip tapes, EMI shielding tapes</i>	●	●	●	●			●	●	
	Foams <i>PU, PE, PET, PVC NBR, EPDM, Silicone, Neoprene</i>	●		●	●		●	●		
RIGID MATERIALS	Composites <i>Thermosets, Silicone glass, Polyimide glass, Polyester glass mat ; Thermoplastics</i>	●	●			●				
	Sleeves <i>Electromagnetic shielding, Electrical insulation, Mechanical protection, Self-extinguishing</i>	●	●	●			●			
LIQUID MATERIALS	Resins & Sealants <i>Mono-component sealant (Polyurethane, Silicone, MS Polymer, Butyl) ; Electrical resin (Epoxy)</i>	●	●		●			●		
	Paints & coatings <i>Uni Primer, Etokat Aqua Primer, Etokat Aqua DS, Colortar Aqua, Socogel</i>		●							
	Adhesives <i>Mono-component (anaerobic, cyanoacrylate, hotmelt, epoxy) ; Bi-components adhesives (Epoxy, acrylic, silicone)</i>			●	●		●			

RAILWAY – SOLUTIONS



RAILWAY – VIDEO



SUMMARY – AUTOMOTIVE



CORPORATE



MOBILITY & INDUSTRIES



RAILWAY MARKET



AUTOMOTIVE MARKET



POWER MARKET



CONSTRUCTION MARKET



INDUSTRIES MARKET



ANNEXES



AUTOMOTIVE – MATERIALS BY APPLICATION

									
	MATERIALS	ELECTRICAL INSULATION & CONDUCTIVITY	THERMAL MANAGEMENT	ASSEMBLY	EMI SHIELDING	FIRE PROTECTION	VIBRATION MANAGEMENT	SEALING	TEMPORARY PROTECTION
FLEXIBLE MATERIALS	Technical films, laminates & papers <i>Kapton®, Nomex®, Laminates (Alu, PET, copper, NMN, NKN), Mica®, Protective films, Heatfilm®</i>	●	●		●	●			●
	Adhesive tapes <i>Adhesive tapes for : Electrical insulation & conductivity, Thermal insulation & conductivity, Assembly, Masking, Sealing, EMI shielding, Thermal pads</i>	●	●	●	●	●		●	●
	Foams <i>Cushioning foams, Insulation foams, Anti-vibration foams, Silicone foams, PU foams, Low sulfur/VOC foams</i>	●	●	●	●	●	●	●	●
	Sleeves <i>Flame-retardant sleeves (Silicone & reflective fiberglass), Mechanical protection sleeves, EMI shielding sleeves</i>	●	●	●	●	●			
	Tubes <i>NKN / NMN laminated tubes, Heat-shrinkable tubes, PTFE, PET & Nomex® tubes</i>	●	●		●	●			
LIQUID MATERIALS	Resins & Varnishes <i>Resins : Electrical resins, Impregnating resins, Casting & Potting resins</i> <i>Varnishes</i>	●	●		●	●	●	●	
	Adhesives & Sealants <i>Adhesives : One or two-component epoxy, Cyanoacrylate</i> <i>Sealants : MS Polymer, silicone, PU, Gap fillers</i>	●	●	●	●			●	



FLEXIBLE MATERIALS

LIQUID MATERIALS

AUTOMOTIVE – SOLUTIONS

ELECTRONICS

- Display systems
- Electrical systems
- Electronics control units
- Data cables

Applications :



INTERIOR

- Trim panels & door pillars
- HVAC systems
- Starters, inverters, fuel lines
- Lighting
- Headliners, shades, sunroofs

Applications :



EXTERIOR & VEHICLE STRUCTURE

- Chassis
- Bodycar elements
- Exterior trim mounting components
- Lighting
- Cameras & sensors

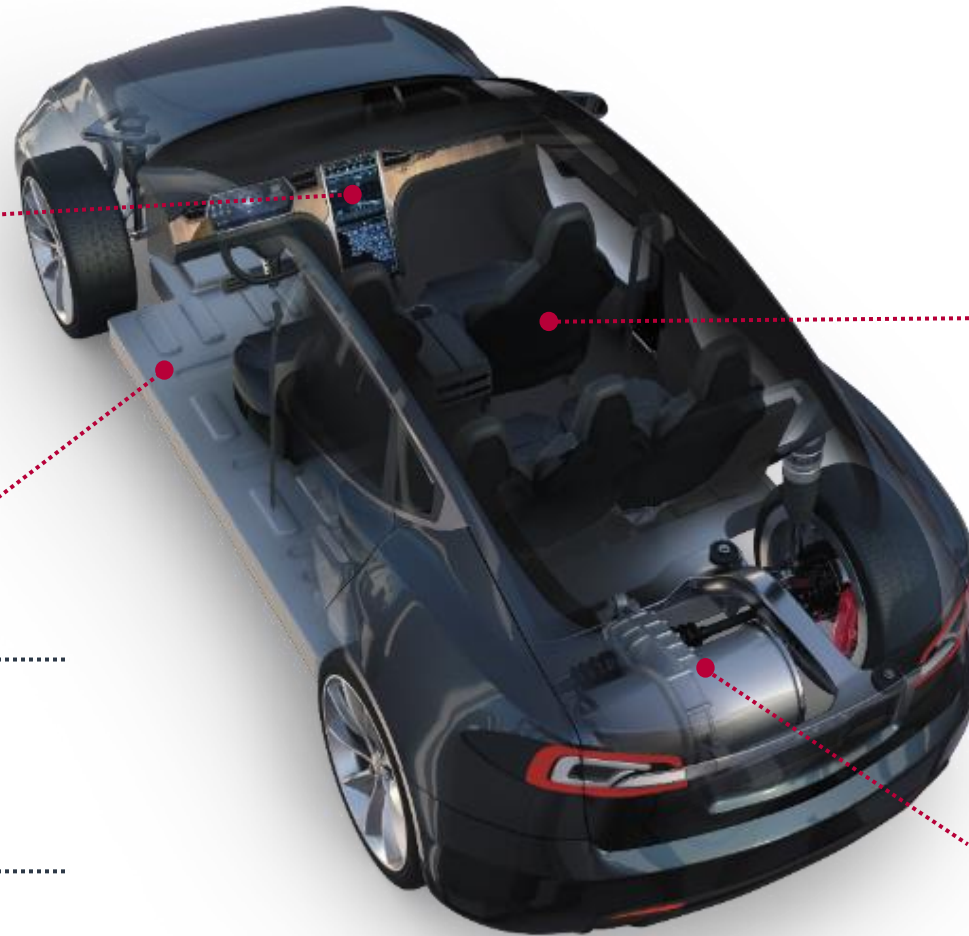
Applications :



ENGINE

- Electric motors
- Batteries

Applications :



SUMMARY – POWER



CORPORATE



MOBILITY & INDUSTRIES



RAILWAY MARKET



AUTOMOTIVE MARKET



POWER MARKET



CONSTRUCTION MARKET



INDUSTRIES MARKET



ANNEXES



POWER – MATERIALS BY APPLICATION

ADDEV Materials is able to provide converting & custom packaging solutions for the whole power products' range.

								
	MATERIALS	ELECTRICAL INSULATION	THERMAL MANAGEMENT	CABLE INSULATION & ASSEMBLY	ELECTROMAGNETIC SHIELDING	MECHANICAL REINFORCEMENT	FIRE PROTECTION	ENVIRONMENTAL CONSTRAINTS PROTECTION
FLEXIBLE MATERIALS	Technical films, laminates & papers <i>Nomex®, PET, Kapton®, Thermex, Mylar®, Tedlar®, Lexan®, Nokamex, Formex®</i>	●	●	●	●	●	●	●
	Adhesive tapes <i>Electrical insulation tapes, assembly tapes, packaging/closure tapes, masking tapes, EMI shielding tapes, adhesive pads</i>	●	●	●	●	●	●	●
	Non-adhesive foams <i>PU, Silicon, & EPDM foams</i>	●	●				●	
	Sleeves & Tubes <i>Polyimide (Kapton®) tubes / Heat-shrinkable tubes / PET (Mylar®) tubes/ Customized tubes / Insulating sleeves</i>	●	●	●	●	●	●	●
LIQUID MATERIALS	Resins & Varnishes <i>Mono-component : PU & thermosetting resins Bi-component : removable encapsulation ,epoxy & PU</i>	●	●			●	●	●
	Adhesives <i>Mono-component : Cyanoacrylate, silicone, hotmelt, UV... Bi-component : epoxy, acrylic...</i>					●		
RIGIDE MATERIALS	Composites <i>Complete kits (screws, nuts, washers, slot, wedges...) / Glass mat epoxy parts / Resins covering</i>	●	●			●	●	●



POWER - SOLUTIONS

- As technical experts, we offer customized solutions for the main applications of the power market from power generation to power distribution :



Electrical insulation



Thermal management



Cable insulation & assembly



Mechanical reinforcement



Fire protection



EMI shielding



Environmental constraint protection

POWER GENERATION



Power plants



Generators



Windmills



Photovoltaic panels



POWER TRANSPORT & STORAGE



Cables



Transformers



POWER DISTRIBUTION



Renewable energy
Consumer goods



Building & Infrastructure
Lighting



Mobility solutions
E-Mobility &
Electronic Batteries



SUMMARY – CONSTRUCTION



CORPORATE



MOBILITY & INDUSTRIES



RAILWAY MARKET



AUTOMOTIVE MARKET



POWER MARKET



CONSTRUCTION MARKET



INDUSTRIES MARKET









ANNEXES



CONSTRUCTION – MATERIALS BY APPLICATION

ADDEV Materials is able to provide converting & custom packaging solutions for the whole construction products' range.

							
	MATERIALS	SURFACE PREPARATION & PROTECTION	SEALING & GASKETING	ASSEMBLY	INSULATION MANAGEMENT	FIRE PROTECTION	ENVIRONMENTAL CONSTRAINTS PROTECTION
FLEXIBLE MATERIALS	Adhesive tapes <i>Electrical insulation, Assembly, Packaging/closure, Masking, Protection, Anti-adhesion, Sealing & Gasketing tapes</i>	●	●	●	●	●	
	Foams <i>EPDM, PU, PE, Neoprene, PVC foams</i>		●	●	●	●	●
	Technical films, laminates & papers <i>Nomex®, PET, Kapton®, Tedlar®, Laminates</i>	●			●		●
	Non-wovens <i>Tyvek® / Non-wovens for : Thermal protection, Roofing, Siding & facade protection, Soil stabilization, Green roofs (Protech', Armat', Greenroof EZ...)</i>	●			●		●
LIQUID MATERIALS	Adhesives <i>Mono component : Hotmelt, Cyanoacrylate, PVC, Neoprene Bi components : Methacrylate, Acrylic, Epoxy...</i>		●	●	●		
	Sealants <i>Mono component : PU, MS Polymer, Silicon...</i>		●	●	●		



CONSTRUCTION – SOLUTIONS

EXTERIOR SOLUTIONS

ROOFS

- Waterproofing / Sealing
- Vegetation
- Thermal insulation
- Sound insulation
- Assembly
- Prefabricated elements



WINDOWS & DOORS

- Assembly
- Waterproofing / Sealing
- Masking
- Sound insulation
- Thermal insulation
- Anti-vibration solutions
- Site protection



FACADES

- Waterproofing/Sealing
- Reinforcement
- Cladding
- Assembly
- Fire protection
- Thermal insulation
- Sound insulation
- Prefabricated elements



EXTERIOR FITTINGS

- Protection during construction
- Mulching
- Marking
- Geotextiles



INTERIOR SOLUTIONS

INTERIOR DESIGN

- Assembly
- Sound insulation
- Thermal insulation
- Fire protection



KITCHEN, STORAGE & BATHROOMS

- Assembly
- Sealing
- Protection of the material



HVAC

- Assembly/Fastening
- Waterproofing / Sealing
- Energy optimization
- Thermal insulation
- Sound insulation
- Anti-mould protection



CONTROLLED ENVIRONMENTS

- Assembly / Fastening
- Waterproofing / Sealing
- Energy optimization
- Thermal insulation
- Sound insulation
- Anti-mould protection



SUMMARY – INDUSTRIES



CORPORATE



MOBILITY & INDUSTRIES



RAILWAY MARKET



AUTOMOTIVE MARKET



POWER MARKET



CONSTRUCTION MARKET



INDUSTRIES MARKET



ANNEXES



INDUSTRIES – SOLUTIONS

— As technical experts, we offer customized solutions for many industrial applications :



INDUSTRIAL EQUIPMENTS

- Machines frames
- Tanks & Pipes
- Global maintenance



CONSUMER GOODS

- Leather goods
- Sports & Leisure
- Appliances



SPECIALTY INDUSTRIES

- Agriculture
- Marine
- Security identification
- Research & development
- Paper graphics packaging



SUMMARY – ANNEXES



CORPORATE



MOBILITY & INDUSTRIES



RAILWAY MARKET



AUTOMOTIVE MARKET



POWER MARKET



CONSTRUCTION MARKET



INDUSTRIES MARKET



ANNEXES



M&I EXTERNAL COMMUNICATION TOOLS



RAILWAY

- ↓ Market specialist presentation
- ↓ Materials selection guide
- ↓ Brochure
- www. Webpage



AUTOMOTIVE

- ↓ Market specialist presentation
- ↓ Brochure
- www. Webpage



POWER

- ↓ Market specialist presentation
- ↓ Brochure
- www. Webpage



CONSTRUCTION

- ↓ Market specialist presentation
- ↓ Brochure
- www. Webpage



INDUSTRIES

- www. Webpage

PRODUCTS SELECTION GUIDES



↓ Foams



↓ Single-sided tapes



↓ Double-sided tapes



↓ Films



↓ Laminates



↓ Papers & fibers



↓ One-part adhesives



↓ Two-parts adhesives



↓ Sealants



↓ One-part resins



↓ Two-parts resins



LAB'INNOV

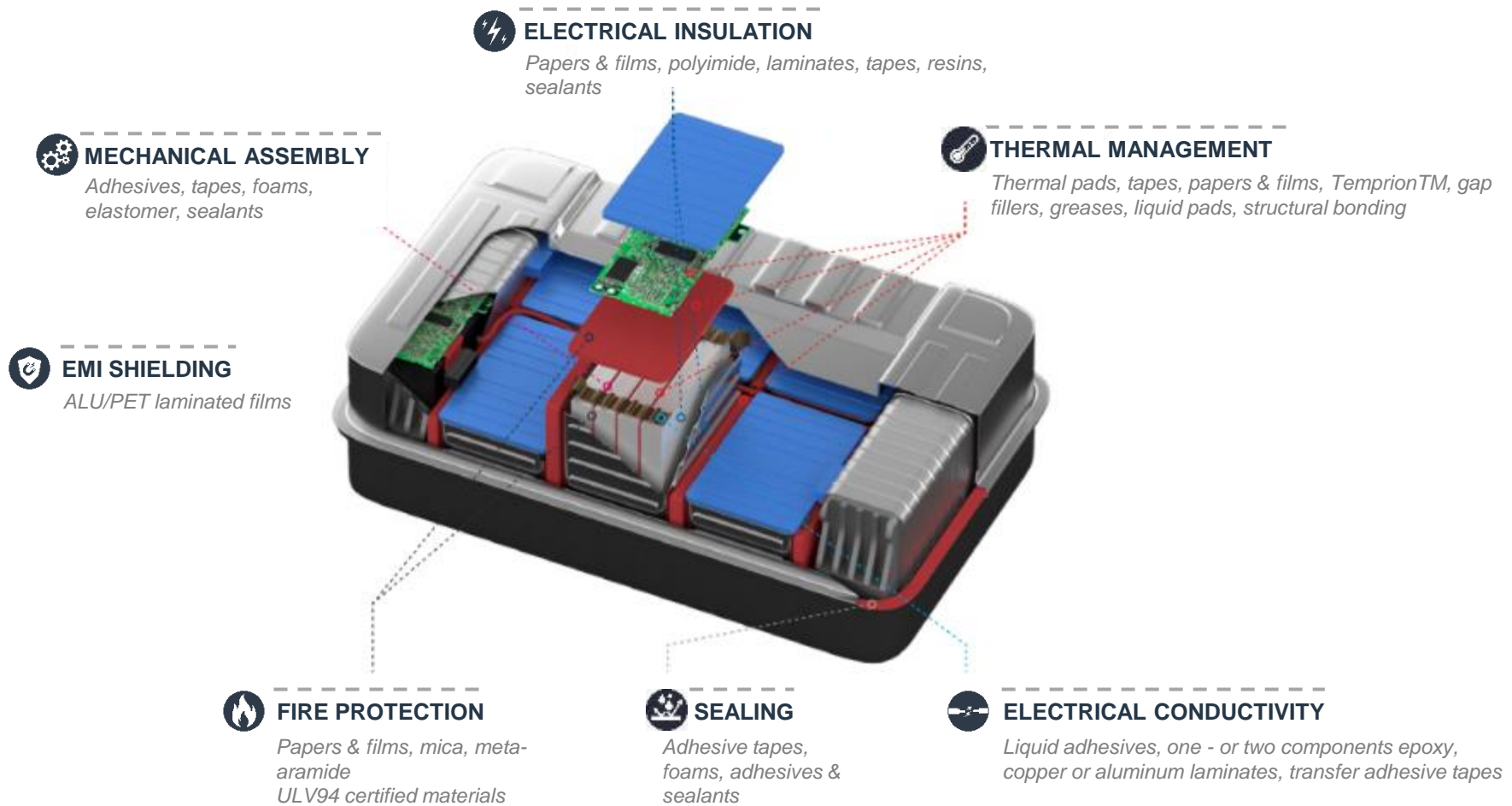


FIND MORE ABOUT OUR INNOVATIVE SOLUTIONS



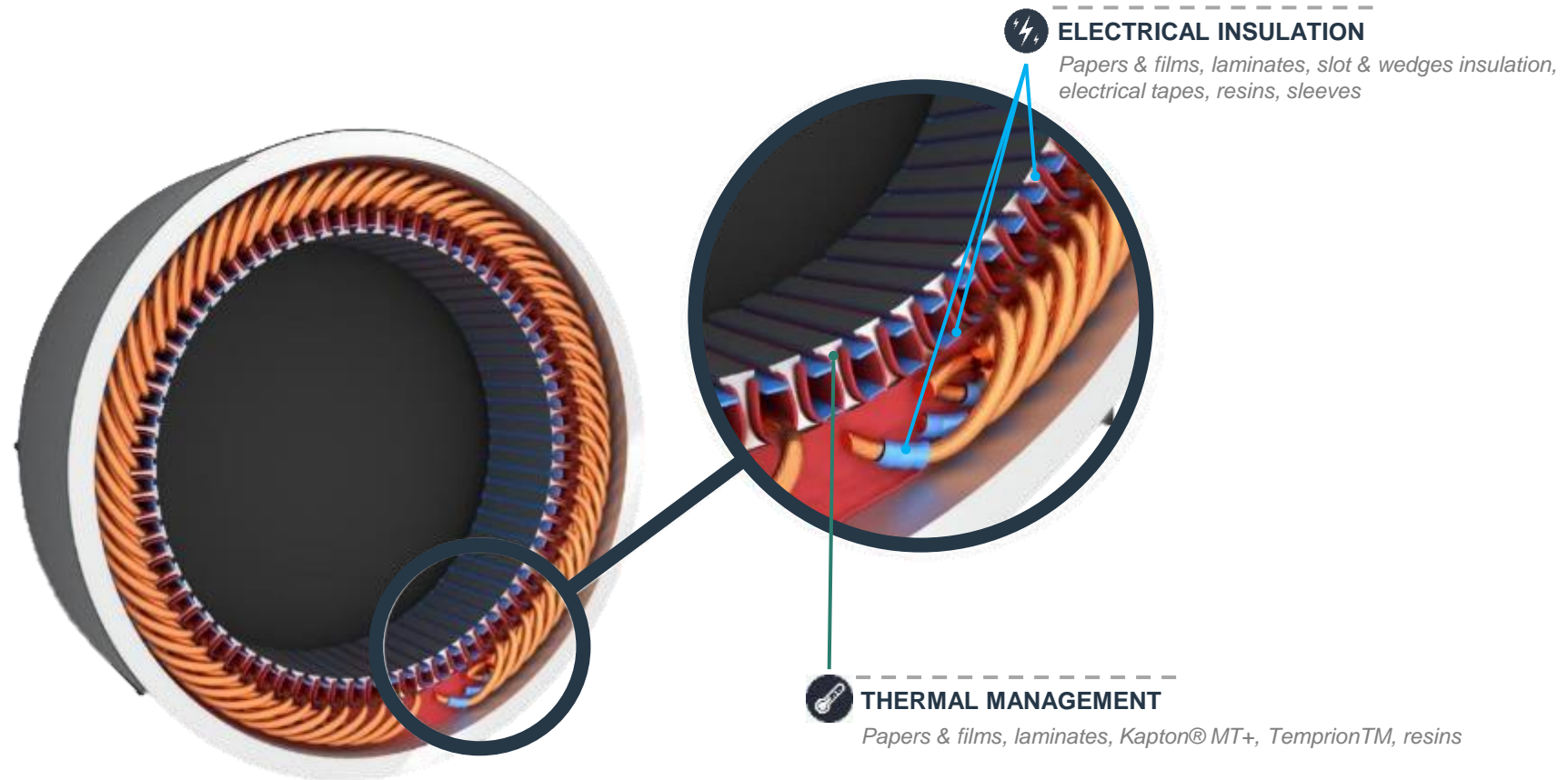
BUSINESS CASE – AUTOMOTIVE

Battery management






BUSINESS CASE – AUTOMOTIVE

Electric motor



BUSINESS CASES – POWER (1/2)

CUSTOMER	CUSTOMER'S BUSINESS	CUSTOMER CHALLENGE	ADDEV SOLUTION		CUSTOMER BENEFITS
OEM in LV/MV equipments	Power management devices, automation and adapted solutions	Find a solution to install devices easily without mechanical fasteners		<p>Material : Complex part involved for material savings and ease of installation</p> <p>Process : Rotary die-cutting & implementation of grippers</p>	<ul style="list-style-type: none"> • Easy to apply → Time saving • Lighter finished product • No need for mechanical fasteners → Aesthetics
OEM in transformers / coils	Power generation & transformation	Find a solution for coil damping		<p>Material : Double-sided adhesive foam cut to size for damping coils</p> <p>Process : Press cutting</p>	<ul style="list-style-type: none"> • Shock absorption • Absorption of surface irregularities
OEM in batteries	Manufacturing of batteries for several industries	Find a solution for homogeneous & uniform heat distribution in the battery		<p>Material : Thermal pad / Thermal pad with an adhesive tape</p> <p>Process : Rotary die-cutting</p>	<ul style="list-style-type: none"> • Extend product life (battery & components) • Provides safety from flammability risks



BUSINESS CASES – POWER (2/2)

CUSTOMER	CUSTOMER'S BUSINESS	CUSTOMER CHALLENGE	ADDEV SOLUTION		CUSTOMER BENEFITS
OEM in electrical systems & equipments	Manufacturing of electrical equipments & systems for building & housing market	Find a solution to avoid arc overload on their circuit breaker chambers		<p>Material : Nomex / Vulcanized fiber / Thermex for insulation</p> <p>Process : Press cutting & Slitting</p>	<ul style="list-style-type: none"> Productivity gains Material savings Extended product life Electrical insulation
OEM in LV/MV equipments	Power management products, automation and solutions	Searching for a solution to avoid arc overload between power supplies		<p>Material: Polyester glass mat with inserts assembled to a grooved bar with spacers (<i>Self-extinguishing material</i> → UL94 V0 rating)</p> <p>→ Phase separator on the power supply to prevent arc overload</p> <p>Process : Machining & stamping</p>	<ul style="list-style-type: none"> Productivity gains Material savings Extended product life Electrical insulation Anti-flash security
Industrial OEM for renewable energy & power generation markets	Manufacturing of wind turbines, gas and steam turbines, hydroelectricity, power systems	<p>Step 1 : Need to externalize the manufacturing process for composites (threaded rods, washers, nuts)</p> <p>Step 2 : Need to receive ready-to-use kits of composites</p>	<p>Step 1</p>  <p>Step 2</p> 	<p>STEP 1 :</p> <p>Materials : Manufacturing & assembly of epoxy screws, nuts, washers</p> <p>Process : Machining</p> <p>STEP 2 :</p> <p>Materials : Complete composites kits to customer's dimensions</p> <p>Process : Machining</p>	<ul style="list-style-type: none"> Productivity gains Simplification of customers' supply process Kitting → Turnkey solution for the customer



BUSINESS CASES – CONSTRUCTION

CUSTOMER	CUSTOMER CHALLENGE	ADDEV SOLUTION	CUSTOMER BENEFITS
Heater manufacturer	Get an aesthetic installation of a glass panel heater	 <p>Material : Double sided high performance acrylic tape (VHB®)</p> <p>Process : Rotary die-cutting</p>	<ul style="list-style-type: none"> • Easy to apply → Time saving • Lighter finished product • No need for mechanical fasteners → Aesthetics
HVAC manufacturer	Get sealing performance & anti-moisture barrier	 <p>Material : Pads of PU foam with one side adhesive & one side mylar film</p> <p>Process : Lamination & Rotary die-cutting</p>	<ul style="list-style-type: none"> • Tailor-made pieces → Time saving • Mylar film → Adds a moisture barrier to the solution
Windows manufacturer	Prevent infiltration of insects & allow drainage	 <p>Material : Weep hole PU foam</p> <p>Process : Slitting & Rotary die-cutting</p>	<ul style="list-style-type: none"> • Tailor-made pieces → Time saving • Prevents the infiltration of insects and allows drainage



THANKS FOR YOUR ATTENTION

www.mi.addevmaterials.com

