Introduction to Presidium & RevoTherm™

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Proprietary & Confidential Information
An innovative technology company that invents, develops and manufactures disruptive engineered materials.

**Mission**: To revolutionize not only what products can be made of, but how products are designed and manufactured.

50 years ago plastics changed how products were made, replacing glass, paper and metal.

Today RevoTherm™ has set out to disrupt the composites industry by doing the same to fiberglass, plastic & metal.
What is RevoTherm™?

Revolutionary Material
• A patented, “polyurethane-based” thermoset resin system with material properties capable of replacing traditional composite materials in either a lightweight “neat” or reinforced system.

Clean, Optimal Process
• Low viscosity material
• Low pressure process
• Minimal skilled labor
• No-styrene VOC’s
• Low cost tooling

Part Design Freedom
• Thick-to-thin areas
• A and B side design capability - ribs, bosses and textures
• Resin-rich areas are a good thing!
RevoTherm™ - Superior Performance

Deliver strength plus other physicals capable of replacing resins and composite materials used in many part applications today.
RevoTherm™ - Think Coke®

Coke Syrup + Carbonated Water = Coke

RevoTherm™ 2-Part Resin System

RT1000B Polyol + RT1000A Isocyanate = RevoTherm™ Meter mix equipment

Our “secret sauce” + RevoTherm™ Meter mix equipment = Truck Headlight Bucket

Finished Product
RevoTherm™ - Multiple Product Variations

RevoTherm™ = A B C D E

“B” Pigment
“C” UV Stable
“D” Flame Retardent
“E” Foam

Additives, Agents, Catalysts
Impact Modified
Viscosity Modified
Customized

Flexible chemistry works with glass/carbon fiber reinforcements and additives, yielding multiple discrete RevoTherm™ products with wide performance range.
RevoTherm™ - Multiple Sales Channels

Works with Existing Processing Equipment for Manufacturing Composite Parts

- Reaction Injection Molding (RIM)
- Resin Transfer Molding (RTM)
- Vacuum Assisted RTM
- Pultrusion
- Foams

Thermoplastics 2,000 psi

- HARDER
- HIGHER

400°F 1 million cp

PROCESSABILITY

RevoTherm™ 200 psi

RT1000B

(RIM & Pultrusion)

HARDER

PROCESSABILITY

Viscosity

RevoTherm™

RT1000B-LV

EASIER

LOWER

86°F = 77,000 cp
200°F = 2,000 cp
86°F = 6,000 cp
100°F = 1,600 cp
RevoTherm™ - Target Markets

- Automotive aftermarket
- Agricultural/ Construction
- EV
- Heavy Truck
- Recreational
- RV/ Specialty Vehicle
- Marine
- Infrastructure
- Aerospace
- Wind

SEMA 2019 – RevoTherm™ Composite Jeep Bumper
Presidium Operations

• Presidium was established in London, ON, Canada in 2011.
  • Home for our fully equipped research and product development facility

• Presidium’s R&D Innovation Center
  • State-of-the-art research lab
  • Analytical testing equipment
  • Physical property testing equipment
  • Covestro Baulé meter/ mix machines
  • Composite tool fabrication
  • Small scale RevoTherm™ part production

• Plans to establish US headquarters and commercial center in Detroit, MI Area Q4 2020
For Further Information
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Thank You
www.PresidiumUSA.com