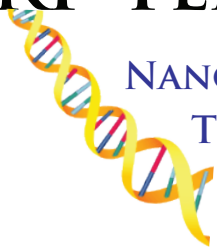


RP TEMPERING™ TECHNOLOGY NEWS



NANO-COMPOSITE
TECHNOLOGY

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SOLID FREEFORM ADDITIVE TECHNOLOGY &
PATENT PENDING ENGINEERING TECHNIQUE

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A Message from Earl Dunlap

I would like to personally thank all our RP Tempering™ users for their feedback over the last month. We have gathered a lot of information from many different sources that we think the RP Tempering™ Technology News readers would be interested in hearing. We are very excited about the many different application challenges that you have brought to us. The majority of the challenges were achieved. Some of the newer and more recent application successes are:

- Shield radiation light from electronic parts inside an CT Scan Machine, taking the place of lead.
- Being able to lubricate 3 different RP/SFF materials to include parts made from SL, LS and FDM machines. This lubricant is very durable and dry.
- RP Tempering™ was used inside

methanol gas tanks at the Indianapolis 500 this year as well as many other races. Our products resist fuels for long periods of time, cycling through hot and cold temperature ranges and handling extensive vibration.

The applications we are still working towards a solution are:

- Being invisible to a MRI machine
- Some Autoclave Sterilization Applications
- Higher heat applications with Objet materials

For this news letter we decided to go back to the basics. We have listed the basic details about all our products for your review. Along with publishing some customer feedback from a survey that I did over the last few months. There will not be any pictures just facts. Please feel free to contact me personally with any questions at ENDunlap@Par3Technology.com.

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Industry Distributors Benefit from Offering RP Tempering™

RP Tempering™ Technologies are being accepted globally with distribution channels in Asia, Europe, South Africa, Middle East, Russia, Korea, USA, Canada, Mexico, Australia and New Zealand.

Distributorships are still available in certain geographical locations. Sales and other opportunities continue to increase every month for RP Tempering™ and their distributors. Even RP Tempering™ end users, academic institutions, government agencies, and OEM's are seeing many benefits from using and offering RP Tempering™. Distributors that sell RP machines, software, support services (training and maintenance), peripherals (tools, fixtures) and consumable materials (resins, powders) are benefiting from adding RP Tempering™ to their product and service offerings. Below is a summary from a recent business

survey of RP Tempering™ Distributors and end users. PAR3 Technology, Inc., interviewed multiple RP Tempering™ distributorships ranging from those that sell just material, resin, and powders to ones that sell RP systems and apparatus (SL, LS, FDM, and Objet). RP Tempering™ Products and Services are proving to be a perfect compliment to their business plan. Some of the reported benefits are:

- o Selling RP Tempering™ Products is a perfect fit with the current consumable product sales. Consumables create a constant source of increased revenue for a good margin.
- o Selling RP Tempering™ Technology Support Services compliment the current services offered by the distributor. Increasing sales, minimal training, and minimal investment add to the company's profitability.
- o RP Tempering™ Products in a competitive situation has proved to be an excellent support mechanism for closing a sale on a system machine and apparatuses. In a potential sale situation where a competitive system

is involved, RP Tempering™ enhancements have proven in multiple cases to help land the sale for a RP machine. If you sell the machine, you sell more consumable materials and services, all with the support of RP Tempering™ Products.

- o Your end use customers will benefit from increased application opportunities.
- o No capital equipment needed and low start-up investment for distributors and end users alike.

PAR3/RP Tempering™ along with their distributors and end users are growing at a record pace in 2008. That is setting a sales record for the 3rd year in a row. Anyone can leverage RP Tempering™ Products and Engineering Services. Individual sale representative companies are welcome to inquire about representing PAR3 Technology, Inc., selling RP Tempering™, Composite Tempering®, Engineering Services and Production Applications.

Introducing RP Tempering™ Starter Kits

RP Tempering™ will be offering two different size starter application kits through our global distribution network. Anyone can purchase these kits including end users, service bureaus, OEM's, or people wanting to experiment with our products and technologies. There will be two sizes of starter kits for each application. One will be an "Introductory Starter Kit" and the other will be a "Standard Application Kit". In the kits the RP Tempering™ Materials will be grouped to address the most common RP/SFF part challenges. RP Tempering™ will work on most FDM, SL, LS, Object resins, thermal plastics, along with some other materials. These kits were based on improving the physical and typical properties seen in almost every industry Technical Data Sheet including:

- Mechanical Properties
- Electrical Properties
- Thermal Properties
- Environmental Properties/Chemical Resistance

The "Introductory Starter Kit" is a lower cost, one time per user offer, for first time user experimentation. PAR3 developed these small container kits for potential new customers/users wanting to experiment with our products and applications.

The "Standard Application Kit" will include standard size products in the kit. If you purchase this kit you will save 20% off the price for each container when compared to buying individual containers. This is for initial users and our complete customer base.

The following kits will be available July 1, 2008:

Mechanical Property Enhancement & Environmental/Chemical Resistance Kit

This kit will supply you with all the materials needed to enhance the mechanical properties in an RP/SFF part. The kit includes 1 container each of the following:

- RP Tempering™ Compound
- Proto-Plasma-Rx™ Spray Clear
- Proto-Reinforcement Infiltrate Coating
- Injection applicators

InsulTemp© (spray/brush on) and LubeTemp© are available in this kit for an extra fee. The "Standard Application Kit" will cover about 1800 square inches of RP/SFF part surface area. The lower cost "Introductory Starter Kit" with small containers will cover about 300 square inches of RP/SFF part surface area.

The mechanical kit will allow you to achieve enhancements primarily in with mechanical properties with some environmental/chemical resistance and thermal property enhancements. Enhancements and achievable applications include:

- Living hinge applications
- Water/fluid tight container
- Withstand 200 psi vacuum
- Seal porosity to a micron level
- Increased durability thin wall & "Z" Axis
- Expandable screw bossed for self tapping screws
- Stronger snap features
- Functional squeezable container
- Reduces UV light deterioration by at least 70%
- Increase impact strength
- Increase torsion durability
- Increase flex modulus
- Reduce vibration signatures
- Pass salt spray test
- Absorb sound for a wide range of decibels
- Reduce chances for catastrophic breaks
- Smooths surface without sanding
- Chemical resistance (fuel, oil, water, etc.)
- Thermally insulates
- Electrically insulates

High Temperature - Thermal Property Enhancement Kit

This kit will supply you with all the materials needed to enhance the thermal properties in an RP/SFF part. The kit includes 1 container each of the following:

- Proto-Reinforcement Infiltrate Coating
- Hi-Temp Protoplass©
- Fire Retardant Protoplass©
- InsulTemp© (brush on)

InsulTemp© Spray is available in place of the brush-on for an extra fee. The "Standard Application Kit" will cover about 1800 square inches. The lower cost "Introductory Starter Kit" with small containers will cover about 100-150 square inches depending on the application.

The thermal kit will allow you to achieve enhancements primarily with thermal properties with some environmental/chemical resistance, electrical and mechanical property enhancements. Depending on the base RP material and thermal application, the following enhancements are achievable:

- Achieve UL94 Burn Test Criteria
 - o V-0 Vertical Burn Test
 - o 5V-A Surface Burn Test
 - o H-B Horizontal Burn Test
 - o Aerospace Fume Test
- Increased heat deflection
- Increased heat resistance
- Increase heat soak penetration
- Fire retardant and passes the Automotive MVSS302 Burn Tests
- Insulates applications for mid-level heat for long periods of time
- Insulates applications for sub-zero cold for long periods of time
- Passes salt spray testing
- Seals porosity to a low level
- Reduces UV light deterioration by 70%
- Reduce vibration signatures
- Absorb sound for a wide range of decibels
- Reduce chances for catastrophic breaks
- Chemical Resistance (fuel, oil, water, etc.)
- Thermally insulative coating wrap – hot and cold
- Electrically insulative 1450 volts per mil.

Electrical Property Enhancement Kit

This kit will supply you with all the materials needed to enhance the electrical properties in an RP/SFF parts. The kit includes 1 container each of the following:

- Proto-Reinforcement Infiltrate Coating
- EMI Shielding
- RFI Shielding
- ConducTemp©
- InsulTemp© (brush on)

InsulTemp© Spray is available in place of the brush-on for an extra fee. Optional RF C13 Absorb© (absorbs microwaves) and TungstenTemp© Radiation Light Shielding are also available for an extra fee. The "Standard Application Kit" will cover about 150 square inches. The lower cost "Introductory Starter Kit" with small containers will cover about 25 square inches depending on the application.

The electrical kit will allow you to achieve enhancements primarily in with electrical properties with some thermal and environmental/chemical resistance property

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Starter Kits - Continued

enhancements. Depending on the base RP material and electrical application, the following enhancements are achievable:

- Conductive surfaces
- EMI Shielding (radio frequencies waves, db ranges, Hz ranges)
- RFI Shielding (radio frequencies waves, db ranges, Hz ranges)
- Achieve UL94 Burn Test Criteria
 - o V-0 Vertical Burn Test
- Electrically insulative 1450 volts per mil
- Increased heat deflection
- Increased heat resistance
- Increase heat soak penetration
- Insulates applications for mid-level heat for long periods of time
- Insulates applications for sub-zero cold for long periods of time
- Passes salt spray testing
- Seals porosity to a low level
- Absorbs microwaves – Stealth Technology
- Reduces UV light deterioration by 70%
- Reduce vibration signatures
- Absorb sound for a wide range of decibels
- Chemical Resistance (fuel, oil, water, etc.)
- Thermally insulative – hot and cold

- Completely block X-rays
- Completely block radiation light (A common application is to protect and shield parts inside CT Scanners and MRI Devices)

Living Hinge Kit

The Living Hinge Kit is available in a “Standard Application Kit” that will include 1 container each of the following:

- RP Tempering™ Compound - 2 oz
- Proto-Reinforcement Infiltrate Coating-2oz
- Proto-Plasma-Rx™ Spray Coating
- 3 Injection Applicators

This should make approximately 500 square inches of living hinge, 200 screw boss, or 200 snap features enhancements. These materials, when used in combination, are commonly called Hybrid-Temp-Rx™.

Fire Retardant Kit – Achieves UL94 Rating

The Fire Retardant Kit is available in a “Standard Application Kit” that will include 1 container each of the following:

- Fire Retardant Protoplass©
- Proto-Reinforcement Infiltrate Coating-4oz

The materials should cover about 400 square inches. This will meet all UL94 criteria in approved RP/SFF materials.

High Temperature Kit

The High Temperature Kit is available in a “Standard Application Kit” that will include 1 container each of the following:

- Hi-Temp© Protoplass©
 - Proto-Reinforcement Infiltrate Coating-4oz
- The materials should cover about 400 square inches. This will increase heat deflection and heat resistance.

FDM Sealing Kit – Small Size

This kit includes a 2 oz container of Proto-Reinforcement© Infiltrate Coating (clear). This will cover 100 square inches. This product is a great insurance policy for all FDM parts. When applied, it is only .0002” thick and cosmetically you cannot not even tell it is on the part. It will seal 94% of the porosity of an ABS FDM part and dries in seconds. Enhancements are evident in the mechanical strength and durability of the part. Do not ship another ABS FDM part without Proto-Reinforcement© Infiltrate Coating Applied. The cost per part will be pennies when applied.

Water/Chemical Tight Application Kit

This is available in a “Standard Application Kit” that will include 1 container each of the following:

- RP Tempering™ Compound - 4 oz
- Proto-Reinforcement Infiltrate Coating - 2 oz
- Proto-Plasma-Rx™ Spray Coating (clear)

These materials should cover about 150 square inches. These materials, when used in combination, are commonly called Hybrid-Temp-Rx™ application.

RP Tempering™ Products - Complete Product List Information

Proto-Plasma-Rx™ Spray

- In stock - 11 oz cans
- Colors - clear, black, red, yellow, blue & white

RP Tempering™ Compound

- In stock - 2 oz jar, 11 oz can
- Non-stock - 14.5 oz can, 1 gal can, 5 gal can, 50 gal drum.
- Colors - clear, black

Proto-Reinforcement© Infiltrate Coating (Sprayable & Dipping)

- In stock - 2 oz jar, 12 oz can
- Non-stock - 1 gal can, 5 gal can, 54 gal drum
- Color - clear

InsulTemp© (Spray or Brush)

- In stock - 4 oz can (black), 6 oz spray (black), 8 oz can (black)
- Non-stock - 4 oz can (red, white) 6 oz. spray (clear)

Conductemp© Coating Kit

- In stock - 2 oz jar with 1 oz copper particles, 12 oz can with 1 oz copper particles
- Other conductive particles are available upon request including: silver, aluminum, nickel, gold and carbon.

RF C13 Absorb© Infiltrate Coating Kit

- In stock - 2 oz jar with 1 oz MWCNT particles, 12 oz can with 1 oz. MWCNT particles
- MWCNT=Multi-wall Carbon Nano-Tubes

EMI Coating Kit

- In stock - 2 oz jar with 1 oz copper particles, 12 oz can with 1 oz copper particles

RFI Coating Kit

- In stock - 2 oz jar with 1 oz Nickel/SS/Al particles, 12-oz can with 1 oz Nickel/SS/Al particles
- Other particle types and blend are available upon special order.

LubeTemp© Spray Coating

- Non- stock - 11 oz can (clear)

RadiationTemp© Shielding (Brush on coating and Filler)

- In stock - 2 oz jar with 1 oz Tungsten micron particles, 12 oz can with 1 oz Tungsten micron particles

Hi-Temp Protoplass© Spray

- In stock - 11 oz can (black)
- Non-stock - 11 oz can (red) Special order colors are available.

Fire Retardant Protoplass© Spray

- In stock - 11 oz can (black)
- Non-stock - 11 oz can (red) Special order colors are available.

Injection Applicators – Application Tool

- In stock - 10 packs

Spray Handle Device – Application Tool

- In stock

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Product List - Continued

Industry Starter Kits – Product List

Mechanical Property Enhancement & Environmental/Chemical Resistance Kit

- RP Tempering™ Compound 2 oz jar (clear)
- Proto-Plasma-Rx™ Spray 11 oz can (clear)
- Proto-Reinforcement© Infiltrate Coating 2 oz can
- 3 Injection Applicators

Optional add on for an additional fee:

- LubeTemp© 11 oz can
- InsulTemp© brush on 2 oz can (black)

High Temperature Thermal Property Enhancement Kit

- Proto-Reinforcement© Infiltrate Coating 2 oz jar (clear)
- Hi-Temp Protoplass© Spray Coating 12 oz (black)
- Fire Retardant Protoplass© Spray Coating 12 oz (black)
- InsulTemp© Coating 2 oz jar brush on (black)

Optional add on for an additional fee:

- InsulTemp© Spray 4 oz can (black)

Electrical Property Enhancement Kit

- Proto-Reinforcement Infiltrate Coating 2 oz jar (clear)
- EMI Shielding 2 oz jar
- RFI Shielding 2 oz jar
- ConducTemp© 2 oz jar
- InsulTemp© (brush on) 2 oz jar

Optional add on for an additional fee:

- InsulTemp© Spray 4oz can
- RF C13 Absorb© 2 oz jar
- TungstenTemp© 2oz jar
- Radiation Light Shielding

Standard Application Kits - Product List

Mechanical Property Enhancement Kit & Environmental/Chemical Resistance Kit

- RP Tempering™ Compound 11 oz can (clear)
- Proto-Plasma-Rx™ Spray 11 oz can (clear)
- Proto-Reinforcement© Infiltrate Coating 11oz can
- 3 Injection Applicators

Optional add on for an additional fee:

- LubeTemp© Spray 11 oz can
- InsulTemp© Spray 4 oz can (black)

High Temperature Thermal Property Enhance-

ment Kit

- Proto-Reinforcement© Infiltrate Coating 11 oz can (clear)
- Hi-Temp Protoplass© Spray 12 oz (black)
- Fire Retardant Protoplass© Spray 12 oz (black)
- InsulTemp© Spray in 4oz can (black)

Electrical Property Enhancement Kit

- Proto-Reinforcement Infiltrate Coating 11 oz can (clear)
- EMI Shielding Kit 2 oz jar
- RFI Shielding 2 oz jar
- ConducTemp© 2 oz jar
- InsulTemp© (brush on) 2 oz jar

Optional add on for an additional fee:

- InsulTemp© Spray 4oz can
- RF C13 Absorb© 2 oz jar
- TungstenTemp© 2oz jar
- Radiation Light Shielding

Specialty Application Kits – Product List

The content information is included in the previous article (Starter Kits) for Living Hinge Kit, Fire Retardant Kit – Achieve UL94 Rating, High Temperature Kit, FDM Sealing Kit – Small Size and Water/Chemical Tight Application Kit.

Customer Statements About RP Tempering™

“Don’t ship an FDM part without Proto-Reinforcement© Infiltrate Coating on it. It will greatly enhance the ABS FDM part within seconds and for pennies! A very cost effective insurance policy at price we can afford” – Timothy Williams Application Engineer

“I cannot believe that RP Tempering™ can make an SLA living hinge bend like this! It only took a few minutes to apply and we achieve 150 plus bends.” – Bob Wood Engineer

“This ABS FDM living hinge part looks and works like a real living hinge injection molded out of polypropylene. We are applying this to a case that holds medial tools as an in-use part. Our customer loved it because they did not have to purchase an expensive injection mold tool. Now they just buy ABS FDM parts from us” – Rob Engineer

“We were going to lose a sale of a Dimension machine to a competitive RP/SFF technology because we could not make part that would pass their primary application specifications. We went back to the customer with RP Tempering™ and met their specifications and

sold the FDM machine. Thanks PAR3!” – Jack Owner

“We use RP Tempering™ Products on our SLA parts almost every day. When we first applied this technology we made living hinges and a Frisbee out of SLA material. We fly the Frisbee and it is still not broken” – Mike Jones Operations Manager

“RP Tempering™ helped us get an Aerospace account using standard GF SLS with your Fire Retardant Protoplass©. We passed all the UL94 Burn Test Criteria to include fume testing” – Eric Shaw Sales

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