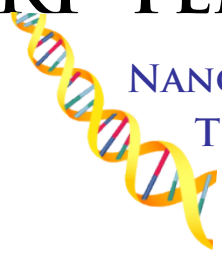


RP TEMPERING™ TECHNOLOGY NEWS



NANO-COMPOSITE
TECHNOLOGY

SOLID FREEFORM ADDITIVE TECHNOLOGY &
PATENT PENDING ENGINEERING TECHNIQUE

VOLUME 8

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Flame Resistant Prototypes

PAR3 Technology is pleased to announce a new product and engineering technique. The new product is Fire Retardant Hi-Temp Protoplass® spray. The new engineering technique is a layering sequence that produces flame resistant parts. The pictures to the right have a layer of standard Proto-Plasma-Rx™ that creates the thermal barrier when applied directly to the part. Then a layer of the new Fire Retardant Hi-Temp Protoplass® is applied. Another technique that will resist even higher temperatures can be done by putting one layer of standard Proto-Plasma-Rx™, one layer of Hi-Temp Protoplass®, and a final layer of Fire Retardant Hi-Temp Protoplass®. When using the second technique the heat resistance and deflection will go up by 10% to 20% depending on the base material. The process only takes a few minutes to apply and the prototype part will pass the MVSS302 Automotive Vertical Burn Test.

When the flame test shown is performed on the base materials, they become non-structural but the RP Tempering™ Compound holds them within the coating barriers and does not catch on fire. Both LS and SL parts will work in most application. PAR3 Technology is currently testing flammability on other products to pass more UL, automotive, aerospace, and marine applications.

PAR3 Technology continues its material and engineering process development for fire retardant applications. The development will target tougher testing standards. The SFF material development includes SL, LS, FDM and digitally printing. Engineering analysis and research is continuing to lead PAR3 Technology in the right direction. Sometimes the



materials used in a product cannot achieve the properties needed by itself, like in this case fire retardant additives. PAR3 Technology's 'Analysis Driven Design' process is key to achieving this standard. Andy Pardue PhD of PAR3 Technology says by using engineering analysis simultaneously with other engineering tools helps speed up the development process.

RP Tempering™ continues to work on new applications, engineering techniques and additive technologies. As always we will temper sample parts at no charge. Please contact us for more information

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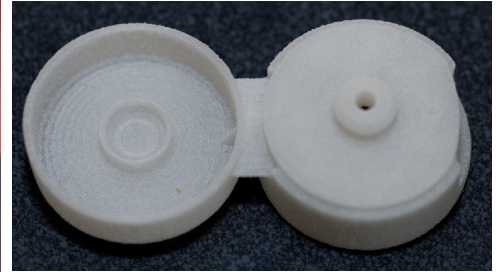
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Join Us in Daytona Beach, Florida for the 3DSUG Conference, March 18-22. RP Tempering will have a Guest Suite. Please Visit Us.



Independent Press on RP Tempering™ Technologies

Objet Geometries published a newsletter bolstering the RP Tempering™ Technologies. Objet Geometries and PAR3 Technology are working together to offer digital printer prototyping organizations more options to enhance mechanical, electrical, thermal, and chemical resistant properties. To read this article about RP Tempering™ Technologies please go to www.RPTempering.com and click on (Press/Newsletter) tab.



Digitally Printed Parts - Pop Hinges and Living Hinges

3DSUG Conference & RP Tempering™ Technology

RP Tempering™ Technologies made its debut at the 2006 3DSUG in Arizona. The conference was attended by some of the top specialists in the industry. After this technical conference PAR3 Technology listened to the users and started making strides towards SFF enhancing technologies for the industry. Since the 2006 3DSUG, the following new technologies have been introduced:

- Hi-Temp Protoplass® and Engineered Layering Technique
- Fire Retardant Hi-Temp Protoplass® and Two Engineered Layering Technique
- Micro Sphere Ceramic
- Proto-Plasma-Rx®
- EMI Shielding Kits - CopperCoat RP
- RFI Shielding Kits - StainlessCoat RP
- EMI/RFI Shielding Kits - NickelCoat RP
- Injection Applicator-New Plastic Tips

Products to be introduced before the 2007 3DSUG are:

- LS Infiltrates and Engineering Techniques
- Starch Infiltrates and Engineering Techniques
- FDM Enhancers and Engineering Techniques
- Digital Printed Coatings and Engi-

neering Techniques

Every company that has leveraged the RP Tempering™ Technologies and became a licensee, with the exception of one, attended the 3DSUG Conference. Marty McGough of Total CS Team and Earl Dunlap P.E., of then



RP TEMPERING™ Manufacturing by Design, Inc. and now PAR3 Technology, gave

a presentation on RP Tempering™ SFF/RP enhancing technologies.

We are looking forward to the 2007 3DSUG Conference in Daytona, Florida in March. PAR3 Technology, owner of RP Tempering™ Technologies, and its west coast business and research support organization, Total CS Team, LLC will both be in the RP Tempering Suite. Demonstrations will be given of product tempering, daily scheduled talks will be given by Andy Pardue PhD and President of PAR3 Technology, Earl Dunlap P.E. and inventor of RP Tempering™ Technologies, Marty McGough President of Total CS Team and Andrew



Graves CTO of Total CS Team.

Total CS Team, LLC will be demonstrating their own products to include the Removable Recoater Blade System, On Site Services, Process Control Module, 3Matic RP Tempering™ Support Software, Magics Software and 3D Systems Authorized Service Provider.

Earl Dunlap P.E., Vice President of PAR3 Technology, will be speaking again at the conference on two topics. The first topic will be Nano Technology Safety after having a real world experience. The second will be additive engineered processes, materials and engineering techniques for the SFF/RP industry. There will be a 2 hour break out session for RP Tempering™ where everyone will be allowed to bring a SFF prototype parts, that can be tempered before the conference is over. It will also include some basic training techniques on tempering parts. Everyone is welcome. The instructors will be Earl Dunlap P.E., Marty McGough and Andy Pardue PhD.

Total CS Team will be speaking in the main hall during the conference about the Removable Recoater Blade System and their Process Control Module.



Protodag Technology - New Exclusive Distributor

With a recently signed agreement Protodag Technology will bring RP Tempering™ into the European and Middle Eastern markets. Protodag Technology, an engineering company specializing in RP Technologies based out of Istanbul Turkey, acquired exclusive distribution rights for all RP Tempering™ technologies in these territories.

"The number of inquiries we receive from overseas companies is growing increasingly," says Earl Dunlap P.E., inventor of RP Tempering™ technologies,

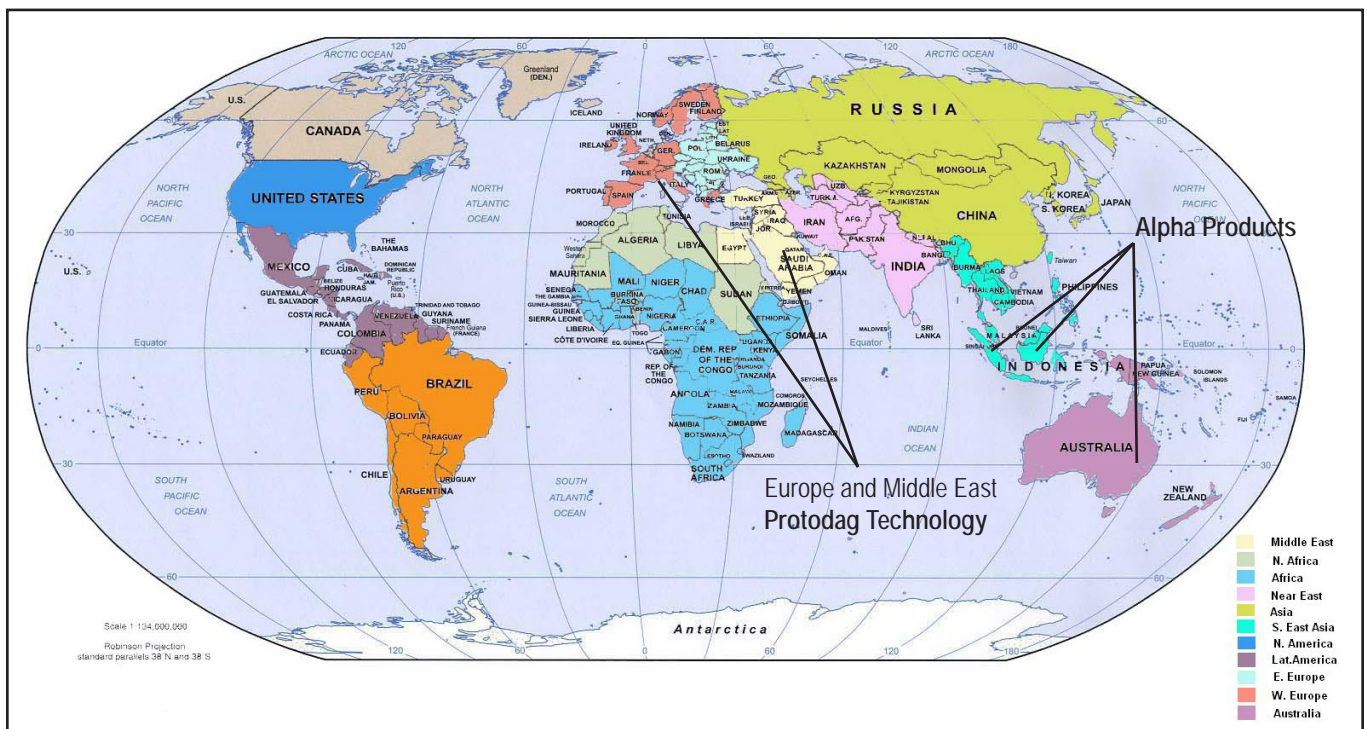
and adds "it was vital for us to find the right distribution partner to better serve the users in Europe and the Middle East. Protodag will provide outstanding customer service to our customers in Europe and the Middle East."

Baran M. Dag, President and CEO of Protodag Technology comments, "We have done extensive testing with the RP Tempering™ products on FDM, SLA, SLS, PolyJet, and 3DPrinted parts. It gave us the chance to observe the level of benefits delivered with RP Tempering™ products. In some applications, the benefits were so great that we had to repeat the tests over and over in order to really

believe it. We are confident that RP Tempering™ technologies will add great value to all the users of RP and truly is the next big step in this field."

Protodag will provide companies in Europe and the Middle East with RP Tempering™ materials and technical training once they are licensed to use the technology. Benchmarking service will also be provided by Protodag for users wanting to test RP Tempering™ in their specific applications.

For further information please contact Protodag Technology at rptempering@protodag.com



Tempermen Initiative - Launched

The Temper-men Initiative is being launched as part of the cooperation with Protodag Technology. It is a growing network of companies from both sides of the Atlantic, joining forces to promote the use of the RP Tempering™ technologies. The companies participating in this initiative will be listed soon at www.tempermen.com. The initiative is aimed at providing a constant flow of information about the new application areas of the technology and to allow users to connect for information sharing.

Other users can have easy access to the RP Tempering™ service

bureaus through the website if they need parts tempered or they can get information on how to become a licensed RP Tempering™ service bureau.

To find out what it takes to be a part of the Tempermen Initiative and for further information please contact the Tempermen Initiative at initiative@tempermen.com



U., &æ/Üä *jä} *Ä-Ä the Tempermen Initiative- Earl Dunlap VP PAR3 and Inventor, Baran Dag CEO Ü! [c {äæ *ÄV^&@}] [- ogy, and Andy Pardue President PAR3 V^&@} [[* ^



Left: Baran Dag, CEO Ü! [c {äæ *ÄV^&@}] [- ogy and Andy Pardue, PhD President PAR3 V^&@} [[* ^

Below: Andy Pardue, Baran Dag, and Jordan Ó [^äÜ^ä} ä [HÖ } *ä} ^Ä,ÉÄ along the Patent Wall of Fame at PAR3



Automated Spiral Creation in New 3Matic 3.0

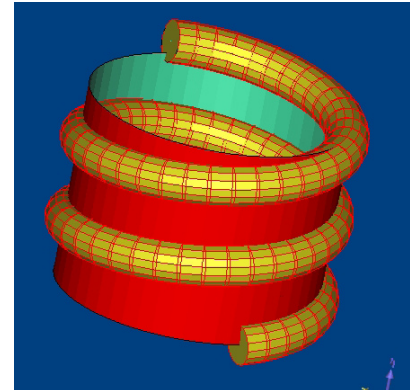
Soon to be released from STL software experts, Materialise is 3Matic v3.0.

This STL-based digital CAD system includes various enhancements and improvements over previous versions – many of which have been developed in conjunction with Total C S Team, Inc and PAR3 Technology, for the benefit of RP Tempering™ customers.

Of special interest is the ability to automatically create spiral

curves. Spirals are used in the tunneling process to enhance the durability of bosses and holes that need to be screw-threaded, press ytted etc. With the new version of 3Matic, the spiral curves used to create these types of tunnels are quick and easy to produce directly in the STL yle.

The new version of 3Matic should begin shipping in the next few months. For more information, contact Andrew Graves at Total C S Team, Inc. (agraves@totalcsteam.com)

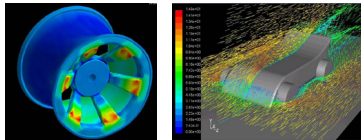


PAR3 Technology's Additional Services

This outlines the additional services that PAR3 Technology offers. Please visit our website at www.PAR3Technology.com and www.RPTempering.com for even more information.

1] Analysis:

- FEA Structural (linear & non-linear)
- Ç CFD/Computational Fluid Dynamics
- NVH/Mechanical Vibration
- Thermal Analysis
- Creep Analysis
- Ç Analysis Driven Design İ System
- Ç Analysis Software: FLUENT & COMOS



2] Mechanical Design:

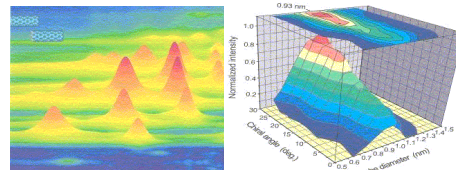
- Ç 2D & 3D CAD Design (mechanical & electro-mechanical)
- Ç Design for Six Sigma Certiyed
- Ç Robust Design

- Statistical Tolerancing
- Rapid Ideation™
- Cost Reduction System
- Ç Design for Manufacture and Assembly
- Advanced Manufacturing Engineering Consulting
- Ç CAD Software: Pro Engineer (ProE) and Solidworks



3] Nano Technology Engineering Research & Consulting:

- Nano partials research and recommendation (CNT, CNF, SWCNT, MWCNT, Clay & other particles)
- Manufacturing dispersion methods – Research, consulting and implementation)
- Nano Engineering and Product



Development

- Ç Special Materials Development using the Composite Tempering™ technology on Carbon Fiber and Fiberglass (reducing weight and achieving greater impact strength)

4] Prototyping and Composite Tooling Consulting:

- RP Tempering™ Technologies
- Composite Tempering™ Technologies
- Consulting
 - Rapid Prototyping
 - Rapid Manufacturing Techniques
 - Composite Tooling using SFF
 - Rapid Tooling
 - Bench Prototyping

5] Testing (In-house and yeld testing)

- Vibration
- Thermal
- Chemical
- Ç Data Collection
- Mechanical First Fit
- Mapping

PAR3 Technology is "Your Engineering Solutions Provider."

Contact Us:

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