



Corporate Headquarters

RTP Company
580 East Front Street
PO Box 5439
Winona, Minnesota
55987-0439 USA

Telephone (507) 454-6900
Fax (507) 454-4629
Internet www.rtpcompany.com

Greetings,

Thank you for your interest in RTP Company.

As your global compounder of custom engineered thermoplastics RTP Company provides custom formulations of conductive, elastomeric, flame retardant, high temperature, special color effects, and wear resistant grades of thermoplastic compounds for injection molding and other processes.

Private ownership allows us to exercise complete independence in our selection of resins and additives, ensuring that you get a material that meets your exact needs.

Best of all, RTP Company offers five-to-ten day lead times for engineered samples, color matches and production orders of standard materials.

Our 12 manufacturing sites located in commerce centers around the globe allow us to serve you efficiently—no matter where you do business.

For personal assistance in specifying a material from RTP Company, please contact your local sales engineer or one of our experienced R&D engineers.

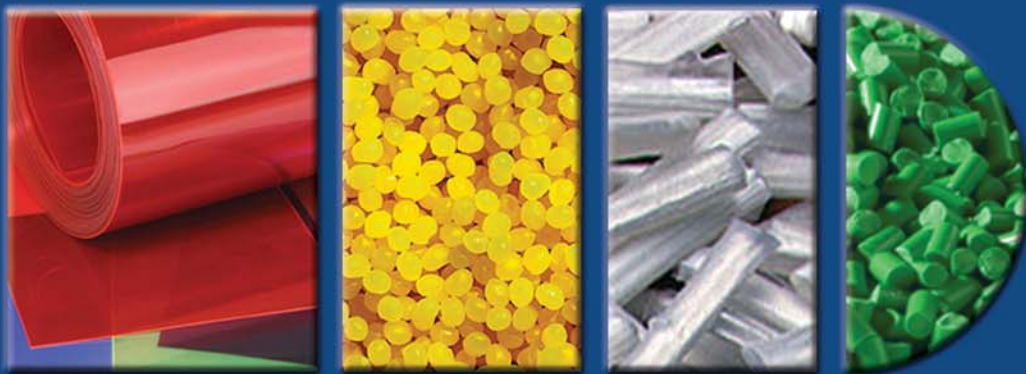
We look forward to working with you.

Sincerely,

A handwritten signature in black ink, appearing to read 'Joe Kluck', with a long, sweeping underline.

Joe Kluck
Director of Sales

P.S. Visit our website at www.rtpcompany.com for in-depth technical information on our wide range of specialty compounds.



Your Global Compounder of Custom Engineered Thermoplastics

Winona • South Boston • Fort Worth • Indianapolis • Sauk Rapids • Dupo • Monterrey
Beaune • Ladenburg • Singapore • Suzhou • Shenzhen

RTP Company

Imagineering Plastics

By combining our in-depth knowledge of plastic technologies with imagination, RTP Company imagineers material solutions ideally matched to end-use requirements. We are dedicated to providing the OEM and molding communities with custom compounds, concentrates, and masterbatches.

Our independence...

permits us to be unbiased as we choose from over 60 engineering resins and 100s of reinforcements and additives to tailor a custom compound matched to your design requirements. With RTP Company, you won't have to change your expectations to fit an off-the-shelf material.

Your productivity...

is our concern. We practice the continuous improvement philosophies and principles of LEAN manufacturing to rapidly respond to your needs and ensure the quality of every order shipped. Be assured that once you receive your products, our technical support specialists will work closely with you during trials and production runs.

RTP Company at a Glance

- Privately-owned thermoplastic manufacturer
- Leader in custom engineered compounds
- Independent, unbiased product development
- Worldwide representation and distribution
- 12 global sites
- ISO 9001:2008 Registered facilities



Strengthen Your Team...

with our experienced engineers. They partner with you throughout application development, bringing added creativity and expertise to your design.

Improve Your Design...

with innovative solutions using leading-edge technologies that provide ideal answers to complex application problems.

Reduce Time to Market...

with our short lead times. Color matches, engineered samples, and standard production orders are shipped in just 3-10 working days.



Business Groups

The background features a faint world map. On the right side, there are four circular insets showing different plastic materials: red granules, yellow granules, grey pellets, and a roll of red plastic film.

Custom Compounds

For over two decades, we have led the industry in offering solutions to application challenges with our advanced specialty compounds for applications requiring wear resistant, conductive, flame retardant, color, long fiber and reinforced technologies. Our custom thermoplastic formulations provide multi-property answers in a single material – increasing your design freedom through consolidation of parts, reduction of weight, elimination of costly secondary operations, and improved aesthetics.

Thermoplastic Elastomers

Only RTP Company offers compounds based on any of 5 diverse thermoplastic elastomer (TPE) technologies. TPEs are ideal for applications requiring "soft-touch" features, sealing in fluid environments, impact improvement, and enhanced ergonomics, and are fully compatible with injection molding, insert, or multi-shot molding methods. When these TPE capabilities are combined with the technologies of RTP Company's specialty compounds, your product designs can be revolutionized.

Color: Masterbatches & Precolor

When you choose our Your Color – Your Way service, you receive color in whichever mode is ideal for you, whether it's masterbatches, precolored compounds, or cube blends. With RTP Company, you will meet your exact color match targets on time. If global service is a concern, be assured that your color will be precisely controlled throughout our manufacturing facilities, regardless of continent.

Eco Solutions

Meeting consumer demand for "green" products starts with sourcing eco-friendly materials. RTP Company's Eco Solutions portfolio includes renewable bioplastics, post-consumer recycled resins, natural fiber reinforcement, and halogen-free compounds. We up-engineer these products to meet your application's performance requirements to ensure your success while going green.

Specialty Film

With RTP Company's acquisition of Wiman Corporation, a unique synergy was created between two leaders of specialty plastic materials. A leader in the plastic film industry, Wiman has over 40 years' experience and the ability to manufacture down to 4 mil using PVC, polyurethane, polyolefins, and lamination technologies. Backed by the unrivaled polymer expertise of RTP Company's compounding business.

Engineered Compounds

Base Polymers

Acetal	(POM)	Polycarbonate/Acrylic Alloy	(PC/PMMA)
Acrylic	(PMMA)	Polyetheretherketone	(PEEK)
Acrylonitrile Butadiene Styrene	(ABS)	Polyetherimide	(PEI)
Alloys, Custom Blended		Polyetherketone	(PEK)
Ethylene Tetrafluoroethylene	(ETFE)	Polyetherketoneketone	(PEKK)
Fluorinated Ethylene Propylene	(FEP)	Polyethersulfone	(PES)
High Temperature Nylon	(HTN)	High Density Polyethylene	(HDPE)
Liquid Crystal Polymer	(LCP)	Low Density Polyethylene	(LDPE)
Modified Polyphenylene Oxide	(PPO)	Polyethylene Terephthalate	(PET)
Nylon, Amorphous	(PA)	Polymethylpentene	(PMP)
Nylon 6	(PA 6)	Polyphenylene Sulfide	(PPS)
Nylon 11	(PA 11)	Polyphthalamide	(PPA)
Nylon 12	(PA 12)	Polypropylene	(PP)
Nylon 6/6	(PA 6/6)	Polystyrene	(PS)
Nylon 6/6, Impact - Modified	(PA 6/6)	Polysulfone	(PSU)
Nylon 6/10	(PA 6/10)	Polysulfone/Polycarbonate Alloy	(PSU/PC)
Nylon 6/12	(PA 6/12)	Polytrimethylene Terephthalate	(PTT)
Perfluoroalkoxy	(PFA)	Polyurethane, Rigid Thermoplastic	(RTPU)
Polyarylamide	(PARA)	Polyvinyl Chloride*	(PVC)*
Polybutylene Terephthalate	(PBT)	Polyvinylidene Fluoride	(PVDF)
Polycarbonate	(PC)	Styrene Acrylonitrile	(SAN)
Polycarbonate/ABS Alloy	(PC/ABS)	Thermoplastic Polyimide	(TPI)
Polylactic Acid	(PLA)		

* Offered in film only

Thermoplastic Elastomers (TPEs)

Ester-based Thermoplastic Polyurethane	(TPUR)
Ether-based Thermoplastic Polyurethane	(TPUR)
Polyether-Ester Block Copolymer	(TEEE)
Styrenic Block Copolymer	(TES)
Thermoplastic Polyolefin	(TEO)
Thermoplastic Vulcanizate	(TPV)
Polyether-Block-Amide	(PEBA)
Function Specific Elastomers	(TPE)

Contact your local
sales engineer
for material
recommendations



Your solution may combine technologies from any of our product families

STRUCTURAL

FEATURES:

For metal or other material replacement. Reinforced products increase strength, stiffness and impact resistance as well as creep and fatigue properties. Customized formulas to meet cost and performance targets.

BENEFITS:

Increase design freedom and reduce costs by consolidating parts, reducing weight, and eliminating finishing steps. Achieve optimal weight in high specific gravity applications.

TECHNOLOGIES:

Glass and carbon fiber reinforcement, including long fiber technologies. Additives to control density, reduce warpage, and improve processability. Also offer platable and radiopaque compounds.

APPLICATIONS/MARKETS:

Industrial equipment, automotive components, fluid handling systems, consumer goods, tools, medical devices, electronics, military applications, business machines, sporting goods, and appliances.

COLOR

FEATURES:

Color inspires, energizes, and builds recognition. State-of-the-art color technologies enable you to have Your Color – Your Way as a colored compound, color concentrate or cube blend.

BENEFITS:

Color match your plastic parts to any standard. RTP Global Color Library has 50,000+ matches in 60+ resin systems with seamless product transfers between facilities.

TECHNOLOGIES:

UniColor™ universal masterbatches, standard engineering resins masterbatches, special effects, light-diffusing, antimicrobial, and laser-markable compounds.

APPLICATIONS/MARKETS:

Medical devices, automotive components, electronics, consumer goods, business machines, industrial, food packaging, construction, tools, sporting goods, and appliances.

CONDUCTIVE

FEATURES:

Compounds for electrostatic discharge (ESD) protection, EMI shielding, or PermaStat® permanent anti-static protection. Particulate and all polymeric-based materials offering colorability.

BENEFITS:

“Compounded-in” conductivity eliminates secondary operations like paints, coatings, and chemical surfactants over a range of surface resistivity from 10^1 to 10^{11} ohm/sq.

TECHNOLOGIES:

Carbon black, carbon fiber, nanotubes, stainless steel, nickel-coated carbon fiber, IDP technologies, thermal management, and purity compliance.

APPLICATIONS/MARKETS:

Electronics packaging, business machines, data storage, automotive components, industrial equipment, electronic devices, microelectronics, consumer goods, and medical devices.

FLAME RETARDANT

FEATURES:

Quickly meet UL and global regulatory standards for flammability with Client Test Data Program (CTDP) while maintaining thermal stability and physical properties.

BENEFITS:

400+ UL recognized grades and in-house UL certified testing. Custom formulations combine flame retardant and other compounding technologies.

TECHNOLOGIES:

Traditional halogen and eco-friendly halogen-free based additives. Compounds are customized from over 40 different engineering resin systems.

APPLICATIONS/MARKETS:

Appliances, electronic devices, industrial equipment, business machines, automotive components, fluid handling systems, microelectronics, consumer goods, and medical devices.

WEAR RESISTANT

FEATURES:

Lower wear factors and coefficients of friction with internal lubrication. Lengthen the life cycle of moving and mated parts while reducing processing costs.

BENEFITS:

Eliminate or minimize external lubricants, scratches or marring, and maintenance costs associated with part failure. Reduce friction rates, vibration, noise, and weight. Consolidate parts and processing steps.

TECHNOLOGIES:

Aramid fiber, carbon fiber, PTFE, PFPE, silicone, graphite, moly, glass fiber, and other lubricants.

APPLICATIONS/MARKETS:

Automotive components, business machines, industrial equipment, fluid handling systems, medical devices, electronic devices, consumer goods, appliances, and microelectronics.

ELASTOMERS (TPEs)

FEATURES:

Ideal for “soft-touch” ergonomic applications. Wide hardness range from Shore 10 A to 80 D. Custom formulations optimized for adhesion to substrates during overmolding.

BENEFITS:

Combine the performance and properties of conventional thermoset rubbers with the processability of thermoplastics. Improve economics and expand performance range of your application.

TECHNOLOGIES:

TPUR, TEEE, TES, TEO, PEBA, and function specific grades that provide optimal bonding for overmold applications. Precolor, FR, static dissipative and lubricated versions available.

APPLICATIONS/MARKETS:

Electronic devices, medical devices, tools, consumer goods, industrial equipment, automotive components, microelectronics, sporting goods, and business machines.



**STRUCTURAL • THERMOPLASTIC ELASTOMERS • WEAR
COLOR • CONDUCTIVE • FLAME RETARDANT • FILM/SHEET**

Your Global Compounder of Custom Engineered Thermoplastics



RTP Company's position as Your Global Compounder of Custom Engineered Thermoplastics is a direct result of our employees. As our customer you can expect:



R&D engineers, color specialists, and technical service representatives who are accessible and responsive. They're conveniently located at each of our full-service facilities to quickly solve your problems.



Experienced sales engineers and customer service representatives who take personal responsibility for meeting your expectations.



Knowledgeable quality control and shipping specialists who ensure you receive consistently manufactured products on time.



RTP Company Corporate Headquarters • 580 East Front Street • Winona, Minnesota 55987 USA
website: www.rtpcompany.com • email: rtp@rtpcompany.com • Wiman Corporation • +1 320-259-2554

TELEPHONE:

U.S.A.
+1 507-454-6900

SOUTH AMERICA
+55 11 4193-8772

MEXICO
+52 81 8134-0403

EUROPE
+33 380-253-000

SINGAPORE
+65 6863-6580

CHINA
+86 512-6283-8383



RTP Company Specialty Compounds

Specialty compounding is an exacting, yet creative, science. RTP Company enhances these and other resin systems with a wide range of additives and reinforcements. The result is a unique material that meets your design criteria for performance and appearance.

Performance Enhancements

RTP Series	Base Polymer	(■ = High Temperature Resins)	Structural	Conductive	Flame Retardant	Wear Resistant	Color
100	Polypropylene (PP)		●	●	●	●	●
200	Nylon 6/6 (PA 6/6)		●	●	●	●	●
200 A	Nylon 6 (PA 6)		●	●	●	●	●
200 B	Nylon 6/10 (PA 6/10)		●	●	●	●	●
200 C	Nylon 11 (PA 11)		●	●	●	●	●
200 D	Nylon 6/12 (PA 6/12)		●	●	●	●	●
200 E	Amorphous Nylon (PA)		●	●	●	●	●
200 F	Nylon 12 (PA 12)		●	●	●	●	●
200 H	Impact-Modified Nylon 6/6 (PA 6/6)		●	●	●	●	●
300	Polycarbonate (PC)		●	●	●	●	●
400	Polystyrene (PS)		●	●	●	●	●
500	Styrene Acrylonitrile (SAN)		●	●	●	●	●
600	Acrylonitrile Butadiene Styrene (ABS)		●	●	●	●	●
700	Polyethylene (PE)		●	●	●	●	●
700 A	Low Density Polyethylene (LDPE)		●	●	●	●	●
800	Acetal (POM)		●	●		●	●
900	Polysulfone (PSU) ■	■	●	●	●	●	●
1000	Polybutylene Terephthalate (PBT)		●	●	●	●	●
1100	Polyethylene Terephthalate (PET)		●	●	●	●	●
1200 S	Ester-based Thermoplastic Polyurethane Elastomer (TPUR)		●	●	●	●	●
1200 T	Ether-based Thermoplastic Polyurethane Elastomer (TPUR)		●	●	●	●	●
1300	Polyphenylene Sulfide (PPS) ■	■	●	●	○	●	●
1400	Polyethersulfone (PES) ■	■	●	●	○	●	●
1500	Polyether-Ester Block Copolymer Thermoplastic Elastomer (TEEE)		●	●	●	●	●
1700	Modified Polyphenylene Oxide (PPO)		●	●	●	●	●
1800	Acrylic (PMMA)		●	●		●	●
1800 A	Polycarbonate/Acrylic Alloy (PC/PMMA)		●	●	●	●	●
2000	Custom Alloys ■	■	●	●	●	●	●
2100	Polyetherimide (PEI) ■	■	●	●	○	●	●



RTP Company Specialty Compounds

(Continued)

Performance Enhancements

RTP Series	Base Polymer	(■ = High Temperature Resins)	Structural	Conductive	Flame Retardant	Wear Resistant	Color
2200	Polyetheretherketone (PEEK) ■		●	●	○	●	●
2200 A	Polyetherketone (PEK) ■		●	●	○	●	●
2300	Rigid Thermoplastic Polyurethane (RTPU)		●	●	●	●	●
2500	Polycarbonate/ABS Alloy (PC/ABS)		●	●	●	●	●
2600	Thermoplastic Polyolefin Elastomer (TEO)		●	●	●	●	●
2700	Styrenic Block Copolymer Thermoplastic Elastomer (TES)		●	●	●	●	●
2800	Thermoplastic Vulcanizate Elastomer (TPV)		●	●	●	●	●
2900	Polyether-Block-Amide Thermoplastic Elastomer (PEBA)		●	●	●	●	●
3000	Polymethylpentene (PMP)		●		●	●	●
3100	Perfluoroalkoxy (PFA)		●	●	○	●	●
3200	Ethylene Tetrafluoroethylene (ETFE)		●	●	○	●	●
3300	Polyvinylidene Fluoride (PVDF) ■		●	●	○	●	●
3400	Liquid Crystal Polymer (LCP) ■		●	●	○	●	●
3500	Fluorinated Ethylene Propylene (FEP) ■		●	●	○	●	●
3900	Polyetherketoneetherketoneketone (PEKEKK) ■		●	●	○	●	●
4000	Polyphthalamide (PPA) ■		●	●	●	●	●
4000 A	Hot Water Moldable Polyphthalamide (PPA) ■		●	●	●	●	●
4100	Polyetherketoneketone (PEKK) ■		●	●	○	●	●
4200	Thermoplastic Polyimide (TPI) ■		●	●	○	●	
4300	Polysulfone/Polycarbonate Alloy (PSU/PC) ■		●	●	●	●	●
4400	High Temperature Nylon (HTN) ■		●	●	●	●	●
4600	Syndiotactic Polystyrene (SPS)		●	●	●	●	●
4700	Polytrimethylene Terephthalate (PTT)		●	●	●	●	●
6000	Specialty Thermoplastic Elastomer (TPE)		✱	✱	✱	✱	●

* Modified versions of this series currently available under alternate nomenclatures

○ = Inherently Flame Retardant

RTP Company Corporate Headquarters • 580 East Front Street • Winona, Minnesota 55987 USA
website: www.rtpcompany.com • email: rtp@rtpcompany.com • Wiman Corporation • +1 320-259-2554

TELEPHONE:

U.S.A.
+1 507-454-6900

SOUTH AMERICA
+55 11 4193-8772

MEXICO
+52 81 8134-0403

EUROPE
+33 380-253-000

SINGAPORE
+65 6863-6580

CHINA
+86 512-6283-8383



No information supplied by RTP Company constitutes a warranty regarding product performance or use. Any information regarding performance or use is only offered as suggestion for investigation for use, based upon RTP Company or other customer experience. RTP Company makes no warranties, expressed or implied, concerning the suitability or fitness of any of its products for any particular purpose. It is the responsibility of the customer to determine that the product is safe, lawful and technically suitable for the intended use. The disclosure of information herein is not a license to operate under, or a recommendation to infringe any patents.

Plugged Into A Solution

Multi Property Compound Solves Impact Challenge Allowing Product Expansion

Matt Smith, Vice President of Manufacturing for SmartPlug Systems, describes his family as "lifelong sailors," and recalls being practically "raised onboard a boat." So it wasn't surprising that, as an adult, he joined his father Ken in a business venture rebuilding fire-damaged boats.

"We soon noticed that in almost every case the reason the boat was destroyed came down to the same thing – the poor design of the shore power inlet on the boat," Smith recalled.

His dad knew he could invent a better solution, and, starting with a simple pencil sketch, proceeded to create a smarter plug incorporating every safety and efficiency improvement he could think of.

The result was the "Smart Plug," a superior solution that minimized the tendencies toward loose electrical connections, corrosion, overheating, and other problems inherent to the incumbent product.

SmartPlug's initial 30 amp version found a ready market with boat owners everywhere. Soon they expanded into RV and EMS vehicle markets, helping additional customers who also needed to plug-in to get power from an external source.

But the SmartPlug team faced a daunting challenge. Their original plastics supplier had a difficult time achieving the high levels of flame retardancy and impact resistance that their connector demanded. While the 30 amp product passed stringent regulatory tests, the SmartPlug team was not happy with the extra wall thickness they needed to add to the design.

"We knew that if and when we wanted to expand our line to a larger, heavier 50 amp version, we would need to find a better material solution," said Smith. Fortunately their molder knew of, and recommended, RTP Company.

"We met with RTP Company and immediately thought, 'wow what a difference,'" said Smith. "The other plastics company was basically an order-taker and didn't offer any specific advice. RTP Company, on the other hand, was helpful and knowledgeable and worked to understand our problem. They said they would develop a solution, and they did."

RTP Company's product was a **RTP 2000 Series custom PC/PBT (polycarbonate/polybutylene terephthalate) alloy**. It incorporated glass fiber reinforcement along with a flame retardant to meet the UL94 V-0 flame rating and a UV stabilizer to achieve the UL746C f1 outdoor suitability rating.

"Not only did RTP Company get us both the strength and flame retardancy we needed for our larger, heavier



SmartPlug, but they also did a great job of custom matching our existing vibrant orange color, even with all the modifiers," said Smith. "It's just a superior product, from a superior company."

With the 50 amp product meeting approvals and heading to market, the SmartPlug team is planning to switch their 30 amp connector to the RTP Company material to gain a higher margin of performance. In addition, according to Smith, they have a 100 amp version in the works, and, of course, will go right to RTP Company for a material solution.

SmartPlug Systems of Seattle, WA, provides innovative and safer alternatives for electrical connections within the marine industry and beyond. For more information visit their website at www.smartplug.com.

Shore Power Connector

Market: Electrical & Electronics

Product: Flame Retardant

Resin: PC/PBT Alloy

Getting in the Door

Quick Action and VLF Product Performance Help Save Auto Program

Michigan-based NetShape International is one of the largest injection molders in the automotive arena, working with a wide variety of companies to create high quality parts for their common end customers, the automotive Tier 1 suppliers and OEMs.

The automotive industry is well known for operating with pinpoint planning schedules, so NetShape was put in an unexpected bind when one of its resin suppliers suddenly announced that they would not be able to honor their commitment for providing a long glass fiber reinforced polypropylene material used to mold door carriers.

Door carriers are large parts that provide an internal frame to which a host of components such as door handles and window regulators are attached to create a unified subassembly. Long fiber reinforced thermoplastic is used because it's a lightweight and cost effective material that can be molded into complex shapes permitting integration of components.

Ironically, NetShape had become involved with the door carrier program less than a year before, when the previous molder's best efforts repeatedly fell short of meeting customer commitments. NetShape was chosen to take over the program because of their outstanding reputation for providing quality service and products.

NetShape stepped up and met all outstanding commitments and also applied additional value using their

manufacturing process. By expertly optimizing the material processing using the same tooling, they succeeded in reducing part warp by 50%, producing a higher quality product.

"The door carrier had been specified with a particular OEM approved material and the supplier offered no back-up plan," said NetShape Product Development Engineer Scott Hayes.

Fortunately, NetShape knew of RTP Company, which had done some well-received work for one of its sister companies, and sought their assistance to resolve the supply problem. After discussing the door carrier's demanding specifications that included tight tolerances and automotive OEM approval, RTP Company quickly provided a very long fiber compound that would meet the demands.

"To get out of this pinch, the OEM directed us to start testing to determine if RTP Company's material really was a spec material equivalent," said Hayes.

NetShape did the work, and found that not only was the material comparable, but the **RTP 100 Series very long fiber reinforced polypropylene compound** enabled them to produce door carriers with even less

warp than the previous material.

"In over twenty years of working with material suppliers, this was one of the quickest responses, as far as finding a solution, that I have ever seen," said Hayes. "The level of service we got from RTP Company compared to what we got from the previous supplier was significantly different. And, absolutely, that's an understatement."

"Not only is RTP Company's material now the official material for this door carrier application, we are in the process of making it the official material for our other projects that utilize long glass fiber reinforced polypropylene," said Hayes.

NetShape International is a global leader in the design, development, and manufacturing of impact energy management systems; they are a part of the Shape Corp. family of companies. For more information visit their website at www.netshapecorp.com.

Door Carrier

Market: Automotive

Product: Very Long Fiber

Resin: PP



No Pain at All!

RTP Company's Expertise and Tech Support Help Produce Radiopaque Catheter

For more than 25 years, Mexico's Plásticos y Materias Primas (PyMPSA) has been manufacturing medical devices and components for the healthcare industry worldwide. They supply their sister organization, PiSA Farmacéutica Mexicana, one of the country's largest pharmaceutical companies, as well as other outside firms.

Recently, PyMPSA's design & development department assigned engineer Claudia Mancilla Ramirez to work with PiSA on developing a new catheter for epidural anesthesia. The specs called for a biocompatible nylon material that was radiopaque so it could be readily observed during x-ray imaging to ensure proper placement.

Their first efforts, explained engineer Mancilla, were disappointing for the quality-conscious company.

"With our original supplier, the extruded nylon ended up with a lot of air bubbles, so it was far from meeting the quality criteria we and our customers demand," she said.

In search of a new material supplier, the PyMPSA team met representatives from RTP Company at a medical device trade show. The difference, they say, was significant.

"RTP Company listened, and not only developed a custom material for our application, they backed it up with technical support. They sent an extrusion technician here that worked side-by-side with our extrusion engineer Lily Díaz to ensure production of a high quality product," said engineer Mancilla.

With RTP Company's assistance, PyMPSA solved the air bubble problem, leading to

the successful development of a new epidural catheter that is marketed by PiSA under its SET ESPICAT brand. The catheter is manufactured using a custom **RTP 2900 Series polyether-block-amide thermo-plastic elastomer (PEBA) compound** that includes radio pacifiers and passed ISO 10993 biocompatibility testing conducted by PyMPSA.

"In our experience, this level of service is uncommon for suppliers," noted engineer Mancilla. "RTP Company's attitude was 'we can help.' When we needed information and assistance they responded quite well and quite fast. Combine that with an excellent product, and it led to a very successful first project together."

Indeed, engineers Mancilla and Díaz noted the success of the catheter project has already led PyMPSA to reach out to RTP Company on several additional new products. They are also working together to produce the catheter in several different colors to help medical and manufacturing personnel quickly identify different diameter versions.

"Now that we know of RTP Company's capabilities, we look forward to many more successful projects with them in the future," said engineer Mancilla.

Plásticos y Materias Primas is part of the PiSA Farmacéutica Mexicana group of companies who are Mexico's leaders in healthcare. For more information visit the website for either firm at www.pympsa.com.mx or www.pisa.com.mx.

Epidural Catheter

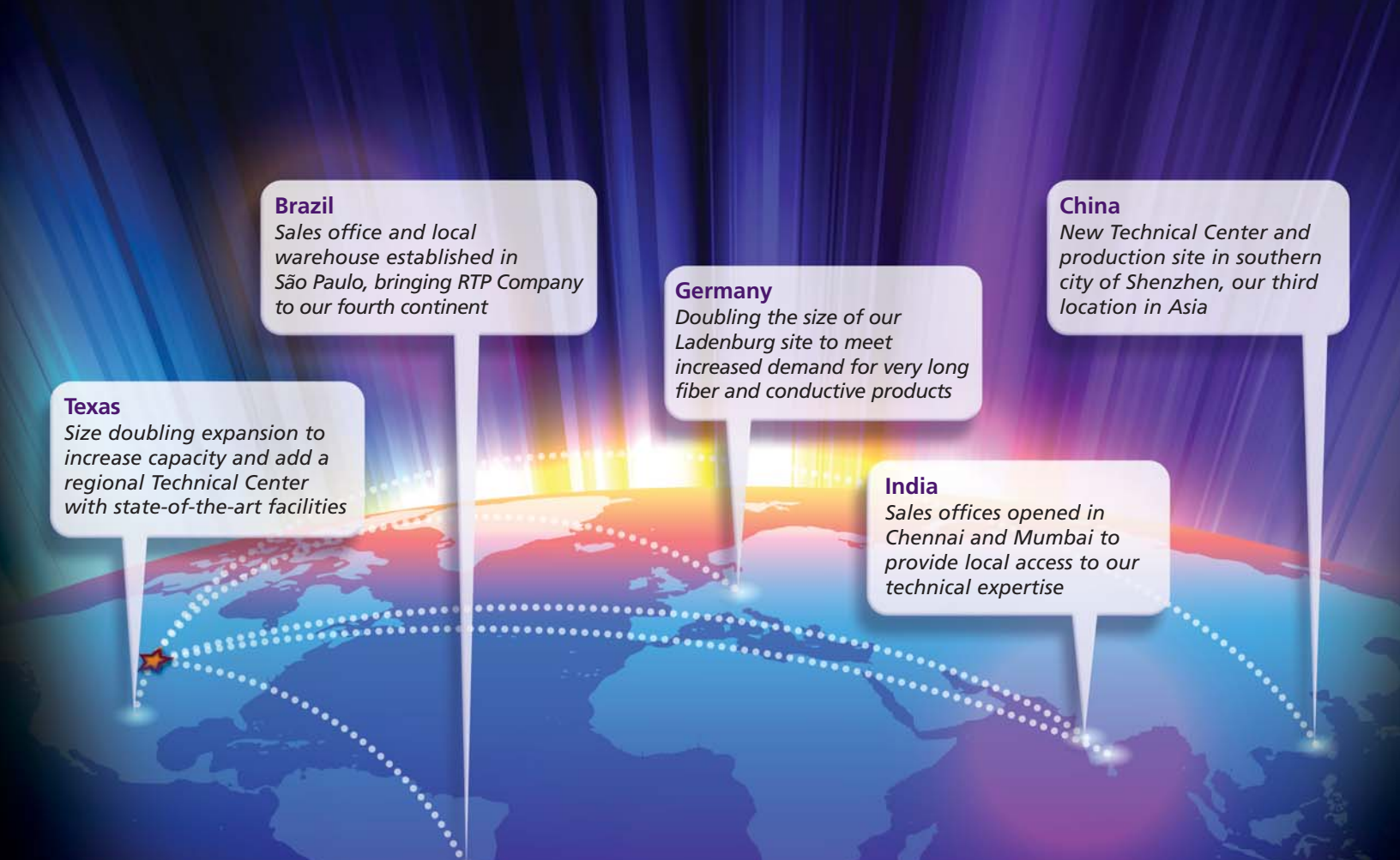
Market: Healthcare

Product: Radiopaque

Resin: PEBA



Color helps quickly identify different diameter catheters.



Brazil

Sales office and local warehouse established in São Paulo, bringing RTP Company to our fourth continent

China

New Technical Center and production site in southern city of Shenzhen, our third location in Asia

Germany

Doubling the size of our Ladenburg site to meet increased demand for very long fiber and conductive products

Texas

Size doubling expansion to increase capacity and add a regional Technical Center with state-of-the-art facilities

India

Sales offices opened in Chennai and Mumbai to provide local access to our technical expertise

Continual Growth and Expansion

RTP Company Provides Custom Engineered Solutions Around the World

RTP Company's long-running success at providing custom engineered thermoplastic solutions has led us to continually expand our global presence in order to have our expertise available wherever you are doing business.

Recently, RTP Company announced that we are nearly doubling the size of our Ladenburg, Germany production facility that was opened in April of 2011. This expansion will add capacity for very long fiber

(VLF) and conductive compounds due to growing business and our acquisition of Clariant's conductive compounds product line.

Also this year, RTP Company opened our Shenzhen Technical Center – giving us our third production site in Asia along with existing facilities in Suzhou, China and Singapore. This facility will allow RTP Company to quickly provide southern China and Hong Kong with engineered samples, custom color matches, and masterbatches to meet rapid product development cycles.

Other new developments at RTP Company include opening sales offices and distribution facilities in São Paulo, Brazil along with Chennai

and Mumbai, India that will enable us to provide our technical knowledge to these emerging markets for our engineered compounds.

Growth continues in the USA as well – our Fort Worth, Texas facility, which has been a part of RTP Company since 1996, is undergoing a significant expansion. The facility will double in size with the addition of new compounding lines and equipment. It will also incorporate a state-of-the-art technical support center to meet customer needs.

RTP Company is not done growing unless you are done innovating new products that require our custom engineered solutions!

Laser Sharp Expertise

Supplier/Processor Partnership Ties Together Laser-Marking and TPE Overmold

The people at injection molder New Berlin Plastics pride themselves on their ability to bring their expert knowledge of plastics processing to bear on customer challenges.

Recently, a new customer, HellermannTyton, was developing an innovative new cable tie tool that offered the ability to select the tension applied to the cable ties as they were being affixed.

For a plastic tension knob, they needed a material strong enough for the small plastic teeth, and it would also need to have a graduated number scale, from zero to eight in half point increments, applied to it.

According to New Berlin's Business Development Manager, Dave Sansone and Director of Engineering, Mike Miller, the customer wanted to discuss which of three ways would be most effective and efficient for the numbering application: printing the numbers directly on the plastic, using in-mold decorating, or attaching a printed adhesive sticker.

Based on their knowledge and experience, the two men instantly knew which of the technologies would be best for their customer's application – none of them.

"We've both worked with RTP Company most of our professional lives, and knew of their ability to create laser-markable plastics that would also meet the strength and other requirements this application demanded," said Sansone.

"Laser-marking the numeric scale was



a much better solution, avoiding the time consuming challenge of printing, the high scrap rates that would have been associated with in-mold decoration, and the physical challenge of precisely affixing a small, 1/4" (6 mm) wide sticker," explained Miller.

Based on New Berlin's recommendation, HellermannTyton gave them the go ahead to team with RTP Company and begin the process of specifying an appropriate material.

After careful testing and evaluation, RTP Company furnished a custom glass fiber reinforced **RTP 600 Series ABS compound** that provided the required tensile strength for the cable tie tool's tension knob.

A matched **RTP 6042 Series thermoplastic elastomer (TPE)** was then overmolded on the knob to provide an ergonomic gripping surface. The TPE compound was formulated to bond with the rigid ABS substrate for optimum product integrity.

Laser-marking additives and colorants chosen for their compatibility with the

ABS compound and the operational range of the laser being used were added by RTP Company's colorists, allowing the laser to clearly "write" an indelible, high contrast white mark on the black plastic surface. "The laser-marked numbers are very durable and will hold up for the life of the product," said Miller.

Sansone noted that this successful application is only one in a long line of successes he and his colleagues have had partnering with RTP Company over the years.

"They're not an 'off the shelf' commodity kind of supplier; RTP Company has excellent engineering capabilities," said Sansone. "When we need to solve a customer challenge by using a custom-engineered compound, we go to RTP Company."

New Berlin Plastics of New Berlin, WI, is a full-service injection molder that consistently exceeds its customer's expectations from design through assembly. For more information visit their website at www.nbplastics.com.

Cable Tie Tool

Market: Industrial Equipment
Product: Laser-Markable
Resin: ABS