



Compounding Lines

Your Global Compounder of Custom Engineered Thermoplastics

Vol. 27, No.3, July 2015

Saving Water

Whether amateur or professional, serious cyclists want the assurance of quick and easy access to their water bottle during a hard ride for health as well as competitive reasons. However when cyclists are speeding up and down hills or racing through rough terrain, it is not uncommon to see a water bottle fly off a bike due to vibration or obstacles.

As a well-respected provider of cycling accessories to these demanding athletes, Netherlands' **Tacx BV** wanted to put a higher level of bottle protection within the reach of every cyclist. To get the durability and flexibility they desired, they developed a bottle cage design utilizing carbon fiber, a material they had not used previously. Then, they turned to their distributor, De Monchy International BV, for advice.

"De Monchy is a trusted and long term partner, and they have enormous experience and product knowledge," said Hans Haasnoot, **Tacx** Production & Quality Manager. "They told us that the answer to our carbon fiber idea was definitely material from **RTP Company**."

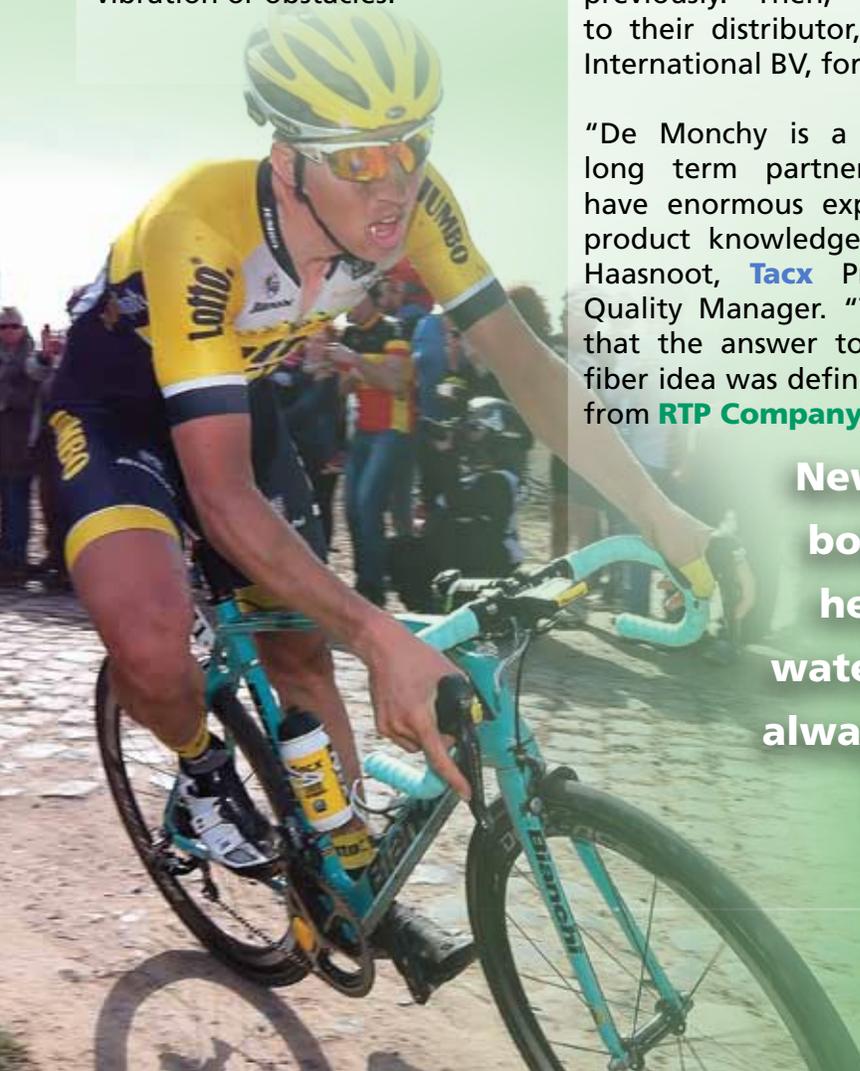
**New bicycle
bottle cage
helps keep
water supply
always safely
at hand**



The advice from De Monchy, noted Haasnoot, was right on target. **RTP Company's** suggested solution, a 40% carbon-filled polyamide, gave them exactly what they envisioned and enabled them to quickly develop their new "Deva" bottle cage line.

"In combination with our Shiva bottle, the Deva bottle cages provide an extremely secure fit," Haasnoot explained. "Cyclists like the fact that they can sense the moment the holder smoothly grips the bottle and feel that satisfying 'click.' It gives them a high degree of confidence that their water bottle will be there for them when they need it, no matter how rough the ride. And that's extremely important to any cyclist."

cont.



cont.

Haasnoot notes that **Tacx** has extensively fatigue-tested the bottle cage, using equipment that simulates conditions of eight hours of extreme vibration, with the Deva holding tight throughout.

“De Monchy and **RTP Company** told us that the clamping power provided by the material would be very good, but we were surprised by how good it actually was,” said Haasnoot. “With just the first few pieces out of the molds, it was clear that the **RTP Company** material would perform a lot better in the application than two other materials we had tried for comparison.”

Another pleasant surprise was how easy it was to work with the **RTP Company** material. “We were a little concerned about how challenging it would be to run the 40% carbon fiber in our injection molding machines, since we hadn’t done that before.



In fact, **RTP Company** very kindly stood by and said ‘call us directly if you need any technical assistance at all,’” explained Haasnoot. “As it turned out, we didn’t need to take them up on that offer.

The material was very easy to work with, and production was a very smooth process. In fact, we found that the **RTP Company** material was even easier to mold than the glass-filled polyamide we more frequently use.”

Perhaps the best surprise of all has been the extent to which the market has embraced the new Deva line. “Although originally designed for a broader cycling market, it has already been specified by professional teams, including some riding in the Tour de France and other cycling classics,” said Haasnoot.

Haasnoot notes that **Tacx** also offers an “all-carbon” version of the Deva. “Customer feedback on the product line continues to be excellent, and we see Deva as being a big success for us,” said Haasnoot. “This is due in no small part to the efforts of De Monchy and **RTP Company**. We are very pleased with their excellent assistance and expertise.”

TACX BV Bicycle Water Bottle Cage

Market: Consumer Goods
Compound: RTP 287A (PA6 CF40)

Adding the TOUCH

From competitive gamers and serious writers to airport check-in staff and IT software engineers, heavy duty computer keyboards with excellent mechanical touch are a must! **Keyed Up Labs**, a producer of third party computer keyboards based in Irvine, California, already had the solutions to these mechanical requirements, but was looking for something more: how to get great aesthetics, with a durable laser mark print on the key caps.

The team at **Keyed Up Labs** searched for a material supplier who could provide the solutions to their needs, and called **RTP Company** for a discussion. Keyboard prices range from low cost to expensive, high-end versions sold on the market today. For **Keyed Up Labs**, the goal was to make keyboards that not only work well mechanically, but also look great.

One important feature is the print quality of the letters on keycaps, which needs to be durable and long lasting. Another feature requested from **Keyed Up Labs** was a unique, colourful keyboard top cover housing, so their customers could purchase a top cover in blue, red, or white with a dash of sparkles.

Engineers at Hueforia, the Colour Development team of **RTP Company**, quickly came up with a colour formulation to solve their needs by custom matching the colour and providing the strength and durability required. The laser marked prints on the new keycaps have durability of up to 5 million touch strokes without the print wearing away.

In addition, the surface quality of the laser marked key caps are now flat compared to the prior models, which provides better tactical feel for their customers on each touch of the keys. The **Keyed Up Labs** team remarked that when the key cap print results in a rough surface, it can be annoying. The flatter surface of the laser marked key caps provides more comfort for their customers when using the keyboards, which is an added quality feature.





Aftermarket computer keyboard provides exceptional functionality and aesthetics

Within a month of releasing their new KÛL ES-87 Smoke keyboards, **Keyed Up Labs** received 21 positive customer reviews on Amazon with a rating of 4.9 out of 5.0 stars. The **Keyed Up Labs** team is currently working on a variety of dazzling coloured keyboard top covers that customers can purchase separately and change themselves in order to add more personality to their keyboard. "We are glad that **RTP Company** can supply us the right engineered colours for our products," says the spokesperson for the team at **Keyed Up Labs**. "We are looking forward to working with **RTP Company's** Hueforia team on new projects."

For more information about **Keyed Up Labs** and their KÛL ES-87 keyboards, please visit their homepage at:

www.keyeduplabs.com.

Keyed Up Labs Computer Keyboards

Market: Consumer Goods
Compound: RTP 600 Series
compound with colour





A Matter of Hours

Recently, **Royal Plastics** found themselves in a difficult situation: they received a silo delivery of a contaminated material from another supplier, which was then used in conjunction with one of **RTP Company's** custom compounds. By the time the contamination issue was detected, **Royal Plastics** already had a great deal of finished goods inventoried in house, plus product sitting in warehouses at two of their largest customers' facilities. "At that point, everything stopped," explains Gary McConnell, President of **Royal Plastics**. "We alerted our customers to the problem, and then had to quickly decide on next steps."

Royal Plastics received a new silo delivery of uncontaminated raw material from the other supplier, but needed the custom compound from **RTP Company** to create new finished goods and deliver them to their customers. Although they already had an order placed with **RTP Company** for more of the custom compound, the anticipated delivery date was two weeks away; waiting

any longer than a few days would most certainly force **Royal Plastics**, as well as their two customers, to shut down.

"Our only available option was to beg," says McConnell. "We got in touch with our local **RTP Company** Sales Engineer and explained our dilemma. Within a matter of hours, we received word that **RTP Company** could improve the delivery date by approximately 10 days." When the material arrived a few days later, **Royal Plastics** returned to full production, and both **Royal Plastics** and their two customers breathed a sigh of relief. "**RTP Company** came through at a critical time," says McConnell. "That was the bailout we needed... and believe me, we appreciate their efforts!"

**Royal Plastics
Appreciates
Extra Effort by
RTP Company
team!**

