

## Interview with Jean Jacques Collin, CEO of Eco-Care BV Recycling content up – costs down

Production scrap from the manufacture of engineering polymer components often ends up as landfill. Reprocessing the scrap and returning it to the production process is thought to be too costly and time-consuming. Jean Jacques Collin, CEO of the Dutch recycling specialists Eco-Care, takes a completely different view.



Jean Jacques Collin, CEO Eco-Care BV

**?** Mr. Collin, your company promises significant cost savings through the use of reprocessed thermoplastics. How is this possible?

**!** Thanks to their very high quality, the recyclates we supply can be processed directly during injection molding together with virgin material. This reduces material costs by up to 40 percent.

**?** Does this mean processors should expect lower quality?

**!** No, since no chemical compounds are used in reprocessing the scrap and no temperature effects occur that could have an adverse influence, the properties of the recyclate are virtually the same as those of the virgin material. Depending on the application area, up to 30 percent recyclate is blended in with virgin material – without affecting the quality of the thermoplastic.

**?** Materials conditioned by Eco-Care BV have a purity of 99.98 percent. How do you achieve such a high value?

**!** It's really quite simple: by separating the different materials to the best possible degree. During reprocessing, the composite passes through many different stages in which it is regranulated, de-metallized, washed, separated, screened and finally de-dusted so that in the end a very pure recyclate is obtained.

**?** Together with Ticona, you developed the Celstran® recycling concept, which is used in the production of dashboard supports for the VW Golf 5 and Golf Plus. What is so special about this recycling loop?

**!** The unusual thing about this process is that the recyclate is blended with the virgin material directly by Ticona. Adding the recyclate directly on their own is far more time consuming and expensive for processors. By blending the reprocessed thermoplastic with virgin material at Ticona's facilities, processing companies save costs – specifically the cost of storage, quality

assurance and logistics. They need only perform a one-time test to verify that the recyclate is suitable for the intended application.

**?** How close was your collaboration with Ticona?

**!** At the beginning, we supplied the recyclate directly to VW. When the quality had been assured and the particle sizes thoroughly studied, the first steps towards blending with virgin material by Ticona could be taken. Throughout this period we worked very intensively with Ticona in order to achieve the optimum reprocessing conditions. This was essential to enable Ticona to blend and produce without problems.

**?** Your company has specialized in the recycling of engineering polymers used in vehicles. Why?

**!** There is a very simple reason for this: production scrap volumes tend to be relatively high in the automotive industry.

**?** Does the reprocessing of engineering polymers make sense for other industries as well?

**!** Yes. It makes sense wherever composites that contain engineering polymers are used and a certain volume of scrap renders economical reprocessing possible. Electrical appliances, for example. Recycling also makes sense where very expensive thermoplastics are used and a high quality recyclate is required – depending on particle size range. There is a huge potential here. That's why we plan to work closely with Ticona to identify and develop new application areas.

