

Customer Chat: Recycling Industry

Patrik Köster is the plant manager at AVR GewerbeService, a certified waste management company specializing in providing complete recycling and waste management solutions. They focus on consistent and continuous quality throughout the entire waste disposal chain.

This primarily includes returning valuable secondary raw materials and other recyclable goods into the material cycle.



How many and what kind of samples do you process?

- ▶ *We process 3-5 samples daily. These can be plastic parts or regrind.*

How do you analyze these samples? Is a sample preparation involved?

- ▶ *Analyzing the samples with the ALPHA FT-IR spectrometer is easy once you've done it a few times and then you obtain the result right away - it doesn't get any better than that.*

Since when is IR spectroscopy part of your laboratory?

- ▶ *We bought the spectrometer back in 2015.*

What brought you to IR spectroscopy?

- ▶ *The Bruker booth at the FAKUMA trade fair in Friedrichshafen.
(An international polymer trade show located in Germany)*

Did you already have any experience with IR spectrometers before you bought one?

- ▶ *No. No experience at all in this field.*

Your resumé after almost 5 years with the ALPHA?

- ▶ *We are very satisfied with the spectrometer since it simplifies the work of recognizing plastics tremendously. We have never regretted purchasing an ALPHA.*

How do the FT-IR results assist in your daily business?


- ▶ *They help us a lot because we can immediately identify the plastic type we are dealing with and we always know if we have received mixed plastics from a customer.*

Are mixed plastics a big problem?

- ▶ *Since we produce pure regrind, „mixing“ of different types of plastics is not acceptable, of course. At the latest, the processor of the regrind will face problems if the types are mixed (e.g. due to different melting points).*

What is the origin of these mixed plastics you encounter?

- ▶ *The most common cause is an unintentional „false declaration“ by the customer. The employees throw plastic waste into the wrong mesh containers, which inevitably leads to mixing.*



I estimate that the potential of IR spectroscopy for the recycling industry will be immense. You have developed a good product, keep up the good work !



The company philosophy is as simple as it is impressive: to combine environmental protection, resource conservation and cost optimization to perfection.

Until now, how much time and money did you have to invest in maintenance or spare parts?

- ▶ *Very little time was spent on maintenance and we did not have to invest money in maintenance or spare parts, yet. It was simply not necessary.*

Tell us, what is the potential of FT-IR in recycling industries?

- ▶ *If you are working in a field where the plastic sorting results must be reliable and polymer purity is vital, the potential is enormous.*

Do you have any suggestions for improvement of the ALPHA?

- ▶ *Currently I have no suggestions for improvement - at all.*

What did you always want to tell Bruker?

- ▶ *You have developed a fine product - keep up the good work.*

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● **Bruker Scientific LLC**

Billerica, MA · USA
Phone +1 (978) 439-9899
Fax +1 (978) 663-9177
info.bopt.us@bruker.com

Bruker Optik GmbH

Ettlingen · Germany
Phone +49 (7243) 504-2000
Fax +49 (7243) 504-2050
info.bopt.de@bruker.com

Bruker Shanghai Ltd.

Shanghai · China
Phone +86 21 51720-890
Fax +86 21 51720-899
info.bopt.cn@bruker.com