

RAMPF and Keil design multi-functional plant for manufacturing alternative polyols in Dubai

PET, PSA, and PU / PIR as sources of raw materials for high-quality in-house production

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Pirmasens, February 26, 2018. RAMPF Eco Solutions has worked with its collaboration partner Keil Anlagenbau to design a multi-functional plant for manufacturing polyols based on polyethylene terephthalate (PET), phthalic anhydride (PSA), and polyurethane (PU) / polyisocyanurates (PIR). The plant was delivered to a leading supplier of insulation technology in Dubai, erected on site, and put into operation.



Chemical and plant construction expertise from a single source – RAMPF Eco Solutions and collaboration partner Keil Anlagenbau are leaders in the development and construction of production plants for high-quality alternative polyols.

Using in-house plants and their own waste production materials, companies can manufacture their own high-quality alternative polyols. In doing so, they cut costs and contribute to the protection of the environment.

With this profitable solution that makes both economic and ecological sense, RAMPF Eco Solutions and collaboration partner Keil Anlagenbau are excelling on international markets. By combining their core areas of expertise, the companies are able to offer a unique complete solution:

> RAMPF Eco Solutions boasts comprehensive know-how in developing chemical solutions for manufacturing high-quality alternative polyols from PU and PET waste materials.

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discover the future

> Keil Anlagenbau has extensive knowledge in developing and constructing tank farms and recycling, supply, dispensing, and process engineering plants.

Multi-functional design increases customer benefits

The multi-functional production plant has been designed for a leading supplier of insulation technology in Dubai and now offers the option of manufacturing high-quality polyols from the customer's own PU/PIR waste materials. Ester polyols based on PET or PSA can also be produced in the same plant.

"With this multi-functional concept, we're offering our customer even greater economic and environmental benefits," says Marco Werth, Director of Sales & Marketing at RAMPF Eco Solutions.



The recycling plant, which is being used in Dubai by an insulation technology specialist, was built on site and put into operation by employees of RAMPF and Keil.

Alternative polyols - sustainable, cost-effective, high-quality

"For over 20 years, our research teams have been developing high-quality alternative polyols", Matthias Rampf, Managing Director of RAMPF Eco Solutions, points out. In two of the largest multi-functional plants in Europe at the corporate headquarters in Pirmasens, Germany, tailored ether and ester polyols are manufactured from

- > industrial and post-consumer PU waste materials (from flexible to rigid foams)
- > PET / PSA

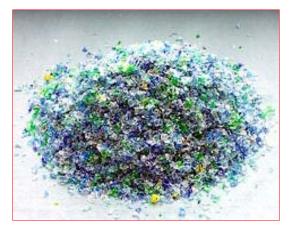
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The company, which is part of the international RAMPF Group, has also developed a chemical process that makes it possible to use PET / PSA, other polyesters such as polylactide (PLA), polycarbonate (PC), and polyhydroxy butyric acid (PHB), and renewable or bio-based raw materials such as vegetable oils as sources of raw materials for manufacturing high-quality alternative polyols.



RAMPF Eco Solutions views production residues and post-consumer PET from packaging not as waste but as valuable sources of raw materials. A special chemical method is used to process these materials into polyol, which is then recycled in polyurethane.



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RAMPF Eco Solutions GmbH & Co. KG is a leading expert in developing chemical solutions for the manufacture of highquality alternative polyols from PU and PET waste materials. This expertise is also put to use in the planning and construction of customer-specific facilities for manufacturing polyols.

The core competence of RAMPF Eco Solutions lies in the manufacture of high-quality alternative polyols from PU waste materials. Using innovative chemical solutions, the waste production materials from PU manufacturers are developed into polyols tailored precisely to their requirements. Waste materials from sister companies RAMPF Polymer Solutions and RAMPF Tooling Solutions are also reprocessed.

Based in Pirmasens, Germany, the RAMPF company has also developed chemical procedures for using PET, Phthalic anhydride, PC, and renewable resources such as vegetable oils as raw materials for producing high-quality alternative polyols.

RAMPF Eco Solutions designs and builds customized recycling facilities directly at the production sites of PU manufacturers that produce high volumes of waste material. This enables customers to produce high-quality alternative polyols cost-effectively and on site. The same applies to the development of plants for manufacturing alternative polyols from PET and PA. True to the concept: your residues – your raw material source.

RAMPF Eco Solutions is a company of the international RAMPF Group based in Grafenberg, Germany.

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