

Project titel: Greenspinning
Partner: Herberger Wasseraufbereitung GmbH,
EPC Engineering GmbH
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Mission Statement

In the context of the REACH reform, many manufacturers of wet-spun man-made fibres have to think about changing their production processes. The EU decisions are affecting the production conditions and thus existence of polyacrylonitrile (PAN) fiber production in Europe, as 90% of the fibers are spun with solvents that are planned to be banned. Therefore, the industry is very interested in process know-how and suitable plant technology for spinning with alternative, non-critical solvents. There is little information in the literature on spinning with these solvents. In addition, there is no international supplier of wet spinning systems that are optimized for spinning with inorganic solvents. The aim of the project is thus to investigate the process, including the recovery of the salts (solvent) from the waste water, and to develop a plant concept suitable for the cost-efficient wet spinning with inorganic solvents.

Approach:

The Herberger Wasseraufbereitung GmbH is investigating the treatment of the process water together with EPC. The ITA develops the spinning process with inorganic solvents. The produced fibres serve as reference values to prove the functionality of the process and to offer the customer the necessary know-how for the operation of the plants.

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