

# GROSS GION-PITSCHEN

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## **BI-COMPONENT AND MONO-COMPONENT POLYPROPYLENE FIBRES USED IN FIBRE CEMENT FOR REINFORCEMENT**

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### **Abstract.**

The fibre-cement industry in Europe and Australia has 30 years of success with asbestos replacement materials. The first generation of air-cured products developed in Switzerland used a combination of Polyvinyl (PVA) fibre from Kurraray Japan, combined with refined Cellulose fibres. James Hardy used Celluloses fibres in an Autoclaved Technology. Since the use of PVA fibres in the industry more interest has evolved in the use of Polypropylene (PP) fibres as a possible alternative to PVA. This paper describes the use of Polypropylene fibres (Bi-Component and Mono-Component) developed by Neumag Oerlikon for use in the fibre cement industry. The fibres have been assessed on a pilot industrial Hatschek machine for their suitability in fibre cement products and also accelerated ageing test has been used to predict the service life of the product. The newly developed PP fibres from Neumag have proved to be viable alternative fibres for PVA in the Fibre Cement Industry.