



High Gradient Magnetic Filter HGF



Degreasing solutions • cooling liquids • process liquids minerals

The treatment of process liquids usually requires a reliable and highly efficient separation of the smallest ferrous particles. The high gradient permanent magnetic filter HGF is designed to solve exactly this problem; either as a process by itself or as a protective device for membrane systems. In the HGF, the ferrous particles are separated at a fine mesh filter matrix in a strong

magnetic field. Particles as small as 1 micron may be separated while still producing an output of more than 90 %.

Technology, models: The matrix consists of closely and regularly spaced wires, which generate the high magnetic field gradients absolutely necessary for product separation. The special feature about the HGF is its

Technology / models

permanent magnet, which consists of a big rotor equipped with the state of the art neodymium iron boron magnets. The force can be "turned on" and off. When "turned on", the permanent magnets are arranged in a way that they generate a magnetic flow towards the separation chamber via an iron yoke. In this position, the ferrous particles from the liquid flowing through get attached to the filter matrix. In order to clean the filter,



the rotor is turned and the magnetic flow in the separation chamber stopped. A short flush removes the solid particles separated. The throughput possible, up to a maximum of 300m³/h·m, depends basically on the type and composition of liquid to be filtered.

Depending on the application the HGF is intended for, the working length may be 50 cm or 100 cm or even twice 100 cm. Assemblies (20" to 40", even 80") with all controls and piping are also available.



Suspension Magnet



Magnetic Head Pulley



Eddy Current Separator



Induction Sorting System



High Gradient Magnetic Separator



High Gradient Magnetic Filter



Wet Drum Separator



Magnetic Drum

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