

APPLICATION SHEET

CUT 'N' SEAL

FILTER INSERT WITH WAVY EDGE ZONE



■ The task

A specially shaped filter insert consisting of various woven and non-woven layers has to be cut out of flat raw material. The 3 mm wide edge zone has to be double welded in order to create a wavy profile. In addition, the cut edge has to be neatly sealed in order to prevent fraying.

■ The solution

The ultrasonic cut 'n' seal technology is used for producing this filter insert with a number of different requirements for the edge zone. In this process it is possible to simultaneously combine welding, cutting and sealing functions. A 2-stage process is used to weld the wide wavy edge zone in the first stage and then to cut out the contour of the filter and simultaneously seal the edge zone.

■ The advantages

The ultrasonic cut 'n' seal process is an interesting production method from the cost-efficiency point of view, which can meet all requirements for the finishes of the edge zone. The process is reliable, can easily be automated and offers various options for quality control. On the basis of the wide weld ring geometry it is possible to produce any kind of profiling.



The application has been produced using a USP8000 welding system with appropriate 2-stage process tools.

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