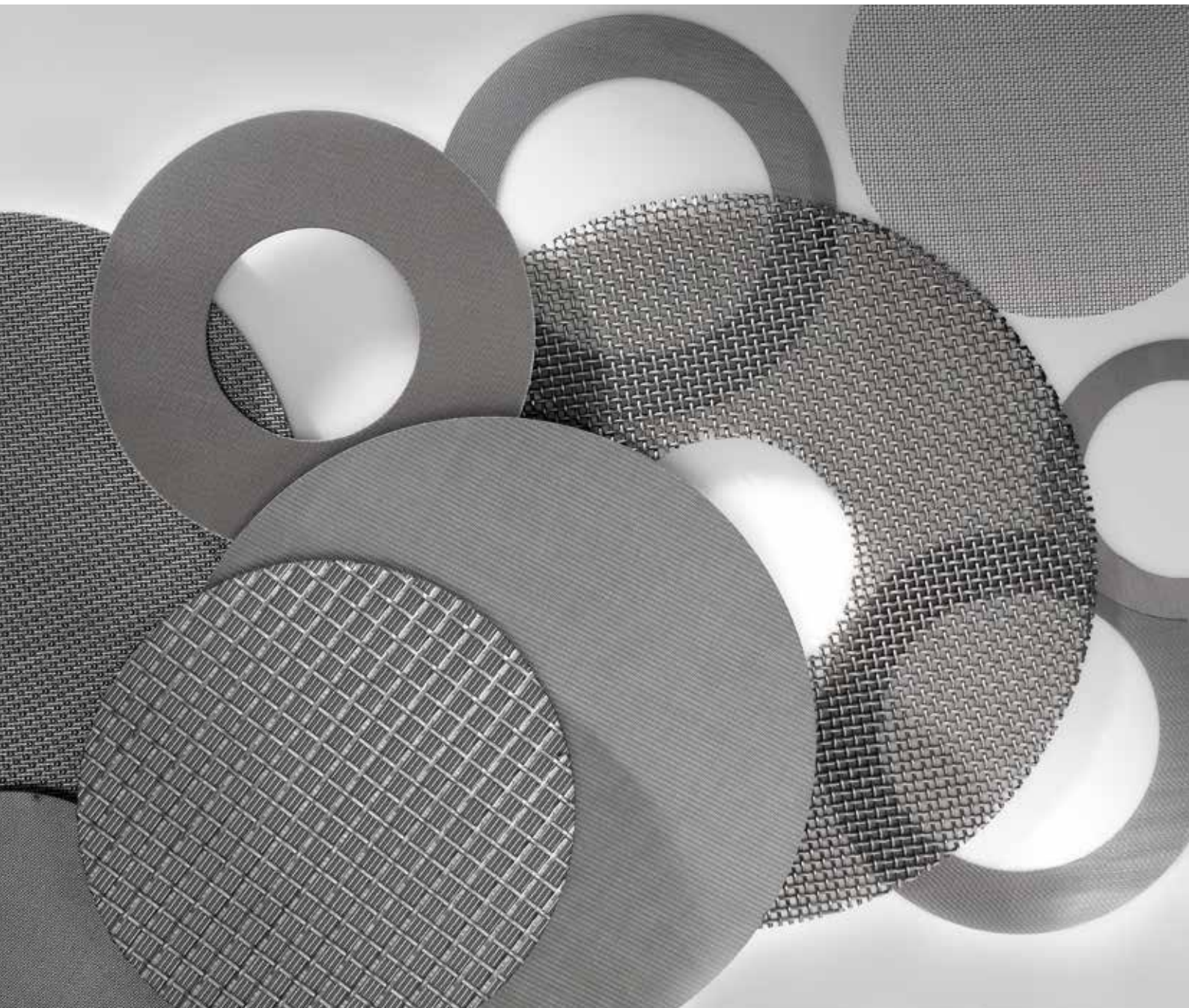


WIRE MESH AND FILTERS FOR POLYMER FILTRATION

FILTER CARTRIDGES + FILTER DISCS + FILTER MEDIA



OPTIMIZED FILTER MEDIA FOR EXTRUDED POLYMERS



ODW – Optimized Dutch Weave

Production of high quality fibers, films and raw materials of polymeric filtermedia does require also high quality filtration media. GKD has been active in this field for decades, and is constantly working with their customers to improve the processes, by implementing new and optimized filter media in the product lines. These activities lead to quality improvements on the final product, longer service life for production tools and filter systems. The result is improved productivity and reduced costs.

OPTIMIZED DUTCH WEAVES

Optimized Dutch Weaves (ODW) from GKD are used where precise filtration rates are required involving high flow rates and high dirt-holding capacities.

HIGH FLOW RATES, PRECISE FILTRATION RATES

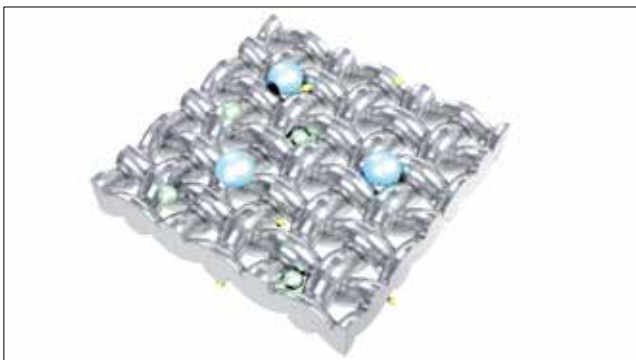
By using particular wire size / mesh count combinations, Optimized Dutch Weaves (ODW) or Reverse Optimize Dutch Weaves (RODW) are produced, which exhibit a specific rectangular geometry, whereby high flow rates, precise filtration rates and a low tendency to clog are assured. Extremely

robust overall constructions can be put into effect by means of a suitable combination of Square mesh or Tela mesh and Optimized Dutch Weaves.

IDEAL FILTER MEDIUM FOR HIGH-VISCOSITY MEDIA

Optimized Dutch Weave has proven itself outstanding as a filter medium in filter cartridges and filter discs for high-viscosity media like polymers or prepolymer products. The media is successfully in use in cartridge filters as well as in standard or backflushable screen changers. Optimized Dutch Weaves are available in the range of 10 μm to 80 μm .

FILTER MEDIA SELECTED FOR INDIVIDUAL SOLUTIONS



Square Weave

Each production line and material does have specific requirements for filtration. Whether it is a high dirt load or special treatment of gels, GKD has the right media available to optimize the process. For basic filtration needs, the standard line of square meshes are used, starting from 25 micron up to 3 mm. For production lines with micron rates between 10 and 80 micron, the Optimized Dutch weave (ODW or ORDW) provide increased performance for gel treatment and dirt holding capacity.



ODW

For the finest filtration applications, twilled dutch weaves offer retention rates down to nom. 1 micron. GKD also employs the qualities of metal fiber felt in applications, where the high shear rates of this media is required.

In order to get the best filter for the specific process, GKD supports the customer process engineer, by developing viable layup options for the screens. Also we offer material options to combat certain corrosive conditions such as are present with fluoropolymers. Alloys such as 904L or Monel are used to weave the filter media in these cases.



Fiber Felt

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- FILTERMEDIA AVAILABLE FROM 4 TO 3000 MICRON
 - SELECTION ACCORDING TO PROCESS REQUIREMENTS
 - STANDARD AND HIGHER GRADES STAINLESS STEELS AS PER MEDIA REQUIREMENTS.
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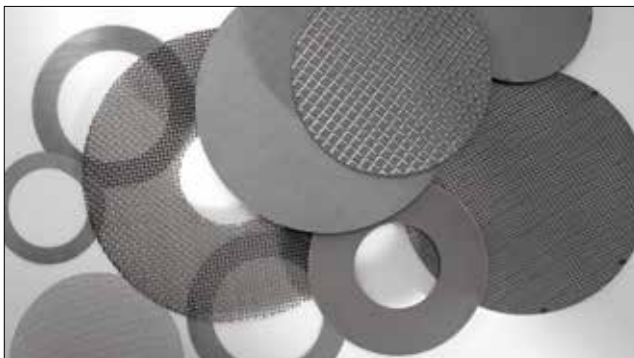
FILTERS AND ELEMENTS



Spinneret Screens



Filter Cartridges



Unframed Filter Discs



Air Quench Element

CLEAN FILTER ELEMENTS

GKD-Filters are produced to the highest standards in the industry. Every filter goes through a 100% quality check. Every fabricated filter is individually cleaned. In addition, all media to be used in the finished filters are cleaned prior to punching, in order to effectively avoid contamination in the filter layouts. GKD-Filters work as problem solvers.

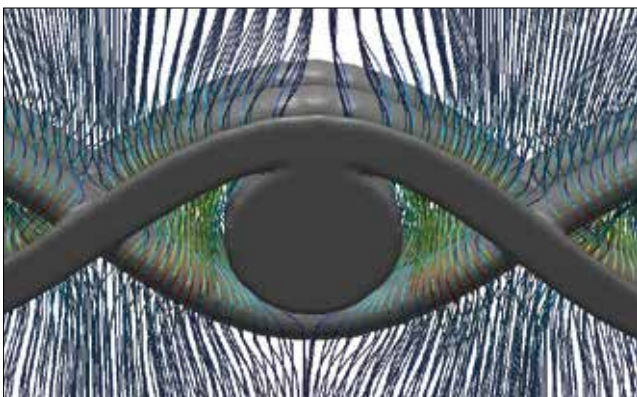
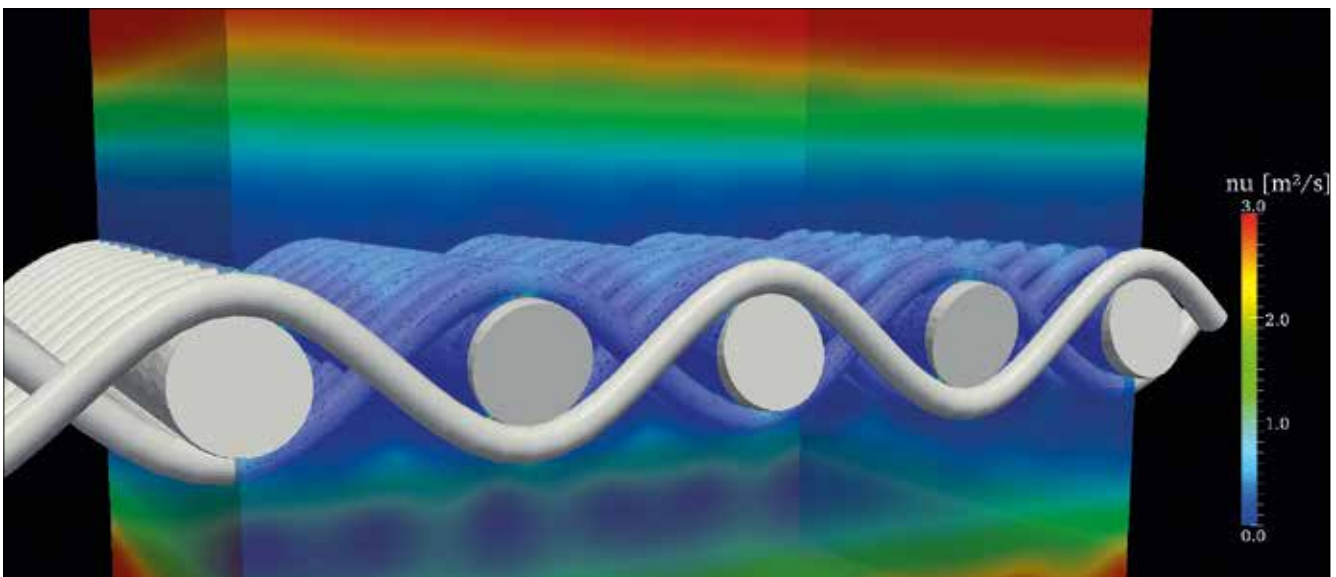
AIR QUENCH SYSTEMS

GKD offers a tailored range of media and individual designs of air quench systems for fiber and nonwoven plants. These include elements for cross and also radial quenching. These systems can be made out of mesh laminate, in order to provide a selfstable design tube design, or combinations out of perforated plates and mesh, which can be used for inside/out and outside in quenching systems.

SIMULATION RESEARCH & DEVELOPEMENT

Very flexible software tools and very precise media models open the possibility to simulate the filter elements in a very accurate way. Based on detailed media models and complete physical properties of the polymer, differential pressures and mechanical loads can be simulated. It allows GKD to make highly accurate predictions about the pressure drop of individual media and layups.

The tools which are available work for newtonian and also for non newtonian liquids.



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GKD - GEBR. KUFFERATH AG

As a privately owned technical weaver, GKD-Gebr. Kufferath AG is the world market leader in metal, synthetic and spiral mesh solutions. Four independent business divisions bundle their expertise under one roof: **INDUSTRIAL MESH** (woven metal mesh and filter solutions), **PROCESS BELTS** (belts made of woven mesh and spirals), **METALFABRICS** (façades, safety and interior design made of metal fabrics) and **MEDIAMESH®** (transparent media façades). GKD continuously develops new fields of application through its manufacturing technology and process expertise. We use GKD meshes to create efficient systems, equipment and components that are perfectly integrated into our customers' processes across all industrial sectors. GKD is active on the international stage from its headquarters in Germany, five further production sites in the US, South Africa, China, India and Chile, as well as branches in France, Spain, Dubai and representatives all over the world.

BUSINESS UNIT: INDUSTRIAL MESH

State-of-the-art mesh and filter solutions made of metal and plastic wires, as well as technical fibers – for use in all industrial sectors. With innovative web technologies and the latest simulation methods, we develop and produce efficient technical weaves, semi-finished products, components and filter equipment – optimally matched to the most diverse mechanical process engineering requirements. We use our high-level laboratory expertise to continually refine and further optimize our products. Leading manufacturing standards, certified processes and comprehensive testing procedures secure end-to-end high quality in all GKD filter media. This approach allows us to produce some of the most reliable, high-performance filter media in the world. Our innovative capacity, many years of experience with application processes and customer proximity, coupled with our cost-focused and user-centered approach, have made GKD the first choice international partner for industrial mesh.

CLOSE TO THE MARKET AROUND THE GLOBE.

- ① GKD GERMANY, Düren (headquarters)
- ② GKD FRANCE, La Roque d'Anthéron, Croisilles
- ③ GKD SPAIN, Barcelona
- ④ GKD USA, Cambridge, MD
- ⑤ GKD LATIN AMERICA, Santiago de Chile
- ⑥ GKD SOUTH AFRICA, Randfontein
- ⑦ GKD INDIA, Jaipur
- ⑧ GKD CHINA, Beijing, Qufu
- ⑨ GKD MIDDLE EAST, Dubai

