

BELTS MADE  
OF WOVEN MESH  
AND SPIRALS



# FILTRATION MEDIA + FORMING FABRICS FOR SPUNLAID APPLICATIONS

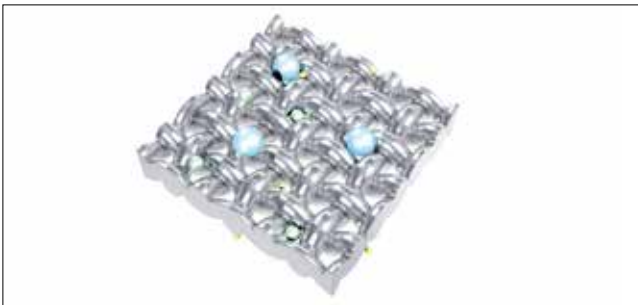
WOVEN MESH SOLUTIONS FROM ONE SOURCE



# OPTIMIZED FILTER MEDIA FOR EXTRUDED POLYMERS



ODW – Optimized Dutch Weave



Square Weave



ODW

The production of high-quality fibers, films and raw materials of polymeric filter media 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.

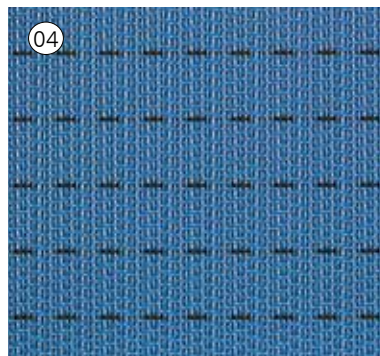
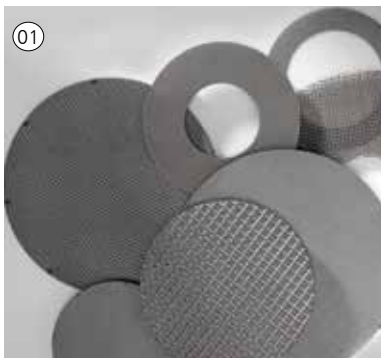
## HIGH FLOW RATES, PRECISE FILTRATION RATES

By using particular wire size / mesh count combinations, Optimized Dutch Weaves (ODW) or Reverse Optimized 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 medium 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 6  $\mu\text{m}$  to 80  $\mu\text{m}$ .

# FILTRATION + COOLING + FORMING COMPETENCE FROM ONE SOURCE



## 01 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 lay-ups. GKD filters work as problem solvers.

## 02 FILTER MEDIA

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 is used, starting from 25 micron up to 3 mm. For production lines with micron rates between 6 and 80 micron, the Optimized Dutch Weaves (ODW or ORDW) provide increased performance for gel treatment and dirt-holding capacity. Finest twilled dutch weaves provide filtration rates down to 7 micron.

## 03 AIR QUENCH + COOLING 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 self-stable tube design, or combinations out of perforated plates and mesh, which can be used for inside/out and outside/in quenching Systems. The rescreening of airquench panels of any size, including replacement of honeycomb, is a core competence of GKD.

## 04 ANTISTATIC FORMING BELTS

For the fast processing of spunlaid nonwovens, antistatic process belts from GKD have a proven track record. Double-layer mesh constructions and fine non-marking pin seams of the belt series CONDUCTIVE and CONDUCTO® guarantee maximum efficiency. Their robust lateral stability allows long life spans and good running characteristics, especially in high speed production.

# CONDUCTIVE + CONDUCTO® ANTISTATIC FORMING BELTS



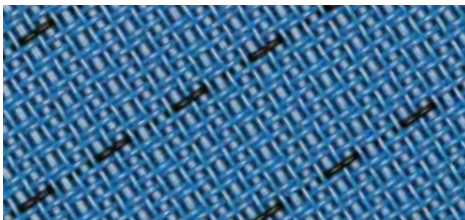
Oerlikon Neumag - Airlaid



STFI Chemnitz - Spunlaid



Trützschler Nonwovens - Roller Cards



Type	Discharge	Structure	CFM	Special Features
CONDUCTIVE 7690	Carbon	Double-layer	690	EASY SERVICE
CONDUCTIVE 7702	Carbon	Double-layer	700	UNIVERSAL
CONDUCTO 7600	Bronze	Double-layer	670	FINEST FILTER MEDIA
CONDUCTO 7900	Bronze	Double-layer	850	HIGH AIR PERMEABILITY
CONDUCTIVE 7900	Carbon	Double-layer	880	HIGH AIR PERMEABILITY



The balanced relationship of fineness and grip predestines multi-layer CONDUCTIVE and CONDUCTO® for Spunbond and Melt-blown processes. With low fiber penetration and non-marking double loop pin seam, its construction guarantees maximum efficiency.

Smoothly and strongly woven and with a well-closable non-marking woven pin seam GKD forming belts fulfill the highest requirements for safety and economy.

Their robust lateral stability allows long life spans and good running characteristics, especially in high-speed production.

Due to increased production speeds and upcoming atmospheric turbulences, permeability to air is requested to installed process belts. Discharging process belts of series CONDUCTIVE and CONDUCTO® fulfill these requirements.



**ATEX 95**  

**II 3G cb IIB T4 und 3D T135°C**  
-10°C<Ta<100°C

# THERMOBONDING BELTS FOR AIR-THROUGH DRYER AND DOUBLE-BELT OVEN



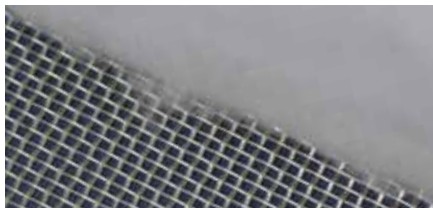
Strahm Oven – feeding



Strahm oven – outcoming



Bronze belt with nonwoven web



Duofil with nonwoven web

No. per cm	Material	Remarks
2,9 / 2,8	AISI 316 / Steel	Magnetic
3 / 3	AISI 316 / AISI 316	Non-magnetic
4,6 / 4,21	Bronze / Steel	Magnetic
4,6 / 4,21	Bronze / AISI 316	Non-magnetic
7,5 / 5,2	AISI 316 / AISI 316	Robust in CD
3x3 / 4,5	AISI 316 / AISI 316	Robust in CD
3x2 / 5,5	Steel / Steel	Robust in CD
4 / 5	PPS / Steel coated	Light weight, magnetic
4 / 5,25	PPS / AISI 316	Light weight, non-magnetic
3x3 / 4,5	PPS / Steel	Light weight, magnetic
3x3 / 4,5	PPS / AISI 316	Light weight, non-magnetic
3 / 3	Glass fiber / Steel	Light weight, magnetic & nonstick-coated

GKD **PROCESS BELTS** are successfully used in double belt ovens for nonwoven bonding. Their customized fabric design out of stainless steel, steel or bronze, or combinations of these materials, optimizes even the most demanding thermobonding process. Cross-stable and robust, they meet the special demands which are expected of high-performance belts. Their non-marking pin seam and special edge coating contribute to this performance. A magnetic process belt is used in double-belt ovens as the upper belt. It is kept in the suspended position by the magnetic system of the oven. This supports exact tolerances during the compression phase. A special belt construction of a combination of materials made out of plastic and metal wires is possible.

In applications processing adhesive materials GKD offers a nonstick-coated surface reducing fiber adherence to the belt. For use in single-belt dryers the customized woven process belts made from metal, PPS, PEEK or a combination of these materials provide

adaptable and unique solutions. Optimum cross-stability and running characteristics – even at high speeds – make them the leading solution for successful nonwoven drying.

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