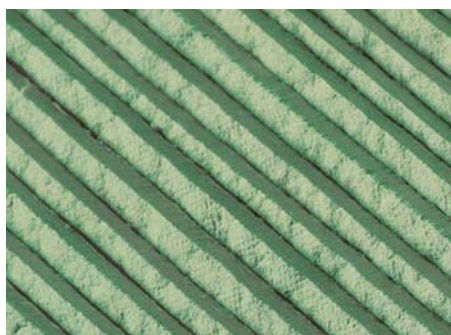


RELIABLE FILTRATION



HOBRAFILT

DEPTH FILTER SHEETS

HOBRA ŠKOLNÍK

FILTER MEDIA
FILTER EQUIPMENT AND TECHNOLOGY



HOBRAFILT

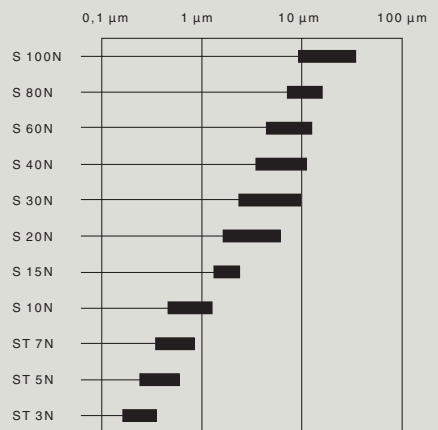
The depth filtersheets are made of raw materials that are harmless to health, especially various types of cellulose, high quality diatomaceous earth, pearlites and resins. The filtersheets are basically three-dimensional depth filters which contain adsorbents - compounds with a large internal surface. These can be imagined as a chunk of variously long channels and chambers inside the material, in which the pollutant particles are caught. In contrast to a sieve filtration (thin layer), depth filtration increases the overall filtration area through the presence of the adsorbents. Pollutants are caught inside the channels not only mechanically, but also by adsorption forces. Utilizing the combination of mechanical and adsorption effects, even particles much smaller than the size of pores of the filtersheet can be caught on the cavity walls. The amount of filtered solution is several times higher with depth filtersheets than with sieve filtration, because there is a larger filtration area.

The filtration mechanism includes various types of particle catching and the resulting filtration effect is created by their combination. It involves mechanical filtration, electrostatic adsorption and electro-kinetic adsorption. Closer specifications of HOBRAFILT depth filtersheets of the "N" series are stated below.

Retention rate of HOBRAFILT "N" series filtersheets:

type	flow capacity (l/m ² /min)	retention (microns)	thickness (mm)
ST 3 N	25 – 38	0,2	3,8 +/- 0,15
ST 5 N	44 – 67	0,3	3,8 +/- 0,15
ST 7 N	79 – 109	0,4	3,8 +/- 0,15
S 10 N	127 – 174	0,8	3,6 +/- 0,10
S 15 N	182 – 227	2	3,6 +/- 0,10
S 20 N	233 – 280	3	3,6 +/- 0,10
S 30 N	275 – 321	4	3,6 +/- 0,10
S 40 N	420 – 540	5	3,6 +/- 0,10
S 60 N	771 – 889	6	3,6 +/- 0,10
S 80 N	1076 – 1390	8	3,6 +/- 0,10
S 100 N	1278 – 1789	11	3,3 +/- 0,10
DZ170N	> 1350	-	+/- 0,10

Retention rate of HOBRAFILT "N" series filtersheets:



Examples of use of HOBRAFILT "N" series filtersheets according to the type in individual applications:

Wine filtration



Coarse / clarifying	S80N, S60N, S40N, S30N
Fine / polishing	S20N, S15N, S10N
Microbiologically efficient	ST7N, ST5N, ST3N

Filtration in pharmacy and biotechnologies



High-flow pre-filtering	S100N, S80N, S60N, S40N
Cleaning	S30N, S20N
Fine polishing	S15N, S10N
Microb. efficient	ST7N, ST5N, ST3N

Beer filtration



Precoat filtration	DZ170N
Fine	S10N, S11N, S16N
Microbiologically efficient	ST7N, ST5N, ST3N

Filtration in chemistry, biochemistry and cosmetics



High-flow pre-filtering	S100N, S80N, S60N, S40N
Cleaning	S30N, S20N
Fine polishing	S15N, S10N
Microb. efficient	ST7N, ST5N, ST3N

Filtration of alcoholic and non-alcoholic beverages



High-flow pre-filtration	S100N, S80N, S60N, S40N
Cleaning	S30N, S20N
Fine polishing	S15N, S10N
Microb. efficient	ST7N, ST5N, ST3N

Hobra offers the following product range of HOBRAFILT depth filtersheets:

- Series „N“** is a standard series which is used in all regular applications of filtersheets.
- Series „NT“** is a technical series of filtersheets designed especially for high-flow technical applications.
- Series „R“** is a special series of sorption filtersheets used in food filtration, mainly for filtration of gelatine.
- Series „NS“** are bio-chemically resistant filtersheets.
- Series „C“** are filtersheets with very small amount of extractable ions (e.g. calcium) frequently used for cognac, brandy and whiskey filtration.
- Series „CP“** is a series of filtersheets with very small amount of extractable ions and pyrogenes used especially in the pharmaceutical industry.

At customer's request HOBRA also supply filtersheets with activated carbon content.