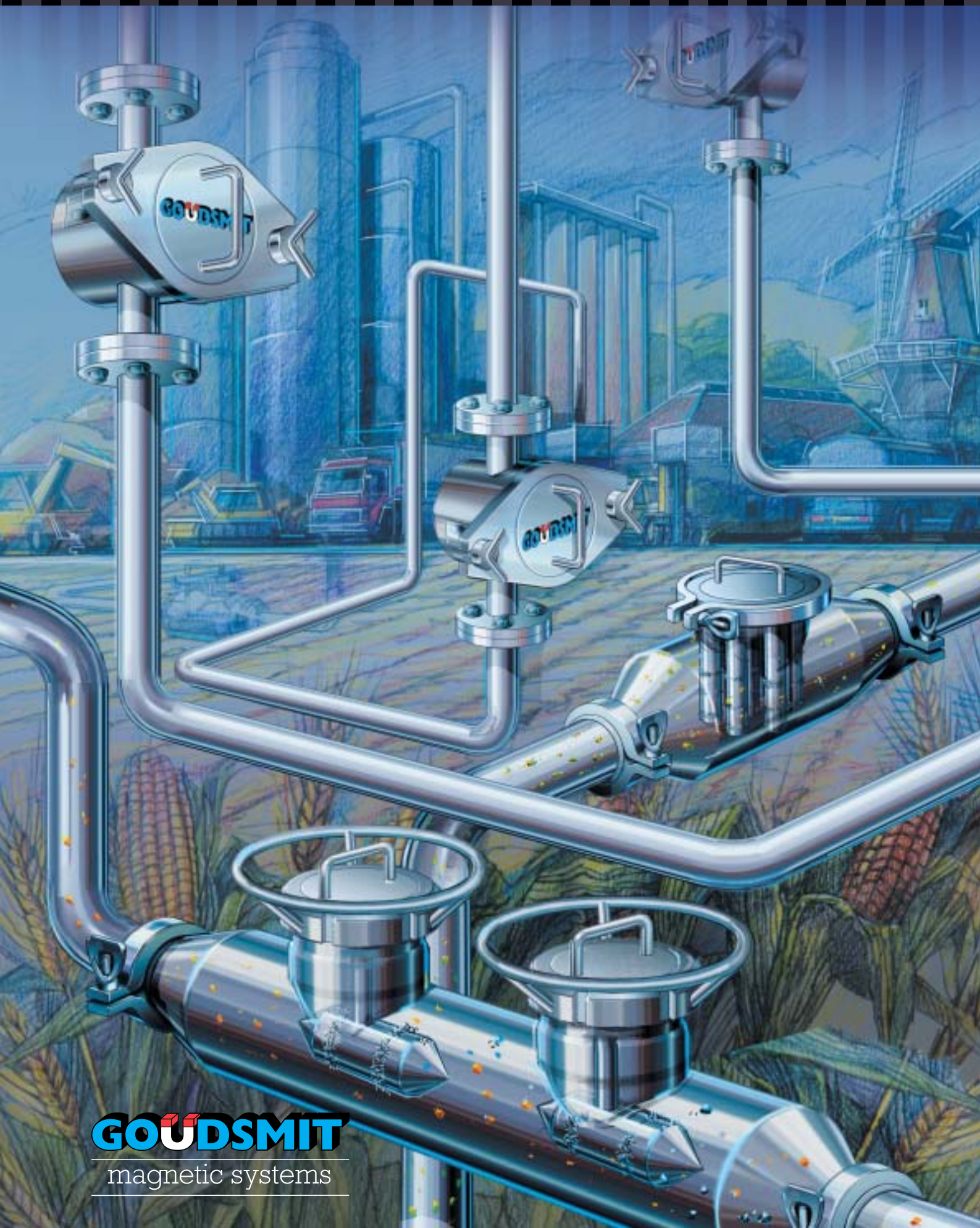
MAGNETIC FILTERS



GOUDSMIT
magnetic systems

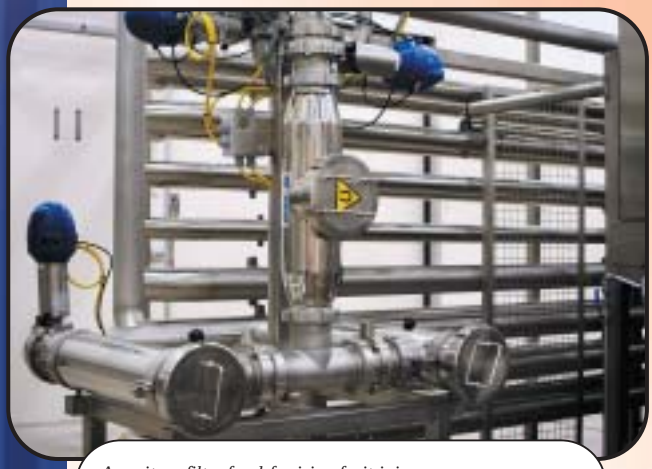
Goudsmit magnetic filters are able to remove ferrous particles of only 30 microns in size from fluids and powders transported under pressure. The filters have a wide range of applications to suit the needs of each industrial sector, but the principle is always the same. The powerful Neoflux® magnetic bars penetrate deep into the product so that they retain even the smallest ferrous particles. The bars can be removed from the product flow for cleaning by lifting the lid. Various tests have confirmed that the powerful GSN 50 magnet can also catch stainless steel scrapings. These particles are so small that they would even escape a metal detector.

CONTENT

MAGNETIC BARS

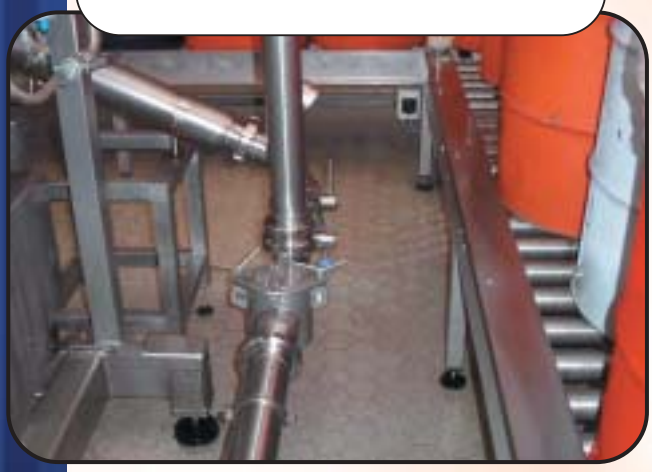
Magnetic bars are the basic filter components.

Quality	: Neoflux®
Dimensions	: Ø 23, fully waterproof
Material	: Stainless steel 316
Magnet material	: GSN 38, Br 12,400 Gauss GSN 50, Br 14,000 Gauss
Temperature	: max 80 °C (to 180 °C for the special model)



A sanitary filter for deferrising fruit juices.

A double sanitary filter for deferrising ketchup

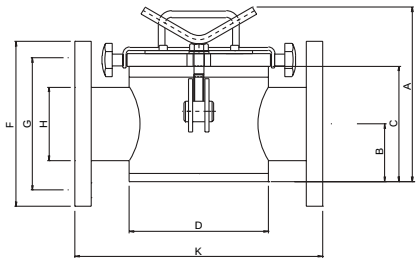


INDUSTRIAL MAGNETIC FILTER

Cleaning

Industrial magnetic filters are available with passage widths from DN 50 to DN 400 and are cleaned manually.
After opening the lid, the magnetic bars can be removed from the product flow as a single unit. You can then remove the bars from the stainless steel extractor case and let the iron fall out. Given that the weight of the lid (plus the magnets attached) exceeds a critical limit with larger passage widths, the followers from passage width DN 150 and beyond are fitted with lateral guides

Industrial filter	A	B	C	D	F	G	H	K	number of bars
SSFN005038	186	50	121	114,3	165	125	DN 50	230	4
SSFN006538	186	60	121	114,3	185	145	DN 65	230	4
SSFN008038	211,5	70	140	168,3	200	160	DN 80	300	7
SSFN010038	236	80	165	168,3	220	180	DN100	300	7
SSFN012538	265	100	195	168,3	210	250	DN125	300	7
SSFN015038	720	104	226	219,1	240	295	DN150	360	9
SSFN020038	720	140	285	273	340	295	DN200	460	11
SSFN025038	830	160	325	325	395	350	DN250	500	13



Magnetic filter in pneumatic transport pipeline for filling storehouses like e.g. for sugar, soy, flour, plastics, spices etc.

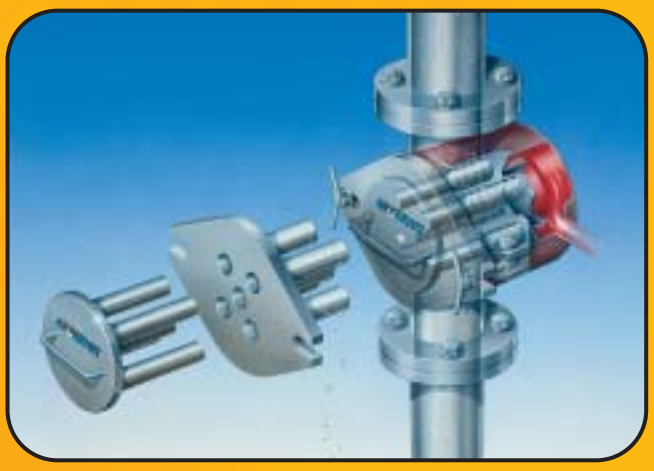
Technical data:

Magnets	: Neoflux® GSN 38
Br value	: 12,400 Gauss
Alternative	: GSN50
Br value	: 14,000 Gauss
Casing	: All stainless steel 316
Flanges	: DIN 2576 PN 10
Working pressure	: 10 bars, testing pressure: 15 bars
Temperature	: Standard 80 °C, (to 200 °C for the special model)

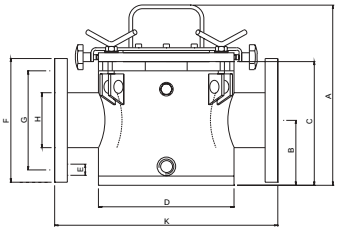
Industrial filter in a pneumatic conveying system, used for deferrising flour.

DOUBLE-WALLED INDUSTRIAL MAGNETIC FILTER

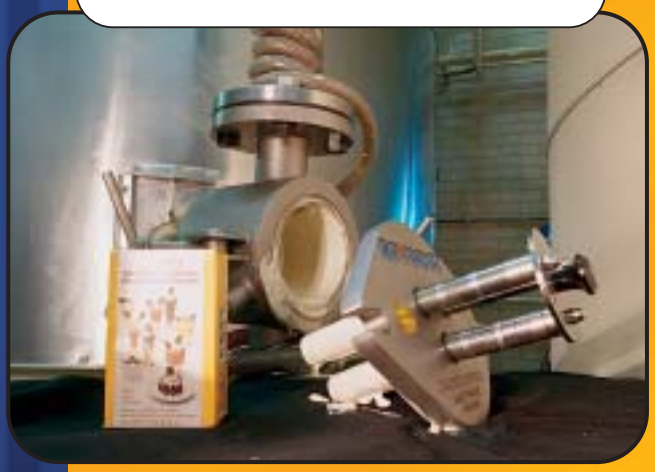
Double-walled filters are specially geared to the removal of ferrous particles from products that tend to coagulate, such as chocolate. The industrial filters used for this purpose are fitted with a double wall to allow a continuous flow of hot water so that the product stays liquid. Double-walled filters are cleaned just like ordinary industrial filters and tolerate a maximum pressure of 5 bar (3 bar in the case of hot water).



Industrial filter	A	B	C	D	E	F	G	H	K	number of bars
SSFD005038	229	99	164	D 168	D 18 (4x)	165	D 125	DN50	300	5
SSFD006538	234	99	164	D 168	D 18 (4x)	185	D 145	DN65	300	5
SSFD008038	280	105	189	D 219	D 18 (8x)	200	D 160	DN80	360	7
SSFD010038	280	109	189	D 219	D 18 (8x)	220	D 180	DN100	360	7



Magnetic filters used in chocolate production processes.



A double-walled magnetic filter is specially designed for products that tend to coagulate, such as chocolate.

SANITARY MAGNETIC FILTER

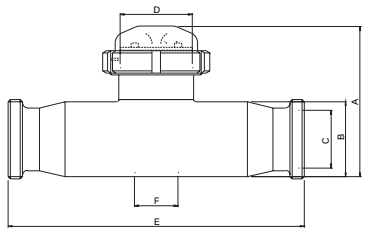
Model

Sanitary magnetic filters are available with passage widths from DN 25 to DN 125. Sanitary filters are cleaned manually just like ordinary industrial filters. The lid comes with a special stainless steel protective hood. The casing is suitable for applications in the food industry.

Technical data:

Magnets	: Neoflux® GSN38
Br value	: 12,400 Gauss
Alternative	: GSN 50
Br value	: 14,000 Gauss
Casing	: Complete stainless steel 316
Flanges	: DIN 11850
Working pressure	: 3 bar, testing pressure 5 bar
Temperature	: Standard 80 °C, (up to 200 °C for the special model)

Sanitary filter	A	B	C	D	E	F	number of bars
SSFM004038	175	85	NW 40	NW 80	426	D 50	3
SSFM005038	175	85	NW 50	NW 80	410	D 50	3
SSFM006538	175	85	NW 65	NW 80	330	D 50	3
SSFM008038	210	104	NW 80	NW100	410	D 60	4
SSFM010038	235	129	NW100	NW125	508	D 80	5
SSFM012538	265	154	NW125	NW150	500	D100	7



Double filter

The use of a double filter system provides extra security. The first filter removes all metallic particles and the second checks the product for any residues. This system is particularly common in food companies, where quality of the end product is a major priority in the light of tightened HACCP requirements.
(see pictures page 3)

Filter with special wire for extracting iron from course products.

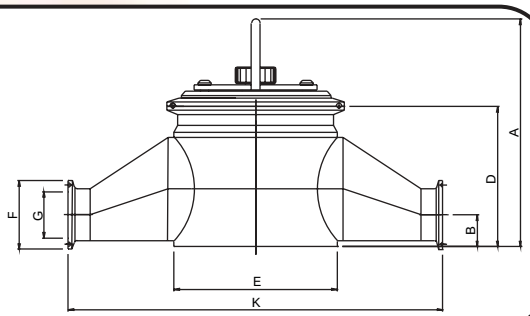
Magnetic filter in pneumatic transport pipeline removes Fe particles from milkpowder.

PHARMA MAGNETIC FILTER

Technical data:

Magnets	: Neoflux® GSN38
Br value	: 12,400 Gauss
Alternative	: GSN50
Br value	: 14,000 Gauss
Casing	: All stainless steel 316
Flanges	: ferrule
Working pressure	: 3 bar, testing pressure 5 bar
Temperature	: Standard 80°C (up to 200°C for the special model)
Finish	: Casing fully polished without any ''dead specks"
Application	: In processes subject to strict sanitary requirements

Pharma filter	A	B	D	E	F	G	K	number of bars
SSFJ004038	165	23	103	120	50,5	1,5 S	275	5
SSFJ005038	165	23	103	120	64	2 S	275	5
SSFJ006038	165	36	103	120	77,5	2,5 S	275	5
SSFJ007038	179	38	112	144	91	3 S	280	7
SSFJ010038	221	64	150	168	119	4 S	290	7



SELF-CLEANING MAGNETIC FILTERS

FOR LOTS OF IRON OR PLACES DIFFICULT TO ACCESS

The Goudsmit Neoflux® self-cleaning magnetic filter removes (extremely small) ferrous particles from liquid product flows. They are used, for example, in the chemical industry for deferrising pigments or varnishes, and in the ceramics industry for "cleaning" the glaze and preventing "black specks" .

Reiniging

Self-cleaning magnetic filters are cleaned on the basis of a PLC-controlled pneumatic system. For cleaning purposes, automatic valves ensure that both the filter input and output are locked. Another valve in the bottom of the filter then opens to allow the liquid to flow out of the filter container.

At the same time the magnetic cores inside the stainless steel tubes are blown upwards, out of the container. With the magnets in this position, there is no magnetic field and the ferrous particles are released. The stainless steel tubes are cleaned with a fine ultra-effective cleaning spray. After the cleaning process the magnetic filters re-enter the container, the drainage valve is closed and the filter input and output are opened. The entire cleaning cycle takes only 15 seconds.

The selfcleaning magnetic filter can be used when lots of Fe particles are to be expected. It saves time and money.

MAGNETIC FILTER WITH METAL DETECTOR

If the product contains non-magnetic components, we recommend installing a metal detector. This instrument detects metal particles and is connected to a valve which ensures the disposal of that part of the product that contains metals, without any interruption of the pressure or the production process. The disposal mechanism is designed to allow easy cleaning.

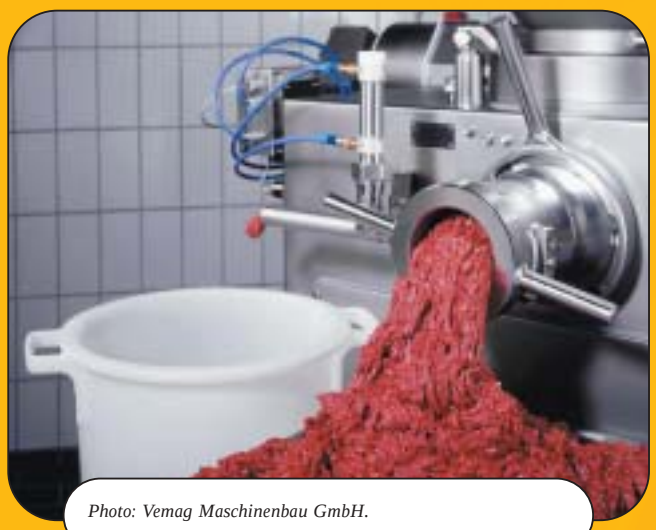
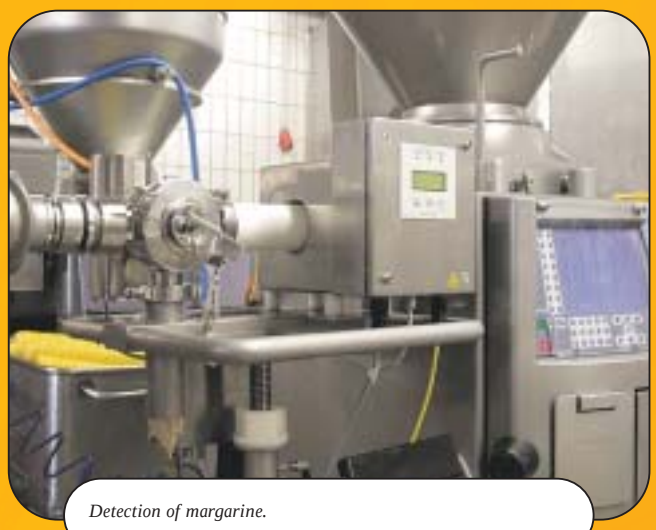


Photo: Vemag Maschinenbau GmbH.



Detection of margarine.

If the product has a high metal content, a detector alone will not suffice. We recommend installing a filter to prevent product loss, product liability problems and the loss of expensive packed products. (see photograph)

Metal detector on a support, used for the removal of non-magnetic particles.

Teamwork between three divisions

Behind the Goudsmit Group stand the divisions where various disciplines are housed. They are ready to supply fitting answers to all your questions about magnets.

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