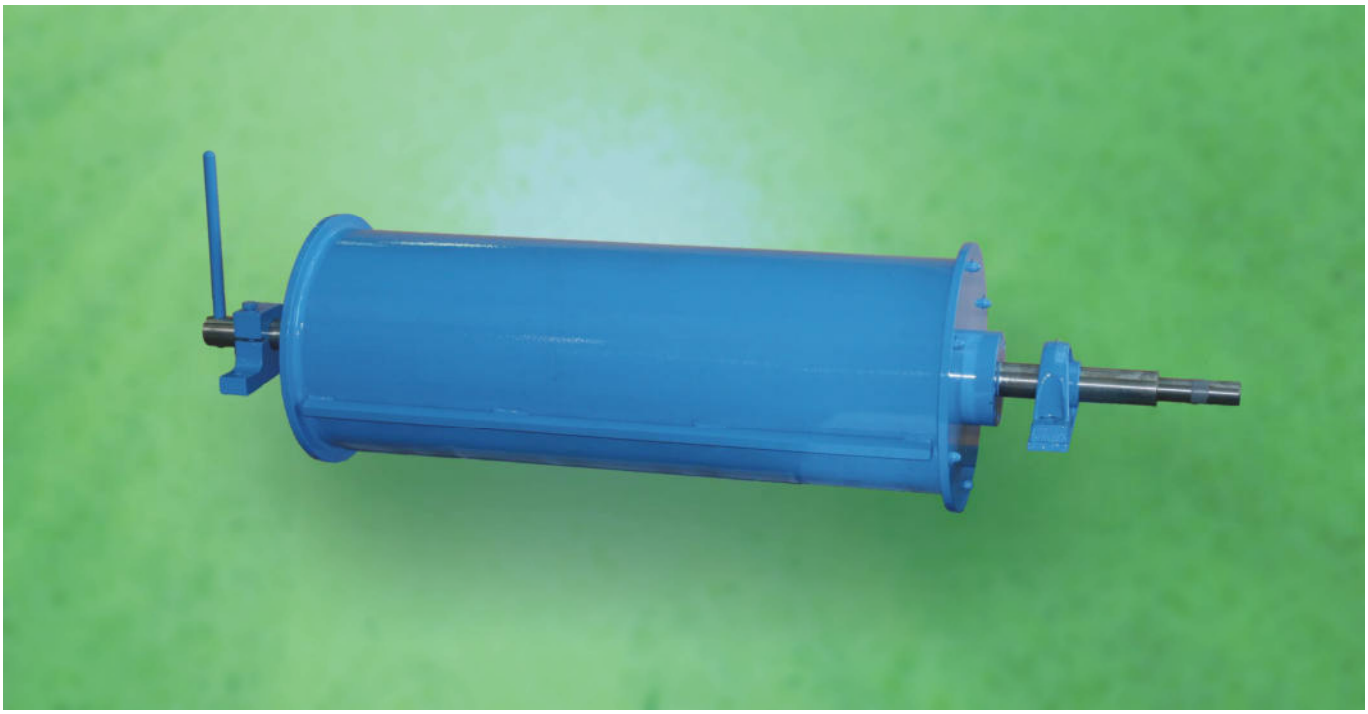
PERMANENT MAGNETIC DRUMS

L 0421 e

Recovery of raw materials
Protection of valuable machines



Technology Full of Attraction

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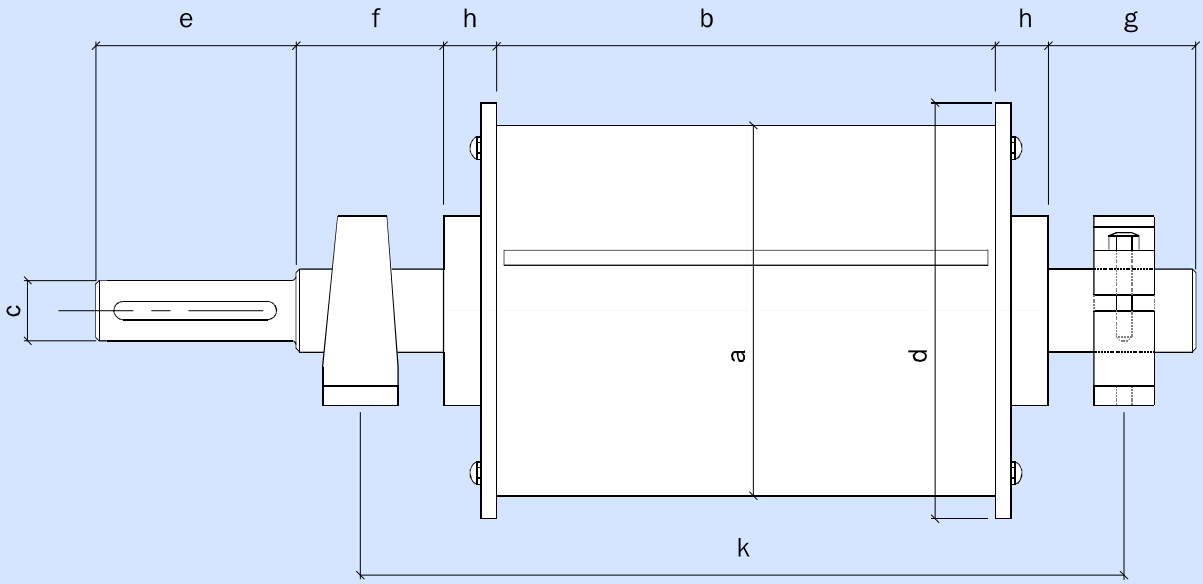
L 0421 e

PERMANENT MAGNETIC DRUMS

When selecting magnetic drums the relevant factors to be observed are the throughput, the size of the material and the shape of the ferrous parts. In general, the layer thickness and grain size should make up not more than one tenth of the drum diameter. In order for the magnetic drum to separate ferrous parts reliably from the flow of materials, the parts should hit the drum shell at little speed. We therefore recommend a continuous material supply by using a vibrating chute. By using neodym permanent magnets it is possible to create strong magnetic fields. Our neodym drums have proved their worth in many difficult fields of application and in the separation of poorly magnetizable alloys. Do not hesitate to contact us if you want to have tests with your materials carried out in our technical center.

DIMENSIONS AND TECHNICAL DATA							
type	revolutions 1/min	layer height mm	thorughput cbm/h	overall dimensions mm			weight kg
				length	width	height	
0421(N)-20/30	38-42	20-30	5 - 9	695	240	240	40
0421(N)-20/50	38-42	20-30	8 - 15	895	240	240	50
0421(N)-20/70	38-42	20-30	12 - 21	1095	240	240	60
0421(N)-20/90	38-42	20-30	15 - 27	1295	240	240	70
0421(N)-20/110	38-42	20-30	18 - 33	1495	240	240	80
0421(N)-20/130	38-42	20-30	22 - 39	1695	240	240	90
0421(N)-30/40	34-38	30-45	13 - 24	810	350	350	130
0421(N)-30/60	34-38	30-45	20 - 36	1010	350	350	160
0421(N)-30/80	34-38	30-45	27 - 48	1210	350	350	190
0421(N)-30/100	34-38	30-45	33 - 60	1410	350	350	220
0421(N)-30/120	34-38	30-45	40 - 72	1610	350	350	250
0421(N)-30/140	34-38	30-45	47 - 84	1810	350	350	280
0421(N)-40/50	28-32	40-60	25 - 45	1005	460	460	280
0421(N)-40/70	28-32	40-60	35 - 61	1205	460	460	320
0421(N)-40/90	28-32	40-60	45 - 78	1405	460	460	360
0421(N)-40/110	28-32	40-60	55 - 96	1605	460	460	400
0421(N)-40/130	28-32	40-60	64 - 113	1805	460	460	440
0421(N)-40/150	28-32	40-60	75 - 130	2005	460	460	480
0421(N)-50/60	22-26	50-70	37 - 63	1240	600	600	470
0421(N)-50/80	22-26	50-70	50 - 84	1440	600	600	540
0421(N)-50/100	22-26	50-70	62 - 105	1640	600	600	610
0421(N)-50/120	22-26	50-70	75 - 126	1840	600	600	680
0421(N)-50/140	22-26	50-70	87 - 147	2040	600	600	750
0421(N)-70/80	20-23	70-85	88 - 153	1555	820	820	900
0421(N)-70/100	20-23	70-85	110 - 191	1755	820	820	1000
0421(N)-70/120	20-23	70-85	132 - 229	1955	820	820	1100
0421(N)-70/140	20-23	70-85	154 - 267	2155	820	820	1200
0421(N)-80/100	18-21	80-95	130 - 223	1995	920	920	1280
0421(N)-80/120	18-21	80-95	157 - 265	2195	920	920	1400
0421(N)-80/140	18-21	80-95	183 - 313	2395	920	920	1520
0421(N)-80/160	18-21	80-95	196 - 335	2595	920	920	1640

We would be more than happy to help you select the right magnet separator for your purposes. Please give us a call or send us a fax or e-mail. A corresponding data sheet that can be downloaded and filled in can be found at: www.wagner-magnete.de



Changes of dimensions and design are subject to alternations!

DIMENSIONS AND TECHNICAL DATA

diameter a mm	magnet width b mm	c mm	d mm	e mm	f mm	g mm	h mm	k mm
205	300	20h6	240	100	88	115	45	460
205	500	20h6	240	100	88	115	45	660
205	700	20h6	240	100	88	115	45	860
205	900	20h6	240	100	88	115	45	1060
205	1100	20h6	240	100	88	115	45	1260
205	1300	20h6	240	100	88	115	45	1460
306	415	30h6	350	100	88	120	42,5	600
306	615	30h6	350	100	88	120	42,5	800
306	815	30h6	350	100	88	120	42,5	1000
306	1015	30h6	350	100	88	120	42,5	1200
306	1215	30h6	350	100	88	120	42,5	1400
306	1415	30h6	350	100	88	120	42,5	1600
406	515	35h6	460	125	102	135	62,5	731
406	715	35h6	460	125	102	135	62,5	931
406	915	35h6	460	125	102	135	62,5	1131
406	1115	35h6	460	125	102	135	62,5	1331
406	1315	35h6	460	125	102	135	62,5	1531
406	1515	35h6	460	125	102	135	62,5	1731
504	603	45h6	600	142	152	175	83,5	920
504	803	45h6	600	142	152	175	83,5	1120
504	1003	45h6	600	142	152	175	83,5	1320
504	1203	45h6	600	142	152	175	83,5	1520
504	1403	45h6	600	142	152	175	83,5	1720
712	805	45h6	820	140	172,5	227,5	107,5	1195
712	1005	45h6	820	140	172,5	227,5	107,5	1395
712	1205	45h6	820	140	172,5	227,5	107,5	1595
712	1405	45h6	820	140	172,5	227,5	107,5	1795
812	1005	60h6	920	180	167,5	222,5	112,5	1395
812	1205	60h6	920	180	167,5	222,5	112,5	1595
812	1405	60h6	920	180	167,5	222,5	112,5	1795
812	1605	60h6	920	180	167,5	222,5	112,5	1995

Ex The magnetic separators can also be delivered as devices protected against explosions according to ATEX 95 (RL94/9). For additional information, please see our I Ex-1 leaflet!

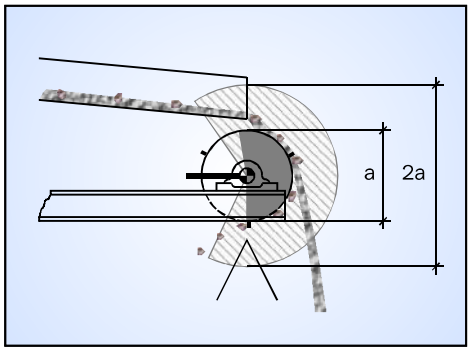
L 0421 e

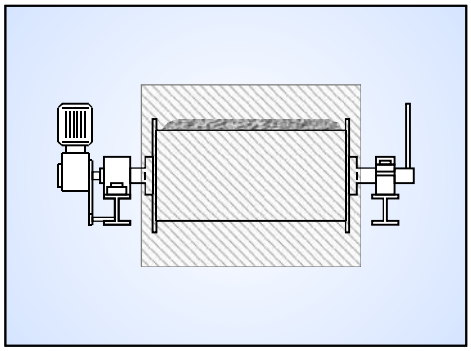
PERMANENT MAGNETIC DRUMS

Optimal for pourable bulk materials

Magnetic drums are mainly used for dry and pourable bulk materials in rotating drums. The fixed magnetic system provides an operating angle of approximately 180 degrees.

The ferrous parts attracted are transported to the end of the magnetic field by discharge rails, which are mounted to the bottom side of the rotating drum. The remaining transported material falls off according to its trajectory parabola.





Nonmagnetic area

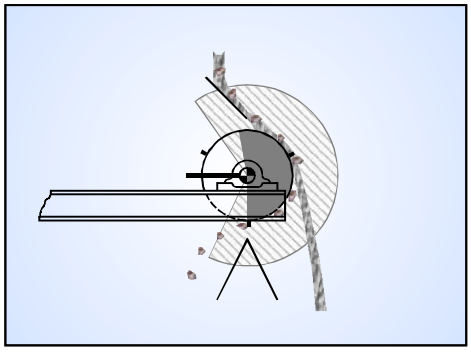
Within the hatched area no magnetizable constructional elements must be used, as otherwise the magnetic force of the magnets is reduced. In addition this may result in accumulation of ferrous materials on these constructional elements. And this will hamper the discharge of ferrous materials and lead to material back-ups. The diameter of the hatched area corresponds to twice the drum diameter. No magnetic field emerges on the front sides of the drum.

Neodym magnets for special requirements

FFor special requirements the Wagner magnetic drums are provided with heavy-duty neodymium material. This ensures high discharge rates even with less magnetizable ferrous parts.

These magnets have proven their worth also for separating smallest ferrous parts. Neodym magnets feature extremely high attractive forces in close-up range, but must only be used for temperatures of 80° C maximum.

Design:
Standard design with bearings
S-1: design without bearings
V2a: stainless steel drum case
SF: width flat instead of lever arm
SP: case with secondary poles
VSS: wear protection shell
0421N: neodymium magnetic drum



Constant material supply

The material to be conveyed should be fed evenly by using a vibrating chute. Alternatively, it may also be fed to the drum by using a nonmagnetic chute.

But pay attention to keep the rate of fall at a minimum. Otherwise, there is the risk that the material bounces back from the drum and the ferrous parts cannot be attracted safely.

Different magnet systems

The inside structure of the magnetic drum must be adjusted to the material to be conveyed and the ferrous parts to be separated. In this way the functioning of the magnetic drum with regard to depth action, separation rate, as well as product and ferrous purity can be controlled optimally. Depending on the case of operation we assure you to propose to you the most suitable magnetic system.

Our company has been DIN EN ISO 9001 certified since 1995. All magnet separators are manufactured and tested according to DIN VDE 0850 and correspond to CE and EMC regulations.