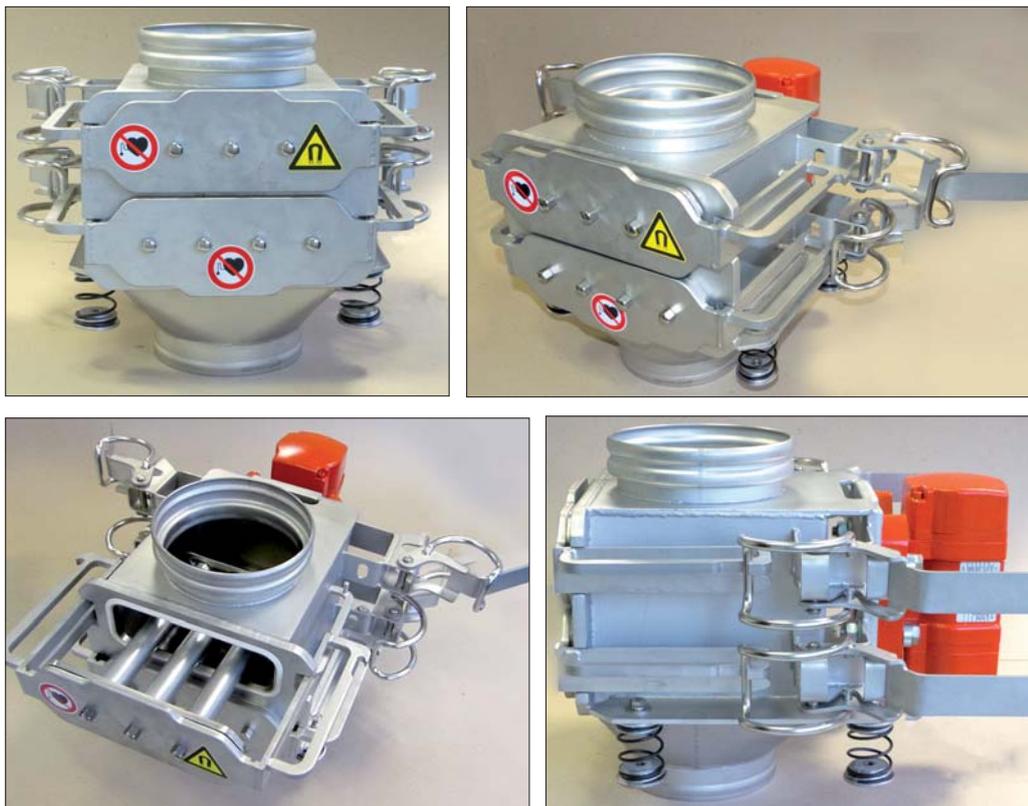


### VibraMag VMF

### Vibrating Magnetic Separator



**VIBRA MASCHINENFABRIK  
SCHULTHEIS GmbH & Co.**  
Im Großen Ahl 41 - 51  
D-63075 Offenbach am Main  
Phone +49 (0)69/86 00 03-0  
Fax +49 (0)69/86 00 03 45

**RS MAGNETE GmbH**  
Quellenweg 4  
D-87700 Memmingen  
Phone +49(0)8331/96 11 90-0  
Fax +49(0)8331/96 11 90-9

## VibraMag EasyClean

### Applications:

If a bulk material from which magnetizable particles must be removed has a tendency to bridge or cake, VibraMag systems provide an effective solution. Milk, cocoa, and starch powder are three typical applications.

### Description of functions:

The VibraMag system is mounted on steel springs and made to vibrate by an eccentric motor fastened to the housing. The intensity of the vibrating motion can be adapted to the specific characteristics of the product. The vibration of the VibraMag housing and the magnetic filter bars attached inside it ensures that any magnetizable contaminants are reliably removed from the product, even if it has poor flow properties, as it passes through the magnetic stages.



### Product requirements:

The bulk material to be monitored must be dry and free flowing.

### Housing:

Material:	Stainless steel 1.4301
Surface	
Outside:	Blasted with ceramic beads
Inside:	Smoothed with 180 µm grain
Connection:	Packings (other designs subject to agreement)

### Magnet type:

High energy neodymium magnets that remove even the finest metal contaminants are used.

### Magnetic material:

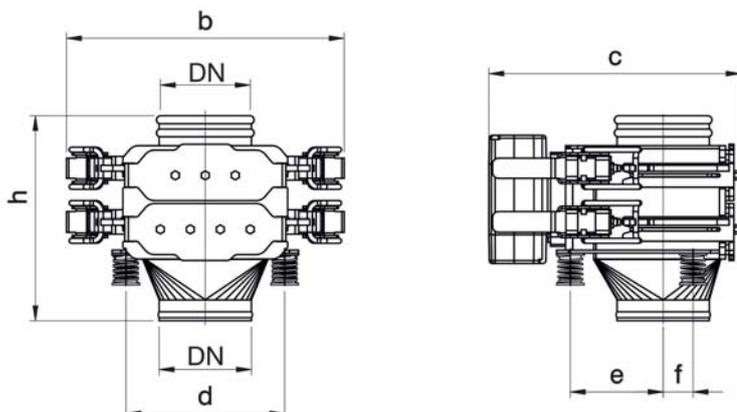
Energy product:	max. 342 kJ/m <sup>3</sup>
Coercive force (H <sub>cJ</sub> ):	> = 876 kA/m
Remanence (B <sub>R</sub> ):	max. 1370 mT
Active surface:	approx. 1000 mT
Operating temperature:	max. 80°C



### Description of the machine:

The VibraMag system consists of a vibration resistant housing with a rear-mounted unbalanced motor. Inside the machine are two rows of magnetic filter bars one above the other in a staggered arrangement.

The bars are fastened to two separate, handhold units in order to reduce the weight that must be moved by the operator. The handles on either side of the withdrawable units are positioned at the center of gravity for easier transport after the unit has been removed. There are no other obstructions inside the housing apart from the magnets, so that the machine is very simple to clean!



Type VMF	No. of magnetic bars		b	c	d	e	f	h	kg
	DN								
NW 150	150	3+4	464	421	265	155	50	344	33,8
NW 200	200	4+5	514	466	315	157	75	344	40,5
NW 250	250	5+6	564	534	365	200	100	344	49,5
MW 300	300	6+7	614	601	415	232	135	344	60,2

Owing to the position of the magnetic filter bars, it is virtually impossible for magnetizable particles to pass through the housing without coming into direct contact with a magnetically active surface on their way through the magnetic system. The complete interior of the housing is monitored homogeneously.

### Cleaning:

The plug-in units can be cleaned by opening the quick-release clamps and sliding the units out of the housing on the guide rails. The operator does not have to carry the weight of the units until they are almost fully removed. Two handles are provided at the center of gravity on either side of the units for easier transport.

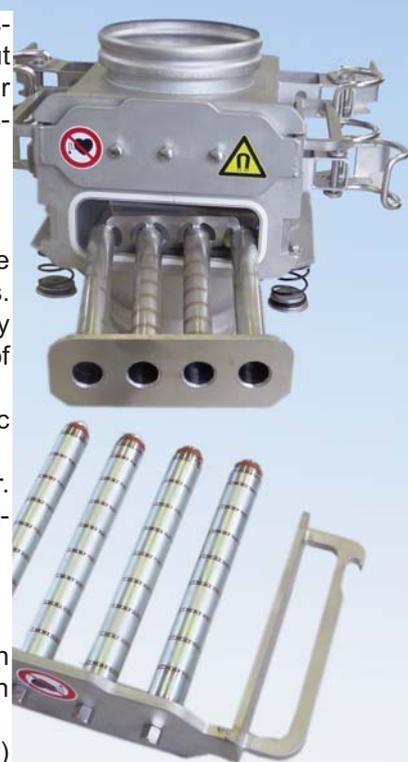
The EasyClean unit can then be removed from the magnetic insertion outside of the product area.

All metal particles picked up by the magnets remain on the scraper. They either drop off on their own or can be wiped off without difficulty.

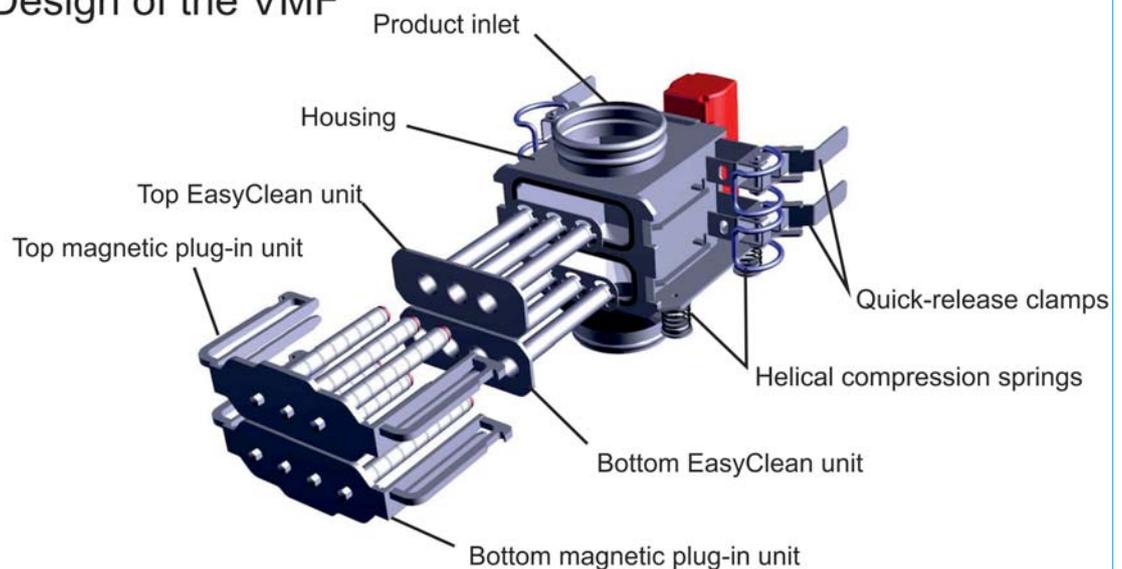
### ATEX:

VibraMag systems have been tested for freedom from ignition sources together with the IBExU (Institute for Safety) in Freiberg in accordance with EU Directive 94/9/EC.

All machines are also suitable for use in ATEX Zone 20 (dust) provided the design is adapted accordingly.



### Design of the VMF



A joint product of

**VIBRA MASCHINENFABRIK  
SCHULTHEIS GmbH & Co.**

Im Großen Ahl 41 - 51  
D-63075 Offenbach am Main  
Phone +49 (0)69/86 00 03-0  
Fax +49 (0)69/86 00 03 45  
Internet: <http://www.vibra-schultheis.com>  
E-mail: [info@vibra.de](mailto:info@vibra.de)

**RS MAGNETE  
GmbH**

Quellenweg 4  
D-87700 Memmingen  
Phone +49(0)8331/96 11 90-0  
Fax +49(0)8331/96 11 90-9