

SCHMIDT

PMB 2400

Airport Permanent Magnet Bar



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The PMB 2400 was developed for clearing airport runways, taxiways and aprons. With an operational width of 2,400 mm and a field density of ca. 300 Gauss, it reliably collects metal objects at a ground clearance of approx. 100 mm.

Construction and Technology

The PMB consists of four components: the magnet system with its upper cover, two parallelograms with lifting/lowering cylinders, as well as, a mounting plate. The PMB 2400's magnet system is powerful and very easy to operate. The strongest magnetic fields are directed downwards while the magnet fields to the side and upwards are considerably weaker. This helps that magnet field restriction limits for the protection of people are strictly adhered to. The permanent magnet bar is smoothly guided over the road surface by two castor wheels. It was developed to be front-mounted on medium and large carrier vehicles. This makes it ideally suited to the airport sweeper AS 990, for example. The permanent magnet bar is mounted to the mounting plate of the carrier vehicle by a quick-change device. This means that it can be mounted or de-mounted within a few minutes. Mounting on size 3 or size 5 vehicle mounting plates is no problem.

In Operation

The PMB 2400 has a working width of 2,400 mm. The operating distance to the ground is approx. 100 mm. The magnet bar's flux density reaches ca. 300 Gauss. With this magnetic force, it reliably collects typical stray metal objects such as nails, screws, bolts and split pins from airport runways, taxiways and aprons. The metal objects are attracted and remain hanging on the underside of the magnet's stainless steel bar when the PMB drives over them. This prevents the objects from coming into direct contact with the magnet. The stainless steel bar is not magnetisable but the magnet's field lines easily pass through it. The magnet bar can be hydraulically raised by the vehicle independ-

ent electrohydraulic system. The transport position is attained by the lifting/lowering cylinders. Ground clearance during transport depends on the individual carrier vehicles. In the transport position, the stainless steel bar can be swung downwards away from the magnet. This way, the foreign objects on the underside of the stainless steel bar escape the magnet's pull and fall off. Afterwards, they can be deposited at the airport's waste management area. Maintenance of the PMB 2400 is limited to damage inspection and possibly the lubrication of the flexible parts.

Technical Data

Working width	2,400 mm
Drive unit	vehicle hydraulics or electrohydraulics
Mounting	on the vehicle mounting plate
Weight	approx. 350 kg
Field density	300 Gauss with a ground clearance of 100 mm

Subject to technical changes without notice!

