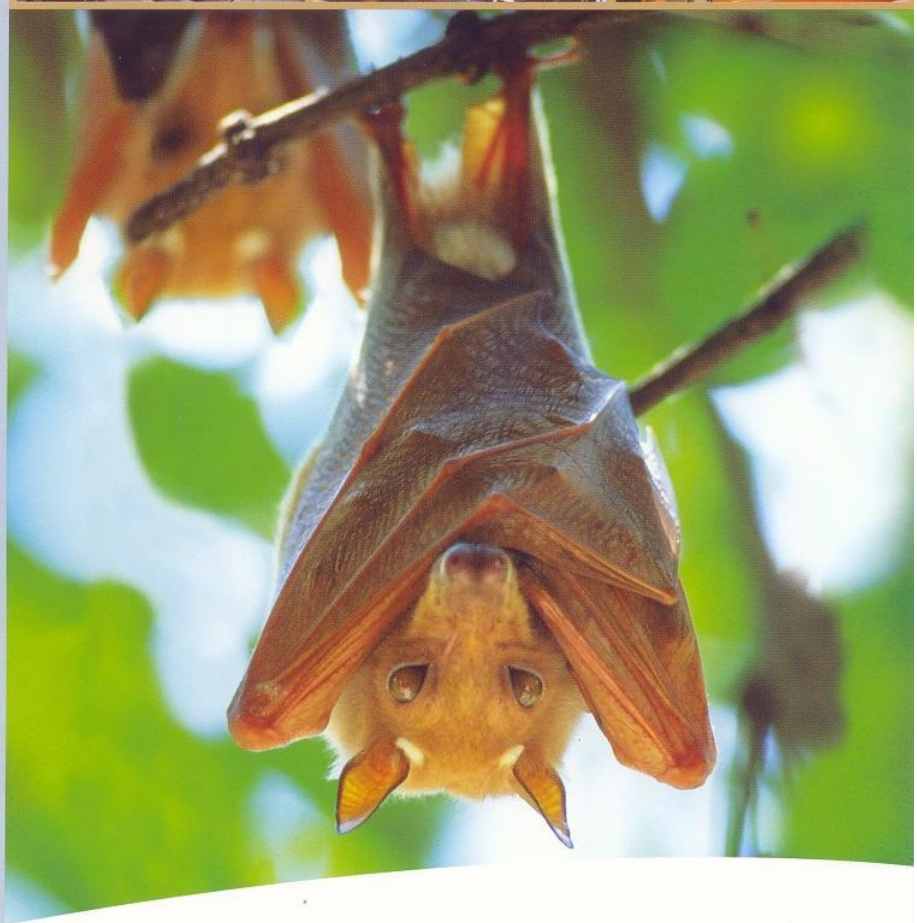
Palletising magnets

lift tins, cans, aerosols and twist-off caps in one go!

Magnetic conveying systems



English

GOUDSMIT
MAGNETIC CONVEYING SYSTEMS

Palletising
magnets

The bat or chiropteran hibernates for 5 months during which it hangs quietly upside down from its hind legs. During hibernation, it does not suffer from muscle cramp, because it has a special "locking mechanism" in its muscles, which look a little like two ribbed vacuum cleaner hoses inserted one inside the other. The ribbing on the inner muscle fits into the ribbing on the outer muscle locking the two together. Goudsmit palletising magnets use magnetic forces to hold cans and jars with twist off caps lids in a suspended position without risks. Without requiring a power supply, a layer of products will remain suspended as long as you want, but it will of course have to be moved during the production process. A sophisticated guide mechanism ensures that your products are picked up and deposited smoothly and quickly.

(1) One of the four palletising magnets used at Johnson Wax in the Netherlands for depalletising aerosols on filling lines.

(2) Palletising tins of syrup; a special micropole Neoflux® magnet system holds the tins in a stable position by the bulge in the filling opening.

Applications

For palletising or depalletising:

- Empty steel cans and aerosols.
- Filled and closed steel cans.
- Filled glass jars with steel twist caps.

Please contact Goudsmit Magnetic Systems for advice on other product dimensions.

Goudsmit Magnetic Conveying Systems develops magnetic transport systems for both the can-maker and can-filler markets. Goudsmit bases the way in which it cooperates with its customers on years of experience and an innovative work method and approach. The specific wishes and requirements of the customer are used in this respect as the starting point for developing tailored solutions.

PERMANENT MAGNET SYSTEM, AVAILABLE IN 5 DIFFERENT POLE DESIGNS:

POOL TYPE	PALLETISING TYPE NUMBER	MAGNET SYSTEM POLE DESIGNS	APPLICABLE FOR	DIMENSIONS
A	TP A-------	Ferrite course pole	Empty cans	Min. ø 73 mm to 180 mm high Max. ø 233 mm to 280 mm high
B	TP B-------	Ferrite fine pole	Empty aerosols	Min. ø 48 mm to 220 mm high Max. ø 65 mm to 320 mm high
			Empty cans	Min. ø 44 mm to 250 mm high Max. ø 83 mm to 350 mm high
C	TP C-------	Neoflux® course pole	Standard filled cans	Min. ø 83 mm to 0,5 kg Max. ø 99 mm to 1 kg
M	TP M-------	Neoflux® medium pole	Large filled cans	Min. ø 65 mm to 0,6 kg ø 99 mm to 1,3 kg Max. ø 153 mm to 3 kg
			Filled jars with RTO twist cap	Twist cap ø 56 mm to 0,45 kg Twist cap ø 82 mm to 1,1 kg
F	TP F-------	Neoflux® fine pole	Extra large filled cans	Min. ø 52 mm to 0,45 kg ø 99 mm to 1,8 kg Max. ø 233 mm to 10 kg
			Large filled jars with RTO twist cap	Twist cap ø 34 mm to 0,45 kg Twist cap ø 42 mm to 0,85 kg Twist cap ø 56 mm to 1,1 kg Twist cap ø 82 mm to 2,2 kg Twist cap ø 110 mm to 4,0 kg

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(3) Special magnetic chuck for use in a robot arm that packs filled tins of syrup in boxes of six. The multipole Neoflux® system firmly grips each tin with a force of approx. 100 N.

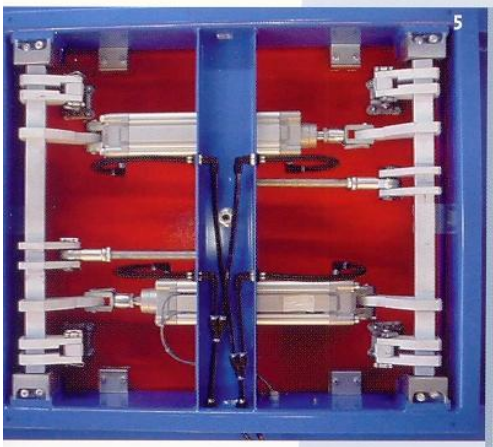
(4) Palletising magnet ready for shipment.

Goudsmit Magnetic Conveying Systems continually focuses on developing new products and implementing product improvements. In this way, the company effectively caters to the wishes and requirements of clients. This innovative approach and work method is underlined by the in-house engineering, fabrication, assembly and test facilities.

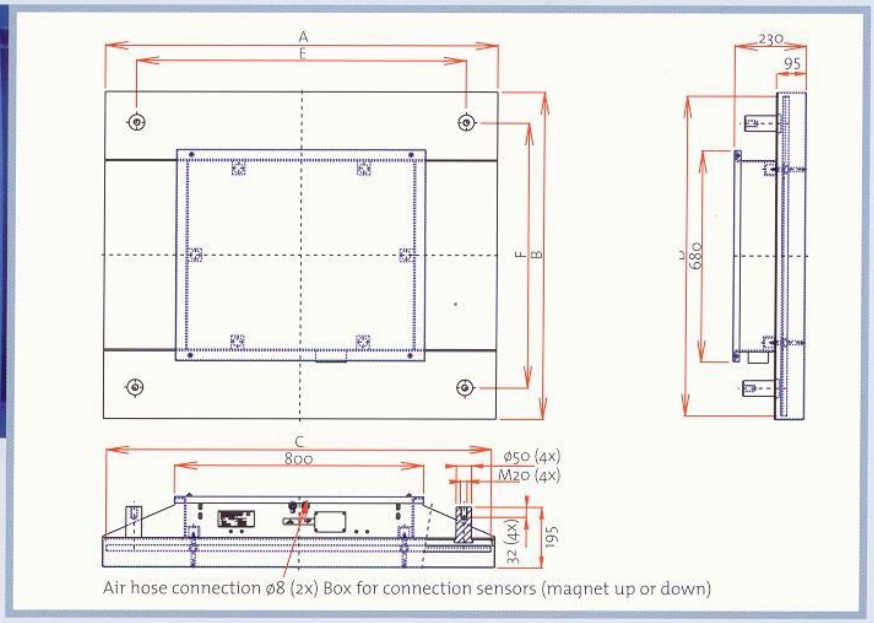
Palletising
magnets

Properties

- Completely sealed housing to keep out dirt and water so that the magnetic working remains guaranteed.
- Contact surface made of 2 mm stainless steel plating with additional reinforcement to guarantee effective magnetic contact with cans or jars.
- The entire internal magnet system is encased in stainless steel plating and sealed with PU resin for optimum protection against corrosion.
- Safe – if there is a loss of air pressure, no cans or jars will fall off the palletising magnet – they can be held magnetically in position permanently.
- Improved double-working "ON – OFF" system with a parallel linked guide mechanism operated by two pneumatic cylinders. This mechanism guarantees effective operation, even if the palletising magnet is only partially loaded with cans (see photo 3).
- Easy to connect with two air hose couplings Ø 8mm, use a 5/2 or 5/3 valve.
- Fitted with two sensors and a terminal box for the magnet. "ON" and "OFF" signalling.
- Easy to maintain; once you have removed the cover on the inspection hatch on the top, you can access and service the entire operating mechanism.
- The permanent magnet system works without a power supply.



5) After the cover has been removed, the inspection hatch provides easy access to the guide mechanism.



Air hose connection ø8 (2x) Box for connection sensors (magnet up or down)

DIFFERENT MODELS ARE AVAILABLE FOR 3 STANDARD PALLET SIZES

PALLET SIZE [mm] [mm]	TYPE NUMBER	PALLETISER HOUSING EXTERNAL DIMENSIONS A [mm]	B [mm]	MAGNETIC CHUCK INTERNAL DIMENSIONS C [mm]	D [mm]	ATTACHEMENT POINTS 4X M20 E [mm]	F [mm]
1200 x 800	TP --1208--	1250	850	1226	826	1050	700
1200 x 1000	TP --1210--	1250	1050	1226	1026	1050	850
1420 x 1120	TP --1411--	1470	1170	1446	1146	1270	970

Please contact Goudsmit Magnetic Systems for advice on other pallet dimensions.

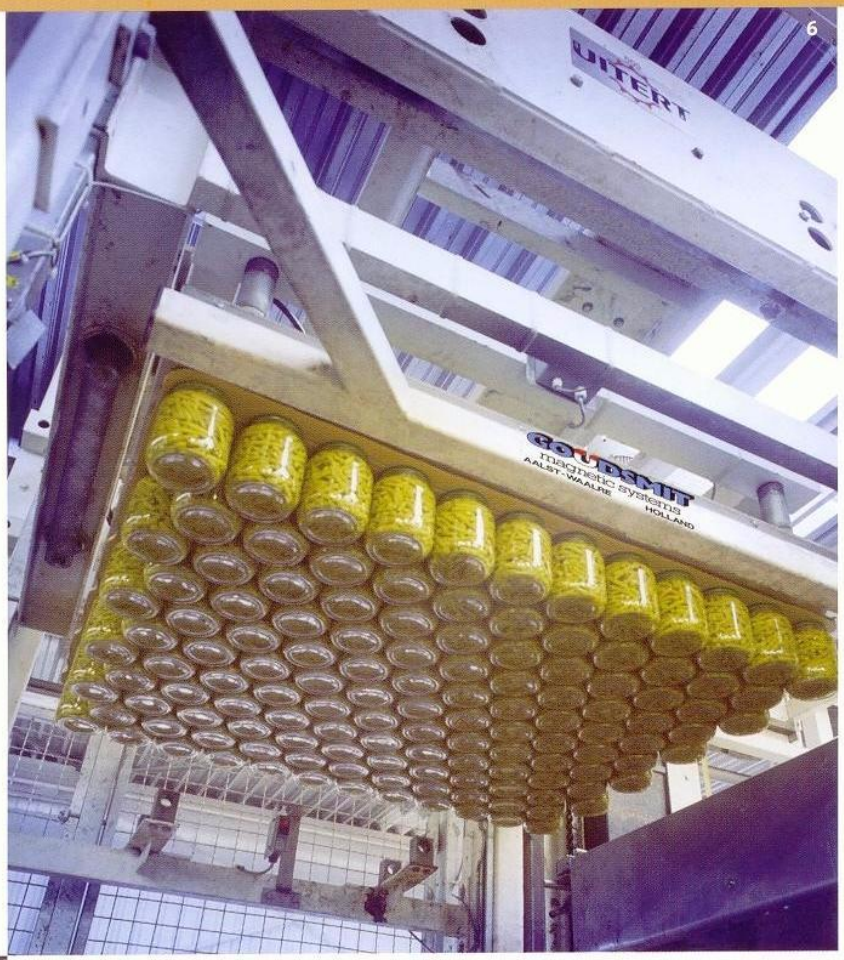
Palletising magnets

Productionprogramme

Various models of Goudsmit palletising magnets are available:

- *Standard model with housing in mild steel.*
- *Sanitary model complete executed in stainless steel.*

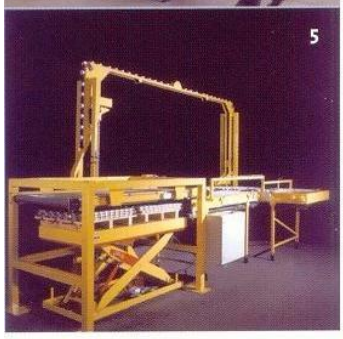
Most of these models are optionally available with an integrated vacuum system with 8 suction cups to handle the sheets between layers of cans.



(4) A manually operated palletising magnet in use. With a manipulator, pallets can easily be repacked. The complete system is available on request.

(5) Goudsmit also supplies customised solutions, for example in the form of this complete depalletising system for feeding cups to a deep drawing press.

(6) Palletising magnets handling filled glass jars and bottles in a preserved foods factory. Jars weighing as much as 5 kg can be picked up quickly and safely.

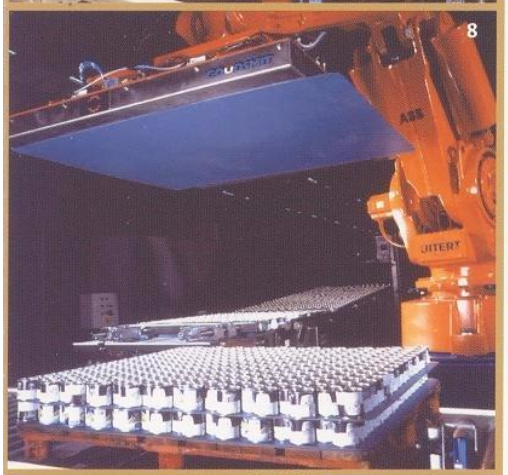


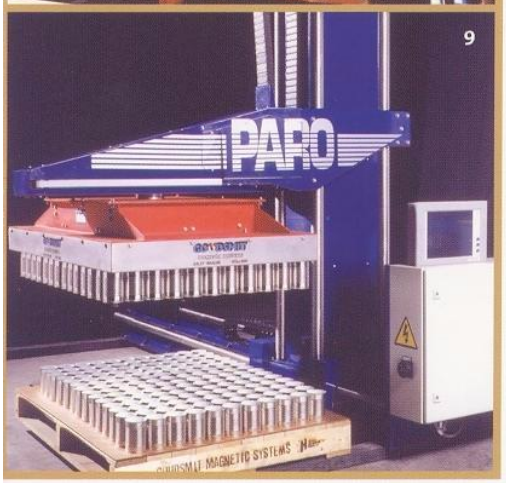
PALLET SIZE [mm]	MAGNET SYSTEM POLE DESIGNS	TYPE NUMMER STANDARD MODEL MADE OF MILD STEEL NO VACUUM	WITH VACUUM SYSTEM	SANITARY MODEL MADE OF STAINLESS STEEL NO VACUUM	WITH VACUUM SYSTEM	TOTAL APPROX. WEIGHT	WORK PRESSURE
1200 x 800	Ferrite course	TPAC 120852	TPAC 120853	TPAS 120854	TPAS 120855	260 kg	3 bar
	Ferrite fine	TPBC 120852	On demand	TPBS 120854	On demand	280 kg	3,5 bar
	Neoflux ® course	TPCC 120852	TPCC 120853	TPCS 120854	TPCS 120855	260 kg	3,5 bar
	Neoflux ® medium	TPMC120852	TPMC120853	TPMS 120854	TPMC120855	270 kg	4 bar
	Neoflux ® fine	TPFC 120852	On demand	TPFS 120854	On demand	280 kg	4 bar
1200 x 1000	Ferriet course	TPAC 121052	TPAC 121053	TPAS 121054	TPAS 121055	300 kg	4 bar
	Ferriet fine	TPBC 121052	On demand	TPBS 121054	On demand	330 kg	4,5 bar
	Neoflux ® course	TPCC 121052	TPCC 121053	TPCS 121054	TPCS 121055	300 kg	4,5 bar
	Neoflux ® medium	TPMC121052	TPMC121053	TPMS 121054	TPMS121055	315 kg	5 bar
	Neoflux ® fine	TPFC 121052	On demand	TPFS 121054	On demand	330 kg	5 bar
1420 x 1120	Ferriet course	TPAC 141152	TPAC 141153	TPAS 141154	TPAS 141155	380 kg	5 bar
	Ferriet fine	TPBC 141152	On demand	TPBS 141154	On demand	420 kg	5,5 bar
	Neoflux ® course	TPCC 141152	TPCC 141153	TPCS 141154	TPCS 141155	380 kg	5,5 bar
	Neoflux ® medium	TPMC141152	TPMC141153	TPMS 141154	TPMS141155	400 kg	6 bar
	Neoflux ® fine	TPFC 141152	On demand	TPFS 141154	On demand	420 kg	6 bar

Please contact Goudsmit Magnetic Systems for advice on other pallet dimensions.

ROBOT APPLICATIONS

Goudsmit has developed a lightweight palletising magnet with an aluminium housing for high speed robot applications. The robot palletising magnets are optionally available with an integrated vacuum system with 8 suction caps to handle the sheets between the layers of cans. NB: always check the maximum weight per can/jar that has to be handled together with Goudsmit engineers.





PALLET SIZE [mm]	MAGNET SYSTEM POLE DESIGNS	TYPE NUMMER LIGHTWEIGHT MODEL IN ALUMINIUM NO VACUUM	WITH VACUUM SYSTEM	TOTAL APPROX. WEIGHT	WORK PRESSURE
1200 x 800	Ferriet course	TPAA 120856	TPAA 120857	150 kg	3 bar
	Ferriet fine	TPBA 120856	On demand	170 kg	3,5 bar
	Neoflux® course	TPCA 120856	TPCA 120857	150 kg	3,5 bar
	Neoflux® medium	TPMA 120856	TPMA 120857	160 kg	4 bar
	Neoflux® fine	TPFA 120856	On demand	170 kg	4 bar
1200 x 1000	Ferriet course	TPAA 121056	TPAA 121057	190 kg	4 bar
	Ferriet fine	TPBA 121056	On demand	220 kg	4,5 bar
	Neoflux® course	TPCA 121056	TPCA 121057	190 kg	4,5 bar
	Neoflux® medium	TPMA 121056	TPMA 121057	205 kg	5 bar
	Neoflux® fine	TPFA 121056	On demand	220 kg	5 bar
1420 x 1120	Ferriet course	TPAA 141156	TPAA 141157	220 kg	5 bar
	Ferriet fine	TPBA 141156	On demand	260 kg	5,5 bar
	Neoflux® course	TPCA 141156	TPCA 141157	220 kg	5,5 bar
	Neoflux® medium	TPMA 141156	TPMA 141157	240 kg	6 bar
	Neoflux® fine	TPFA 141156	On demand	260 kg	6 bar

Please contact Goudsmit Magnetic Systems for advice on other pallet dimensions.

(7) This 6-axle robot with a lightweight palletising magnet can palletise and depalletise 1200 filled cans per minute.

(8) With the integrated vacuum system, the palletising magnet can also pick up the sheets between product layers.

(9) On a filling line with a capacity of 400 cans per minute, the tins are supplied by a lightweight aluminium palletising magnet suspended from a compact portal robot.

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ISO gecertificeerd: Nr. 653438

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