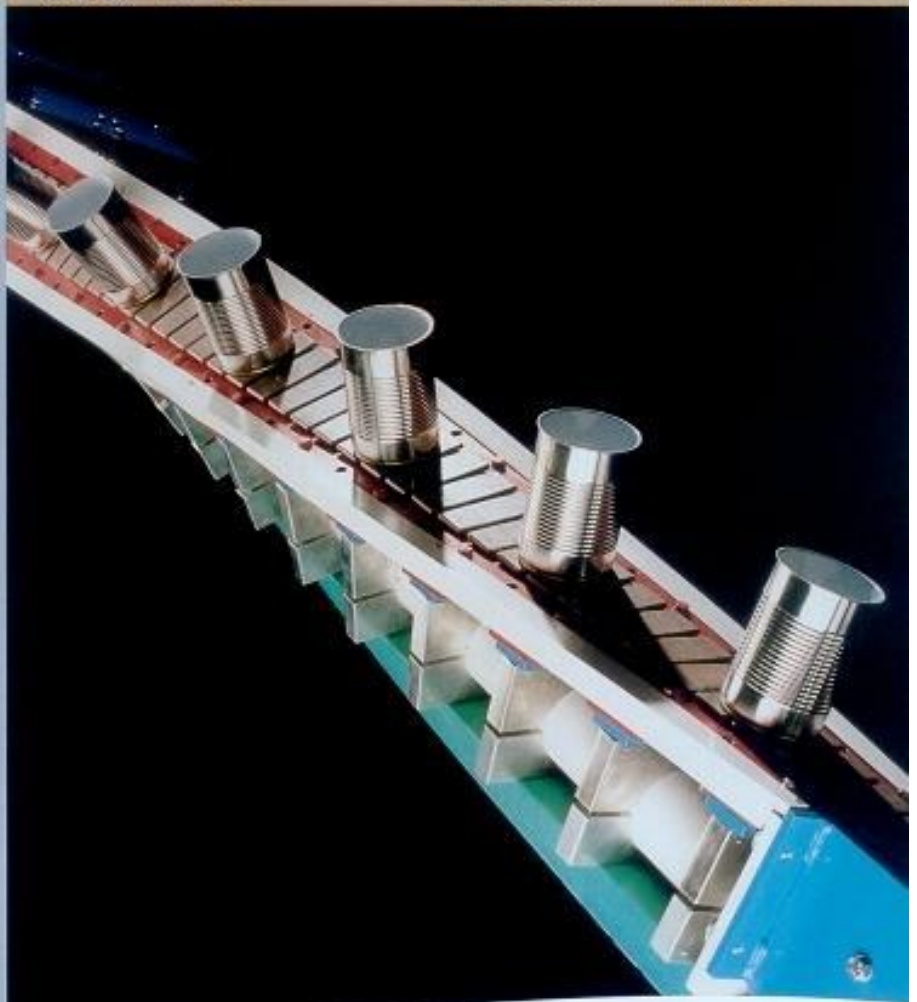


Magnetic Conveying Systems and components for industrial applications:

# Magnetic conveying systems



E n g l i s h

**GOUDSMIT**  
MAGNETIC CONVEYING SYSTEMS

The Goudsmit Magnetics Group is active in the field of magnetism on a world-wide basis for various industries. With around 45 years of experience, Goudsmit has now grown into the most significant manufacturer/producer and supplier of magnetic materials. The Magnetic Conveying Systems division is specialised in the transportation of all ferrous products for the tin can, canned goods, metal and steel goods and automotive industries.

# Magnetic g-lowerator



The speciality of Goudsmit G-lowerator is the bridging of level differences. The bottom of the can is held in place, allowing the various can heights to be used without reprogramming the system.

The innovative and dependable G-lowerator guarantees a quick and smooth operating process, which also means that transport is run extremely effectively and efficiently.

*Goudsmit Magnetic Conveying Systems is oriented towards the design, fabrication, placement in the market, application and maintenance of magnetic transport systems. With its tailor-made solutions, Goudsmit is able to smartly anticipate the wishes and needs of its clients. Goudsmit Magnetic Conveying Systems also offers solutions for the supply of individual magnet components.*

## Magnetic components

### rails, rollers and specials



- (1) The Goudsmit G-lowerator
- (2) The feed worm places products at exactly the same distance from one another.
- (3) The side-transfer transports products from one conveyor belt to the other.



In addition to complete transport systems, Goudsmit also supplies individual, flexibly usable, stainless steel components that are excellent for application in a self-constructed transport system. With this, both ferrite and Neoflux® (Neodymium-Iron-Barium) magnets are used. Special components for specific applications are produced exactly in accordance with your specifications.

- (1) Individual components in varying shapes and magnetic strengths.
- (2) Magnet rollers are available in miscellaneous variations, polar divisions and strengths.
- (3) Magnetic plates for conveying steel belt material in vehicle tyre production machines.
- (4) Diabolic rollers for transporting pipes and tubes.
- (5) Miniature Neoflux® components with extremely precise magnetic strength for the high-tech industry.



*Goudsmit Magnetic Conveying Systems develops magnetic transport systems for both the Can makers and Can filler markets. Goudsmit bases the cooperation with its clients on years of experience and an innovative operating procedure and school of thought. The specific wishes and requirements of the client for the basic principle in this respect.*

# Palletising magnets



- (1) 6-Axis robot with lightweight aluminium palletising magnet for filled tin cans.
- (2) Compact portal robot with palletising magnet for empty tin cans.
- (3) Identical robot installation to that in the photo on the left. However, the integrated vacuum suction cups with which the intermediate skins are taken out of the storage bunker are now visible.
- (4) Palletising magnet for moving aerochocs.
- (5) The palletising magnet with flexi-hoister for manual transport of filled cans.



Transportation with a palletising magnet is a speciality in itself. Owing to its sophisticated, lightweight construction, the aforementioned robot has a tilting and palletising capacity of as much as 1200 cans a minute and optimal transport is therefore realised. The unique aspect here is that this palletising magnet also takes up the intermediate skins between the tin layers. Considerable gaining of time is subsequently realised by way of this quick and efficient method of transportation.

*A highly effective transport system is indispensable in an economical climate in which everything is about efficiency and alert reaction to wishes and signals from the market. Goudsmit Magnetic Conveying Systems strongly anticipates this with innovative magnetic transport systems.*

## Mat conveyors

single line and mass

- (1) Top view of the Mat conveyor with lexan cover plates.
- (2) Buffer table with glass turntable to avoid damage to products.
- (3) Mass belts with negative bends.
- (4) Horizontal bends can be created with a plastic mat.
- (5) Side transfer for transfer from one conveyor to the other.



It is nowadays almost impossible to imagine life without transport by way of Mat conveyors. A transport speed of as much as 180 metres per minute means that you are assured of speed and flexibility. Application of modular mat belts means that the conveyors are maintenance-friendly and replacement or

modification is significantly less expensive and time-consuming than with traditional transport conveyors. Furthermore, it is no problem at all with these mats to incorporate horizontal, vertical and negative bends in the transport line, contrary to with transport conveyor belts.

# Sanitary

magnetic conveyor

*Magnetic transporters offer a multitude of advantages. Their permanent magnetic strength guarantees reliable and breakdown-free transport. In addition, a considerable saving in space is brought about due to the fact that the transporters are also able to transport vertically. The fact that magnetic transport takes place silently and without damage makes working with magnetic transporters even more interesting.*



Goudsmit Conveying Systems designed a sanitary stainless steel transport installation that is excellent for transportation of both full and empty cans especially for the Can fillers (canned goods) market. The hygiene and safety requirements are naturally very high as cans are also half filled and are therefore transported while open.

The lowerator can therefore be kept clean by way of water and cleaning agents. All construction details have been tailored to suit this. In addition, a fully welded roof-shaped covering is fitted so that contamination, condensation and drip water is unable to enter the cans.

Goudsmit Magnetic Conveying Systems makes every effort to be the best partner for magnetic transport systems, with a wide and comprehensive range of magnetic products and installations. We realise, by way of the power of magnets, tailor-made systems and components that guarantee a unique way of transportation. Quick, safe, flexible and, most importantly of all, effective.

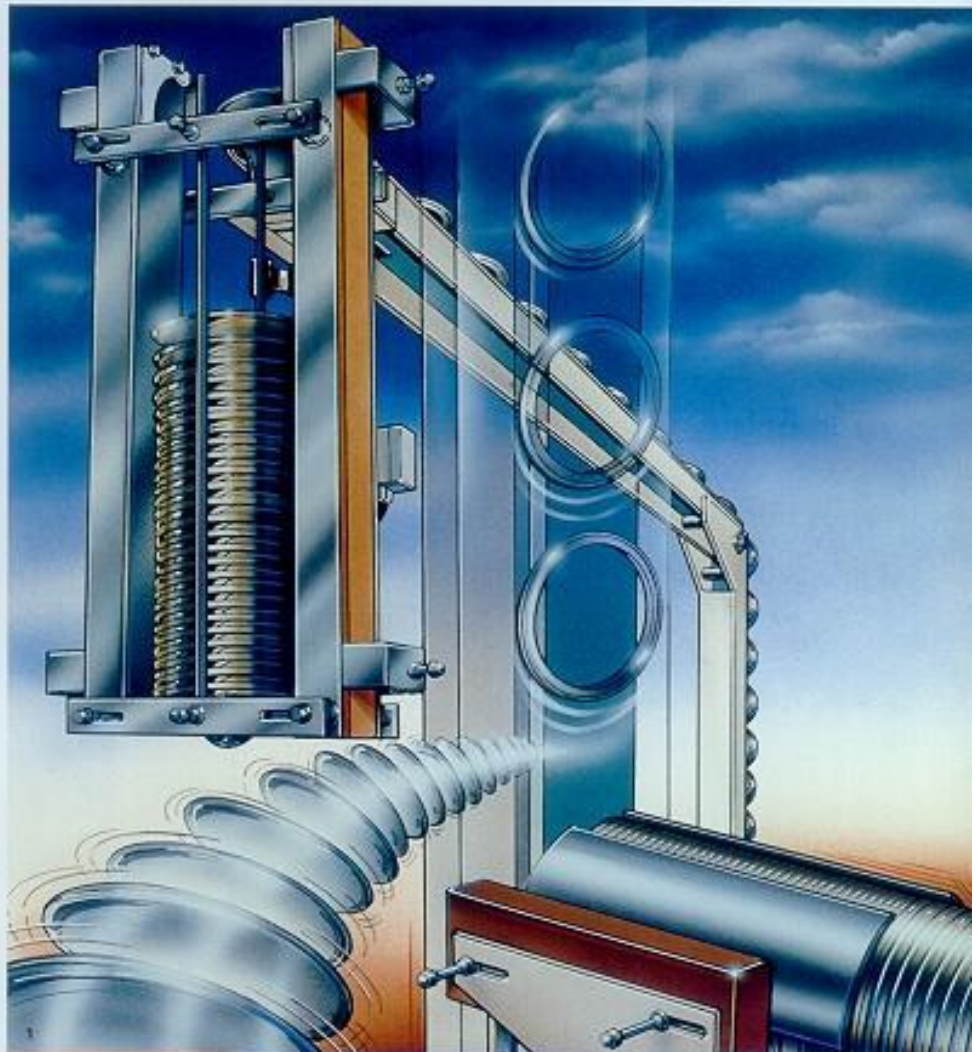
## Endhandling systems + feeder conveyor

Goudsmit regulates the entire transport within the Can filling market. From 'lid unpicker' to 'lid sealing machine'. Our lid transport installations are unique owing to

the great speed and precision at which transport of the lids takes place. The installation can move as much as 600 lids per minute and is also suitable for 'easy open ends'.



- (1) Transport lines for empty and/or filled cans, shown here without covering.
- (2) Drive module with covering to prevent drip water from entering cans.
- (3) This can rotation conveyor transports the cans over the head to remove any internal contamination. This installation is also often used in combination with a blow-off construction/device.
- (4) A vertical bend module.
- (5) The 'up-ender' places the cans lying down into an upright position at high speed and is often set up as next in line to a continuous sterilizer.

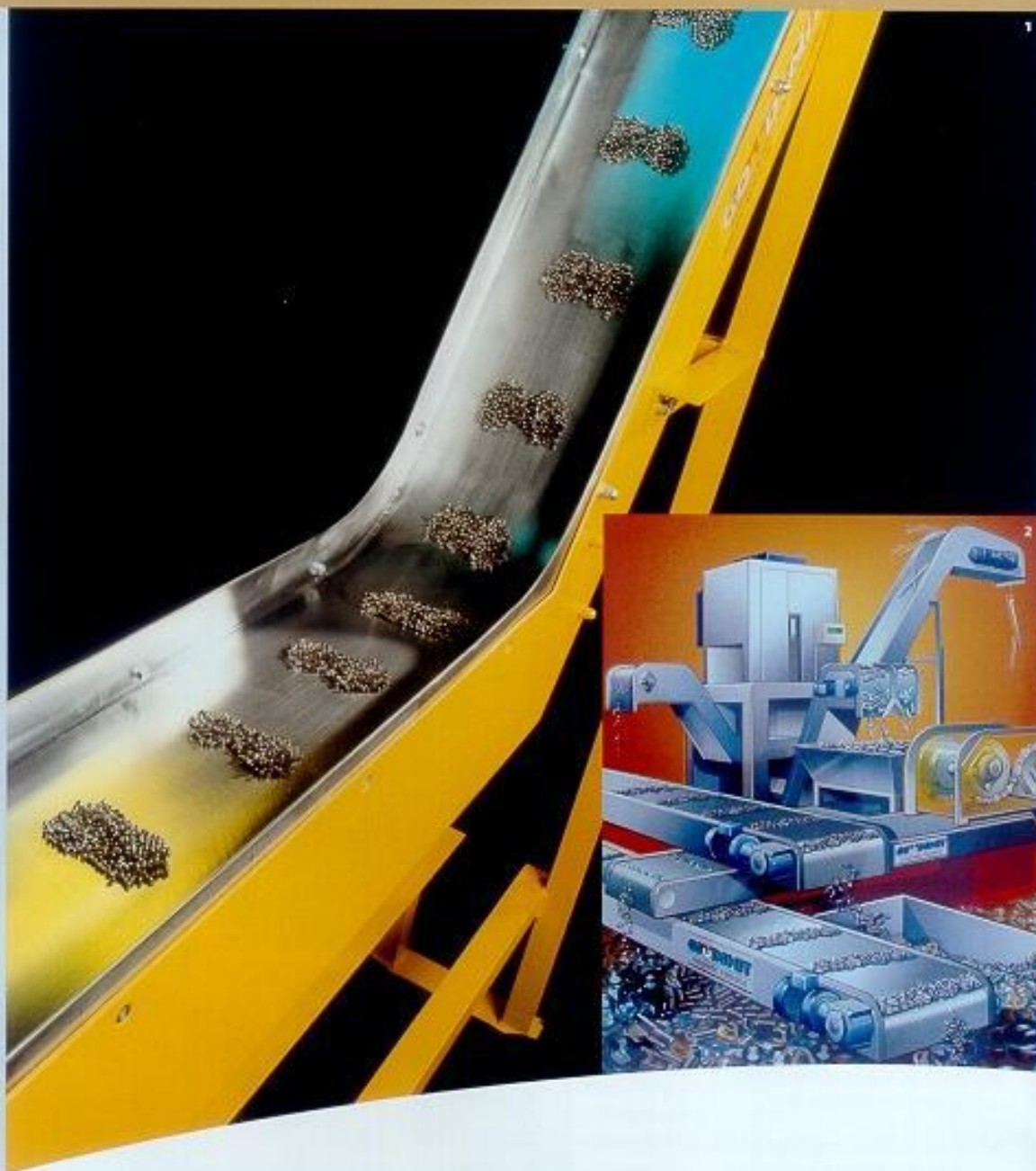


- (1) Distribution unit for lids, with magnet buffer for stacking.
- (2) Installation for transportation of crown caps.
- (3) Magnet bend, whereby lids are not stacked but are immediately transported.

# Slidebed conveyor

for scrap or parts

*Goudsmit Magnetic Conveying Systems is constantly focusing on the development of new products and the introduction of product improvements. This method of working means that Goudsmit is able to skilfully anticipate the wishes and requirements of clients. This innovative school of thought and operating procedure is accentuated by Goudsmit's engineering, manufacturing, assembly and test facilities.*



The slide bed conveyor is often used in metal and steel goods factories and in the (steel) plate processing industry. This system offers a great deal of advantages compared with the outmoded belt or chain transporters:

- resistant to wear and low on maintenance;
- the closed construction means that no material can remain behind;
- no chain blockages;
- no damage to product or transport conveyor;
- contamination and moisture have no effect on operation;
- system and products do not become stuck due to the fact that there is no mutual contact.

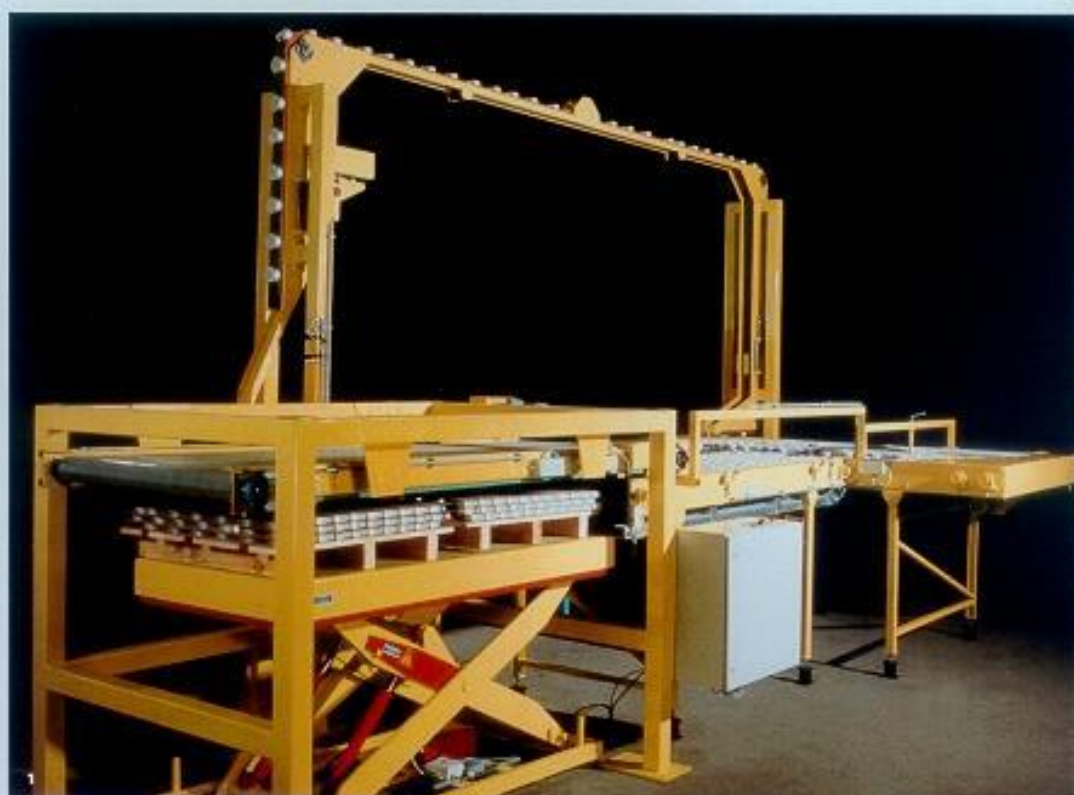


The area in which transport should take place and the method used for this do of course vary for each project. This is why Goudsmit develops the transport system entirely on the basis of the requirements that you set for that transport. In this respect, you are assured that the installation can be integrated into the production process at your company. Goudsmit brings about a phased project approach for realisation of your order, which is divided up into development, construction and aftercare sections.

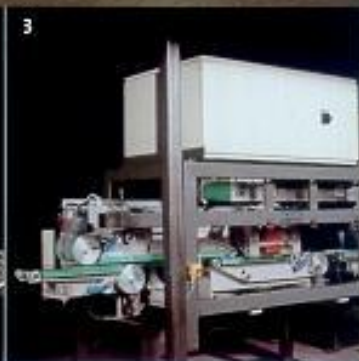
## Turn-key handling systems +sheetfeeders



- (3) Complete slide bed conveyor with magnetic stainless steel slide bed.
- (4) Impression of various slide bed conveyors for application of various products.
- (5) Two slide bed conveyors for transport of products and press residues.
- (6) Slide bed conveyor with two belts for individual transportation of product components and punch waste.
- (7) Drive head of the slide bed conveyor with inspection hatch and automatic chain tensioning device.
- (8) Production line with slide bed conveyor for discharge of punch residues.



- (1) Complete transport installation for the feeding of steel cups to a deep drawing press.
- (2) The 'sheet feeder' transports round 'blanks' into the die within the 'Time window' of 0.3 seconds.
- (3) Complete sheet feeder with magnet buffer and servo drive.

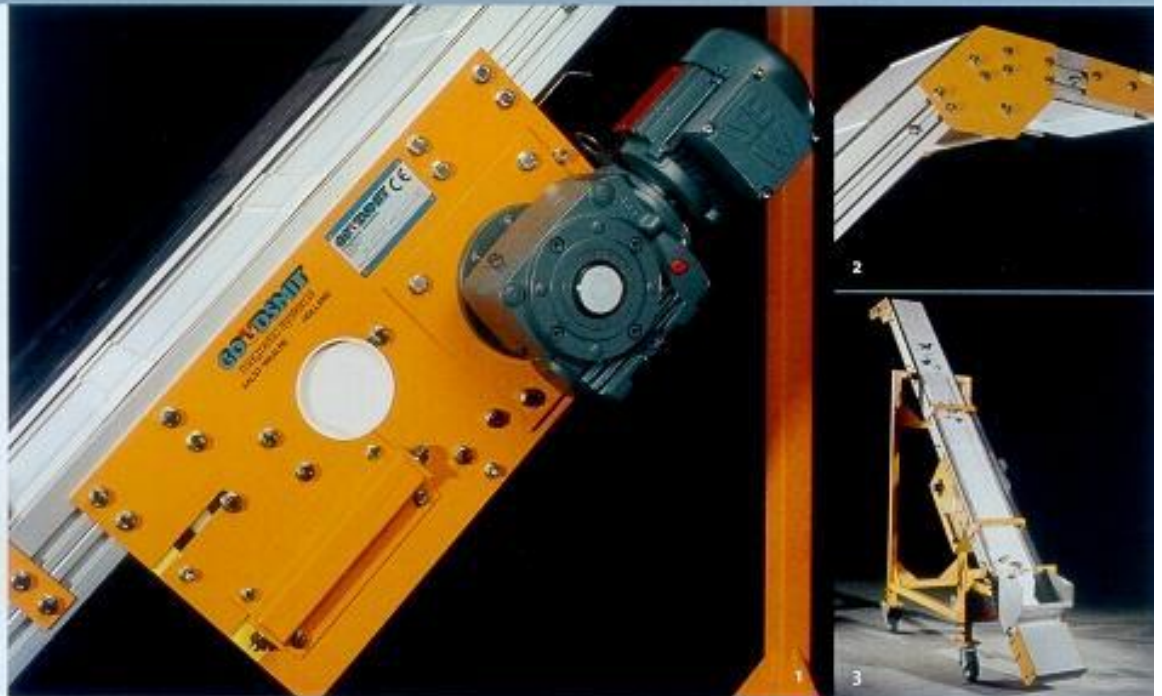


The complexity of specialist machines is increasing and higher requirements are therefore constantly being set. Efficiency, speed and effectiveness are core principles with development of these installations. Goudsmit provides surprising and creative solutions based on tailor-made goods.

Goudsmit provides guidance from beginning to end owing to its thematic approach. The systems are tested, set and put into place in a complete and comprehensive manner. Goudsmit remains in the picture subsequent to delivery and you can always depend on advice and support.

Every company strives to keep engineering costs as low as possible. Goudsmit has also thought about this. Components can be reused by constructing the conveyors in a modular way and any replacement or modification is carried out within no time and at low cost. In addition, modules can be stocked more easily, which drastically reduces the delivery time.

# Modulair construction



Goudsmit transport installations are extremely durable due to the use of modern materials and aluminium extrusions. The modules can be simply combined in each desired shape and Goudsmit offers numerous options in terms of magnet types and strengths.

The modular construction method is also very handy for complex installations where various production machines with conveyors are 'tied' to one another, forming a complete production line.

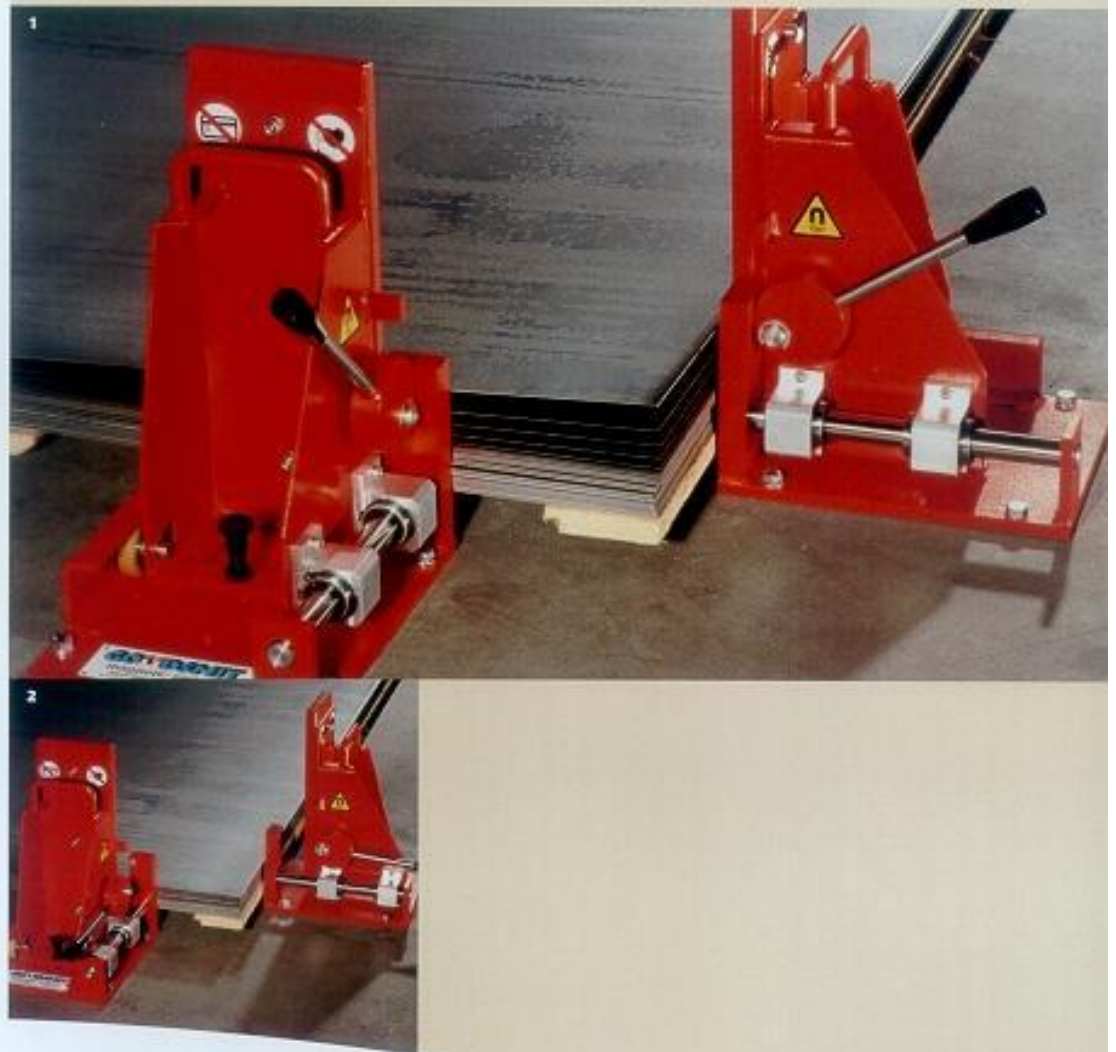
Goudsmit also employs a phased project approach here, starting off with the layout engineering followed by the design phase, construction phase and aftercare phase. You remain involved in all of these phases in order to arrive at a result that works.

- (1) Modular drive unit with belt tensioning device. The drive motor can be simply interchange.
- (2) 'Nose over' module with magnet bend.
- (3) Completely modular-construction conveyor for transport/elevation of battery cases.
- (4) Switching of cans from one conveyor to another, constructed using modular components.
- (5) A 180 degree bend module, also referred to as 'nose-over'.

*Goudsmit always tries to anticipate important market developments. After all, clients are constantly entering new markets or expanding their activities in existing markets, thereby creating a need for transport systems that are able to support these activities. Goudsmit develops advanced tailor-made transport systems to this end.*

## Sheet separators

- (1) The extremely strong Neoflux® sheet separators.
- (2) The strong magnets can easily be pressed away from the pile using the lever, after which the pile can be replenished in a simple manner.

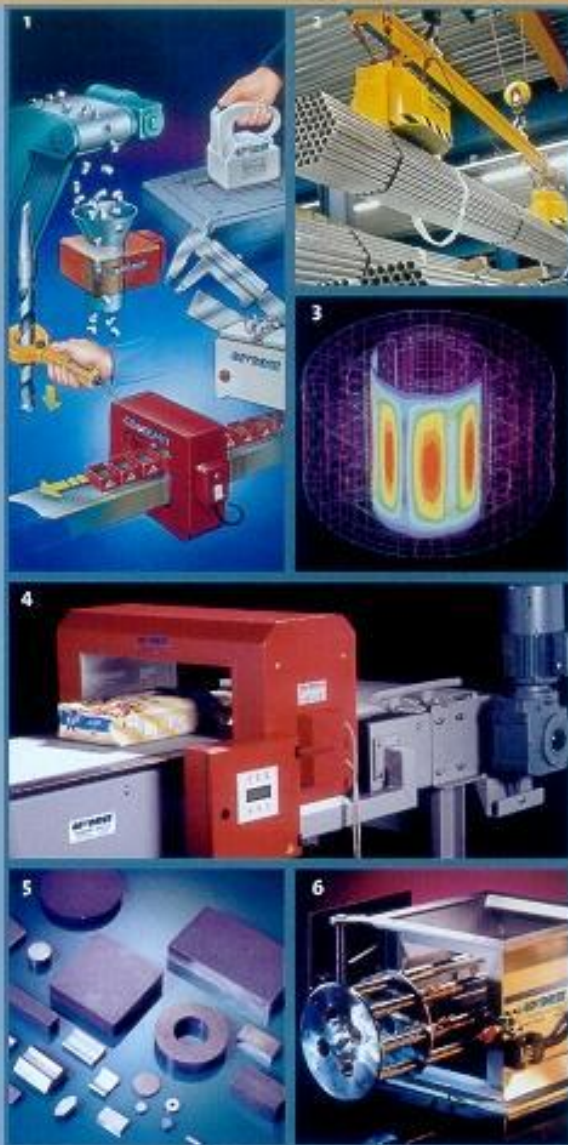


Sheet separators are specially made for the separation of metal plates by way of magnetism and are often used in robotised production cells. Steel plates are oiled and therefore stick to one another, which consequently means that the robot sometimes picks up two at a time. These 'double sheets' cause a great deal of damage, as do falling plates.

Despite the presence of the oil film, the steel plates are kept separate from one another owing to the use of extremely powerful Neoflux® magnets and the robot is subsequently lift them off the pile one by one.

### Teamwork between three divisions

The teams of three divisions are behind the Goudsmit Group, within which various disciplines are housed. They are always ready to provide you with a suitable answer to all your questions regarding magnets.



Within the three business units, work is carried out from out of the following specialist areas:

1. Magnetic de-ironing systems /  
Magnetic Separating Systems
2. Magnetic transport systems /  
Magnetic Conveying Systems
3. Electro lifting magnets /  
Magnetic Handling Systems

If you require more information, please contact Goudsmit Conveying Systems or surf to: [www.goudsmit-magnetics.nl](http://www.goudsmit-magnetics.nl)

- (1) Goudsmit Magnetic Handling Systems also supplies a wide range of demagnetising equipment.
- (2) The lifting and transportation of steel pipes by Goudsmit Magnetic Handling Systems
- (3) FEM analysis of a magnetic field by the Goudsmit engineering department.
- (4) Goudsmit Magnetic Separating Systems supplies complete metal detector systems.
- (5) Goudsmit Magnetic Supplies is able to supply magnets in all forms and various qualities.
- (6) Magnet separator for removal of ferrous constituents, i.e. from out of foodstuffs, by Goudsmit Magnetic Separating Systems.



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