

CREATING MOVEMENT

# Solving Movers

FOR THE PAPER INDUSTRY



# Automated and manual systems

## For the paper industry

Solving is one of the leading manufacturers of customised systems for handling heavy loads, such as reels and cores. Based on 40 years experience we provide solutions both on air bearings and wheels.

In the paper industry simple Solving Movers are used for manual movement of smaller paper reels, whilst automated systems using Solving AGV Movers are designed for continuous handling of paper reels and cores.

For printing houses we offer an air film-based handling concept facilitating the supply of paper reels into printing machines.



## Solving AGV Movers on air bearings or wheels

Solving AGV Movers are driverless systems for continuous handling of paper reels and cores in paper mills. These are operated from a PC-based control system incorporating the software required to give the AGVs their driving orders.

Different navigation methods can be chosen; the three most common are laser, wire and tape guidance. Solving AGV Movers incorporate the latest safety equipment, such as mechanical and laser bumpers, photo cells, audible signals, warning lights as well as the usual emergency stop buttons.



Solving AGV Movers are based on air bearings or wheels, or a combination of both.



Rapid chargeable batteries are designed for continuous use, 24 hours a day.



AGVs suitable for continuous use contribute to a more efficient production.



# Solving Movers: pedestrian and stand-on trucks on wheels



Solving has developed simple and cost effective wheeled pedestrian and stand-on trucks for handling loads weighing 4 to 10 tonnes, such as paper and plastic reels, pallets and containers.

The trucks are suitable for moves of 20 to 150 meters around production facilities.

The hydraulic forks can be adjusted to suit the customer's requirements.

The trucks are robust and able to withstand heavy industrial use whilst still being relatively lightweight. A tight turning circle provides good manoeuvrability.

The "deadman" pedal has to be depressed to maintain movement.

## Manually operated Solving Movers

Simple U-shaped Solving Movers are used to handle reels, cores, cable drums and similar loads directly from the floor. Air bearings lift the loaded Mover from the floor and a thin film of air is formed on which the Mover floats. The load is thus easy to manoeuvre in all directions and to position accurately.

The manually operated Solving Roll Movers are used for handling smaller paper or plastic reels, cable drums and similar cylindrical items.



# A handling concept for printing houses

Solving has developed an air film-based reel handling system that has been installed in printing houses all over the world. The U-shaped Roll Mover is fitted with a lifting system allowing paper reels of various diameters and weights to be collected directly from the floor. Paper reels weighing up to 7 tonnes are positioned in front of the roll changer; the Mover can be equipped with a powered rotator for removing the reel wrappers if required. A lift table mounted in the floor is raised between the Mover's forks to collect the paper reel. This handling concept can also be automated.



The paper reel is collected by a U-shaped air film Mover from the storage area.



The Mover's forks are fitted with a lifting device to collect the paper reel directly from the floor.



Integral motorised reel rotators facilitate the unwrapping of reels.



The reel is rotated and unwrapped easily.



The reel is raised by a lift table mounted in the floor.



The paper reel is positioned accurately in the reel changer.

## Advantages

- Multi-directional manoeuvrability; flexible in narrow aisles
- Reels can be collected directly from the floor
- Rotating device facilitates unwrapping
- Exact positioning into the roll changer
- No fixed installations in the building are required
- Competitive price



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