

MultiPick® Case for order picking of card- board cases

MultiPick, developed for the order picking of plastic crates, grips the crates by their handles. The collected crates thus form a stack inside the Multi-Pick gripper.

The same technology cannot however be used for cardboard cases, because the handles of the lowest case cannot bear the weight of the whole stack.

Fire hose is used in the new MultiPick Case cardboard gripper, which squeezes the cases using air pressure so that they stay in place in the gripper. Not only does this technique direct pressure onto the lowest case, but each case is held in place separately. Plastic crates can also be handled with the same gripper construction.

Tests made on the customers' cardboard cases have shown that for this to succeed the cases must be stackable and of sufficient dimensional accuracy (+/- 0.5 – 1 cm).



Unbroken, dry cardboard cases also seem to withstand stacking very well, since they are strong at the corners.

Innovation extends the market area

This gripper innovation enables the application of the MultiPick order picking concept to new areas. Cardboard cases are used especially in the distribution of bakery products, fruit and vegetables. These order picking systems are also based largely on MultiPick robotics and control technology. This new gripper unit, specially developed for cardboard cases, is now speeding up development in this direction.

More intelligence for ReelPick®

The features of the ReelPick robot now also include vision. Using a vision system, ReelPick is able to locate and pick up paper reels that are placed randomly. This is the only way to unload a container automatically in a consignment of paper reels.

With the current advanced robot technology, paper reels can be loaded onto transportation vehicles and unloaded very gently. Gantry robots are ideally suited to this time-consuming work stage, which involves the movement of units weighing several tonnes and demands great precision. Robots, which handle each operation with the same degree of care, never damage the reels, which is certainly not the case when they are handled by forklift trucks.

Machine vision enables the paper reels to be taken to the robot's working area in random order and allows for different picking locations. The robot control software developed in connection with the vision system, which recognises reels using laser technology, determines the order in which the reels can be picked up. The smart system is also immune to changes in the lighting conditions.

In addition to the ReelPick system, Cimcorp also uses the vision system in TyrePick applications to measure the tyre stack locations.