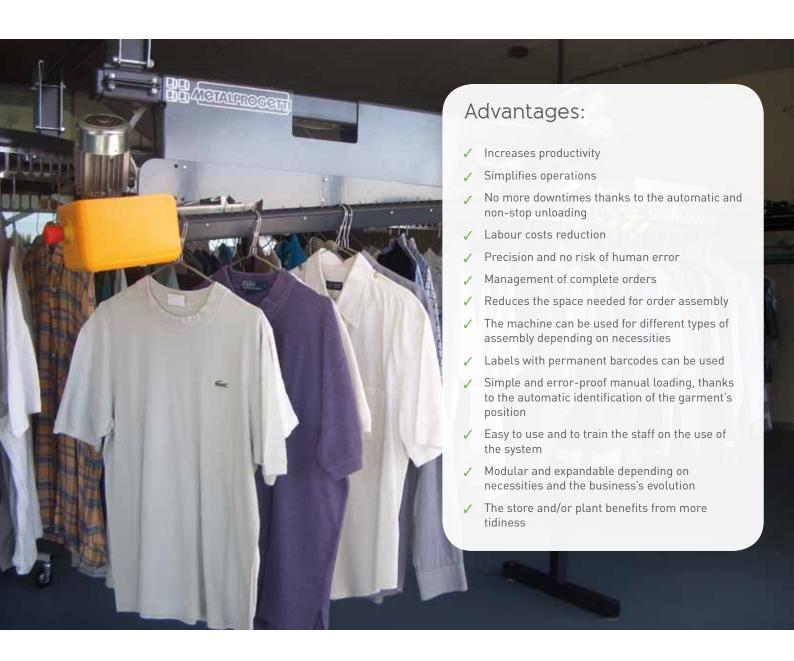
PIECE ASSEMBLY

Automatic assembly system that stores single pieces before assembly





It automatically identifies and assembles one by one the garments of the order so that they are ready for delivery. It loads and unloads at the same time, avoiding downtimes. Very accurate, it increases productivity and reduces labour costs.

The **Piece Assembly** consists in a conveyor that has a belt with narrow slots.

How does the Piece Assembly system work? The garments are loaded onto the system manually. To do this, considering that all garments are identified by a barcode, the operative scans the garment barcode with a barcode scanner, after which the conveyor begins to rotate. The garment can be randomly placed onto any empty slot that passes the operative. Thanks to the exclusive Metalprogetti patent, the system performs a "dynamic loading" with no errors possible, as it marries every garment loaded onto the conveyor with the slot it is loaded in, in order to then assemble the orders. The operative needn't look for a particular slot, he can just hang the hanger in one of the

empty slots. It's the system that will find the garment, wherever it is hanging. The operative continues this process and loads the conveyor with other garments.

The system accumulates the data for the loaded garments and tracks the completion of orders: at this stage, all the garments of that order will automatically be extracted on an unloading arm and gathered together on an accumulation chain, maintaining order integrity. The operative can then remove the assembled orders off the accumulation chain in order to bag them.

Another advantage of the **Piece Assembly** is that it can have multiple employees loading the conveyor simultaneously, even while the system is unloading completed orders.

Production numbers for piece assembly range from 800 to 1200 pieces with one employee working 8 hours. The system can have multiple people loading and multiple unloading arms. So, if you can produce 1200 pieces with one employee, with multiple employees working on the same system you can produce more than 4000 pieces in an 8-hour shift!

