

sheet metal storage technology – guidelines for system selection

storemaster® offers the following basic options for sheet metal feeding on sheet metal processing machines:

Machine manufacturers offer so-called machine-integrated sheet metal warehouses (e.g. ByTower), which feed the sheet metal to the machine in a fully automated manner and, if necessary, also sort cut parts or entire cut sheets; for 40 possible units, a double tower system of approx. 6 m height with 2 x 20 storage spaces is required (budget price € 400,000 required ... rather uneconomical with a relatively low turnover). In the case of a semi-automatic device (e.g. Byloader or ByTransCross), the sheets are removed from a provided pallet using a machine-connected lifting device; the pallets (wooden one-way pallet or steel system pallet) are removed by forklift from conventional storage towers (e.g. storemaster®) and thus moved to the machine in constant change of demand ... sorting takes place manually (budget price incl. 40 tower spaces € 150,000 ... at relative low turnover means economical).

Another variant of fully automatic sheet metal processing is offered by the new sheet metal automation from storemaster®. Such a ShiftMaster system could consist of 3 towers with 15 changing places (modularly expandable), from which a movable robot takes the sheets and feeds them to a simple changing table machine. The change or refilling of the sheet metal packages is done on the back by forklift (sheet types and machines can be expanded to an unlimited number) ... budget price € 250,000 ... sorting cut sheets + € 75,000 ... with a relatively low turnover, conditionally economical. If the system only consists of a change tower with 15 places for the temporary provision of any number of sheet types and a stationary robot (later movability possible), the system price is reduced to € 175,000 incl. 40 conventional storage spaces (long-term economical) ... if necessary + sorting of the cutting board € 75,000.

In addition, with a relatively low turnover and relatively few types of sheet metal, one can also think of a manual (expandable) version. A complete MasterTower® system consisting of 2-3 drawer towers à 13-19 very easy-to-use drawers for belt loading, incl. System-integrated sheet handling removal device would be possible at a budget price of € 75,000. Alternatively, a manual ShuttleMaster changing system with up to 13 forklift buffers on the machine, as well as integrated crane vacuum sheet metal removal technology, including system pallet towers for forklift operation with 40 (expandable) storage spaces could be considered ... at a budget price of € 65,000 (amortization within 6-12 months). Basically, with 40 conventional ShuttleTower system pallet tower positions for forklift operation, you would not go wrong in the medium to long term, as this leaves all options open for any adaptation requirements that may arise in the future.

We hope to have given you some decision-making aids with these explanations. For further system explanations and material flow recommendations - also in your factory - the storemaster® project team is always there for you.

storemaster® sheet metal project data

project data:	1,0 x 2,0 m	1,25 x 2,5 m	1,5 x 3,0 m	2,0 x 4,0 m
total number sheet metal packages				
number of types of packages mostly processed in small batches				
number of sheet types in package heights up to 50 mm				
number of sheet types in stack heights up to 75 mm				
number of sheet types in package heights up to 80 mm				
number of sheet types in package heights up to 100 mm				
number of sheet types in package heights up to 120 mm				
number of sheet types in package heights up to 140 mm				
number of sheet types in package heights up to 160 mm				
single sheet removal by hand				
manual removal of individual sheets using a vacuum lifter				
machine type for single sheet removal by machine (autom.)				
reference point stop with expanding magnet				
crane system available	hall crane		pillar jib crane	
integrate slewing crane in sheet metal storage system				
forklift use	none	mostly	additionally	
forklift lift height (mm)			mm	
operating mode	inside		outside	
fairground storage rules				
warehouse management with LED display (article search function)				
chaotic warehouse order manually				
chaotic warehouse order using RFID				
order quantity management according to the canban principle				
article removal with batch and priority reference (fifo)				
sheet metal feed (brief description):				