# **BowerLoader**

## AUTOMATION SHEE META **CUTTING AND STORAGE**

## TowerLoader

logitower.eu

AUTOMATION AND ROBOTISATION OF MANUFACTURING design and manufacturing

### TRAY WITH METAL SHEETS

CUTTING MACHINE TABLE

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LogiTowerLoader - automatic sheet metal loading and unloading system:

THE PARTY

SHEET SEPARATION

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- Collecting sheets from a stack or storage system cassette
- Loading into the laser cutting machine
- Receipt of cut elements

THICKNESS MEASURMENT

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Delivery of parts to the storage buffer or picking point



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LASER CUTTING MACHINE





TIME SAVING







**INDUSTRY 4.0** 

**EFFICIENT** LOGISTICS

# Sower Loader

#### CUT ELEMENTS







ERGONOMY



RELIABILITY



SPACE SAVING

#### Advanced

- integrated solution for operating one laser cutting machine with a sheet metal warehouse - takes up a small area, can be placed in a corner or against the wall of the hall
- short material replacement cycle time
- **system components:** two independently working platforms: - **loading platform** - **suction up** module (movement in the X and Y axes)

with a system for separating and measuring the thickness of individual **metal sheets,** and delivering them to the laser cutting table. It also has the functionality of a trolley transporting cut sheets.

- unloading platform - double-sided gripper module (movement in the Y axis) - picks up cut sheets (cut details and openwork) from the laser cutter and puts them on a transport trolley with a shelf located on the loading platform

- possible upgrade to the Complex version adding movement in the X axis to the unloading platform
- **possible version without a storage tower -** putting the cut material on a pile or pallet and then collecting it with a forklift



#### Complex

- a comprehensive system for operating multiple laser cutting machines designed for manufacturing environments requiring high efficiency and high divsersity
- very short material replacement cycle time
- **system elements:** two independently operating platforms (movement in the X and Y axes):

- loading platform - suction cup module with a system for controlling and measuring the thickness of individual metal **sheets,** and delivering them to the laser cutting table. It also has the functionality of a trolley transporting cut sheets.

- unloading platform - double-sided gripper module - picks up cut sheets (cut details and openwork) from the laser cutting machine and places them on a shelf in the LogiTower storage system or storage areas with a pallet, on AGV trolleys, tables or conveyors

• cooperation with LogiTower and MultiLogiTower storage systems in order to obtain large capacity

#### Basic





- **block (modular) solution** allows modification of the configuration as the needs change, including the number and settings of cutting machines
- **system dedicated** to work without a LogiTower storage tower
- system elements: only one platform equipped with two modules (a set of suction cups and double-sided grippers) responsible for loading and unloading. It has a system for seperating and measuring the thickness of individual sheets of metal
- application for fewer cycles
- economical and structurally uncomplicated solution

### Compact



#### Technical data

Туре	Loader 3015	Loader 4020	Loader 6020
Metal sheet size (max)	3 x 1,5 m	4 x 2 m	6 x 2 m
Metal sheet weight	900 kg	1600 kg	2300 kg
Metal sheet thickness (max)	25 mm	25 mm	25 mm



MATERIAL PROTECTION

The grippers are covered with a material that reduces the risk of scratching the sheet metal



#### METAL SHEETS SEPARATOR Thin sheet separating system (magnetic/mechanical/air)









- maximal use of space compact structure, vertical storage tower positioned above the laser cutting table
- very short metrial exchange cycle time on the cutting . table
- availability for various sizes of metal sheets **system dedicated** to work with a single laser cutter and a standard tower for lower room heights
- quick replacement of shelves with a sheet metal and cut material - **possible** integration with laser cutting machines from various manufacturers

