

The background image shows a large industrial facility with a complex system of orange overhead cranes and automated machinery. The system is designed for the automated cutting and storage of sheet metal. The machinery consists of multiple levels of conveyor belts and cutting heads, with various components labeled with numbers like 10, 17, 05, and MAX 31. The overall scene is brightly lit, highlighting the industrial environment.

Logi**TowerLoader**

AUTOMATION
SHEET
METAL
CUTTING AND STORAGE

Logi**TowerLoader**

logitower.eu

AUTOMATION AND ROBOTISATION OF MANUFACTURING
————— design and manufacturing —————

LogiTowerLoader



LASER CUTTING MACHINE

CUT ELEMENTS

TRAY WITH METAL SHEETS

CUTTING MACHINE TABLE

Benefits



TIME SAVING



PERFORMANCE



IT INTEGRATION



RELIABILITY



INDUSTRY 4.0



EFFICIENT
LOGISTICS



ERGONOMY



SPACE SAVING

LogiTowerLoader - automatic sheet metal loading and unloading system:

- Collecting sheets from a stack or storage system cassette
- Loading into the laser cutting machine
- Receipt of cut elements
- Delivery of parts to the storage buffer or picking point

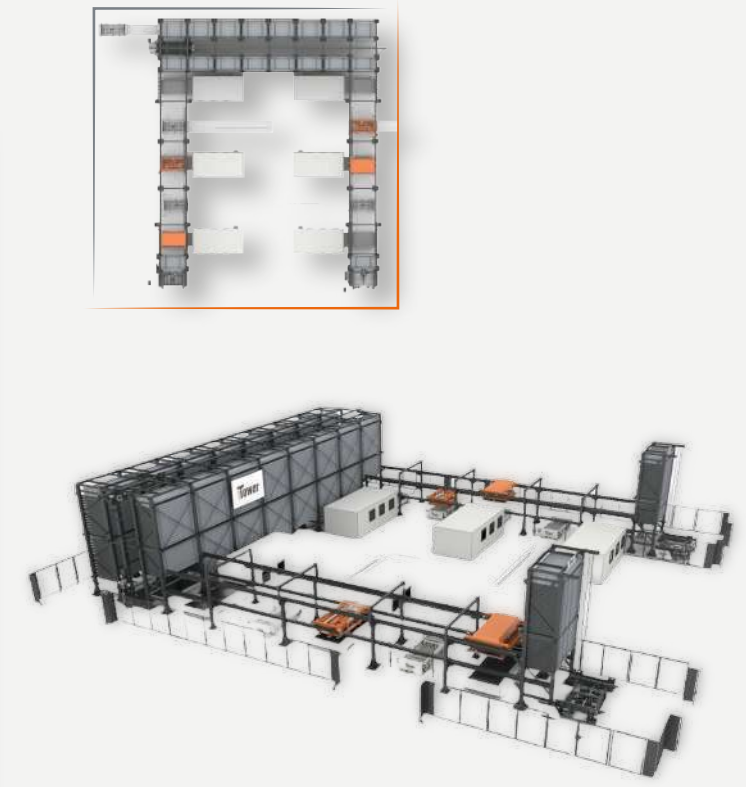
Advanced

- **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 diversity
- **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 separating and measuring the thickness of individual sheets of metal**
- **application for fewer cycles**
- **economical** and structurally uncomplicated solution

Compact



- **maximal use of space** - compact structure, vertical storage tower positioned above the laser cutting table
- **very short material 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

Technical data

Type	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

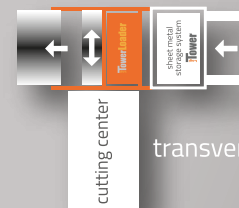
The grippers are covered with a material that reduces the risk of scratching the sheet metal



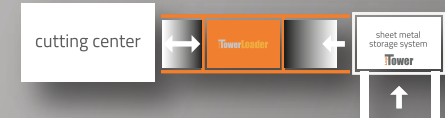
METAL SHEETS SEPARATOR

Thin sheet separating system (magnetic/mechanical/air)

Setting options



transverse layout



linear layout

