

FEEDER - X1 LTS - 6 — Technical Data Sheet

What it is and what it promises

More than just a loader: it is the connecting link that eliminates every bottleneck between warehouse and production.

Like an intelligent “buffer” system, it synchronizes pallet handling with the rhythm of the case erector, creating a continuous and unstopable flow.



**HIGH-SPEED
PERFORMANCE**



**OPERATIONAL
VERSATILITY**



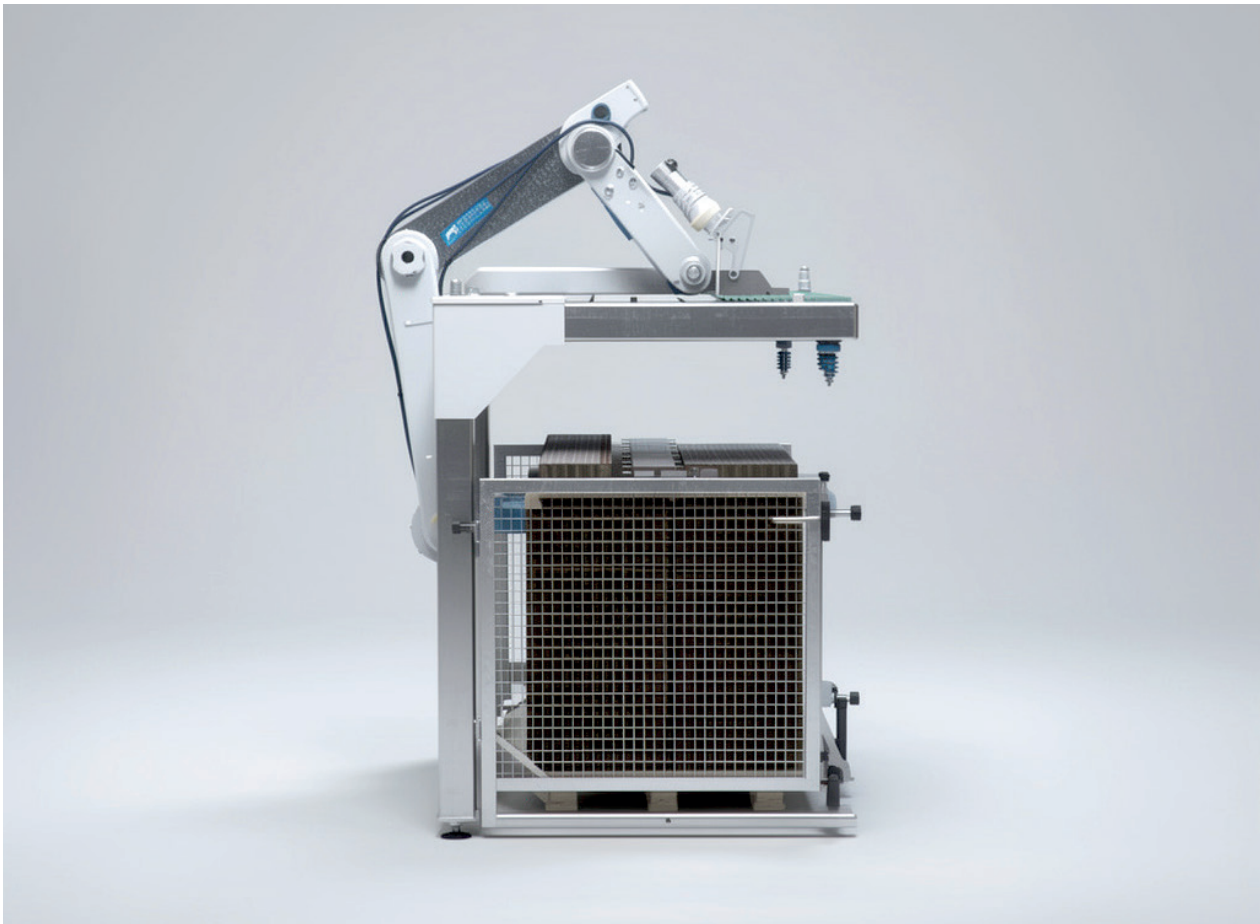
**INTEGRATION
FLEXIBILITY**



The bridge between warehouse and production

FEEDER-X1 LTS-6 is a high-speed industrial robot **designed to automate the feeding and handling of flat or stacked consumables** (such as cartons, blanks, honeycomb pads, and separators).

It precisely picks items and feeds them into forming or case packing machines (new or existing), **ensuring a continuous flow while reducing manual intervention and bottlenecks.**





The added value

01. **SPEED**

Theoretical throughput of 5,000 pieces/hour or 720 feeding cycles/hour, eliminating manual feeding bottlenecks and maximizing the productivity of case erectors.

02. **SAFE BYPASS**

The overhead-mounted robot frees up the working area and allows manual intervention on the downstream machine, ensuring production continuity even when the robot is not in operation.

03. **UNIQUE KINEMATICS**

The system uses the same LTS-6 robot as the PAL-X1, programmed for standardization, spare parts, and maintenance (RPL language)

04. **OPTIMAL LAYOUT**

Overhead robot installation and integrated structure free up floor space, facilitating safe passage for operators and forklifts.



Technical details

PARAMETERS	SPECIFICATION	UNIT	NOTE FOR AGENT
MODEL	PAL-X1 LTS-6	-	Linear Telescopic System - 6 Axes
NOMINAL SPEED	720	cycles/hour	Reference productivity (12 cycles/minute)
PAYLOAD CAPACITY	120	kg	Enables handling of complex grippers and heavy loads.
MAX. PALLET HEIGHT	1700	mm	Supports high-density pallets and vertical storage.
REPEATABILITY	± 0.5	mm	Positioning accuracy
MAX. FOOTPRINT	~2.8x 2.2	m	Total layout for the Full Option version.

Typical Applications

Blank/Carton Feeding: Picking of flat blanks and placement into the forming area for the production of displays or complex boxes.

American Case Feeding (RSC/KSR):
High-speed pick from stacks of cartons

and transfer to the case erector.

Divider/Honeycomb Insertion: Pick & place of separators for feeding divider/honeycomb inserter systems.



Scalability and customization

LEVEL 1: FEEDER BASE

Functionality: Supply of the LTS-6 robot with end-of-arm tooling (EOAT) configured for a single format and a single manual pick position (operator reloads parts).

Commercial Objective: Maximum accessibility and minimal initial investment. Eliminates physical effort and repetitive pick & place operations.

LEVEL 2: MODULAR CUSTOMIZATION

This level adds modules to increase autonomy and flexibility.
For example:

Autonomous Warehouse Module (HFF):
Adds an extra pallet pick position to extend autonomy and allow machine operation without downtime due to pallet changeovers.

Quick Format Change Module: Integration of multi-format grippers or automatic tool-changing systems to handle different geometries on the same line.

Vision & Control Module: Integration of a 2D/3D vision system for picking from non-precise positions and for quality control.

LEVEL 3: FEEDER FULL AUTOMATION

Functionality: The Full Option version includes product feeding logistics (pallet conveyors).

Commercial Objective: Maximum efficiency, autonomy, and continuous speed for 24/7 unattended operation cycles.

FEEDER - X1 LTS - 6

**Advanced robotic performance.
Unlocks production flows without limits.**