

LoadX MACHINE TENDING SOLUTIONS



Maximum output. Minimum effort. Higher return.

Get more out of your CNC machine up to 30% more capacity without extra personnel.

More output from your CNC machines, even without a CNC operator

At a metalworking supplier, the CNC machine stood idle for several hours every day. Not due to a lack of work, but due to a shortage of operators. Evening and weekend production was simply not feasible.

After the implementation of the LoadX Machine Tending solution, that changed immediately.

The cobot took over loading the machine, allowing production to continue outside working hours. Within a few days, the system was operational, and operators could focus on setup, quality control, and other valuable tasks.

The result:

- ✓ Up to 30% more machine capacity
- ✓ Unmanned production during evening and weekend hours
- ✓ Payback within 6 to 8 months

With LoadX, you automate the loading of your CNC machines easily and reliably. Thanks to the intuitive software, you can set up new products within minutes without complex programming.

More output. Less dependence on staff. Maximum flexibility.

LOADX MACHINE TENDING PAYBACK PERIOD

Production data

CNC machine hourly rate: €60
Production hours: ±1600 hours/year (realistic)

€96,000 PER YEAR

Cost of LoadX StackerPro

Investment: €66,000
Production hours: ±2,100 hours/year (realistic)

€126,000 PER YEAR

SCENARIO 1: 1 operator + 1 cobot + standard hours 1600 hours/year

- ✓ Stable and predictable daily production
- ✓ Optimal utilization of regular working hours
- ✓ Good control over quality and process

Annual ROI: +45.5%

Net profit in year 1:

€96.000 - €66.000 = €30.000

Euros and time:

€66,000 / €96,000 = 0.69 years

SCENARIO 2: 1 operator + 1 cobot + extra hours 2100 hours/year

- ✓ +31% extra capacity without an extra machine
- ✓ Unmanned production (evening/weekend)
- ✓ More output and shorter delivery times

Annual ROI: +90.2%

Net profit in year 1:

€126.000 - €66.000 = €60.000

Euros and time:

€66,000 / €126,000 = 0.52 years

ROI WITHIN 6 TO 8 MONTHS

Get more out of your production with smart automation

Do you want to grow without extra machines or staff? We are happy to think along with you and always find a suitable solution for your situation.

- ✓ More capacity from your existing CNC machines
- ✓ Unmanned production (evening/weekend)
- ✓ Shorter delivery times and higher output



+31(0)85-0805046



sales@nexsteprobotics.com



www.nexsteprobotics.com



+31(0)6-2148 3694

CONTACT US



LOADX MACHINE TENDING STACKER-C

Compact, accessible, and the simplest step to CNC automation

The Stacker-C was developed for companies that want to start with CNC machine automation quickly and easily. This compact solution is ideal for smaller series and flexible production environments.

Equipped with a powerful cobot with up to 12 kg payload and a reach of 1434 mm, combined with a single 2- or 3-finger gripper for reliable handling of products and workpieces.

The Stacker-C comes standard with the Smart Machine Tending software on the original teach pendant for quick and easy operation.

CR12C cobot
€53.500,-



Slim & robust design

- ✓ Tabletop 1200 x 800 mm
- ✓ Suitable for grids
- ✓ Teach pendant bracket & controller compartment
- ✓ Standard single 2 or 3 finger gripper (double option)
- ✓ Dimensions: H900 x W1490 x L800 mm

Robotics

- ✓ CR12C cobot: 12 kg | reach 1.4m
- ✓ CR20C cobot: 20 kg | reach up to 1.8m
- ✓ Safety screens & safety scanner

Key benefits

- ✓ Maximum machine utilization
- ✓ Consistent quality
- ✓ Fast ROI
- ✓ Compact and flexible deployment

CONTACT US



+31(0)85-0805046



sales@nexsteprobotics.com

LOADX MACHINE TENDING MULTISTACKERPRO-MINI

Intelligent multi-level storage system for robot machine tending

The MultiStackerPro-Mini is a compact 10-level storage system designed for automated CNC machine tending with collaborative robots. Equipped with a Siemens PLC, Siemens HMI, and Inovance servo technology, it delivers reliable and precise operation for extended unattended production.

**CR12C cobot
& Safety
€58.780,-**

Featuring 10 trays of 600 × 480 mm with a maximum payload of 35 kg per tray, the MultiStackerPro-Mini increases machine utilization while reducing floor space and labor requirements. Its compact, freestanding design allows for easy integration into new or existing production environments.



Slim & robust design

- ✓ Tray dimensions 600 x 480 mm
- ✓ Standard servo controlled 5 drawers, up to 10
- ✓ Suitable for grids
 - Teach pendant bracket & controller compartment
- ✓ Standard single 2 or 3 finger gripper (double option)
- ✓ Dimensions: H1200 x W820 x L1560 mm

Robotics

- ✓ CR7C cobot: 7 kg | reach 950mm
- ✓ CR12C cobot: 12 kg | reach up to 1400mm

Key benefits

- ✓ Maximum machine utilization
- ✓ Consistent quality
- ✓ Fast ROI
- ✓ Compact and flexible deployment

CONTACT US



+31(0)85-0805046



sales@nexsteprobotics.com

LOADX MACHINE TENDING MULTISTACKERPRO

Maximum autonomy, ideal for long runs and unmanned production

The MultistackerPro is designed for high volumes and long-term unmanned production. With 6 to 24 drawers, the system produces continuously, without interruption.

A unique feature is that product changes are possible while the robot continues to run. The MultistackerPro continues to produce during changeover, making it ideal for long production series.

Powerful, scalable, and quick to set up.

**CR20C cobot
& Safety
€102.800,-**



Slim & robust design

- ✓ Standard 6 drawers, up to a maximum of 24 drawers
- ✓ Drawer size W710 x D580mm
- ✓ Effective drawer size W680 x D550mm
- ✓ Standard product height 245mm, minimum up to 35mm
- ✓ Maximum drawer load capacity up to 150kg
- ✓ Compressed air preparation and cable assembly
- ✓ Standard single 2 or 3-finger gripper (double option)
- ✓ Dimensions: W1300 x D2850mm

Robotics

- ✓ CR-serie cobots: 12, 20, 35 kg | bereik tot 2.2m
- ✓ NB-serie robots: 12, 25, 35 kg | bereik tot 1.8 m

Key benefits

- ✓ 24/7 unmanned production
- ✓ Maximum machine utilization
- ✓ High utilization rate up to 9 m²
- ✓ Fast ROI
- ✓ Loading and unloading during robot cycles

CONTACT US



+31(0)85-0805046



sales@nexsteprobotics.com

LOADX MACHINE TENDING COBOTS



CR12-12/1.4C cobot:

Type robot:	6-axis collaborative robot
Load capacity:	12 kg
Reach:	1.434 mm
Repeatability:	±0,05 mm
Max. speed:	3.0 m/sec.
Level of protection:	IP67 (robot arm)
Force & Torque:	integrated into all 6 axes
Type controller:	MCC xCore and xPad2 10.1-inch teach
Montage:	pendant floor, wall, or ceiling
MBTF:	+80,000 hours

of;



CR20-20/1.8C cobot:

Type robot:	6-axis collaborative robot
Load capacity:	20 kg
Reach:	1.798 mm
Repeatability:	±0,05 mm
Max. speed:	3.5 m/sec.
Level of protection:	IP67 (robot arm)
Force & Torque:	integrated into all 6 axes
Type controller:	MCC xCore and xPad2 10.1-inch teach
Montage:	pendant floor, wall, or ceiling
MBTF:	+80,000 hours

CR series cobots: power, precision, and flexibility in one

CR cobots excel in powerful performance combined with extreme precision. With high payloads, integrated Force & Torque technology, and intuitive operation, they effortlessly automate complex tasks. Flexible deployment, quick changeover, and reliable in any production environment exactly what modern manufacturing companies need.

LOADX MACHINE TENDING ROBOTS



NB25-25/1.8 robot:

Type robot:	6-axis industrial robot
Load capacity:	25 kg
Reach:	1,813 mm
Repeatability:	±0.05 mm
Level of protection:	IP65 (robot arm), IP67 (wrist)
Weight:	approx. 256kg
Type controller:	XBC5 xCore en xPad2 10.1 inch teach
Montage:	pendant vloer of plafond
Speed:	Axis 1; 204°/s, Axis 2; 186°/s, Axis 3; 182°/s, Axis 4; 492°/s, Axis 5; 450°/s, Axis 6; 705°/s

of;



NB25-35/1.8 robot:

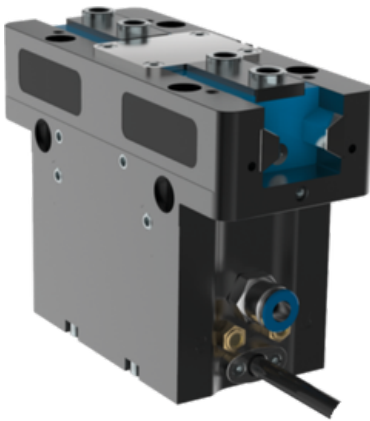
Type robot:	6-axis industrial robot
Load capacity:	35 kg
Reach:	1,813 mm
Repeatability:	±0.05 mm
Level of protection:	IP65 (robot arm), IP67 (wrist)
Weight:	approx. 256 kg
Type controller:	XBC5 xCore en xPad2 10.1 inch teach
Montage:	pendant vloer of plafond
Speed:	Axis 1; 204°/s, Axis 2; 186°/s, Axis 3; 182°/s, Axis 4; 310°/s, Axis 5; 360°/s, Axis 6; 444°/s

NB series industrial robots built for speed and continuity

For production where every second counts. The NB series delivers maximum performance, high speed, and reliability.

With IP64 and IP67 on the wrist joint, it is ideal for CNC loading. Thanks to the same software as the CR series, it is easy to operate and quick to deploy.

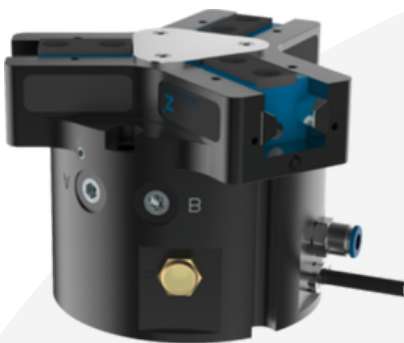
LOADX MACHINE TENDING MAXIMALE GRIP



Zimmer GPP5010 2-finger gripper (CNC milling)

- ✓ Pneumatic actuation with integrated IO-Link technology, up to 50% faster cycle times and 90% compressed air savings
- ✓ Gripping force up to 1260 N with a minimum spring-loaded force of 375 N for secure part attachment
- ✓ Fully integrated system (valve, sensors, monitoring, and status display), simple installation with a single air line and a single IO-Link cable.
- ✓ High repeatability (± 0.01 mm) combined with a low weight of 1.4 kg
- ✓ IP64 certified and corrosion-resistant, suitable for industrial environments.
- ✓ Maintenance-free for up to 30 million cycles

of;



Zimmer GPD5010 3-finger gripper (CNC turning)

- ✓ Pneumatic actuation with integrated IO-Link technology, up to 50% faster cycle times and 90% compressed air savings
- ✓ High gripping force up to 2400 N with precise and reliable workpiece handling
- ✓ Integrated system (valve, sensors, monitoring, and status display), simplified installation with a single air line and a single IO-Link cable
- ✓ High repeatability (± 0.01 mm) combined with a robust design (2.3 kg)
- ✓ IP64 certified and corrosion-resistant, suitable for demanding industrial environments
- ✓ Maintenance-free for up to 30 million cycles

Zimmer grippers: maximum reliability, minimum downtime

Zimmer pneumatic grippers combine robustness with smart IO-Link technology for real-time monitoring and maximum process reliability. That is why we choose Zimmer: consistent performance, high precision, and reliable production, day in, day out.

LOADX MACHINE TENDING SOFTWARE & SUPPORT

One software for every robot. No robot programmer needed.

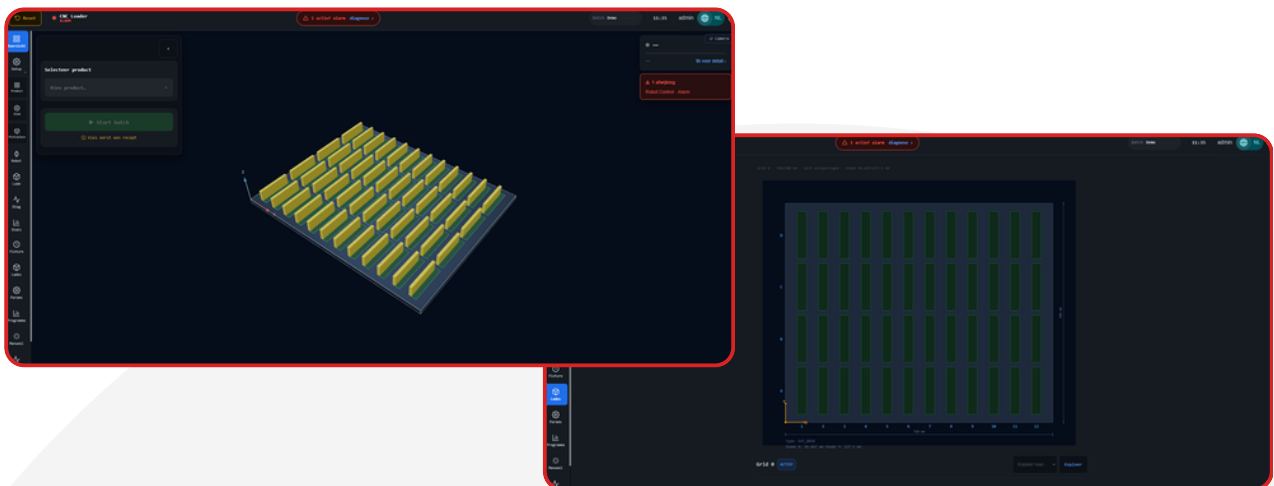
For the LoadX Machine Tending Solutions, we have developed our own Smart Machine Tending software that works with any cobot or industrial robot.

Operation is via a clear 15" touchscreen. After a short training, any CNC operator can immediately start production themselves.

The software is visual and intuitive: after entering the product dimensions, the system automatically determines the correct product layout for the LoadX application. During the process, the screen continuously displays clear status information, such as door open/closed, clamp active, and CNC program in execution.

The look & feel is always the same, regardless of the system, so it quickly becomes familiar to every operator.

Need help? With our VPN Support Pack, we can immediately look along remotely.



VPN Online Support pack:

- ✓ Direct remote support door robot specialist
- ✓ Fast problem solving, less downtime
- ✓ Remote optimization of programs and processes
- ✓ Lower service costs due to fewer on-site visits
- ✓ VPN Online Support Pack for 3 years of online service

LOADX MACHINE TENDING INTEGRATION

Safely designed robot loading for reliable CNC automation

The LoadX Machine Tending Solutions from NexStep Robotics are designed as a modular robot loading solution for integration with CNC machines and other production systems.

Depending on the application, the LoadX can be equipped with safety sensors and/or physical shielding, tailored in consultation with the end customer and/or system integrator.

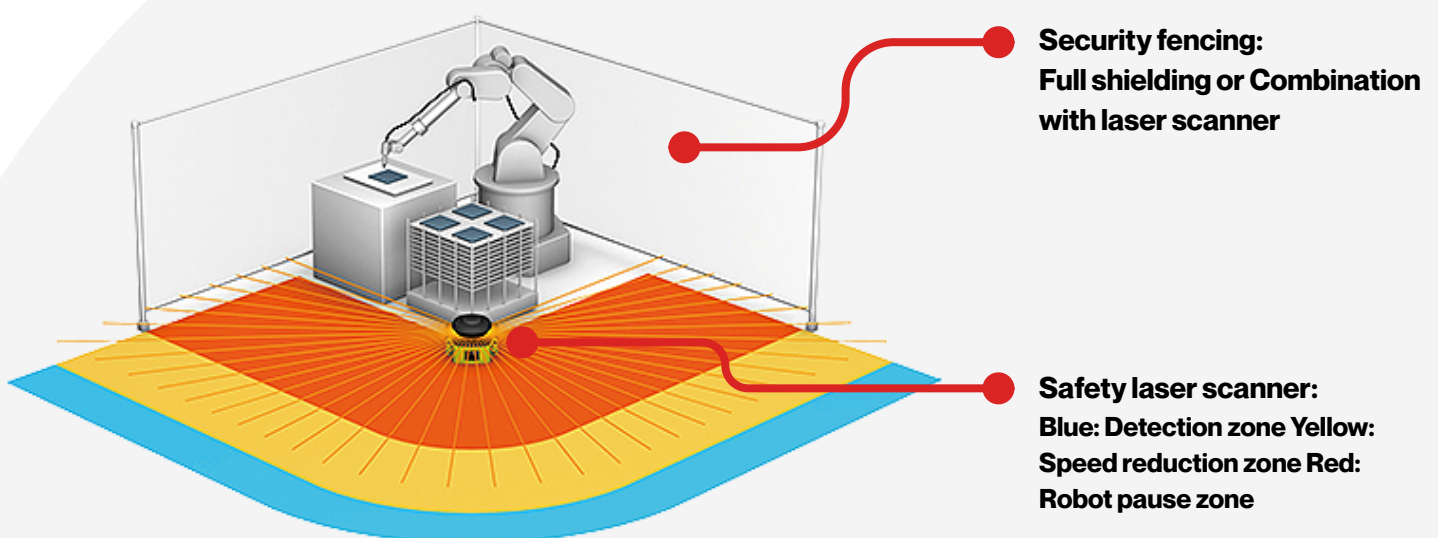
The LoadX is intended as an unfinished machine and can only function after integration with a CNC machine or other control system via a pre-specified communication protocol. Without this connection and release via external control, the system is not operational.

The final integration, including validation of the safety functions and execution of the risk analysis in accordance with the Machinery Directive, falls under the responsibility of the party that assembles and puts the complete installation into operation.

NexStep Robotics can provide support with risk analysis, safety integration, and CE processes, if desired.

The LoadX is supplied with an installation declaration and accompanying mounting instructions, in accordance with the Machinery Directive 2006/42/EC.

Example of applied safety systems





CONTACT:

Office: Nieuwkoop, South Holland, Netherlands

Telephone: +31(0)85-0805046 | **Mail:** sales@nexsteprobotics.com

Website: www.nexsteprobotics.com