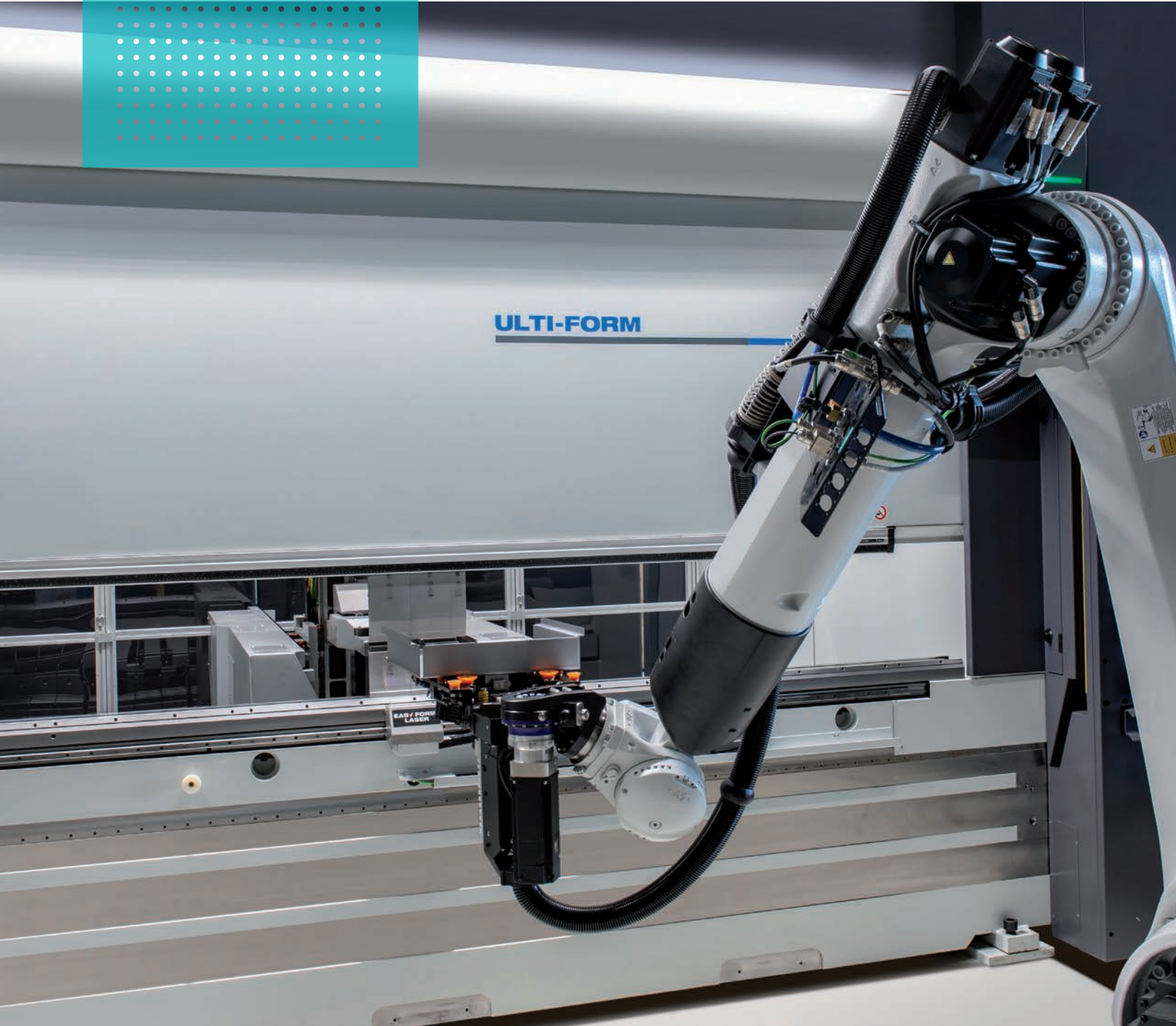


*Press brake  
automation*

# ULTI-FORM

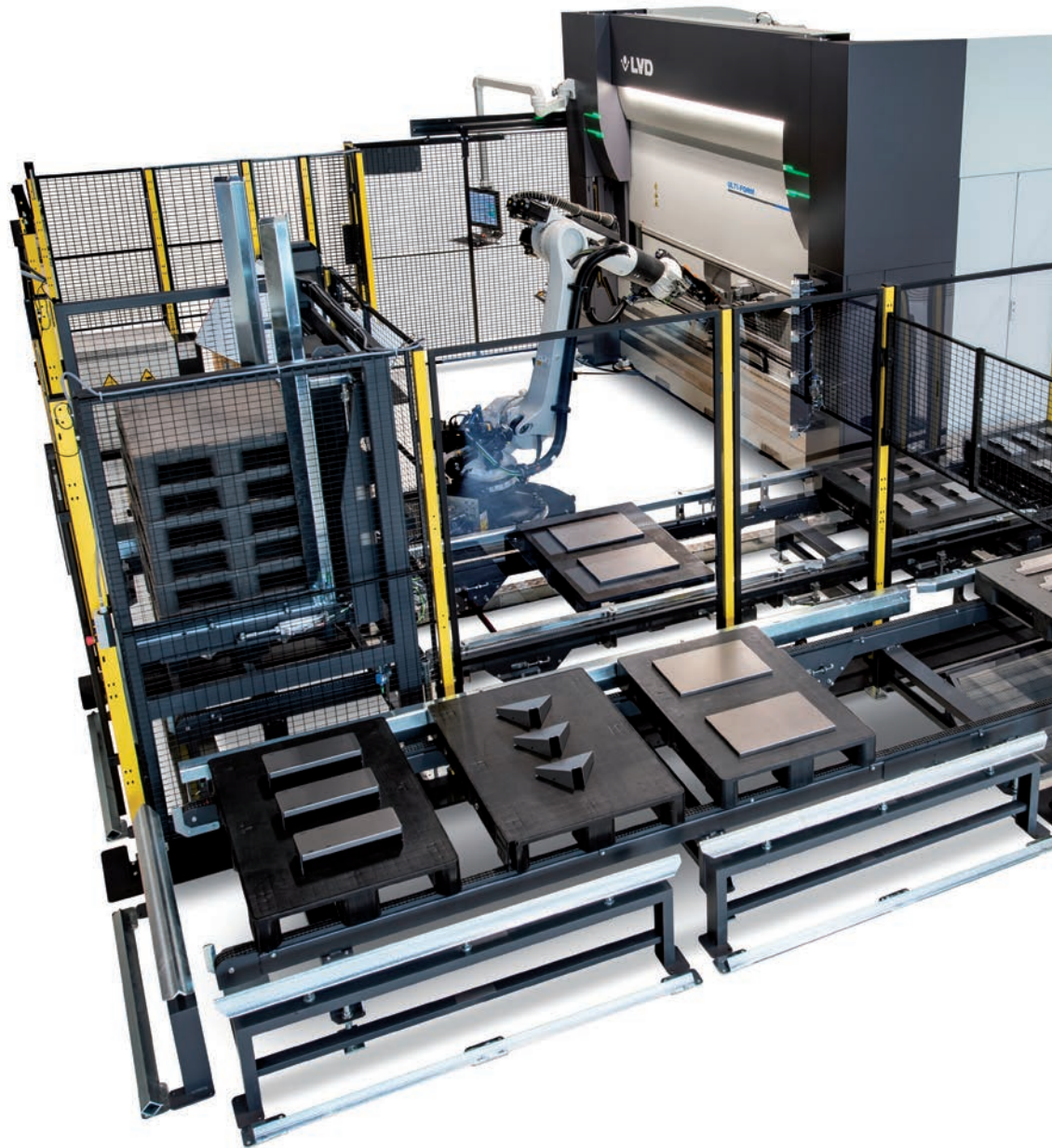
THE ULTIMATE BENDING SYSTEM



# ULTI-FORM

## THE ULTIMATE BENDING SYSTEM

Ulti-Form takes the best of LVD bending technology and combines it with fast robot and press brake programming, optimized input and output capacity, and a universal gripper – to create a unique system that efficiently bends parts from 1.9" x 3.9" (50 x 100 mm) up to 47" x 31" (1200 x 800 mm).



*“Ulti-Form takes bending automation to the maximum, delivering high productivity in a compact space.”*



## **BUILT FOR TOP PERFORMANCE**

**Automated press brake with integrated tool changer and tooling warehouse**

**Kuka industrial robot**

**Auto-adapting, universal gripper**

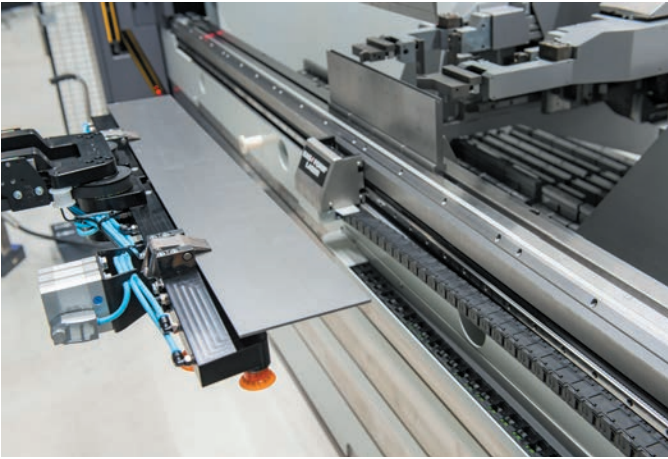
**Easy-Form® Laser adaptive bending system**

**3 input pallets**

**Large output zone for 10 pallets including pallet dispenser and conveyor system**

**Intuitive Touch-B control**

# WHY CHOOSE ULTI-FORM

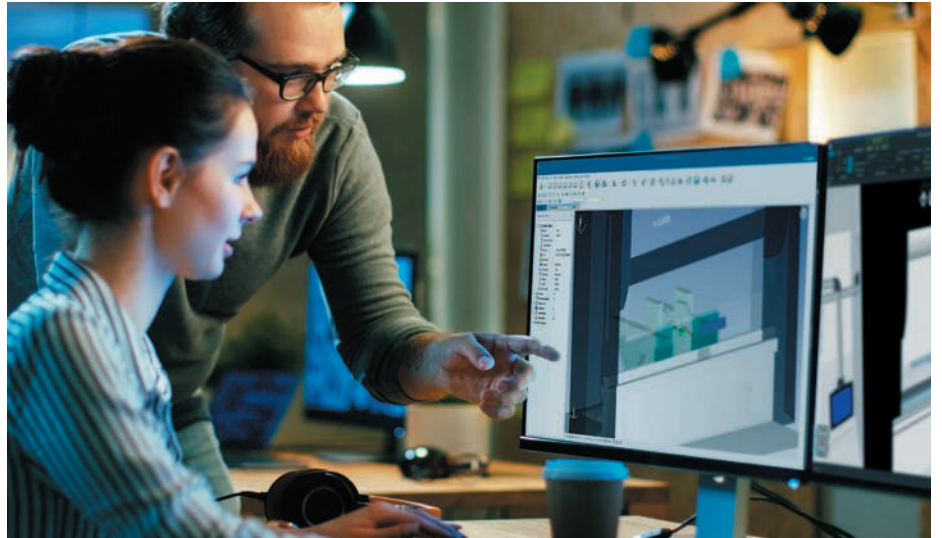


## MINIMIZED SETUP TIME

The robot and press brake work in synergy to keep change-over time to a minimum. As the robot picks the workpiece from the input stack and centers the part, the press brake with integrated automated tool changer completes the tool change. Setup is fast, accurate and efficient.

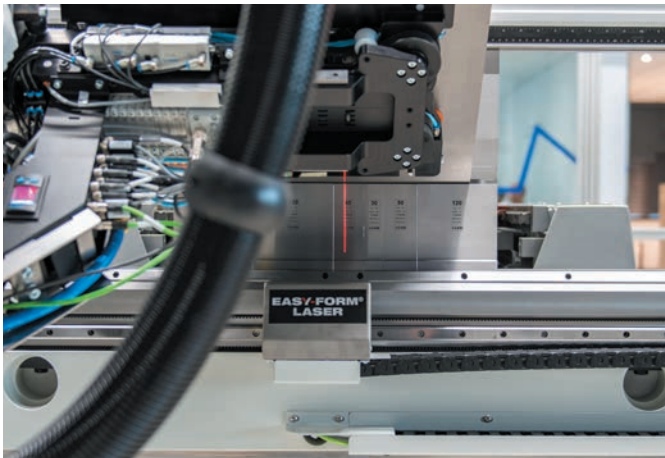
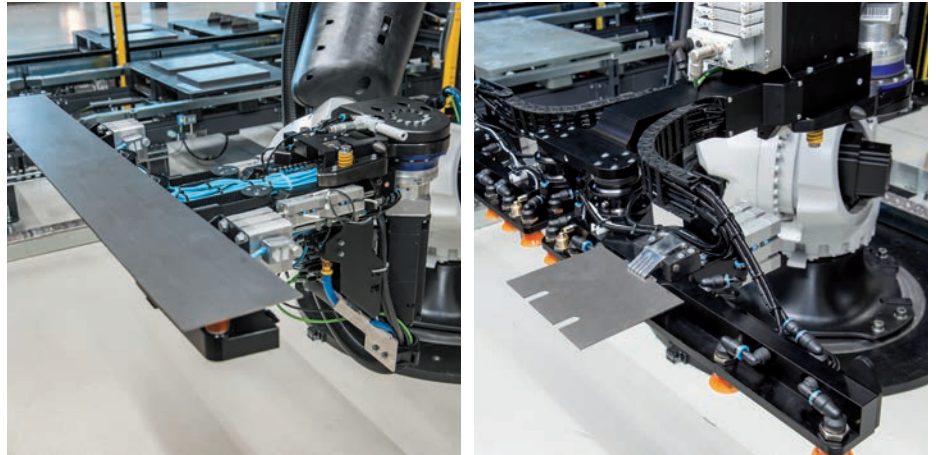
## FAST PROGRAMMING

Programming of Ulti-Form is handled completely offline, reducing downtime and setup time. The system automatically calculates gripper positions and a complete collision-free robot path. There is no need to physically “teach” the robot at the machine. A full 3D environment provides a realistic virtual simulation of the production so the user can check and visually confirm the bending sequence.



## AUTO-ADAPTING GRIPPER

Engineered by LVD, Ulti-Form's universal robot gripper eliminates gripper changes. The gripper adapts to the workpiece to accommodate a number of part geometries. Its smart design saves investment in different grippers and gripper changeover time, keeping production continuous.



## ANGLE ACCURACY ENSURED

LVD's in-process angle monitoring system, Easy-Form® Laser, ensures the first bend is accurate every time. It enables Ulti-Form to consistently deliver perfect parts.

## MORE RETURN ON INVESTMENT

Ulti-Form offers the flexibility to operate in either automated or manual mode. Use Ulti-Form in automated mode for large batches; in manual mode for small batches and complex parts. Ulti-Form allows you to realize the lowest cost per part and get the most from your investment.



# EFFICIENTLY ORGANIZED

Ulti-Form automates material handling and bending, delivering consistent output.

This happens in an efficiently-organized 26 x 32 foot (8 x 10 m) space.

Here are the key components of the system :

## Automated press brake minimizes changeover times

The press brake design is based on LVD's renowned ToolCell, featuring an automatic tool changer with a large, integrated tooling warehouse.



## Unique gripper – For all part sizes

A universal gripper designed by LVD eliminates the need to change grippers and keeps production continuous and uninterrupted.



## Dynamic robot

The industrial-grade Kuka robot handles workpieces up to 55 lbs (25 kg) with full reachability across the cell's entire working area.



## Drop zone

Through the drop zone, the robot can remove parts smaller than 7.8" (200 mm) directly out of the cell.



## Input pallets

The input zone provides three input pallets with an inclined plane for easy picking.

## Sliding doors

Sliding doors at the front and side of the bending cell allow convenient access for the operator and a way to supply material to the cell.

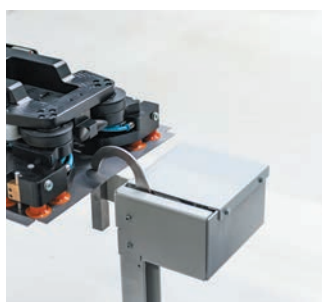
## Center station

The robot takes a part from the material supply and references the blank position on the center station using the vacuum cups or the clamp for very small parts.



## Touch-B control

LVD's latest 19" touch screen control features intuitive graphical icons used to control all parameters of the robot, gripper and the machine for fast and efficient operation.

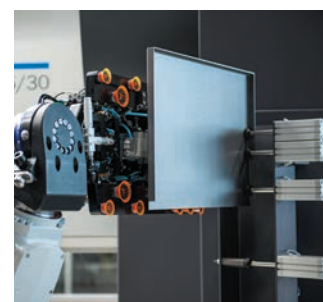


## Sheet thickness measurement

Sheet thickness inspection prevents processing double sheets or parts of the wrong thickness.

## Regrip station

A regrip station attached to the press brake allows the regripping of a part when necessary.

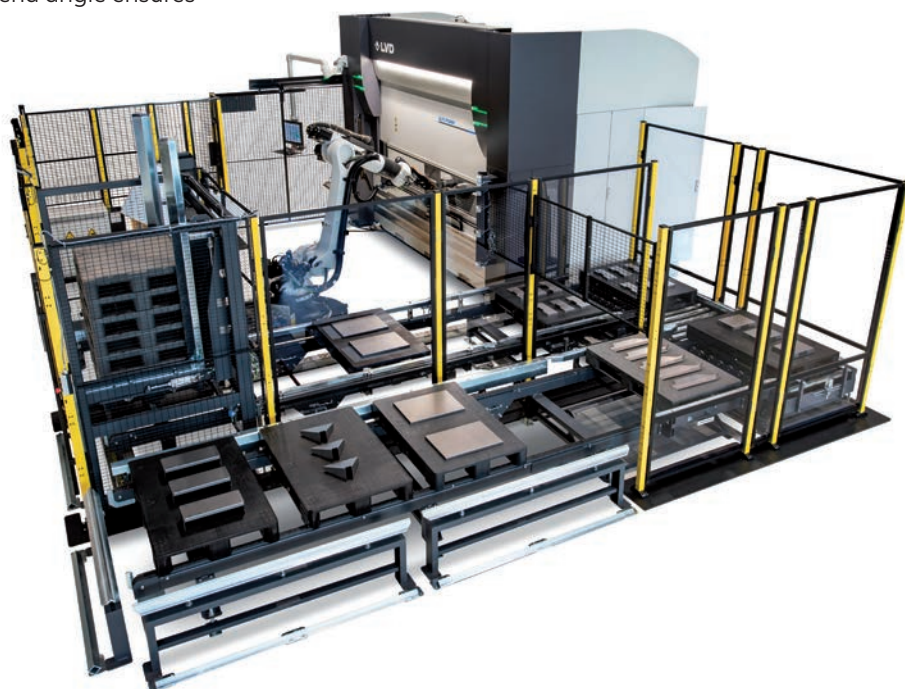


## Easy-Form® Laser adaptive bending system

LVD's adaptive, in-process control over the bend angle ensures consistency from the first to the last part.

## Large output zone

A large output zone offers space for up to 10 pallets, an automated pallet dispenser and a conveyor system that efficiently move finished parts outside the cell, freeing space inside for long production runs.



# TECHNICAL SPECIFICATIONS

ULTI-FORM		135/30
Pressing force	ton	150
Pressure	bar	290
Working length	inches	120
Distance between uprights	inches	157
Stroke	inches	15.7
Distance table/ram	inches	23.6
Table width	inches	4.7
Max. load table	ton/ft	281
Working height	inches	38
Approach speed*	inch/sec	425
Working speed**	inch/sec	51
Return speed	inch/sec	472
Top tooling - height	inches	W style, 9.09
Bottom tooling - height	inches	LVD style, 5.12
Backgauge		X1R1Z1, X2R2Z2
Safety system		IRIS Lazer Safe
Main motor	kW	22
Weight press brake	lbs	41,887
Oil tank	gallon	66
Robot		6-axis Kuka robot
Reachability	inches	122
Part size	inches	min 1.9 x 3.9 – max 47.2 x 31.4
Maximum part weight	lbs	55

\*For CE-countries only if the machine is equipped with an optional safety system.

\*\*For CE-countries working speed is limited to safety norm.

Specifications subject to change without prior notice.

LVD North America  
 12975 Clarence Center Rd. AKRON NY 14001, UNITED STATES  
 Tel. +1 716 542 4511 - marketing.us@lvdgroup.com - [www.lvdgroup.com](http://www.lvdgroup.com)

LVD North America is the trade name of the Sales & Service division of Stripit, Inc.

