

ENSPECTOR

ZEMAN SYSTEMS



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PART INSPECTION, QUALITY CONTROL & SORTING SYSTEM

At Lincoln Electric Automation, we developed a Zeman system that can globally facilitate the part management of steel fabricators & service centers. A smart scanning system, used to identify each plate in its dimension, shape and quality. After automatically evaluating the characteristics of a part, the work piece will be sorted according to the desired criteria into a designated bin.

STANDARD SYSTEM INCLUDES

- Control Panel & Operating Software
- Scanning System
- Robot with one external Axis
- Conveyor Belt
- Magnetic Gripper
- Safety Equipment
- Standard bin rack
- 41 Bins

BENEFITS

- Improve Quality Control
- One-person-job
- Optimize Productivity
- Increase Production Efficiency
- Minimize loss on errors for downstream production

INDUSTRIES

- Structural Industry
- General Industry

IDEAL APPLICATIONS

- Quality Control
- Part Management

OPERATING SOFTWARE

With the Zeman ENSPECTOR™ machine, you receive our proprietary software: ENSPECTOR-Sort and ENSPECTOR-Scan, tailored specifically for this machine. This software imports .nc data of parts, necessary for measuring, comparing, and identifying them. Additionally, an XML file [Zeman export] or designated Microsoft Excel® spreadsheet is required to assign scanned parts to bins based on chosen sorting criteria such as beam, fabrication stage, customer, batch, lot or sequence.

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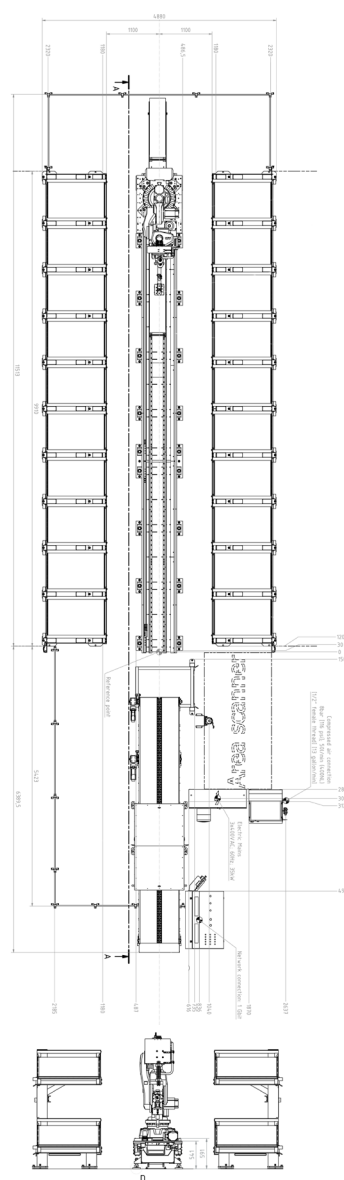


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STANDARD LAYOUT



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SYSTEM DETAILS

SCANNING SYSTEM

Each individual part will be scanned and the actual dimensions get compared with the 3D data in the background.

ROBOT WITH EXTERNAL AXIS

Once the scanning and quality check is completed, the sorting robot picks up the part with a magnetic tool and moves it to the designated area.

CONVEYOR BELT

Moves the part through the scanner until the sorting robot picks it up or it drops into the reject bin. **Max. Loading weight: 3pcs. x 80 kg**

MACHINE SET-DOWN STATIONS

Once a part passes the quality check, the sorting robot will pick up the part and moves it to the assigned setdown station. These stations are defined positions to place the bins in order to enable the robot to drop with precision the scanned parts. **Quantity: 41 pcs.**

Size: 1200mm x 800mm x 600mm (47" x 31" x 23")

Maximum fill level: 1500kg (3300 lbs)

CONTROL PANEL

The control panel displays production data and enables operator oversight and intervention in sorting. Part details are imported from 3D (Tekla, SDS2, Bocad, Advanced, etc.) and the production software (Fabtrol, Excel and custom imports from other ERP tools may be an option). Custom Multiple sorting options exist, including by patch, beam, and project. The system facilitates in operation adjustments via drag-and-drop on the operator screen.

MAGNETIC GRIPPER

A pneumatically operated permanent magnet enables parts to be picked up and placed in the assigned bin.

OPTIONAL FUNCTIONS

Marking Unit: Can label identified parts.

Self-Feed incl. pallet rotator: Switches empty with full pallets and automatically feeds the machine.

PRODUCT SPECIFICATIONS

Product Name	Product Number	System Dimensions LxWxH in. (mm)
ENSPECTOR	AD2533-1	Depending on Configuration

PART SPECIFICATIONS

Plate Size	(mm) / (kg)	(Inch) / (lbs)
Length:	100-800 mm	[4" – 31.5"]
Height:	5-70 mm	[3/16" – 2 3/4"]
Width:	50-600 mm	[2" – 23 5/8"]
Weight:	up to 80kg	[up to 175 lbs]

CUSTOMER ASSISTANCE POLICY

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