Integrated 3015 Laser Cutting & Automated Sorting Line Guide.

Configure a connected flow from sheet loading and adaptive cutting to vision sorting, coding, palletising and recovery.



KLD LASERSORT 3015 / FINAL CONFIGURATION SUBJECT TO PROJECT ENGINEERING

SYSTEM LOGIC	OUTPUT CONTROL	CLOSEOUT
CUT → SORT	CODE → STACK	RECOVER

Why integrate the cut-to-sort flow?
Make part identity and output control part of the production plan.

Disconnected handoffs create avoidable decisions.

- Sheet handling, part recognition and labels become separate tasks.
- Manual micro-joint clearance slows the route from cut to stack.
- Work-in-process grows when stack, bin and recovery logic are not defined together.

THE INTEGRATED RESPONSE

Define the equipment around the actual production flow.

Sheet flow
Loading to cut.

Part flow
Identify to stack.

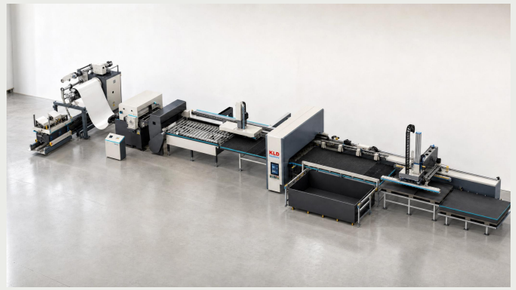
Closeout
Code and recover.

Selection focus: define part mix, stack destinations, traceability fields, scrap route and downstream logistics before final configuration.

Two routes to 3015 laser automation.

Choose a compact cut-to-sort cell or an extended production line based on actual flow scope—not headline machine size.

01 COMPACT CUT-TO-SORT



Fourth-generation integrated sorting cell

Integrated cut-to-sort platform for controlled sheet-to-part flow.

Reference footprint: 14,500 × 6,500 × 3,000 mm

02 EXTENDED PRODUCTION FLOW



Flexible laser sorting production line

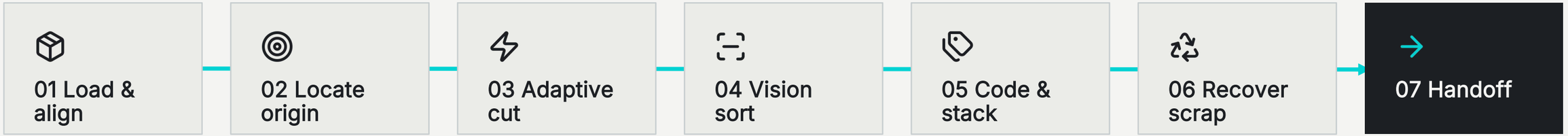
Extended material flow with an engineered downstream bending interface.

Reference footprint: 31,000 × 6,500 × 3,000 mm

Footprint and equipment mass are reference values extracted from supplied configuration material; final layout requires project engineering.

One controlled production loop.

Every handoff becomes a defined process stage—from the first sheet to the final sorted part, code and recovery route.



Flow-led engineering.

SELECT BY PART AND ROUTE

Part matrix

Dimensions, geometry, material and loading state.

Output logic

Stack, bin, label, code and recovery route.

Interface definition

Data handshake, downstream process and acceptance plan.

Automatic loading, positioning and adaptive cutting.

The upstream module prepares the sheet, establishes the datum and executes the laser programme within the selected material range.



INTEGRATED 3015 LINE REFERENCE / ISOLATED PRODUCT VISUAL

THREE UPSTREAM CONTROL POINTS

01 Automatic sheet loading
Align the handling scope with format, loading state and material supply.

02 Intelligent origin positioning
Confirm datum, sheet tolerance and the programmed locating sequence.

03 Adaptive programme execution
Validate material, thickness and process data against the approved part set.

Buyer validation: material source • sheet format • thickness range • loading strategy • nesting and programme interface.

AI vision sorting and controlled part handling.

Vision identifies the part position; the handling logic then applies the approved pick, destination and stack route.



PART ROUTE IS DEFINED BY THE PROJECT PART FAMILY AND OUTPUT LOGIC.

VISION-GUIDED SORTING / SELECT BY THE PART, NOT ONLY THE MACHINE

01

Identify the part

Read position and orientation after cutting.

02

Apply pick logic

Set the gripper and handling response.

03

Confirm output

Assign the stack and destination bin.

BUYER CHECK

Part geometry • target stack • bin count • destination route •

Traceability, palletising and material recovery.

Close the loop with documented part identity, an agreed output stack and a defined recovery route for the residual material.



01 / TRACEABILITY

Smart part coding

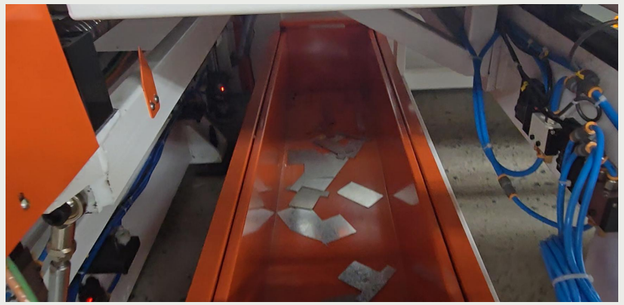
Define the visible code and the data field before final acceptance.



02 / OUTPUT CONTROL

Part stacking route

Agree stack identity, bin logic and downstream material handover.



03 / CLOSEOUT

Automatic scrap recovery

Plan the collection method and the route for residual material.

Project scope checkpoint: labeling fields • destination bins • stack identity • recovery method • downstream handover

Integrated sorting cell — technical reference.

Fourth-generation integrated 3015 laser sorting configuration. Values below are reference figures extracted from the supplied material.

Reference item	Value	Selection interpretation
Overall dimension	**14,500 × 6,500 × 3,000 mm**	Confirm installation footprint, loading lane and maintenance access.
Approx. equipment mass	**8,500 kg**	Validate civil works and installation plan.
Process sheet envelope	**Max. 3,010 × 1,510 × 3.0 mm**	Match the material and thickness range to the approved part set.
Minimum process sheet	**800 × 600 × 0.8 mm**	Confirm sheet source and minimum handling condition.
Max. part loading weight	**100 kg**	Confirm part payload, gripper and stack strategy.
Sorted part range	**100 × 100 to 2,800 × 1,200 mm**	Validate part geometry, stack destination and bin logic.

CONFIGURATION NOTE

Compact cut-to-sort for controlled part output.

Confirm final footprint, output logic, recovery route and utilities in project engineering.

Reference-data note: final technical scope, cycle outcome and safety configuration are subject to KLD’s review of parts, material and material flow.

Flexible laser sorting line — technical reference.

Extended RAY STAR-3015 flexible production-line reference with automated sorting and potential downstream bending connection.

Reference item	Value	Selection interpretation
Overall dimension	**31,000 × 6,500 × 3,000 mm**	Confirm full production-line footprint and material travel route.
Approx. equipment mass	**45,000 kg**	Validate civil works, unloading and installation plan.
Process sheet envelope	**Max. 3,010 × 1,510 × 3.0 mm**	Match format and thickness range to the production profile.
Minimum process sheet	**800 × 600 × 0.8 mm**	Confirm sheet source and minimum handling condition.
Max. part loading weight	**100 kg**	Confirm payload state, stack logic and end-of-line handover.
Sorted part range	**100 × 100 to 2,800 × 1,200 mm**	Validate geometry, stack destination and output strategy.
		Reference value; final acceptance criteria are

CONFIGURATION NOTE

Extended flow, engineered for the downstream process.

Define the bending interface, output handling, code fields, recovery route and control responsibility.

Planning focus: evaluate the flexible line as an end-to-end material-flow solution, not only a laser-cutting installation.

Project review, engineering and contact.

Start with the production facts. KLD will align the line architecture, technical boundary and acceptance path.



KLD LASERSORT 3015 / CONFIGURATION DEFINED BY PROJECT REVIEW

TECHNICAL REVIEW INPUTS

01 Part drawings, material range and maximum part payload
02 Output target, part mix, stack logic and recovery route
03 Layout, utilities, interfaces and local standards

ENGINEERING PATH

01 Review ← 02 Configure ← 03 Validate ← 04 Handover

KLD MACHINERY
www.kld-machinery.com | info@kld-machinery.com | +86 134 0005 7689
No. 101 Tongtian Road, Jiangning District, Nanjing, China