

SLITTING LINE SOFTWARE

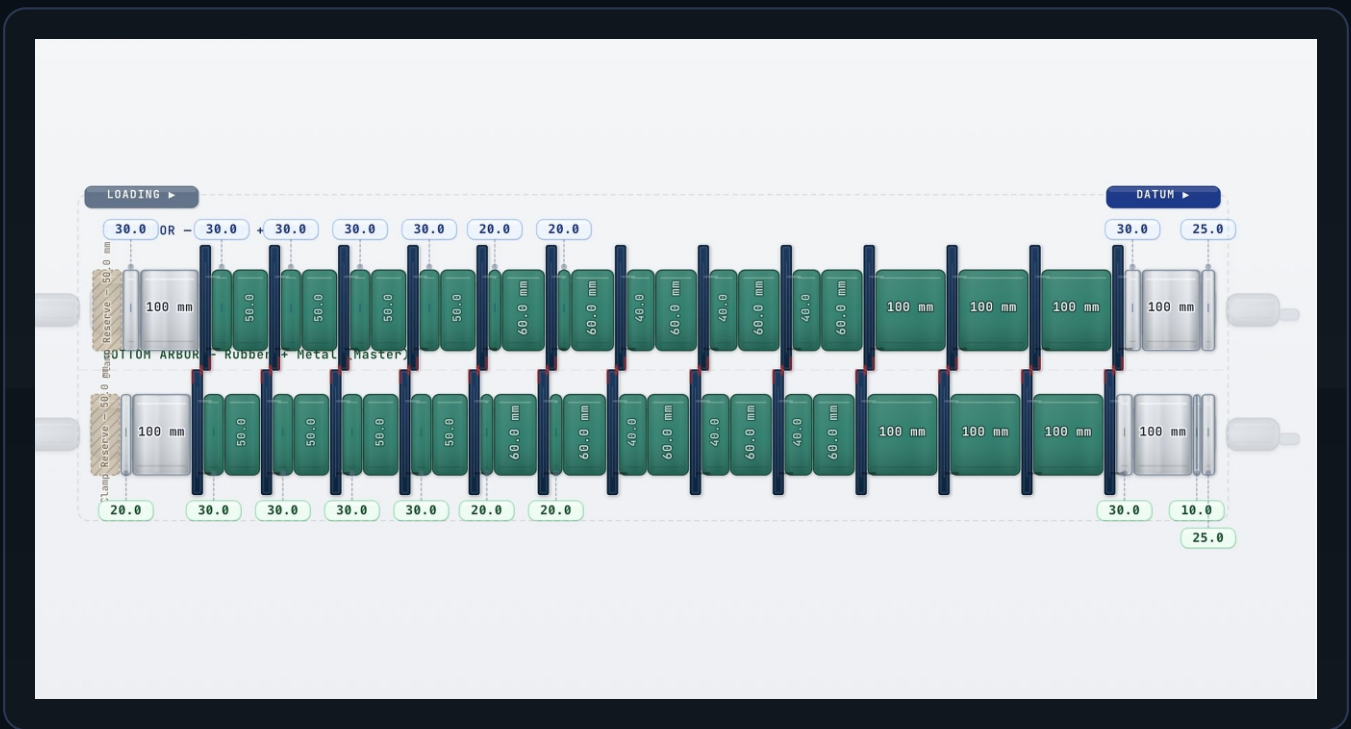
PATTERN SOLVER

INVENTORY AWARE

PRINT READY

Slitting setup, without the spreadsheet.

OptiStack Pro **calculates the slit pattern, picks the spacers from your live inventory,** and **prints the assembly sheet.** Operators stop guessing clearance. Planners stop redrawing patterns in Excel. Plant managers stop firefighting at every shift change.



MIXED-WIDTH PATTERN, RUBBER BONDED SPACERS ON BOTH ARBORS, ALTERNATING ENGAGEMENT. BUILD EFFECTIVE LENGTH 1400 MM.

60 sec
SETUP TIME, MAX

97 %
COIL YIELD*

0
EXCEL SHEETS

1 sheet
PER JOB, EACH SHIFT

*Typical coil yield observed across early deployments on 1110 to 1250 mm CR coils. Result varies by pattern.

— WHY THIS EXISTS

Every shift loses time to the **same five questions.**

Slitting lines are built on tacit knowledge. The senior operator knows which spacers go where. The planner keeps the pattern in an Excel sheet on a desktop. The new operator looks at three sources and guesses. OptiStack replaces all of it with one answer that every shift gets the same way.

THE OLD WAY

- 01 Clearance calculated by hand. A different operator picks a different number.
- 02 Spacer combination chosen from memory. The 1.09 mm shim is missing and nobody knows until startup.
- 03 Pattern redrawn in Excel for every order. Half the work, half the night shift.
- 04 No record of what the last shift ran. The order comes back, the setup starts from zero.
- 05 Mixed-width and alternating patterns calculated on paper. One arithmetic error, one bad coil.

WITH OPTISTACK PRO

- ✘ **Clearance calculated from thickness.** Same value, every operator, every shift.
- ✔ **Solver picks from live inventory.** Missing pieces flagged before the line starts. Purchase list ready.
- ✔ **Pattern saved.** Sheet exported as PDF. The next shift opens the same spec and runs it.
- ✔ **Every job archived** with date, machine, coil width, strip mix, and operator. Search and reuse.
- ✔ **Alternating engagement** handled by the solver. Phase shift, sliver minimum, all checked automatically.

One operator. One screen. One spec. The pattern that came back from the customer on Tuesday is the same pattern the night shift loads on Wednesday.

Senior Operator, 1250 mm slitting line, North India service center

SAME SPEC, EVERY SHIFT

VERIFIED INVENTORY

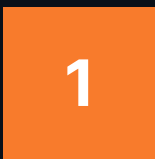
PRINTABLE PDF

FULL AUDIT TRAIL

— HOW IT WORKS

Three steps. One build. Under sixty seconds.

Each step takes around twenty seconds. OptiStack remembers your machines, your inventory, and your last job. The operator answers what the order is. The software answers everything else.



JOB

Job basics

Pick the slitting line from your saved machines. Enter coil width, material, and thickness. **Side clearance is calculated automatically** from the thickness setting. No rules of thumb. No operator-to-operator variance.



STRIPS

Slit requirements

Enter the finished strip widths and quantities the customer ordered. Add as many sizes as the job needs. **The utilization bar shows you in real time** whether the pattern fits the coil, before you commit to step three.

STRIP WIDTH (MM)	NUMBER OF STRIPS	
100	6	+ 600 mm
80	6	+ 480 mm

+ Add another strip width

Back to Step 1 | Continue to Step 3



BUILD

Build configuration

Pick the knife from inventory. Choose spacers: metal, rubber bonded, or both. Select standard or alternating engagement. **Live validation** flags any tooling conflict before the solver runs. No surprises at the machine.

SETUP SUMMARY			
Material	Hot Rolled Steel (HR)	Thickness	1 mm
Coil Width	1110 mm	Clearance	0.1 mm
Clamp Zone	50 mm	Datum	RIGHT

BUILT AROUND YOUR FACTORY

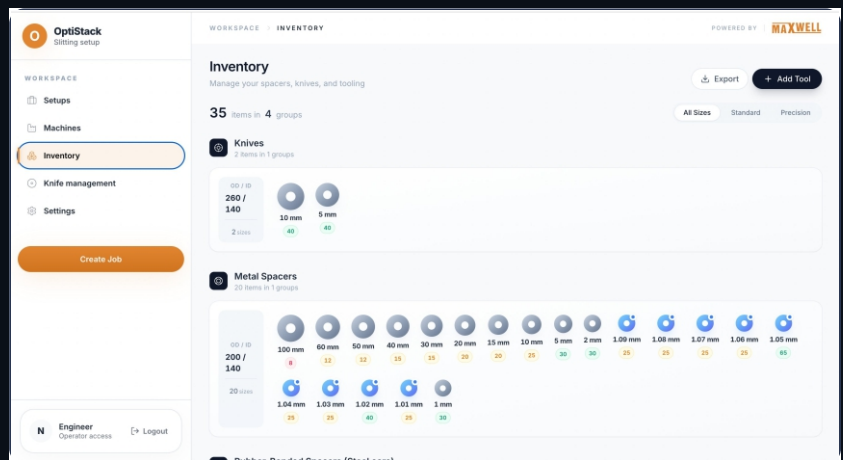
Your spacers. Your knives. Your machines. All counted.

OptiStack does not guess what you have on the shelf. Every spacer, every knife, every slitting line in your plant is registered with real outside diameter, real bore, real stock count, and real tolerance. The solver only picks pieces that exist in your inventory, on a machine you actually run.

01 · INVENTORY

Stock that cannot lie.

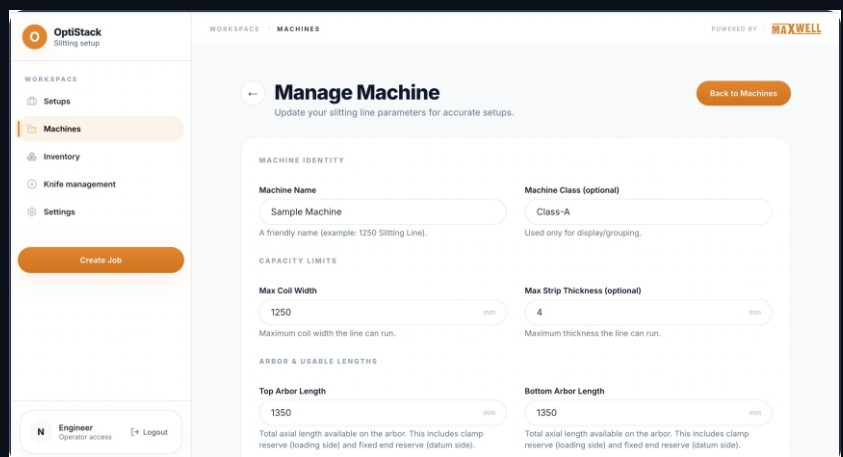
Knives, metal spacers, rubber bonded spacers, plastic shims. Grouped by outside diameter and bore. Live quantities. The solver checks every piece against this list before it offers a solution. Tolerance, location, and condition recorded against every piece.



02 · MACHINES

Every slitting line, on file.

Machine name, class, max coil width, max thickness, top and bottom arbor length, clamp reserve, datum side. Add as many lines as your plant runs. Jobs use the machine you select, not a default. Re-run last week's order on the same line and the setup is identical.



BEYOND THE BASICS

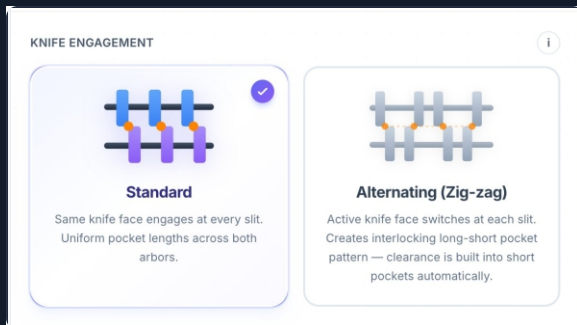
Every shop floor decision, handled in software.

The choices a senior operator makes by experience are first-class options in OptiStack. Engagement mode, pack style, tooling shortfalls, edge quality. All in the same workspace. All recorded against every job.

01 • ENGAGEMENT MODE

Standard, or alternating zig-zag.

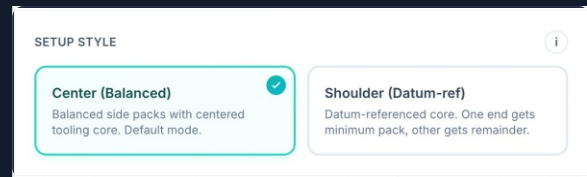
Standard engages the same knife face at every slit. Alternating switches the active face each slit, so clearance is built into short pockets automatically. One toggle. Two correct answers.



02 • PACK STYLE

Center balanced, or shoulder datum-referenced.

Tell OptiStack how the pack sits on the arbor. Center divides it evenly around the tooling core. Shoulder anchors against the datum side and lets the loading end take the remainder.



03 • MISSING TOOLING RECOMMENDER

Know what to buy before the line stops.

If the solver picks a spacer you do not own, the build is flagged with type, width, how many you have, how many you need, how many short. Send it to purchase. Resume the job when stock lands.

The following items are required to complete this build. Add these items to your inventory to proceed.

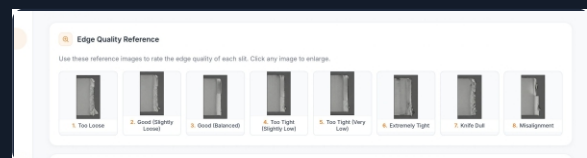
REQUIRED TO BUILD THIS JOB	TYPE	WIDTH	OD	LOCATION	HAVE	NEED	SHORT
	Metal Spacer	1.000 mm	--	--	0	3	3
	Metal Spacer	1.000 mm	--	--	0	1	1

Action Required: Navigate to the inventory tab to add these items to proceed with this build.

04 • EDGE QUALITY REFERENCE

Eight references. Operators trained in days.

From too loose to misalignment, every common defect has a reference photo. Operators rate inbound and outbound edges against the gallery. Ratings save against the job for audit.



ENGAGEMENT MODE CLARITY

Standard setup, or male-female zig-zag.

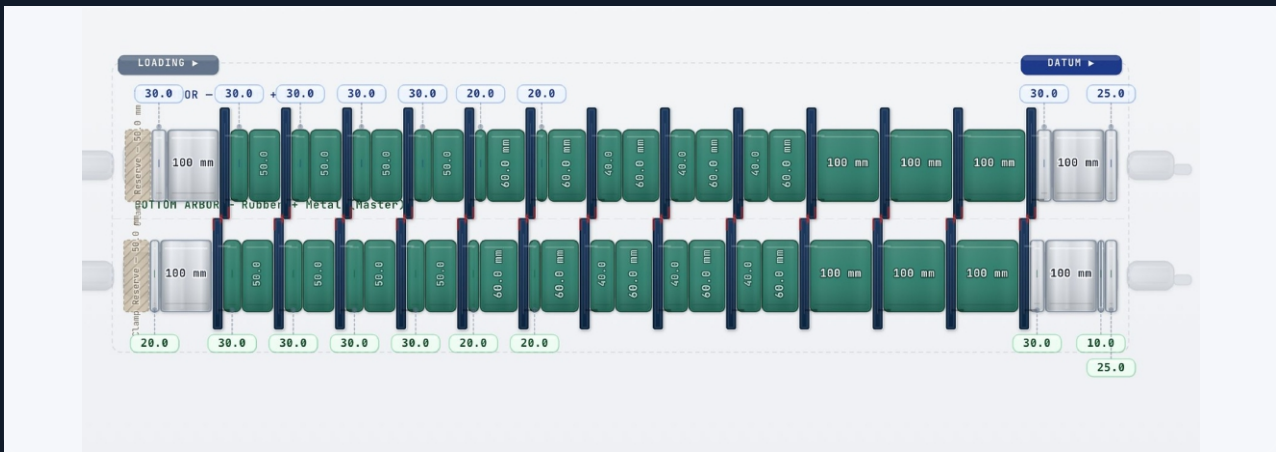
OptiStack does not force one cutting philosophy. The operator selects the engagement mode, and the solver builds the matching top and bottom arbor stacks from the same live inventory.

01 · STANDARD SETUP / CROSS-CUT

SAME-WIDTH TOP + BOTTOM

Same-width pockets on both arbors.

Used when the line is intentionally run without alternating male/female engagement. Top and bottom pockets repeat the finished strip widths, keeping the setup simple and repeatable.



02 · ALTERNATING ZIG-ZAG / MALE-FEMALE

ACTIVE FACE SWITCHES

Male-female engagement calculated automatically.

Active knife face alternates slit by slit. Long pockets, short pockets, phase shift, clearance and datum placement are calculated before the operator loads the arbors.



— THE OUTPUT

The whole build, on one screen. Hand it over. **Start the line.**

Coil width, produced length, trim, strip count, knife layout, spacer stack, datum side, clamp reserve, effective length. All decided. All on one screen. Save the job, export the PDF, and the next shift opens the same setup and runs the same line. No translation, no telephone game.

← Back

Assembly View
Complete build specification

✓ Save Job
📄 Export PDF

Job Summary

Pattern: 100 mm × 6 + 80 mm × 6 • Trims: 30 mm

● SYSTEM: READY

COIL WIDTH
1110 mm

PRODUCED
1080 mm

STRIPS
12

SLIT LINES
13

DATUM / LOAD
RIGHT / LEFT

CLAMP RESERVE
50 mm

KNIFE (T)
10 mm

CLEARANCE
0.1 mm

EFFECTIVE LENGTH
1325 mm

SETUP STYLE
Center

Slit Pattern

Finished strip widths from Step 2

WIDTH (MM)	QTY	TOTAL (MM)
100	6	600
80	6	480
TOTAL PRODUCED	12 strips	1080 mm

ASSEMBLY VIEW • JOB SUMMARY WITH COIL WIDTH, PRODUCED LENGTH, TRIM, STRIP COUNT, DATUM, CLAMP RESERVE, KNIFE AND CLEARANCE.

Grouped BOM

Start from LOADING side and stack toward DATUM side. Parts aggregated by type and width. Pull all pieces before starting assembly.

TOP ARBOR

COMPONENT	WIDTH	OD	QTY	NOTES
CLAMP RESERVE: 50 mm — Keep Clear				
Knife	10	—	13	
Rubber-bonded	20	—	2	
Rubber-bonded	30	—	4	
Rubber-bonded	40	—	3	
Rubber-bonded	50	—	4	

Total pieces: 39

BOTTOM ARBOR

COMPONENT	WIDTH	OD	QTY	NOTES
CLAMP RESERVE: 50 mm — Keep Clear				
Knife	10	—	13	
Rubber-bonded	20	—	2	
Rubber-bonded	30	—	4	
Rubber-bonded	40	—	3	
Rubber-bonded	50	—	4	

Total pieces: 40

BUILT ON THE SHOP FLOOR, FOR THE SHOP FLOOR

Shipped by Maxwell Slitter Industries.

Designed by people who have spent twenty years next to a slitting line. Engineered to make the next twenty years quieter, faster, and fully traceable.

optistackpro.com

— FOR THE PEOPLE WHO SIGN THE PO

The numbers that close it.

A slitting line spends more time set up than running. OptiStack pulls setup time back from operators and gives it back to the coil. Here is what a single line typically returns in twelve months.

TYPICAL ANNUAL ROI · ONE SLITTING LINE

From **USD 30,000+** saved in setup labour and scrap, per line, per year.



Indicative model. Loaded operator cost taken at USD 10 per hour. Scrap reduction not included. Result varies by line speed, order mix, and operator experience.

WHAT IS INCLUDED

Every operator. Every job. Every feature.

- **Unlimited operators, planners, and managers.** No per-seat charges.
- **Unlimited jobs, patterns, and machines.** No usage caps.
- PDF assembly sheet export. Audit trail. Search and reuse.
- Email support, lifetime feature updates, no installation required.
- Browser based. Setup in 30 minutes. First job runs the same day.
- Pilot first if you want. Activate only after the first job runs on your line.

READY TO RETIRE THE SLITTING SPREADSHEET?

Run a 20-minute pilot on your live line.

We will load your coil widths, your spacers, and your last order. You watch the solver produce the same setup your senior operator runs today, in under sixty seconds.

BOOK A DEMO

www.optistackpro.com

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