

TEEMYEAH Baby Leaf Equipment Selection and Trial Matrix

Use this worksheet to compare equipment around actual leaf condition, product protection, foreign-material removal, moisture control and pack readiness.

1 Project and Product Definition

Complete this section before asking suppliers to size a line. Baby spinach, rocket/arugula, lamb's lettuce, Swiss chard and mixed baby leaves can differ in leaf size, maturity, stem strength, surface shape and bulk density. Those differences affect feeding, washing, transfer, dewatering and weighing.

Project	Company / site: _____	Contact: _____
Product family	☐ Baby spinach ☐ Rocket/arugula ☐ Lamb's lettuce ☐ Swiss chard ☐ Mixed baby leaf	Other: _____
Incoming condition	Harvest date/time: _____ Arrival temperature: _____ C Wet/dry: _____	Field debris / insects / soil: _____
Leaf profile	Average leaf length: _____ mm Stem fraction: _____ Maturity/size band: _____	Fragility notes: _____
Finished product	☐ Single leaf ☐ Blend ☐ RTE pack ☐ Foodservice pack	Pack weight / format: _____
Required output	Accepted packed output: _____ kg/h Peak production window: _____ h	SKU/changeover sequence: _____
Buyer-defined limits	Maximum visible damage: _____ % Maximum foreign material: _____	Moisture / clumping method and limit: _____

Decision principle

Select equipment from the accepted pack specification backward. A machine's catalog rate is not the same as saleable line output. Record the material condition entering and leaving every stage, then test the weakest leaf in the intended product mix.

2 Equipment Selection Checklist

For each stage, identify the equipment feature, the adjustable variable and the evidence the supplier will provide during a representative trial.

Stage	Why it matters for baby leaf	Selection checks	Trial evidence
Receiving and feeding	Crowded bins and uneven feed can compress leaves or create surges.	Metered, low-compression feed; adjustable belt speed; no narrow choke point; manageable drop height.	Photos/video of flow; product depth; stoppage and bridging record.
Pre-inspection	Older, damaged or decayed leaves can deteriorate faster and reduce accepted yield.	Accessible inspection surface; clear reject path; lighting; staffing position.	Incoming defect count; reject categories; accepted input weight.
Pre-wash and debris removal	Sand, insects and floating debris may hide in folds or travel with the product.	Stage purpose defined; debris screening; overflow and waste collection; product does not bunch.	Foreign-material capture by category; screen load; water condition.
Main washing	Excess turbulence, residence time or repeated impacts can bruise edges and stems.	Adjustable water flow and bubble action; product separation; controllable residence time; fresh-water rinse option.	Before/after damage score; residence time; settings; unwashed areas.
Transfer interfaces	Drops, pinches and uneven conveyor handoffs can add damage after washing.	Low and controlled transfer; no trapping edge; matched belt speeds; stable wet-leaf release.	Slow-motion handoff video; drop height; trapped-leaf/rework count.
Draining and buffering	Free water and wet clumps can overload the dryer or destabilize downstream feed.	Drainage before centrifuge; short controlled buffer; no long wet-leaf hold.	Queue time; visible clump count; drip/runoff observation.
Dewatering	Baby leaves need surface-water removal without edge tearing, stem breakage or over-compression.	Batch vs continuous selected from SKU mix; adjustable program/speed/time; cleanable basket/conveyors.	Paired damage and moisture method; cycle/program; accepted output.
Inspection and blending	Wet clumps and fragile leaves can separate unevenly or break during mixing.	Gentle spreading; inspectable bed depth; recipe-controlled weighing; low-shear blend method.	Blend deviation; clump count; damage after mixing; giveaway/rework.
Packing handoff	Overfilled feed systems and long waits can compress leaves and undo upstream protection.	Stable feed to weigher/packer; defined maximum wait; temperature-controlled handoff.	Wait time; pack-weight variation; visible compression/damage.

3 Representative Product Trial

Run comparable lots of the actual baby-leaf SKU. Change one operating variable at a time where practical, and keep incoming product condition and acceptance definitions visible in the record.

Trial item	Run A	Run B	Run C
Leaf type / supplier lot / harvest date	_____	_____	_____
Leaf maturity and size band	_____	_____	_____
Incoming temperature and wet/dry condition	_____	_____	_____
Input mass and test duration	_____	_____	_____
Feed depth and belt speed	_____	_____	_____
Wash stages and purpose of each stage	_____	_____	_____
Water-flow / bubble / residence-time settings	_____	_____	_____
Screen / filter / waste observations	_____	_____	_____
Transfer drop height or handoff setting	_____	_____	_____
Drain / buffer time before dewatering	_____	_____	_____
Dewatering method and selected program	_____	_____	_____
Accepted output mass	_____	_____	_____
Buyer-defined damage score	_____	_____	_____
Foreign material remaining / captured	_____	_____	_____
Residual surface-water method and result	_____	_____	_____
Wet clump count / definition	_____	_____	_____
Blend ratio result where applicable	_____	_____	_____
Rework, rejects and operator intervention	_____	_____	_____

4 Acceptance and RFQ Handoff

Use buyer-defined limits tied to the intended pack. Do not accept a single machine-rate figure as proof of complete-line output.

Acceptance item	Limit or method	Result	Decision	Evidence reference
Accepted output by finished SKU	_____	_____	☐ Pass ☐ Hold ☐ Reject	_____
Visible edge / blade / stem damage	_____	_____	☐ Pass ☐ Hold ☐ Reject	_____
Broken-leaf and fragment level	_____	_____	☐ Pass ☐ Hold ☐ Reject	_____
Foreign-material removal	_____	_____	☐ Pass ☐ Hold ☐ Reject	_____
Residual surface moisture	_____	_____	☐ Pass ☐ Hold ☐ Reject	_____
Wet clumping before weighing	_____	_____	☐ Pass ☐ Hold ☐ Reject	_____
Blend accuracy	_____	_____	☐ Pass ☐ Hold ☐ Reject	_____
Unwashed folds / trapped debris	_____	_____	☐ Pass ☐ Hold ☐ Reject	_____
Changeover and cleaning access	_____	_____	☐ Pass ☐ Hold ☐ Reject	_____
Operator intervention and rework	_____	_____	☐ Pass ☐ Hold ☐ Reject	_____
Packing-feed stability	_____	_____	☐ Pass ☐ Hold ☐ Reject	_____
Utilities and site-interface confirmation	_____	_____	☐ Pass ☐ Hold ☐ Reject	_____

Files attached	☐ Product photos ☐ Defect samples ☐ Pack specification ☐ Layout ☐ Utilities ☐ Trial video
Open decision	_____
Supplier action	_____
Buyer action	_____
Owner and due date	_____

Next step

Submit the completed product definition, representative samples and acceptance limits before the equipment review. TEEMYEAH can then compare washing, transfer and dewatering options against the actual baby-leaf SKU and proposed packing handoff.

Commercial route: <https://www.teemyeah.com/solutions/leafy-vegetable-processing-line/>