



SP-20 Extended Vacuum Kit

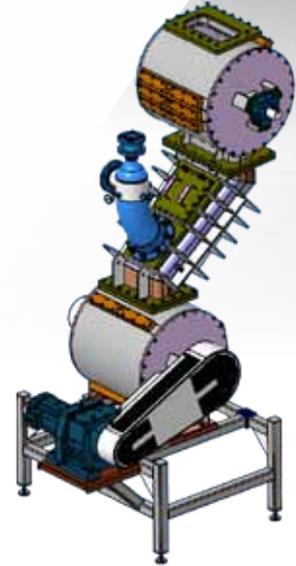
Further leveraging your existing installed machine(s), the SP-20 extended vacuum kit will allow for dramatic improvements in both throughput and peel removal efficiency, with a minimal investment.

Background

JBT SP-20 Tomato Peeling Systems have been successfully used by tomato processors around the world for many years. JBT has developed an upgrade kit to modify existing machines which will substantially improve the throughput capacity and peeling performance.

Concept

As shown in the diagram to the right, the kit involves the addition of a vacuum chute and second discharge valve, positioned downstream of the existing discharge valve, so prolonged vacuum conditions can be achieved to provide more uniform vacuum exposure to each tomato.



BENEFITS	STANDARD SP-20	SP-20 EV
Reduced dwell time in the heating vessel	35 - 40 seconds	20 - 25 seconds
Increased throughput	20-30 TPH	45 TPH, or greater
Reduced product loss	5.4% drain weight lost	4.4% drain weight lost
Higher peeling efficiency	74% tomatoes w/ substantial peel (9.9 sq. in. per lb)	19% tomatoes w/ substantial peel (3.2 sq. in. per lb)

Improved Peel Removal Efficiency

Extended vacuum conditions are applied as tomatoes flow through the chute in a singulated fashion. This will result in more uniform and increased vacuum exposure to each tomato, and improved peel removal efficiency ... up to 200% improvement in peel removal efficiency.

Improved Fruit Yield

Long dwell times result in a high degree of heat penetration into the fruit. This damages the cellular structure of the fruit and results in yield loss. By extending the vacuum time, dwell time can be reduced improving yield due to shallower peel removal depth and reduced juice loss when dicing due to less internal heating of the tomato. Up to 1% improvement on yield recovery can be achieved.

Increased Throughput

Decreasing the dwell time means increasing the heating vessel auger speed; this, in turn, will result in the ability to process more product through the machine, while maintaining a more ideal product load level in the auger. Throughput increases up to 50%.

Air in Peeler Reduced

With the addition of the vacuum chute, air is no longer present at the "first" discharge valve and any air introduced via the "second" discharge valve will be evacuated in the vacuum chute. This improves heating efficiency of the processing vessel.

Reduced Energy Consumption

Since this upgrade results in less heat penetration into the tomato, energy consumed per pound of product is reduced.

Improved Product Quality and Yield Recovery



Unmodified SP 20



Extended Vacuum Kit

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Ordering Information

As part of JBT's commitment to your success, our wide range of upgrade kits are designed to give you maximum return on your original investment through increased performance and service life.

Please contact CustomerService.Canning@jbt.com for more information or to request a quote.