



Processing Equipment of Today



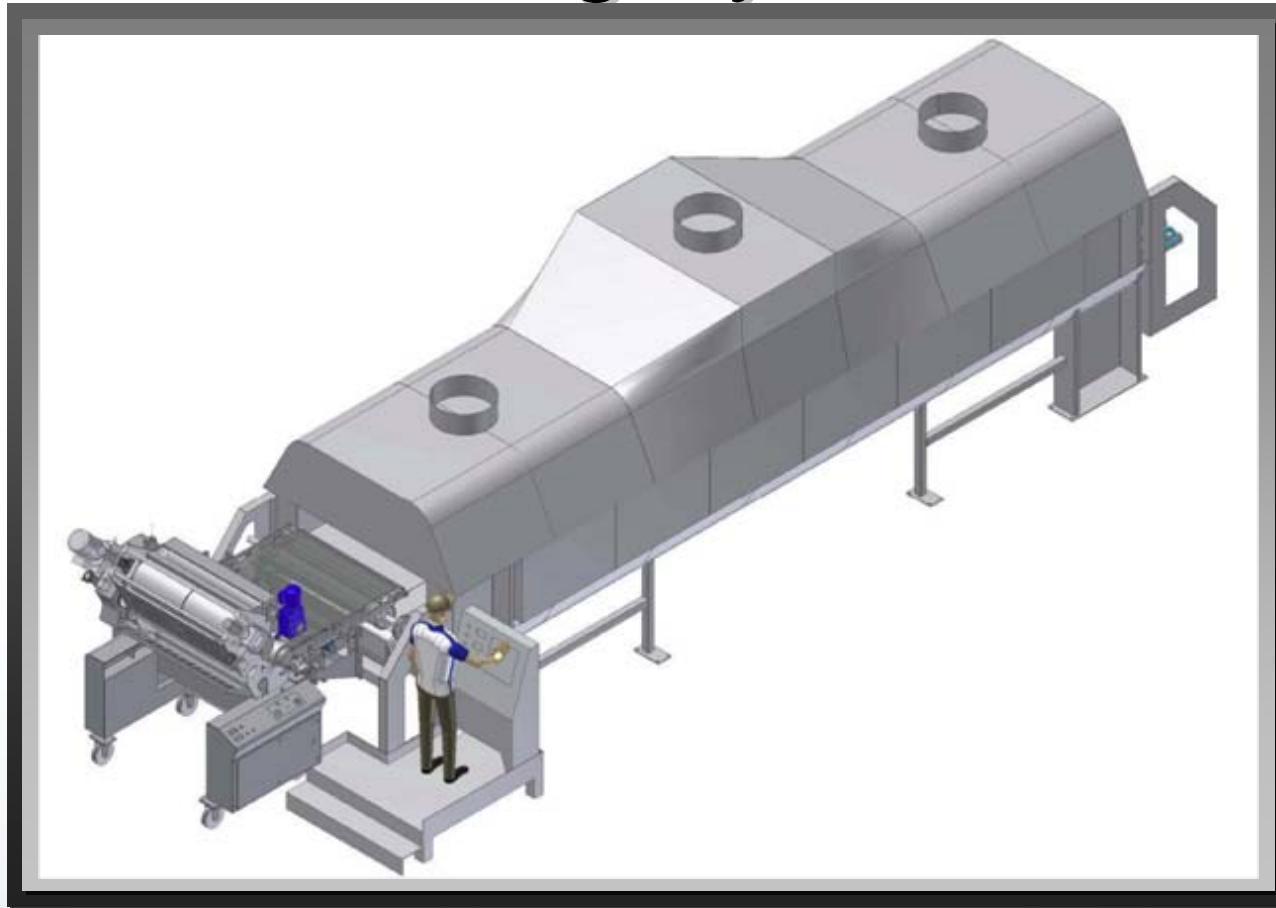
Following the Market

- Tortillas have quickly become one of the most popular bread items in America and continue to gain popularity throughout the world.
- Such rapid growth of the tortilla industry and such high demand for quality tortillas forced the evolution of tortilla equipment.
- Increased volumes and cost of materials put a higher price on inefficiencies.

Meeting the Demand

1. Sheeting Systems
2. Hot Presses
3. Toasting/Baking Ovens
4. Automated Controls and Systems Integration

Sheeting Systems



Corn Tortilla & Tortilla Chip Production

Evolution of the Sheeter

- Increased Roller Integrity
- Eccentric Roller Positioning System (patented)
- “ATC System” (patented) Automatic Thickness Control
- Thickness Recording Charts

Cost of Poor Sheeting

Costing Worksheet - .5 Grams/Tortilla Over

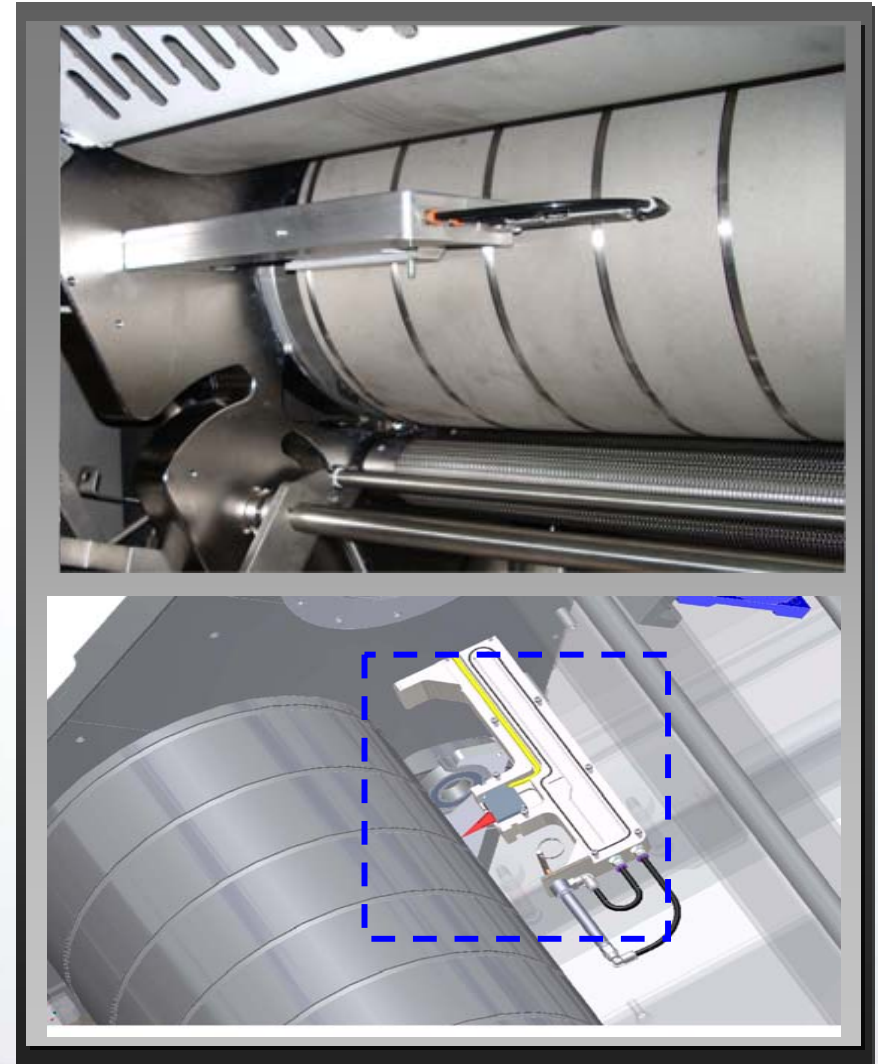
Lines	Tortillas/Hr	Grams Over	Lbs/Hr	Day (16 Hrs)	Week (6 Days)	Year (52 Weeks)
1	72000	0.5	79.47	1271.52	7629.14	396715.23
2	144000	0.5	158.94	2543.05	15258.28	793430.46
3	216000	0.5	238.41	3814.57	22887.42	1190145.70

		Cost/Pound	Cost/Hr	Day	Week	Year
1	72000	\$0.25	\$19.87	\$317.88	\$1,907.28	\$99,178.81
2	144000	\$0.25	\$39.74	\$635.76	\$3,814.57	\$198,357.62
3	216000	\$0.25	\$59.60	\$953.64	\$5,721.85	\$297,536.42

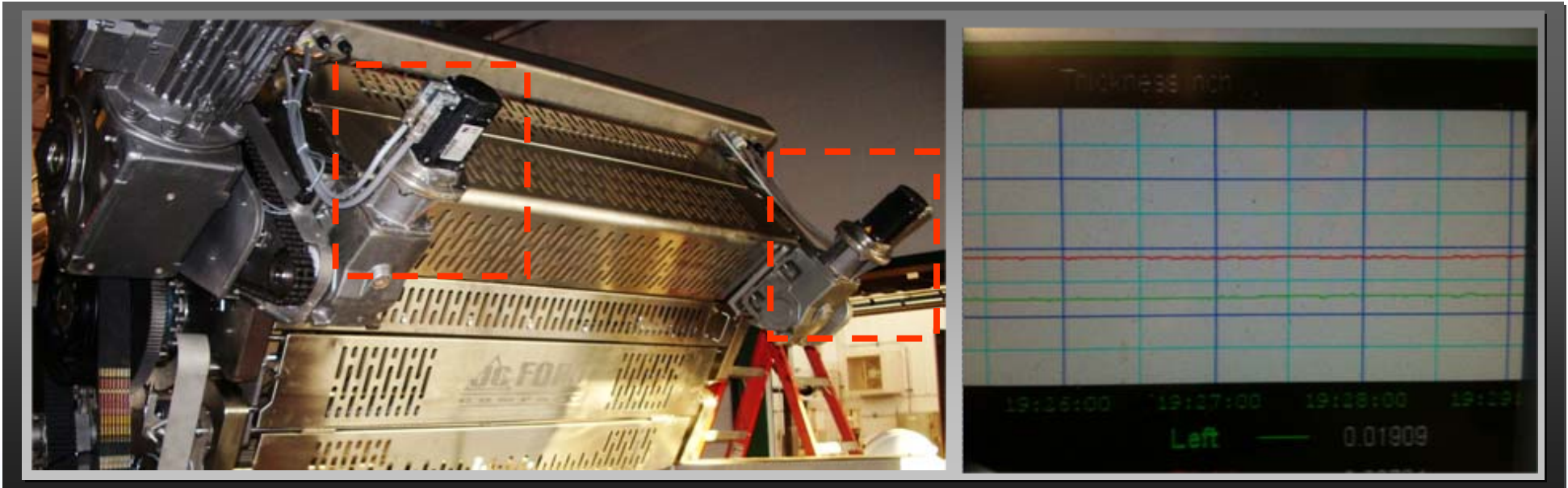
- Cost of overshooting target product weight by .5 gram/tortilla at 6,000 dz/hr cost ~\$100,000/year.

“ATC” Automatic Thickness Control System

- Masa scanning laser sensors are used to monitor and record masa thickness throughout the day.
- Data is processed and necessary adjustments are made automatically via servo motors.
- Systems maintains product weights and eliminates operator interaction.

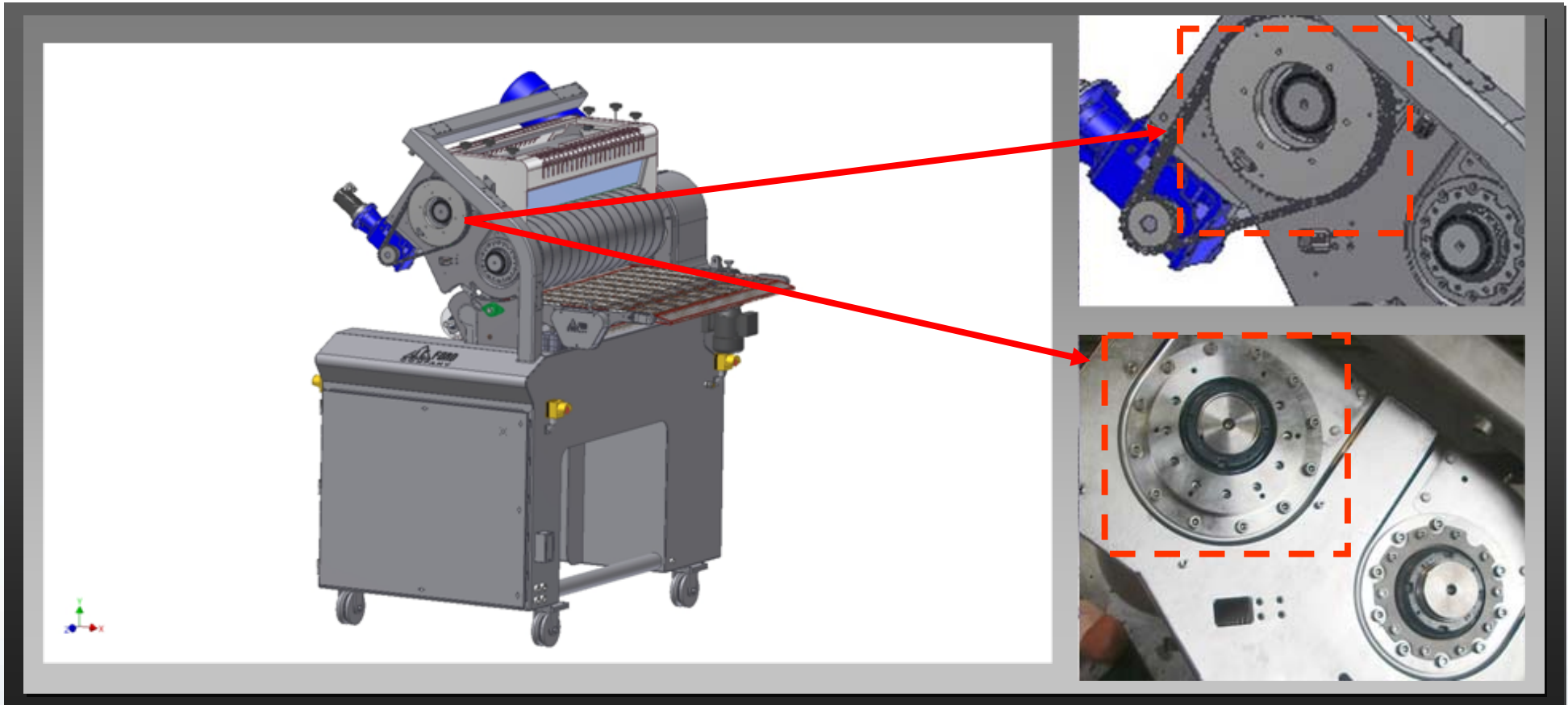


“ATC” Automatic Thickness Control System



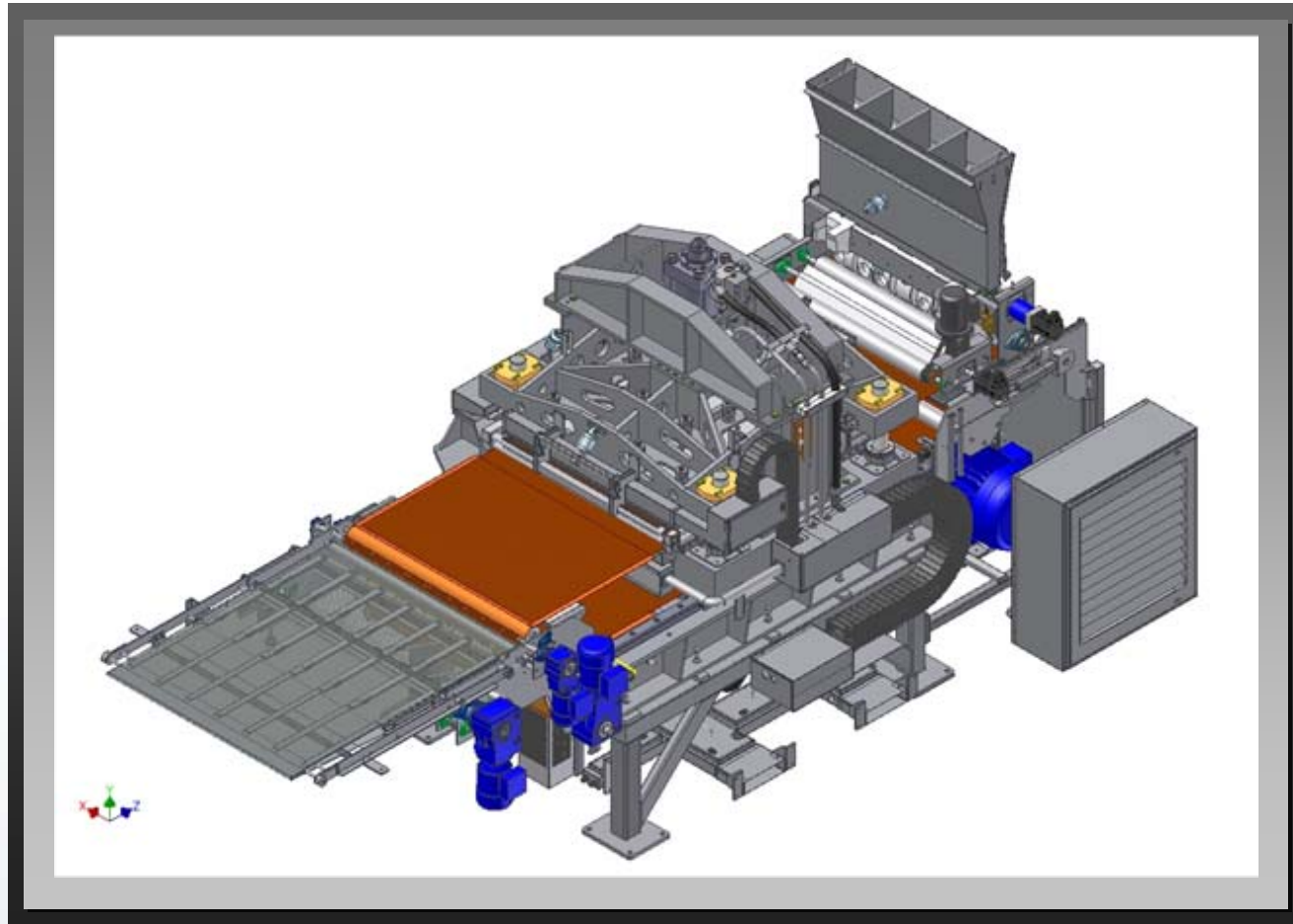
- Servo motors coupled to heavy-duty gearboxes along with eccentric roller positioning maintain masa thickness tolerances up to .0005”.
- Increasing material costs create an even higher demand to hold tighter tolerances and maintain product weights

Eccentric Roller Positioning System



- Using an eccentric adjustment system gives huge mechanical advantage over more traditional methods. Pressure is transferred to the 2" thick side frame, not the adjusting linkage.

Hot Press

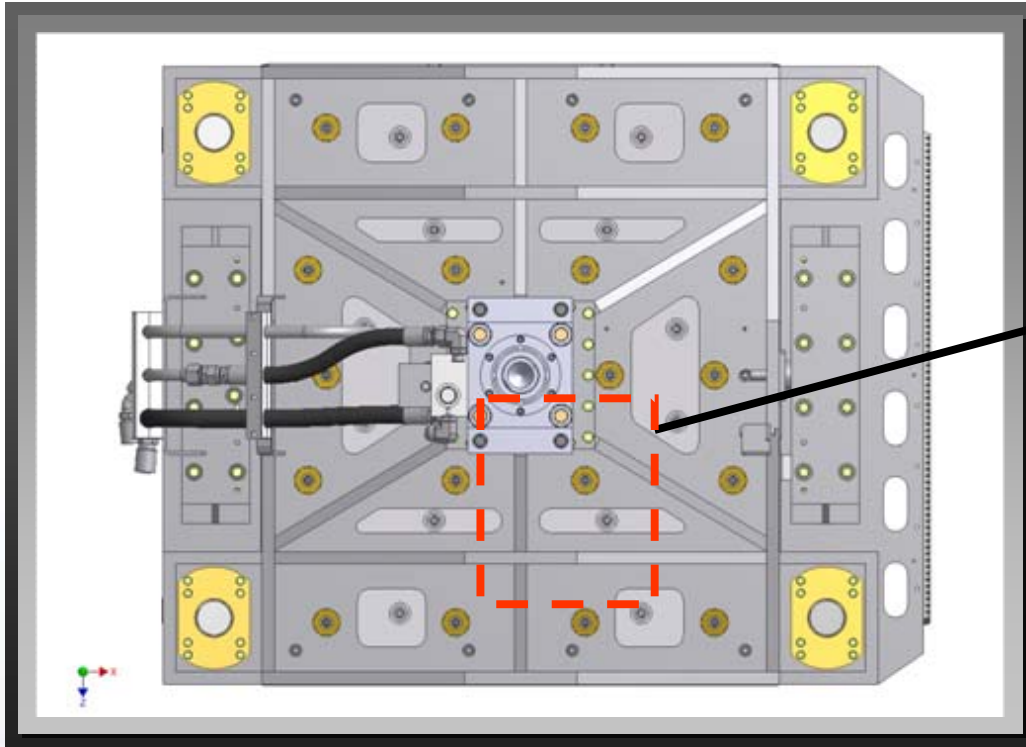


Flatbread & Flour Tortilla Production

New Designs in Pressing Technology

- “NO Shim” Platen Adjustment System
- Stay Flat Top Platen Guides with Expansion Joints
- Continuous Press with Reciprocating Press Head
- Easy Change Loading System

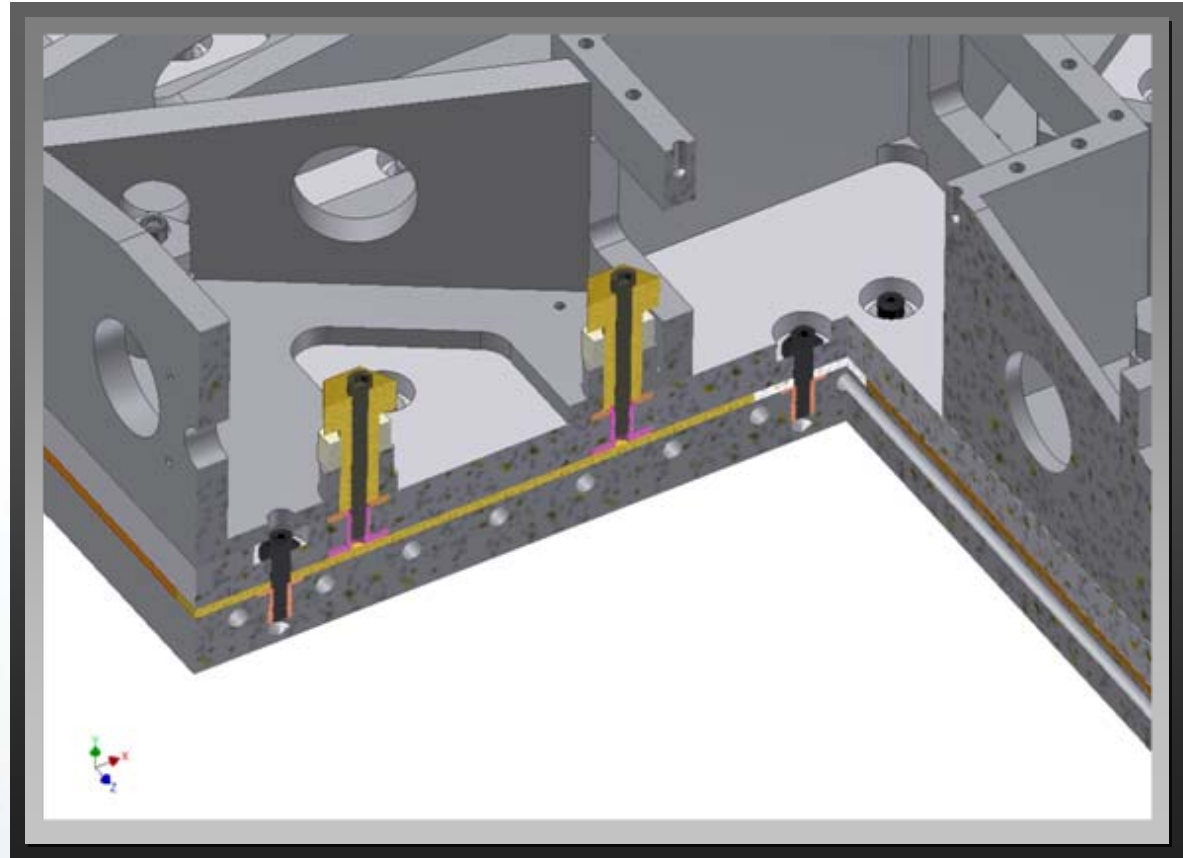
“NO Shim” System



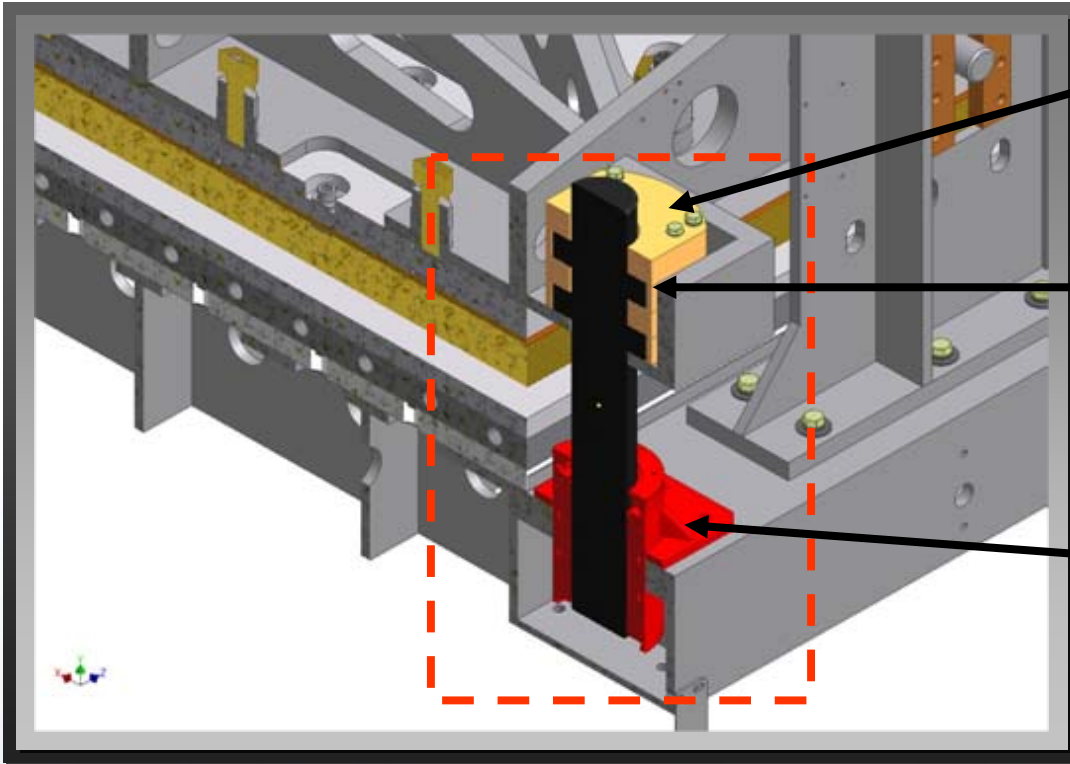
- Product adjustment bolts allow for “NO shim” platen adjustment and fine tuning of product sizes.
- System allows for quick product adjustments that can be made during production to ensure the highest quality and most consistent product.

“NO Shim” System

- Product adjustment bolts are designed to apply pressure to the actual press platen. This eliminates any heat transfer issues that occur with a more traditional shim method.
- Consistent temperature across the platens allows the press to be run at lower temperatures because it has no cooler spots caused by the shim material.



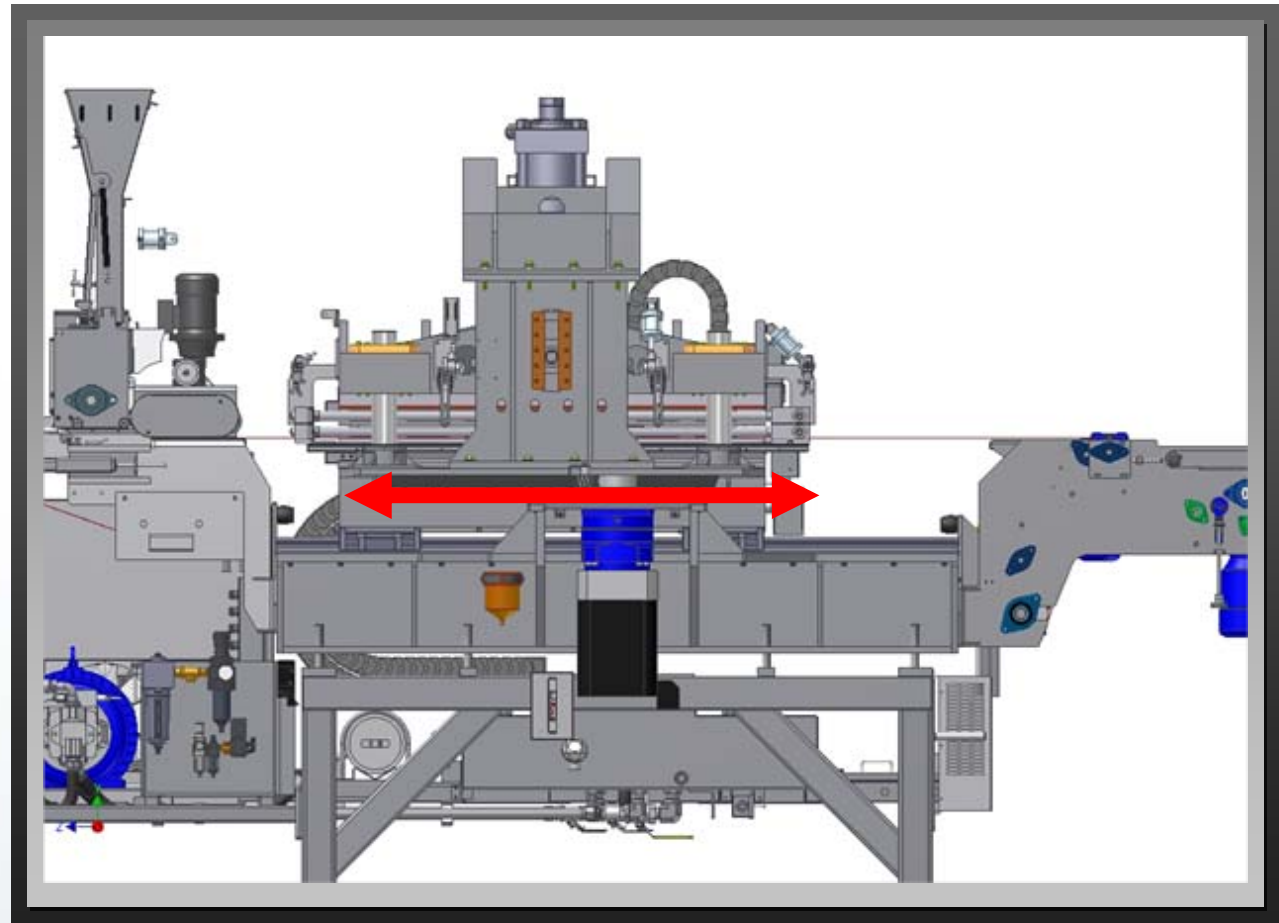
Top Platen Guides



- Heavy-Duty guide posts in the corners of the press ensure the top plate comes down level every time.
- Guide posts are equipped with expansion capability to compensate for thermal expansion in the steel structure.
- Guide posts are directed through heavy-duty linear bearings for rigidity and dependable life.

Continuous Press

- Reciprocating press head allows for continuous flow of tortillas from the press belt.
- Continuously moving Teflon belt reduces movement seen by dough balls to help maintain orientation throughout the press cycle.



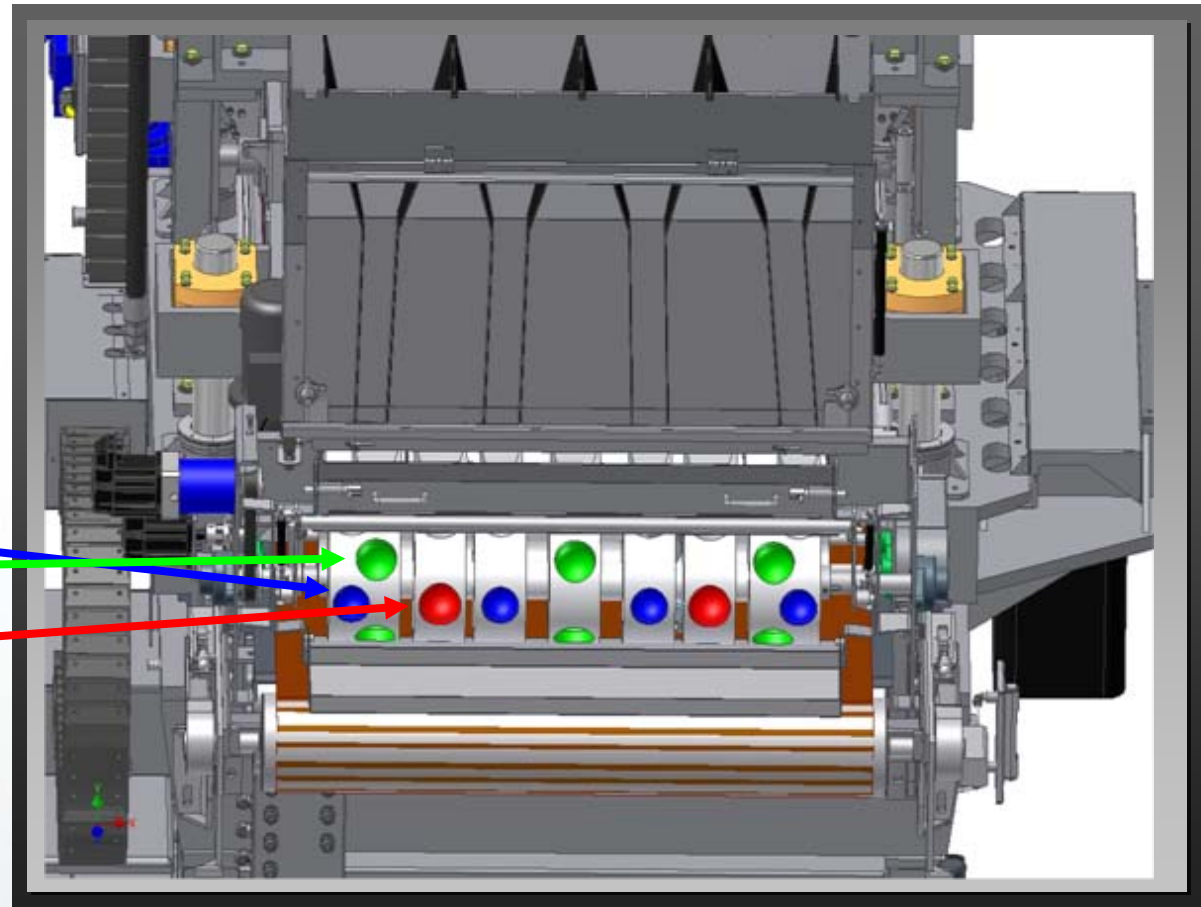
Easy Change Load

● Integrated loading system for all product sizes. No parts required for change of tortilla size or pattern.

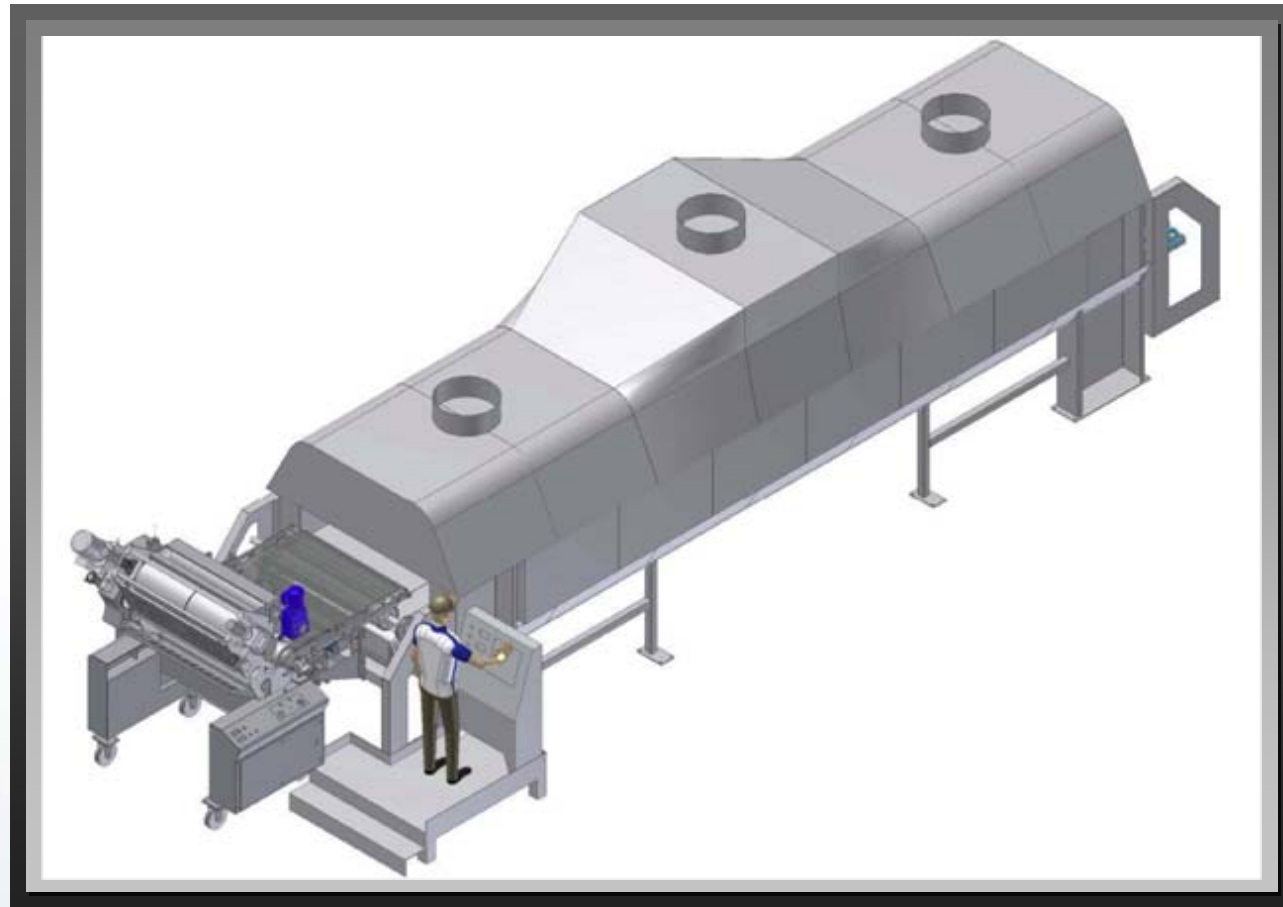
● 6"-8"

● 10"-12"

● 14"



Toasting Oven



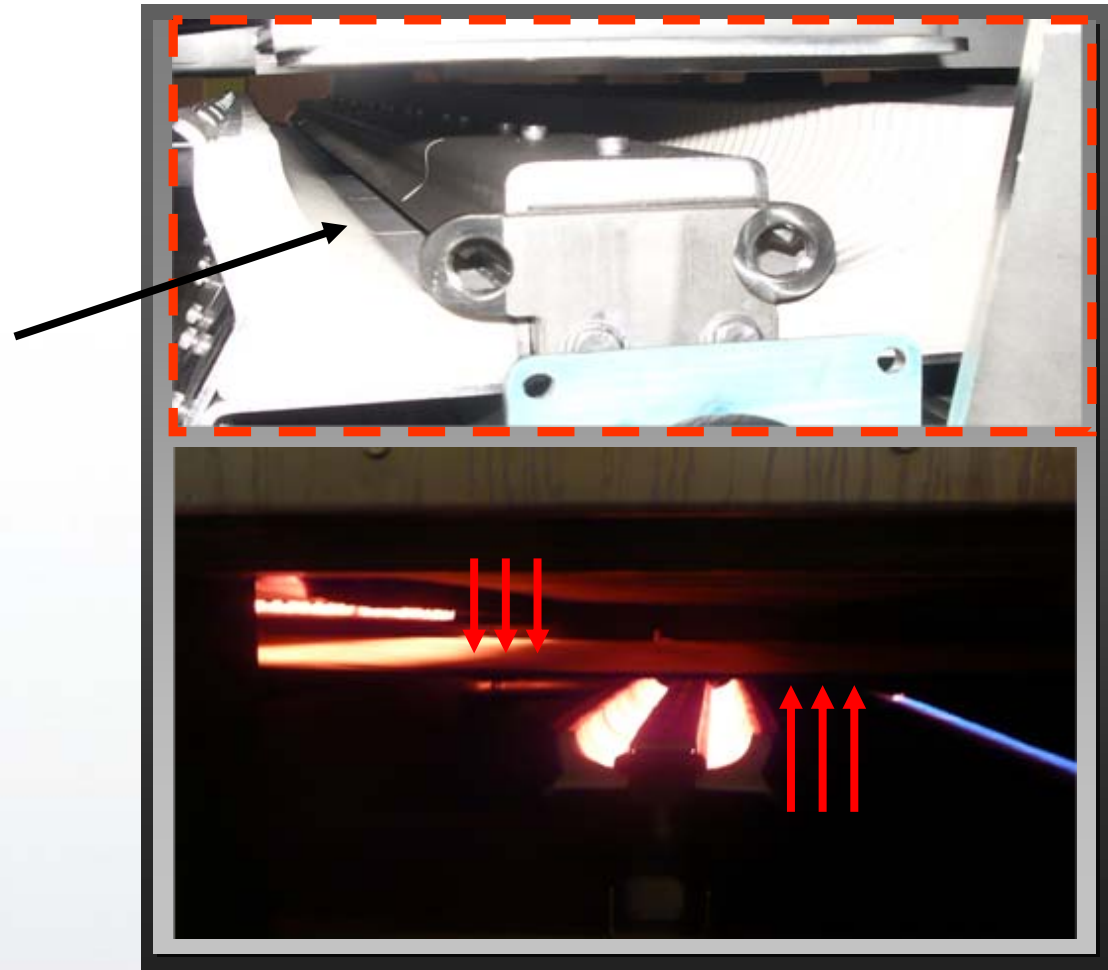
Toasting & Baking Tortilla Products

Development in Oven Technology

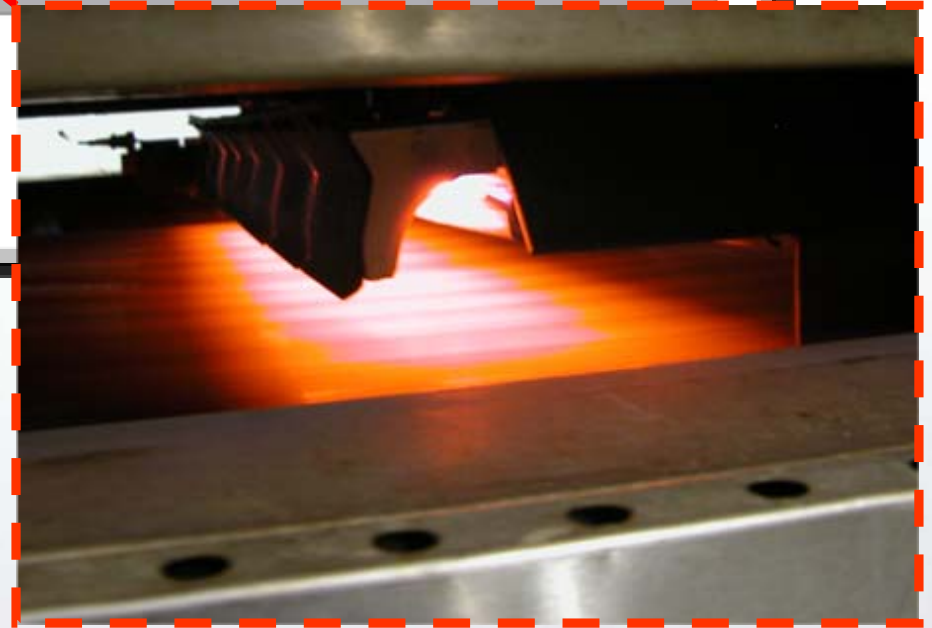
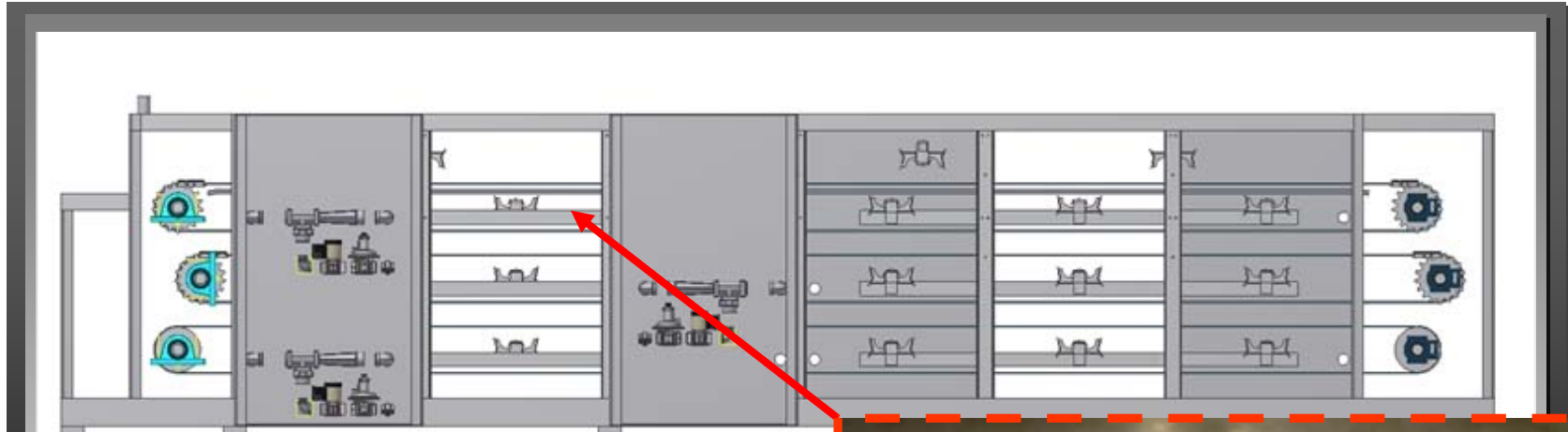
- New infrared burner systems throughout the oven burn hotter and use less gas than conventional ribbon burners.
- More isolated heating chambers for better use of heat that's been generated and cooler environments for mechanical parts.
- Multi-Section frame allows for greater expansion of heating chambers while reducing the effect on drive systems and belt tracking.

Energy Efficient Infrared Burners (patented)

- More intense burner system utilizing new infrared technology to increase oven efficiency.
- Burners are easily shut down and re-fired to maintain desired belt temperature.
- System is undergoing testing which will hopefully show a 15%-30% savings on gas.



Energy Efficient Infrared Burners (patented)



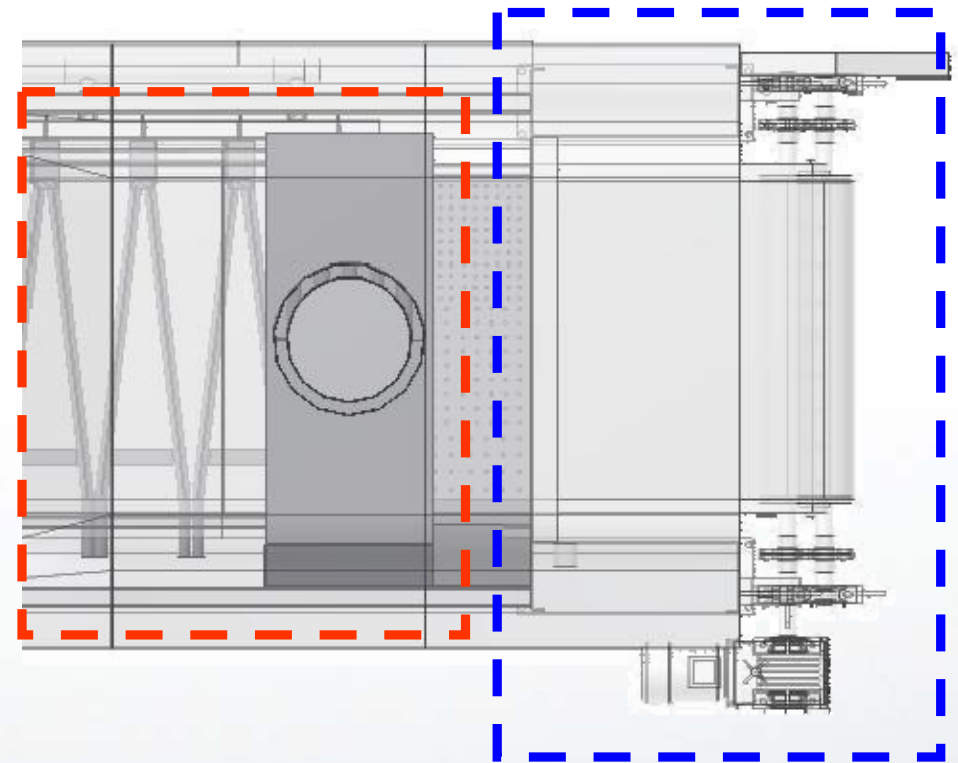
Transfer Assist Blades (patented)

- Specially designed scraper blades are used to eliminate product sticking on the first to second level transfer.
- Individually adjusted blades for each lane allow you to fine tune the system to your specific product.

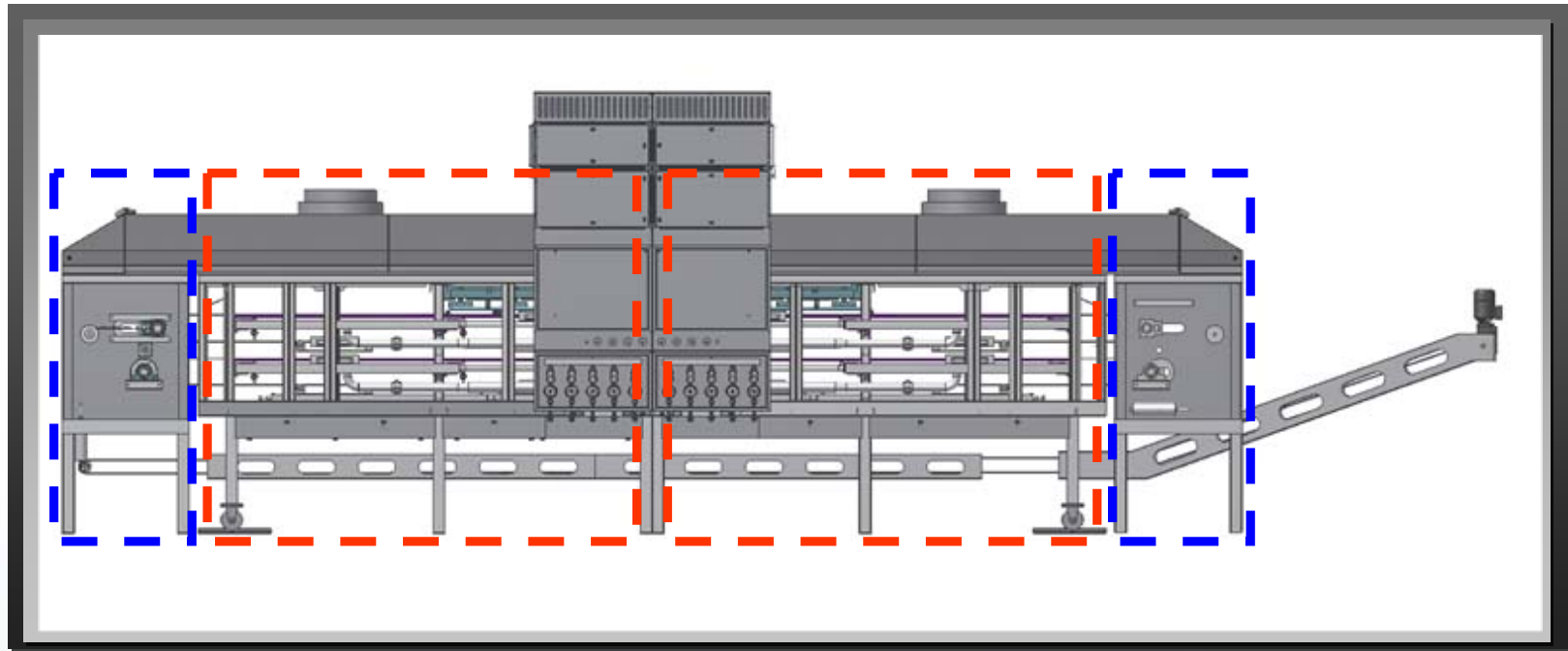


Isolated Heating Chambers

- Reduces temperatures in the bearing boxes and on critical mechanical parts.
- Allows heat to be contained in product areas to give better utilization of energy.



Multi-Section Frame With Expansion Area



- Frame is constructed in multiple sections which are given the ability to expand under heat. This reduces the effects of thermal expansion on drive components.

New Standards in Controls Integration



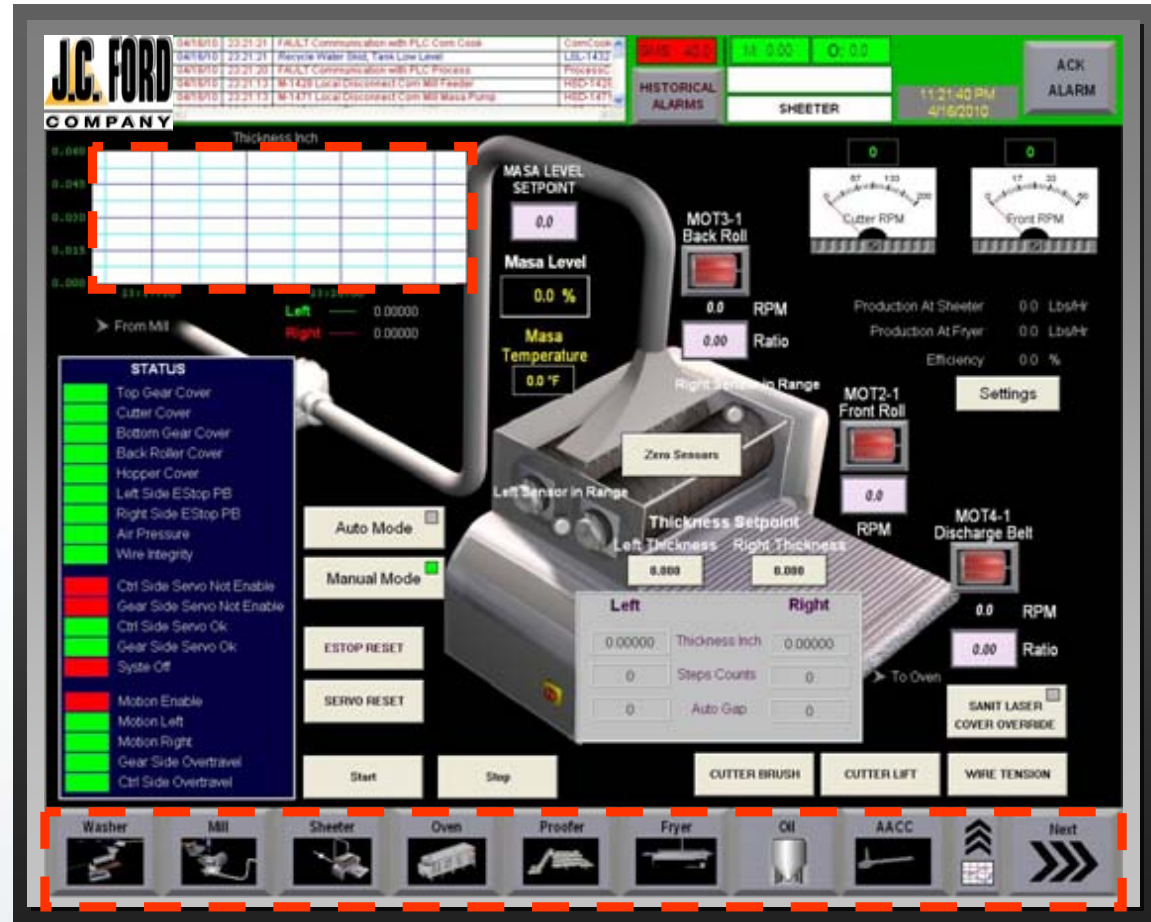
- Useful & informative control systems are more important than ever.
- Easy to understand control panels help operators have a full view of the line from a single panel.

Flatbread, Tortilla, and Tortilla Chip Systems



Systems Integration

- Central Control Centers – Simplify line adjustments
- Systems can store and chart critical data for later review.
- New controls systems link multiple control centers and allow you to view or adjust the entire system or certain parts of the system from multiple locations.





Meeting the Demands of Tomorrow

