

# How to Make a Hamburger



SIVA™

At your favorite restaurant, every recipe includes a taste of technology.

## Out of tomatoes?

Purchase order is automatically generated by inventory application; items are delivered to the door.

## Lettuce limp?

Temperature and humidity sensors ensure foods are stored in optimum conditions—and track restaurant equipment energy usage. If a refrigerator breaks, the manager gets paged.

## Burgers ready for the grill?

Labor scheduling application assigns the person to the position; time and attendance software keeps track of his/her hours for pay; computer-based training teaches safe food handling techniques.

## Buns need to be baked?

Production planning software anticipates quantities needed of long lead-time items and prompts for preparation.

## Sandwich completed for a holding bin?

Bin tracking tools and item label scanning prompt discards when sandwiches are no longer fresh (often a matter of minutes). Bin software integrates with kitchen production system to create make orders, keeping bin quantities at preferred levels.

## Hamburger



.40 oz.  
Tomatoes



.60 oz.  
Lettuce



.45 oz.  
Special Sauce



3.3 oz.  
Hamburger Pattie



2.25 oz.  
Wheat Bun

.10 oz.  
Burger Wrap

7.1 oz. with packaging



## Customer orders at the drive-thru.

Order confirmation software also suggests additional items to buy. "Would you like some fries with that?"

Point-of-sale rings up order. Kitchen display shows new burger order at grill station.



Speed of service timers track car through drive-thru lane, page manager if times are slow.



## Customer orders in the restaurant.

Wireless handheld allows order to be taken while customer waits in line.

Point-of-sale takes credit card payment; loyalty software processes frequent diner program points for future discounts.



Kitchen display highlights special order with no onions.



## Building a better burger machine.

Employees track burger sales on a visual dashboard showing their performance against other stores.

Manager is paged when sales numbers are exceeded, prompting positive reinforcement of the team.

Corporate headquarters receives sales figures, results of recent marketing promotions, inventory and labor costs, live video of store activity and more via a web-based reporting system.



## INTERNET & TECHNOLOGY

### Advances Beef Up Fast-Food Industry

#### High-Tech Hamburger Helpers

BY SHEILA RILEY  
FOR INVESTOR'S BUSINESS DAILY

Would you like a helping of technology with that double cheeseburger?

It may not be obvious to the average patron in a lunchtime rush, but technology is becoming as essential an ingredient in your fast-food meal as ketchup, mustard and mayonnaise.

Innovations are transforming just about every step of running a burger joint, everything from ordering the buns and patties to scheduling the night shift.

**PAR Technology**<sup>PTC</sup>, based in New Hartford, N.Y., sells software that does the following:

- Automatically generates the purchase order for the tomatoes that top the burger, using inventory application software.
- Checks that the lettuce isn't wilting by tracking refrigeration temperature, humidity and even energy usage.
- Schedules employees, tracks their hours and trains them in safe food handling.
- Anticipates quantities of buns to be baked, using production planning software.
- Tracks the number of burgers in

bins with bin-tracking software. Yes, there's really such a thing.

Some fast-food outlets have begun using electronic kiosks to take orders, and others, such as **McDonald's**<sup>MCD</sup>, have experimented with drive-through speaker systems that connect to order-takers in a remote call center.

But even when a mere human takes your order, it's often done with a wireless handheld.

Order-confirmation software running on the cash register prompts employees to suggest additional items to buy, as in, "Would you like fries with that?"

That information, along with other special requests — think "Easy on the onions, please" — will appear highlighted on an electronic kitchen order display.

When you pull out your wallet the point-of-sale software kicks in, taking credit card payments, followed by loyalty software that awards frequent-diner points.

Later on in the process, restaurant executives see sales on an on-screen "dashboard" that shows their store's performance relative to other restaurants in the chain.

Managers are automatically paged when projected sales numbers are exceeded — or need a promotional boost.

The next step: Someone at corporate headquarters gets sales figures, marketing campaign results and inventory and labor costs through a Web-based reporting system.

In the case of fast-food heavyweight Carl's Jr., that someone might be the original Carl's grandson, Jason Levecke. He owns 56 franchises of the **CKE**<sup>CKR</sup>-owned burger chain in Arizona.

Levecke started out as a cashier and cook in one of his grandfather's restaurants in 1985. That makes him old enough to remember when ATM cards were the new thing in the business.

Since that time, he has made the leap from deciphering handwritten orders for cooks to pushing a button on a touch-screen.

"There are a lot of moving parts to the technology," Levecke said, though younger employees have no trouble absorbing it all.

"They're too smart," he said. "They're usually showing us how it works."

But computers can't do everything. There will always be a place for, say, a cook to grill the burger and flip it at just the right time.

"We're always going to have to make your hamburger by hand," Levecke said. "That, I don't see computerized, ever."



A woman orders a meal from a computerized kiosk as other patrons wait in line to place their order at a McDonald's in St. Charles, Ill. McDonald's is just one of the chains using kiosks to speed up service. Getty Images