

A wooden cutting board is the central focus, surrounded by fresh ingredients. In the top left, there is a pile of green leafy lettuce. Next to it is a bunch of fresh basil. To the right of the basil are several red cherry tomatoes on the vine. Below the tomatoes are two yellow bell peppers and one red bell pepper. In the bottom left corner, there is more fresh basil. To the right of the cutting board, there are two whole yellow onions and a large kitchen knife with a black handle and a silver blade.

# FOODSPACE®

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# The SpeedOven Challenge

## + Executive Summary

The FoodSpace SpeedOven Challenge was developed to evaluate the real-world performance of leading SpeedOvens under controlled and comparable conditions. Sixteen ovens were evaluated across a standardized menu using blind scorecards and a 1, 2, 4, and 5 scoring scale that removed neutral responses and encouraged clearer differentiation between results.

Across the raw scoring rows, the test produced 2,790 completed scorecards and 46,370 raw scored points. Because Buffalo Chicken Dip used a four-criterion scorecard while most products used five criteria, the analysis normalizes each row to a comparable 25-point equivalent before calculating percentages and application averages. On that normalized basis, overall oven averages ranged from 12.02 to 18.77 points out of 25, a spread of 6.74 points. That difference is meaningful, but it is not the purpose of this report to name a winner or loser. The most useful finding is that the ovens are separated by application, food type, program fit, and workflow coverage.

When the scoring data is viewed through those Operational Categories groups, the pattern becomes easier to use. Conveyor throughput ovens showed the strongest normalized averages in breakfast and Appetizers/shareable applications. Large-format hybrid ovens were strongest in the lunch grouping, burger, Reuben, and pretzel-style items. Multi-technology batch ovens led dessert performance. These patterns do not identify a universal winner; they show how oven format, energy transfer, cavity size, and workflow align with different menu needs.





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# + Why the SpeedOven Challenge

FoodSpace has committed to fostering a neutral environment where equipment can be stress tested under real-world conditions. SpeedOvens are especially difficult to evaluate from spec sheets alone because their performance depends on the interaction of microwave energy, impingement, convection, radiant heat, accessories, cavity design, and program logic, and most importantly, the types of food they are preparing.

The SpeedOven Challenge was created to close the gap between marketing claims and operational reality. A single oven may be excellent for pizza, another may be stronger for breakfast sandwiches, and another may be better suited to appetizers or desserts. Traditional demonstrations rarely reveal these differences because product demos are often optimized for a pre-determined set of products.

Our testing and evaluations do not declare a winner or loser. Instead, the goal is clarity. The challenge exists to help operators, designers, and consultants understand which ovens align with specific menus, production needs, space constraints, throughput expectations, and operator workflows.





## + Methodology and Framework

The SpeedOven Challenge framework established defined testing parameters to create a consistent comparison across participating ovens. Each unit was assigned a blind oven number during evaluation. Tasters scored products without relying on brand identity and used scorecards tailored to the attributes that mattered for each menu item.

The scoring scale used 1, 2, 4, or 5 with **no** neutral 3. (See Fig. 1) Including 3 as a score possibility can hide uncertainty; removing it pushed tasters toward clearer decisions about whether a product attribute was being supported or missed. The menu was organized across five functional categories: breakfast, sandwiches, pizza, appetizers, and desserts.

Analysis was performed from the raw scoring rows across all three scoring-data tabs. Scorecards with categories left blank were excluded, which most often indicated a lack of completion from a certain oven. Buffalo Chicken Dip rows were included and normalized because that product used a four-criterion scorecard rather than the five-criterion format used by most other items. To keep tables and charts comparable, averages are shown as a normalized score out of 25 and as a percentage of available points.

| Burger                                                                                                                                    |         |         |         |         |         |         |
|-------------------------------------------------------------------------------------------------------------------------------------------|---------|---------|---------|---------|---------|---------|
| Please score each category by circling 1, 2, 4, or 5 - no 3's allowed!<br>A 3 is neutral, and we're here to make clear calls, not maybes. |         |         |         |         |         |         |
|                                                                                                                                           | Oven 1  | Oven 2  | Oven 3  | Oven 4  | Oven 5  | Oven 6  |
| Temperature                                                                                                                               | 1 2 4 5 | 1 2 4 5 | 1 2 4 5 | 1 2 4 5 | 1 2 4 5 | 1 2 4 5 |
| Browning (Bun)                                                                                                                            | 1 2 4 5 | 1 2 4 5 | 1 2 4 5 | 1 2 4 5 | 1 2 4 5 | 1 2 4 5 |
| Texture                                                                                                                                   | 1 2 4 5 | 1 2 4 5 | 1 2 4 5 | 1 2 4 5 | 1 2 4 5 | 1 2 4 5 |
| Moisture Retention                                                                                                                        | 1 2 4 5 | 1 2 4 5 | 1 2 4 5 | 1 2 4 5 | 1 2 4 5 | 1 2 4 5 |
| Overall Quality                                                                                                                           | 1 2 4 5 | 1 2 4 5 | 1 2 4 5 | 1 2 4 5 | 1 2 4 5 | 1 2 4 5 |

Figure 1: Representative score sheet. Actual criteria varied by product, so tasters evaluated application-specific qualities.

## + Performance Dimensions

To maintain a blind testing environment, each SpeedOven was color coded on score sheets and in tasting rounds. The scorecard categories were not generic; they were selected to match the quality attributes expected from each product. Pizza was evaluated differently from breakfast pastry, and buffalo chicken dip was evaluated differently from burgers.

That approach matters because SpeedOvens can produce mixed outcomes. A product may be hot throughout but pale on the surface. It may be sufficiently browned but dry. It may be crisp outside but still unstable inside. We have defined the main scoring categories. Tasters were provided with a short reference sheet with each of the possible categories and their subjective definitions. They were intentionally left subjective as to not sway the outcome of the test.

There were two more measures to ensure the test was as blind and natural as possible. Firstly, all of the food was procured by one of two vendors. All food was either received in the same way as a restaurant cook would receive the product, OR we assembled the items in house. In-house items were weighed to ensure the same product was delivered for the entire range of the test. Finally, each manufacturer sent their own corporate chef to prepare their ovens product. They were also provided with sample products to assist in the creation of the best possible product they could with their oven.



# + Evaluation Criteria:

## Heat and Exterior Finish

These measures focus on whether the oven moved energy into the correct part of the product and produced the exterior finish guests expect. They expose the balance between speed, heat-through, surface drying, and appearance.

**Temperature:** Does the product seem to have been heated throughout?

- All internal components - proteins, fillings, cheese, and doughs - are fully warm.
- Exterior temperature feels proportionate to the interior instead of becoming excessively hotter.

**Why it matters:** Temperature is the baseline promise of a SpeedOven. These ovens often combine microwave energy, impingement, convection, and radiant heat, so different parts of a product can warm at different rates.

**Browning:** The level, consistency, and quality of surface color development as a result of proper cooking.

- Even golden-brown color across the surface.
- Consistent appearance across all pieces or surfaces.

**Why it matters:** Browning is the visual evidence that a rapid cooking cycle produced an appetizing finish, not just heat-through. It reflects how well the oven balances air movement, top heat, bottom heat, radiant energy, and program timing.

**Crispness / Exterior Texture:** The firmness, crunch, or light crisp texture of the exterior surface where crispness is expected.

- Not soggy, soft, or weakened.
- Not overly hard, brittle, or dried out.
- Consistent crispness across the entire product.

**Why it matters:** Crispness is one of the hardest outcomes for a SpeedOven because rapid heat must drive off surface moisture without drying the interior. This criterion matters for breaded appetizers, fries, hash browns, pizza crusts, toasted bread, pastries, and any product where guests expect interior and exterior contrast.

**Underside Bake:** The level of doneness and browning on the bottom of the crust.

- Even browning across the underside.
- No pale or doughy sections.
- No burnt or overly dark spots.

**Why it matters:** Pizza, flatbreads, breakfast items, and bakery products can look complete on top while the bottom remains soft or pale. Underside bake reveals whether the oven platform, accessory package, tray, stone, or belt can support the bottom of the product during a short cycle.

# + Evaluation Criteria:

## Structure and Moisture

These measures look beyond the surface. They show whether rapid cooking preserves product structure, moisture, tenderness, and the intended contrast between exterior and interior.

**Flakiness:** Quality of pastry layers and how well they separate and crisp during cooking.

- Distinct, layered structure where applicable.
- Not dense, doughy, or compressed.

**Why it matters:** Laminated and pastry products are sensitive to speed-oven energy. Strong flakiness indicates that the oven can set the exterior, open the layers, and manage moisture without flattening the product or turning the interior heavy.

**Interior Texture:** The physical structure and consistency of the interior after cooking.

- Not raw, doughy, or underdeveloped.
- Not overly dense, gummy, rubbery, or tough.

**Why it matters:** Interior texture shows whether the cook cycle is balanced all the way through the product. SpeedOvens can toughen proteins, over-set breads, melt fillings too aggressively, or leave dough underdeveloped before the exterior appears finished.

**Moisture Retention:** The ability of the product to retain appropriate internal moisture without becoming overly dry, soggy, or waterlogged.

- Interior remains moist and tender where expected.
- No excessive dryness, dehydration, or moisture loss.

**Why it matters:** A SpeedOven generally needs to remove surface moisture while protecting internal moisture. This makes moisture retention critical for proteins, seafood, burritos, sandwiches, pastries, and desserts. Strong moisture scores indicate that the oven can finish quickly without turning quality into dryness.

**Texture:** Overall internal and external physical structure of the product.

- Interior remains soft and slightly moist where expected.
- Not dense, gummy, or overly dry.
- Exterior and interior contrast appropriately.

**Why it matters:** Texture is the bite test. It captures the final physical experience of the food, including whether a breaded item stays crisp, a sandwich remains tender, a dessert sets correctly, or a filled product holds its intended structure.



# + Evaluation Criteria:

## Application-Specific Signals

Some products require specialized criteria because their failure modes are different. These measures translate the scorecard into practical application fit for dips, desserts, pizza, pastry, and other specific menu items.

**Overall Quality:** The holistic physical assessment of the product, combining temperature, texture, moisture, structure, doneness, and appearance.

- All components cooked to proper doneness.
- Finished item feels service-ready, not merely heated.

**Why it matters:** Overall quality matters because guests and operators do not experience criteria independently. This score captures tradeoffs - strong browning with dry interiors, good heat-through with weak crispness, or attractive appearance with unstable fillings - and translates them into application fit.

**Surface Condition:** For buffalo chicken dip and similar high-moisture items, the condition and appearance of the top layer after heating.

- No excessive oil or grease pooling.
- No dried-out, crusted, or hardened top layer.
- Consistent surface from edge to center.

**Why it matters:** Wet and high-fat products reveal whether a SpeedOven is calibrated poorly or uneven. Surface condition shows whether the oven can heat a dip or casserole-style item without scorching, hardening, or breaking the top layer.

**Separation:** The extent to which ingredients remain fully combined versus separating during or after heating.

- No visible oil or liquid separating from the product.
- Ingredients remain integrated without layering or settling.

**Why it matters:** Separation is important for creamy, emulsified, or high-fat products. Localized heat can cause oils, liquids, or dairy components to break away from the product. This criterion highlights whether the oven can heat delicate products gently enough for service.

## + Oven Profiles (in alphabetical order)

**ACP**  
INC.



### ACP XpressChef 3i

Day 3; 233 cards; overall average 61.5%.  
Strongest application signals: Appetizers 64%; Desserts 63%.



**ACP**  
INC.



### ACP XpressChef 4i

Day 3; 240 cards; overall average 66.2%.  
Strongest application signals: Breakfast 75%; Sandwiches 71%.



 **Electrolux**



### Electrolux SpeedLight

Day 3; 131 cards; overall average 48.1%.  
Strongest application signals: Appetizers: 57%; Sandwiches 50%.



**Lincoln**



### Lincoln Aperion

Day 3; 240 cards; overall average 70.3%.  
Strongest application signals: Pizza 84%; Breakfast 73%.



## + Oven Profiles (in alphabetical order)

**MERRYCHEF®**



### **MerryChef Connex 12**



Day 3; 242 cards; overall average 68.1%.  
Strongest application signals: Sandwiches 77%; Desserts 73%.

**MERRYCHEF®**



### **MerryChef Connex 16**



Day 3; 236 cards; overall average 64.1%.  
Strongest application signals: Desserts 77%; Appetizers 65%.

**OVENTION**



### **Ovention MiLO 14**



Day 1; 118 cards; overall average 68.2%.  
Strongest application signals: Sandwiches 89%; Desserts 74%.

**OVENTION**



### **Ovention MiSA**



Day 1; 126 cards; overall average 63.2%.  
Strongest application signals: Sandwiches 71%; Appetizers 64%.



## + Oven Profiles (in alphabetical order)

**OVENTION**



### **Ovention Shuttle**

Day 1; 122 cards; overall average 75.1%.  
Strongest application signals: Pizza 95%;  
Appetizers 81%.

**Prática**



### **Prática FIT Express**

Day 2; 193 cards; overall average 72.6%.  
Strongest application signals: Pizza 81%;  
Desserts 79%.

**Prática**



### **Prática FIT XL**

Day 2; 196 cards; overall average 71.6%.  
Strongest application signals: Desserts  
84%; Sandwiches 74%.

**RATIONAL**



### **Rational iHexagon**

Day 1; 126 cards; overall average 71.7%.  
Strongest application signals: Sandwiches  
78%; Pizza 74%.

## + Oven Profiles (in alphabetical order)



### **TurboChef Bullet**

Day 1; 126 cards; overall average 63.9%.  
Strongest application signals: Desserts 78%; Appetizers 66%.



### **TurboChef Conveyor 2020**

Day 1; 69 cards; overall average 70.7%.  
Strongest application signals: Appetizers 78%; Pizza 76%.



### **UNOX Speed.Pro**

Day 2; 196 cards; overall average 71.9%.  
Strongest application signals: Desserts 88%; Breakfast 77%.



### **UNOX Speed.X**

Day 2; 196 cards; overall average 69.1%.  
Strongest application signals: Pizza 89%; Sandwiches 74%.



# + Oven Operational Categories

The most useful way to organize the SpeedOvens is by Operational Categories rather than by manufacturer. This grouping was made from the Oven Specs page only: heating technologies, conveyor versus batch workflow, remote menu-management capability, and cavity size. (See Table 1) This matters because speed-oven performance is not one single feature. It is the combined effect of internal heating, surface finishing, airflow, loading pattern, and operator workflow.

The four categories below should be read as application-fit families. The goal is not to decide which oven is universally best. The goal is to understand which oven type best supports a specific menu mix, peak-hour volume, crew training model, and desired product quality.

| Operational Categories                              | Ovens Included                                                                                                                                   | Spec-Based Signal                                                                                                          | Why it matters for restaurant selection                                                                                                                                                                                                                                                                 |
|-----------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Multi-Technology Batch SpeedOvens</b>            | ACP 3i, ACP 4i, MerryChef Connex 12, MerryChef Connex 16, Ovention MiSA, Practica FIT Express, Practica FIT XL, TurboChef Bullet, UNOX Speed Pro | Non-conveyor batch ovens using microwave plus convection and/or impingement; several also add conduction or infrared.      | The broadest family for mixed menus. Microwaves support fast internal heating while air, impingement, infrared, or conduction develops exterior color and texture. Best evaluated by menu breadth, portion fit, and whether programs can be locked down across stores.                                  |
| <b>Surface-Finishing / Contact-Heat Specialists</b> | Electrolux Speedelight, Ovention MiLO                                                                                                            | Compact or contact-oriented platforms with conduction and/or infrared emphasis; not primarily broad-cavity conveyor ovens. | These ovens should be viewed as finish-quality tools. They can be attractive where underside bake, top color, crispness, or contact finish are more important than holding many SKUs in a large chamber. They may be best for targeted menu items rather than every product on a service line.          |
| <b>Conveyor Throughput Ovens</b>                    | Lincoln Aperion, Ovention Shuttle/S2000, TurboChef High h Conveyor                                                                               | Conveyor workflow. Product travels through a fixed heat path instead of being loaded into a closed batch cavity.           | This category is about repeatability, speed of service, and line simplicity. It reduces the number of decisions an operator makes during a rush and can be a strong fit for pizza, flatbreads, appetizers, breakfast items, and high-volume repeated production.                                        |
| <b>Large-Format Hybrid Production Ovens</b>         | Rational iHexagon, UNOX Speed X                                                                                                                  | Much larger cavities with microwave, convection, and conduction, but without conveyor operation.                           | These are not small countertop SpeedOvens. They can support larger batches, broader product loading, and production-style workflows, but the specification conversation should include footprint, ventilation, menu loading, and whether the operation needs capacity more than countertop compactness. |

Table 1: Oven Operational Categories



# + Why Operational Categories Matter

## Multi-Technology Batch SpeedOvens

These ovens solve the two-part speed-oven challenge: heat the center quickly and finish the surface convincingly. Microwave energy helps move heat into dense, cold, or filled products. Air, impingement, infrared, or conduction helps brown, crisp, bake, or dry the outside.

## Surface-Finishing / Contact-Heat Specialists

This category is valuable when the menu is driven by surface quality: crisp wraps, pressed sandwiches, flatbreads, pastries, quesadillas, melts, or products where bottom bake and top color matter. The caution is that a finish-focused oven may not behave like a broad all-purpose SpeedOven; it may be excellent for targeted products and less versatile for bulky or moisture-heavy items.

## Conveyor Throughput Ovens

A conveyor oven turns speed cooking into an incredibly repeatable process. Belt speed and heat settings reduce the number of operator decisions, which can help with high-volume menus built around repeatable items. The tradeoff is flexibility: frequent menu changes or highly variable products may require more careful programming, staging, and belt management.

## Large-Format Hybrid Production Ovens

Large-format hybrid ovens change the specification question from single-item speed to production capacity. They can carry larger loads and may support more menu volume in one cycle, but the larger cavity also changes airflow, recovery, floor or counter planning, and operator interaction. This category is best considered when a restaurant needs speed technology as part of a broader production platform.



# + Basic Oven Classifications

## 1. Microwave

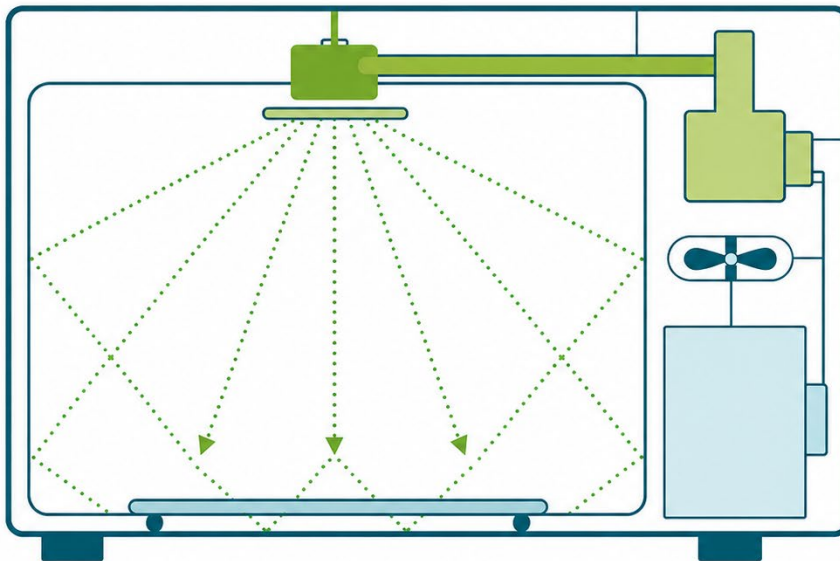


Figure 2: Microwave

- 1 Waveguide**  
Directs microwaves from the magnetron into the cooking cavity.
- 2 Magnetron**  
Generates microwaves (2.45 GHz).
- 3 Fan**  
Cools components and moves air.
- 4 Power Supply**  
Provides high voltage power to the magnetron.
- 5 Turntable & Baseplate**  
Rotates food for even cooking and supports microwave reflection.

## 2. Convection

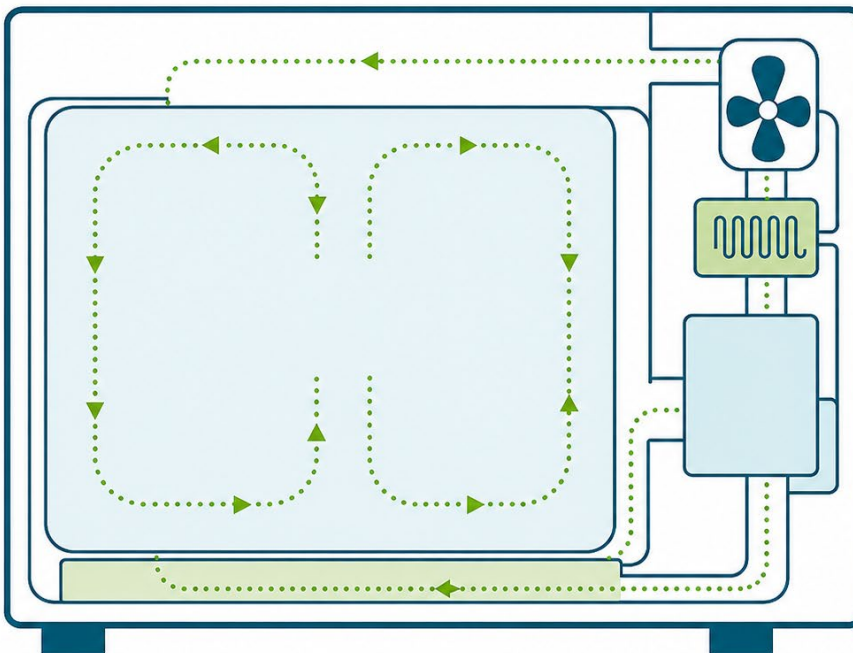


Figure 3: Convection

- 1 Convection Fan**  
Circulates hot air throughout the oven cavity.
- 2 Heating Element**  
Heats the circulating air.
- 3 Air Circulation Path**  
Moves heated air evenly through the chamber.
- 4 Cooking Cavity**  
Surrounds the food zone with moving hot air.
- 5 Return Air Flow**  
Pulls air back through the system for recirculation.

# + Basic Oven Classifications

## 3. Impingement

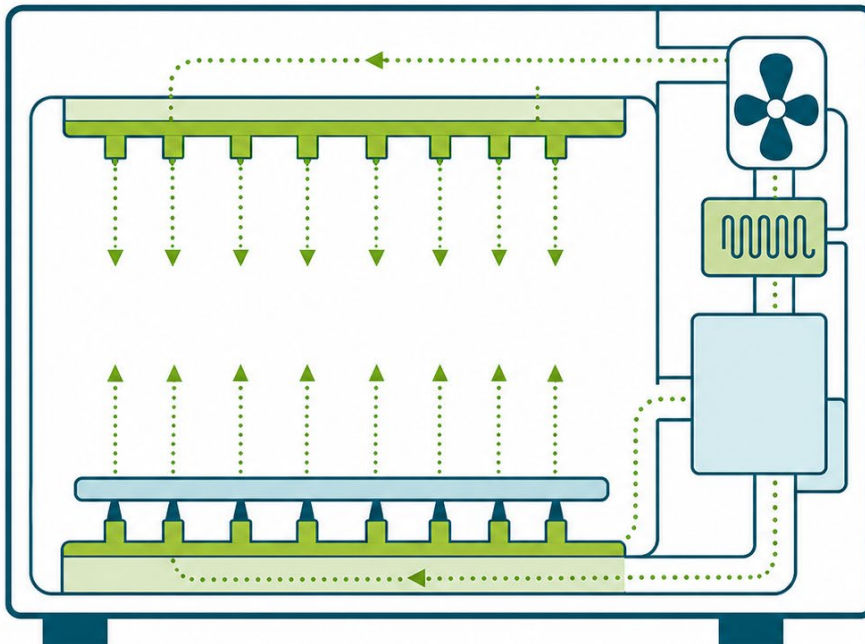


Figure 4: Impingement

- 1 Blower Fan**  
Circulates air through the oven at high velocity.
- 2 Heating Element**  
Heats the recirculated air.
- 3 Plenum / Air Duct**  
Channels heated air toward the jet fingers.
- 4 Jet Fingers / Nozzles**  
Direct focused streams of hot air onto the food.
- 5 Return Air Path**  
Pulls air back into the system for recirculation.

## 4. Infrared

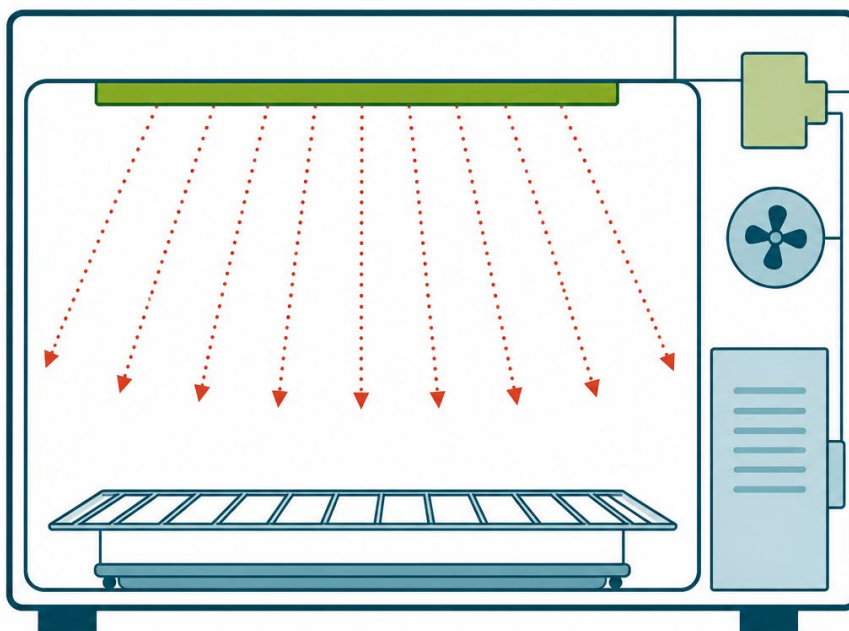


Figure 5: Infrared

- 1 Infrared Heater**  
Emits infrared energy that radiates downward to heat food.
- 2 Power Supply**  
Provides electrical power to the infrared heater.
- 3 Fan (Optional)**  
Helps circulate air and maintain even cooking temperatures.
- 4 Reflector / Shield**  
Directs infrared energy toward the cooking area and improves efficiency.
- 5 Cooking Surface**  
Supports food while allowing infrared energy to cook and brown efficiently.



# + Basic Oven Classifications

## 5. Conveyor

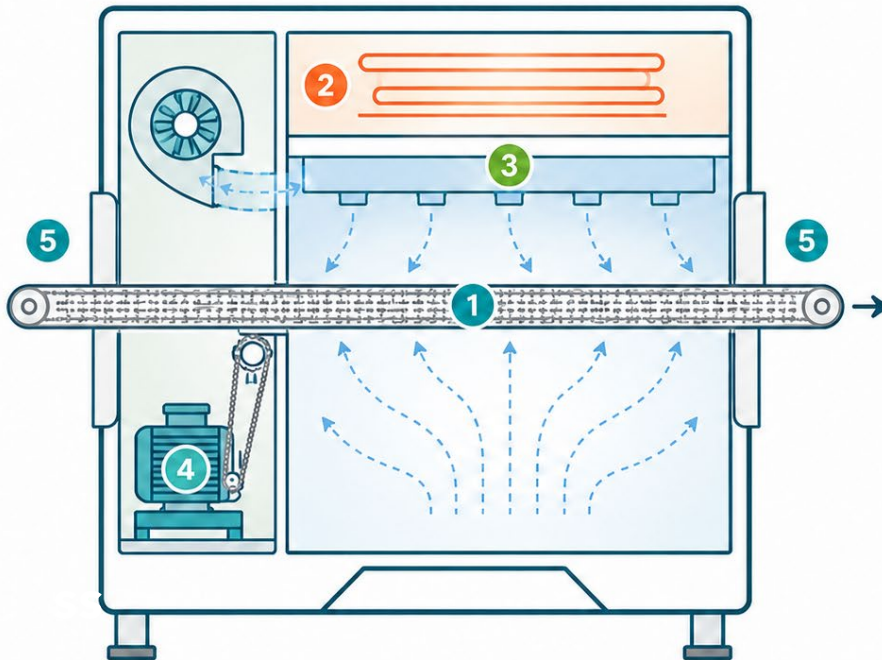


Figure 6: Conveyor

- 1 Conveyor Belt**  
Moves product through the oven at a controlled speed.
- 2 Heating System**  
Generates heat for cooking and browning.
- 3 Air / Jet Fingers**  
Direct heated air toward the product path.
- 4 Drive Motor**  
Powers the conveyor belt movement.
- 5 Entry & Exit Openings**  
Allow continuous loading and unloading during cooking.

## 6. Conduction / Direct Contact

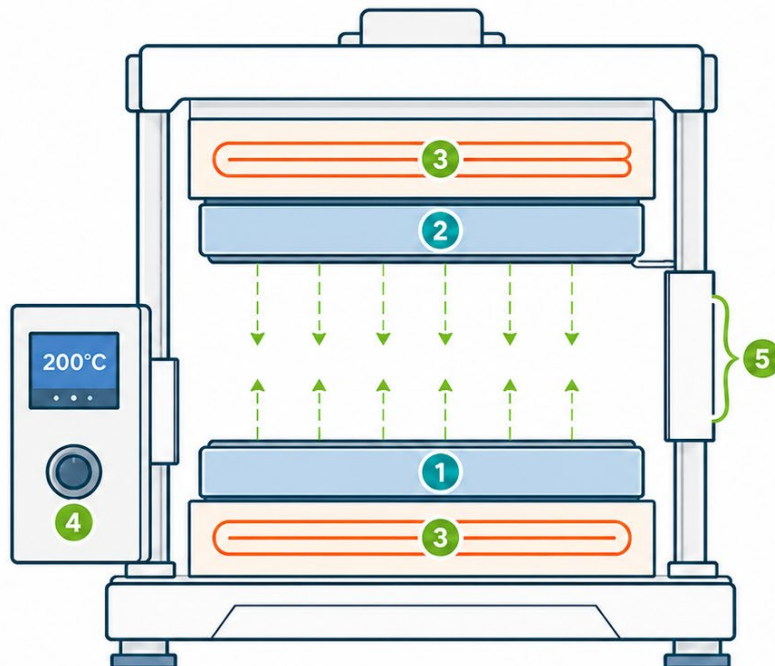


Figure 7: Conduction / Direct Contact

- 1 Heated Plate**  
Primary hot surface that transfers heat by contact.
- 2 Upper Platen**  
Applies top-side contact heat for even cooking.
- 3 Heating Element**  
Generates thermal energy within the plates.
- 4 Temperature Control**  
Regulates plate temperature for consistency.
- 5 Contact Zone**  
Area where direct surface contact drives heat transfer.



# + Operational Categories

## Performance by Menu Period

The same oven category did not lead every type of food. That is the central planning insight. Breakfast, lunch, Appetizers/snacks, and dessert each stress the oven differently. Some items need rapid center heating. Others need browning, underside bake, crispness, moisture retention, or consistent peak-hour flow. This chart (See Fig. 8) is used to show where each oven's Operational Categories fit best by menu period.

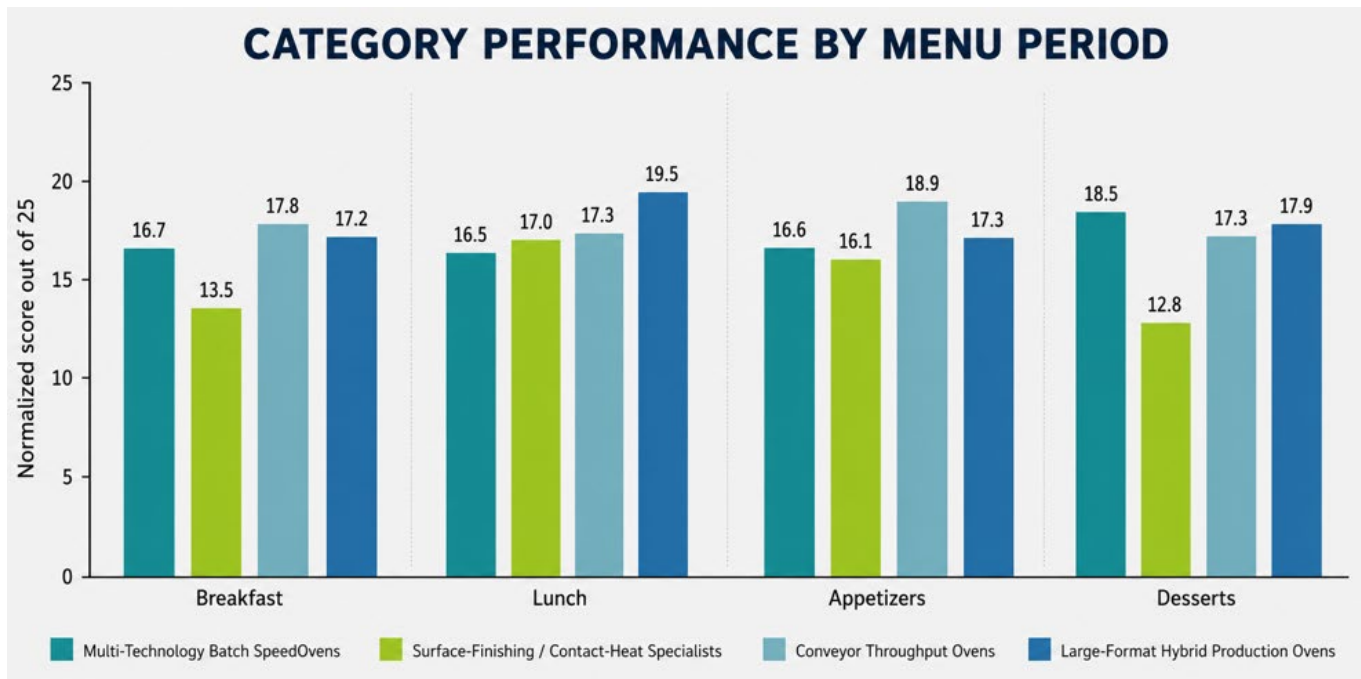


Figure 8: Operational Categories Performance by Menu Period

When the results are grouped by menu period, the data shows that each oven Operational Categories has a different area of strength. For breakfast, Conveyor Throughput Ovens produced the strongest normalized average at 17.8 out of 25, or 71%. This suggests that breakfast menus benefit from repeatable heat paths, especially for items such as burritos, French toast, sandwiches, and buns. However, the final oven selection should still consider pastry and hash brown performance, since those items rely more heavily on exterior crispness, browning, and moisture control.

For lunch, Large-Format Hybrid Production Ovens led with an average of 19.5 out of 25, or 78%. This category performed well across the broader lunch set, including sandwiches, pizza, burgers, and tots. The result suggests that larger format hybrids are well suited for menus that require strong heat-through, underside bake, and visual finish across a range of mixed-format products.

For Appetizers and shareable items, Conveyor Throughput Ovens again showed the strongest average at 18.9 out of 25, or 75%. This was driven by performance across Buffalo Chicken Dip and other appetizer-style products. These results point to the value of conveyor systems when products benefit from repeatable exterior crisping, consistent browning, and predictable production flow during peak periods.

For dessert, Multi-Technology Batch SpeedOvens led overall with an average of 18.5 out of 25, or 74%, when lava cake and cookie results were combined. The cookie application is especially important because it rewards controlled browning, underside bake, and moisture retention, rather than simply reheating a molten-center dessert. This reinforces that dessert performance is not only about speed; it is also about how well the oven can protect texture, structure, and finished product quality.



## + Which Operational Categories Led Each Food Item

| Menu period | Food Item                  | Leading Operational Categories               | Avg Score     | Runner-Up Operational Categories             |
|-------------|----------------------------|----------------------------------------------|---------------|----------------------------------------------|
| Breakfast   | Classic Breakfast Sandwich | Large-Format Hybrid Production Ovens         | 18.1/25 (72%) | Conveyor Throughput Ovens                    |
| Breakfast   | Breakfast Burrito          | Conveyor Throughput Ovens                    | 20.7/25 (83%) | Multi-Technology Batch SpeedOvens            |
| Breakfast   | French Toast Sticks        | Conveyor Throughput Ovens                    | 16.6/25 (66%) | Multi-Technology Batch SpeedOvens            |
| Breakfast   | Hash Browns                | Large-Format Hybrid Production Ovens         | 17.8/25 (71%) | Conveyor Throughput Ovens                    |
| Breakfast   | Breakfast Pastries         | Surface-Finishing / Contact-Heat Specialists | 22.6/25 (90%) | Large-Format Hybrid Production Ovens         |
| Lunch       | Reuben Sandwich            | Large-Format Hybrid Production Ovens         | 18.6/25 (74%) | Surface-Finishing / Contact-Heat Specialists |
| Lunch       | Burger                     | Large-Format Hybrid Production Ovens         | 19.5/25 (78%) | Conveyor Throughput Ovens                    |
| Lunch       | Pizza                      | Conveyor Throughput Ovens                    | 21.2/25 (85%) | Large-Format Hybrid Production Ovens         |
| Appetizers  | Chicken Tenders            | Large-Format Hybrid Production Ovens         | 21.9/25 (88%) | Conveyor Throughput Ovens                    |
| Appetizers  | Tots                       | Conveyor Throughput Ovens                    | 18.4/25 (73%) | Large-Format Hybrid Production Ovens         |
| Appetizers  | Pretzel Bites              | Large-Format Hybrid Production Ovens         | 19.5/25 (78%) | Conveyor Throughput Ovens                    |
| Appetizers  | Pork & Veggie Egg Roll     | Conveyor Throughput Ovens                    | 20.4/25 (82%) | Large-Format Hybrid Production Ovens         |
| Appetizers  | Buffalo Chicken Dip        | Multi-Technology Batch SpeedOvens            | 19.6/25 (79%) | Conveyor Throughput Ovens                    |
| Appetizers  | Mozzarella Sticks          | Surface-Finishing / Contact-Heat Specialists | 18.6/25 (74%) | Conveyor Throughput Ovens                    |
| Appetizers  | Breaded Shrimp             | Conveyor Throughput Ovens                    | 16.4/25 (66%) | Large Hybrid                                 |
| Appetizers  | Potato Cheddar Bites       | Conveyor Throughput Ovens                    | 21.6/25 (86%) | Multi-Technology Batch SpeedOvens            |
| Dessert     | Chocolate Lava Cake        | Multi-Technology Batch SpeedOvens            | 17.7/25 (71%) | Conveyor Throughput Ovens                    |
| Dessert     | Chocolate Chip Cookies     | Large-Format Hybrid Production Ovens         | 21.4/25 (85%) | Multi-Technology Batch SpeedOvens            |

Table 2: Food Leader by Operational Categories



## + Actual Oven Data: Breakfast

Breakfast scoring included sandwiches, burritos, French toast sticks, hash browns, and pastries. This table is useful because breakfast combines several failure modes: fillings must be hot, bread and tortillas should not toughen, pastry layers should stay flaky, and hash browns should crisp without drying out.

| Oven                    | Category     | Day Avg | Breakfast Sandwich | Burrito | French Toast | Hash Browns | Pastry |
|-------------------------|--------------|---------|--------------------|---------|--------------|-------------|--------|
| UNOX Speed Pro          | Batch        | 19.3    | 19.5               | 22.1    | 19.5         | 12.1        | 23.4   |
| ACP XpressChef 4i       | Batch        | 18.7    | 18.9               | 19.8    | 17.4         | 19.4        | 17.8   |
| TurboChef High h        | Conveyor     | 18.3    | 18.1               | 21.0    | 19.6         | 15.7        | 17.0   |
| Lincoln Aperia          | Conveyor     | 18.3    | 15.7               | 19.7    | 18.4         | 15.5        | 22.0   |
| Prática FIT XL          | Batch        | 17.8    | 20.7               | 19.2    | 14.3         | 15.4        | 19.5   |
| Rational iHexagon       | Large Hybrid | 17.7    | 19.3               | 15.3    | 14.3         | 20.0        | 19.6   |
| Ovention Shuttle/S2000  | Conveyor     | 16.8    | 20.0               | 21.4    | 11.9         | 17.1        | 13.7   |
| MerryChef Connex 12     | Batch        | 16.8    | 11.4               | 18.4    | 16.8         | 14.9        | 22.5   |
| UNOX Speed X            | Large Hybrid | 16.7    | 16.8               | 16.9    | 16.5         | 15.6        | 17.9   |
| Prática FIT Express     | Batch        | 16.7    | 13.7               | 18.9    | 18.4         | 15.5        | 17.1   |
| ACP XpressChef 3i       | Batch        | 15.7    | 16.1               | 16.8    | 14.3         | 16.7        | 14.8   |
| MerryChef Connex 16     | Batch        | 15.6    | 10.6               | 17.5    | 15.0         | 13.2        | 21.7   |
| Ovention MiLO           | Surface      | 15.4    | 13.3               | 11.7    | 12.6         | 16.9        | 22.6   |
| TurboChef Bullet        | Batch        | 15.2    | 14.9               | 16.1    | 15.0         | 14.4        | 15.7   |
| Ovention MiSA           | Batch        | 14.6    | 15.3               | 19.7    | 12.7         | 11.3        | 13.9   |
| Electrolux SpeedDelight | Surface      | 11.1    | 11.2               | 11.7    | 13.4         | 8.2         |        |

Table 3: Actual Oven Data - Breakfast

## + Actual Oven Data: Lunch

Lunch scoring focused on sandwiches and pizza. These foods need quick service, visual browning, and reliable texture. The table helps show whether an oven is better suited to sandwich-style work or pizza-style work.

| Oven                   | Category     | Day Avg | Reuben | Burger | Pizza |
|------------------------|--------------|---------|--------|--------|-------|
| Ovention MiLO          | Surface      | 20.0    | 23.3   | 21.1   | 15.4  |
| UNOX Speed X           | Large Hybrid | 19.8    | 18.0   | 19.2   | 22.4  |
| Rational iHexagon      | Large Hybrid | 19.1    | 19.1   | 19.9   | 18.4  |
| Prática FIT Express    | Batch        | 18.5    | 15.4   | 19.8   | 20.2  |
| Prática FIT XL         | Batch        | 18.2    | 18.2   | 18.6   | 17.8  |
| Ovention Shuttle/S2000 | Conveyor     | 18.2    | 13.3   | 17.6   | 23.7  |
| UNOX Speed Pro         | Batch        | 18.1    | 20.7   | 16.8   | 16.7  |
| Lincoln Aperion        | Conveyor     | 18.0    | 14.4   | 18.6   | 21.0  |
| MerryChef Connex 12    | Batch        | 17.8    | 19.6   | 18.9   | 14.8  |
| ACP XpressChef 4i      | Batch        | 17.4    | 20.1   | 15.5   | 16.5  |
| Ovention MiSA          | Batch        | 17.1    | 19.1   | 16.4   | 15.9  |
| TurboChef High h       | Conveyor     | 15.1    | 11.1   |        | 19.0  |
| MerryChef Connex 16    | Batch        | 14.5    | 12.1   | 16.4   | 14.9  |
| TurboChef Bullet       | Batch        | 13.5    | 9.7    | 16.1   | 14.6  |
| ACP XpressChef 3i      | Batch        | 13.3    | 16.9   | 10.5   | 12.6  |
| Electrolux Speedelight | Surface      | 12.5    | 13.4   | 11.6   |       |

Table 4: Actual Oven Data - Lunch

## + Actual Oven Data: Appetizers

Appetizers scoring included many smaller or shareable items. This is the most texture-sensitive part of the menu because many items need crispness and browning while still protecting cheese, filling, or protein moisture.

| Oven                   | Category     | Day Avg | Tenders | Egg Roll | Buff Dip | Mozz Sticks | Shrimp | Potato Bites | Tots | Pretzel |
|------------------------|--------------|---------|---------|----------|----------|-------------|--------|--------------|------|---------|
| Ovention Shuttle/S2000 | Conveyor     | 20.2    | 24.0    | 22.3     | 19.6     | 18.6        | 18.4   | 23.0         | 21.2 | 14.5    |
| TurboChef High         | Conveyor     | 19.4    |         |          |          |             |        | 22.0         |      | 16.9    |
| Prática FIT Express    | Batch        | 18.6    | 22.4    | 18.9     | 20.5     | 10.3        | 16.5   | 19.8         | 19.2 | 21.0    |
| Rational iHexagon      | Large Hybrid | 17.6    | 22.4    | 20.6     | 16.4     | 13.6        | 19.3   | 12.4         | 19.1 | 17.0    |
| Lincoln Aperiaon       | Conveyor     | 17.4    | 18.4    | 18.5     | 17.5     | 13.4        | 14.4   | 19.7         | 15.6 | 21.6    |
| Prática FIT XL         | Batch        | 17.1    | 20.4    | 18.6     | 21.0     | 10.1        | 12.6   | 18.6         | 16.0 | 19.5    |
| UNOX Speed Pro         | Batch        | 16.1    | 19.4    | 16.5     | 19.5     | 9.0         | 11.8   | 18.8         | 15.2 | 18.5    |
| UNOX Speed X           | Large Hybrid | 16.5    | 21.5    | 17.0     | 19.7     | 13.8        | 10.9   | 15.0         | 11.9 | 22.1    |
| Ovention MiLO          | Surface      | 16.7    | 20.1    | 16.7     | 18.0     | 18.6        | 16.4   | 14.0         | 12.5 | 17.4    |
| MerryChef Connex 12    | Batch        | 16.6    | 18.1    | 13.1     | 19.4     | 12.4        | 15.4   | 19.1         | 19.8 | 15.8    |
| TurboChef Bullet       | Batch        | 16.5    | 18.6    | 17.6     | 20.7     | 11.3        | 12.3   | 20.6         | 10.6 | 20.1    |
| MerryChef Connex 16    | Batch        | 16.2    | 16.8    | 13.6     | 19.7     | 13.3        | 13.2   | 17.6         | 16.6 | 18.8    |
| ACP XpressChef 3i      | Batch        | 16.0    | 17.1    | 17.3     | 18.6     | 11.8        | 17.9   | 18.0         | 12.5 | 15.0    |
| Ovention MiSA          | Batch        | 16.0    | 20.0    | 18.3     | 18.9     | 9.1         | 14.3   | 15.6         | 10.1 | 21.7    |
| ACP XpressChef 4i      | Batch        | 15.4    | 20.7    | 17.1     | 18.4     | 12.9        | 13.5   | 16.4         | 18.0 | 6.2     |
| Electrolux Speedelight | Surface      | 14.5    |         |          | 15.0     |             |        | 16.8         |      | 11.6    |

Table 5: Actual Oven Data - Appetizers



## + Actual Oven Data: Dessert

Dessert scoring includes both chocolate lava cake and Chocolate Chip cookies. This matters because the two items test different speed-oven behaviors: lava cake rewards fast internal heating and moisture protection, while cookies reveal bake quality, browning, crispness, texture, and whether the oven can finish a bakery item without drying or hardening it.

| Oven                    | Category     | Day Avg | Lava Cake | Cookies |
|-------------------------|--------------|---------|-----------|---------|
| UNOX Speed Pro          | Batch        | 22.1    | 21.3      | 22.8    |
| Prática FIT XL          | Batch        | 21.0    | 20.9      | 21.2    |
| TurboChef Bullet        | Batch        | 19.6    | 22.7      | 16.4    |
| Prática FIT Express     | Batch        | 19.5    | 17.9      | 21.1    |
| MerryChef Connex 16     | Batch        | 19.2    | 20.2      | 18.3    |
| Ovention Shuttle/S2000  | Conveyor     | 19.1    | 16.6      | 21.7    |
| MerryChef Connex 12     | Batch        | 18.3    | 19.8      | 16.8    |
| Ovention MiLO           | Surface      | 18.4    |           | 18.4    |
| Rational iHexagon       | Large Hybrid | 18.0    | 13.6      | 22.4    |
| UNOX Speed X            | Large Hybrid | 17.9    | 15.4      | 20.3    |
| TurboChef High h        | Conveyor     | 16.4    |           | 16.4    |
| Lincoln Aperia          | Conveyor     | 16.0    | 16.0      | 16.0    |
| Ovention MiSA           | Batch        | 15.9    | 11.6      | 20.3    |
| ACP XpressChef 3i       | Batch        | 15.8    | 13.0      | 18.7    |
| ACP XpressChef 4i       | Batch        | 15.1    | 11.7      | 18.4    |
| Electrolux SpeedDelight | Surface      | 7.2     | 7.2       |         |

Table 6: Actual Oven Data - Dessert

# + Specification Guide using the category data

The category data is most useful when it is tied to a specific menu profile. It should not be used as a brand ranking or a declaration of a single best oven. Instead, it helps identify which oven typologies should be studied first based on the way the operation actually cooks. Used early in the design process, this approach can help narrow the equipment conversation before comparing brand preference, list price, or final specification details.

## **Breakfast Menu**

For a breakfast-heavy menu with burritos, sandwiches, and hot sides, the first oven families to study should be Conveyor Throughput Ovens, Large-Format Hybrid Production Ovens, and selected Batch Speed Ovens. Conveyor ovens led breakfast overall, while large-format hybrid and batch ovens stayed close behind and showed product-specific strengths. This suggests that breakfast performance depends heavily on the exact menu mix. Burritos and sandwiches may benefit from repeatable heat paths and steady production flow, while pastries, buns, and hash browns may require more attention to browning, crispness, and texture.

## **Lunch Menu**

For a lunch menu centered on sandwiches, pizza, burgers, and pretzels, the first typologies to study should be Large-Format Hybrid Production Ovens, Conveyor Throughput Ovens, and Surface Finishing Contact Heat Specialists. Large-format hybrid ovens led lunch overall, while conveyor ovens were especially strong in pizza applications. These products tend to reward even heating, underside bake, surface browning, and visual finish across larger or more structured items. The key specification question is whether the bottleneck is product fit, speed, or queue management. Operators should also consider whether one oven needs to handle both sandwiches and pizza without constant menu changes, or whether separate equipment strategies may better support peak flow.

## **Appetizers Menu**

For an Appetizers or shareable program with items such as tenders, egg rolls, shrimp, cheese items, and bites, Conveyor Throughput Ovens should be studied first, followed by selected Large-Format Hybrid, and Multi-Technology Batch. Conveyor ovens led the Appetizers and shareable category after appetizer-style products were included and normalized to available points, including Buffalo Chicken Dip, tots, and pretzel bites. This points to the value of repeatable exterior crisping, consistent browning, and predictable production flow during higher-volume periods. Before specifying, operators should ask whether items are cooked from frozen, whether cheese blowouts are a concern, whether speed is less important than texture, and whether the crew needs a simple, repeatable process during peak service.

## **Dessert Menu**

For a dessert or café-style item requiring a hot center and protected texture, Multi-Technology Batch Speed Ovens should be studied first. Batch speed ovens led dessert overall when lava cake and cookies were combined. This matters because lava cake favored internal heating and moisture protection, while cookies showed how strongly bake quality, browning, crispness, and texture influence bakery-style applications. Dessert performance should not be generalized from one sweet item to another. Operators should ask whether the dessert is a cake, cookie, pastry, or filled item, and whether the goal is molten center, crisp edge, controlled browning, soft interior, or flakiness.

## **High Volume Narrow Menu**

For a high-volume single-product or narrow-menu execution, Conveyor Throughput Ovens are often the best Operational Categories to evaluate first. The strength of this oven family is not just cooking performance; it is workflow control. Conveyor systems can reduce operator variability by creating consistent dwell time, a repeatable cook path, and continuous output under peak load. They also provide consistent cook times while reducing the need for constant operator's attention. This allows staff to perform other kitchen tasks simultaneously, improving labor efficiency and workflow while maintaining consistent product quality. This makes them especially useful when the menu includes many identical items per hour.

## **Broad Menu**

For a broad menu in a limited space with frequent menu-period changes, Multi-Technology Batch Speed Ovens are typically the first family to study. These ovens tend to offer strong menu flexibility in a compact footprint, especially when paired with remote menu management and accessories that support different product types. They can be useful in operations that need to move between breakfast, lunch, snack, and dessert applications without dedicating a separate piece of equipment to each task. Before specifying, operators should ask how often programs change, how easy recipe selection needs to be for new staff, and what accessories are required for the highest-volume products.

## **Large Menu Items**

For a production platform or larger load requirement, Large-Format Hybrid Production Ovens should be studied early. These ovens change the capacity conversation because their larger cavities may reduce the number of individual cook cycles required. They may be especially useful where product size, batch capacity, or broader production support matters more than countertop convenience. Before specifying, operators should confirm whether the kitchen has the required footprint and utility capacity, whether larger batch size matters more than speed for a single item, and whether the operation benefits from a production-style platform rather than a smaller point-of-service oven.

## + Category Performance

The category-level results show why we avoid relying on one overall score. An oven can be strong in one type of food and less aligned with another. We use these charts to separate menu fit from general performance and to help operators focus on the items that matter most to their operation.

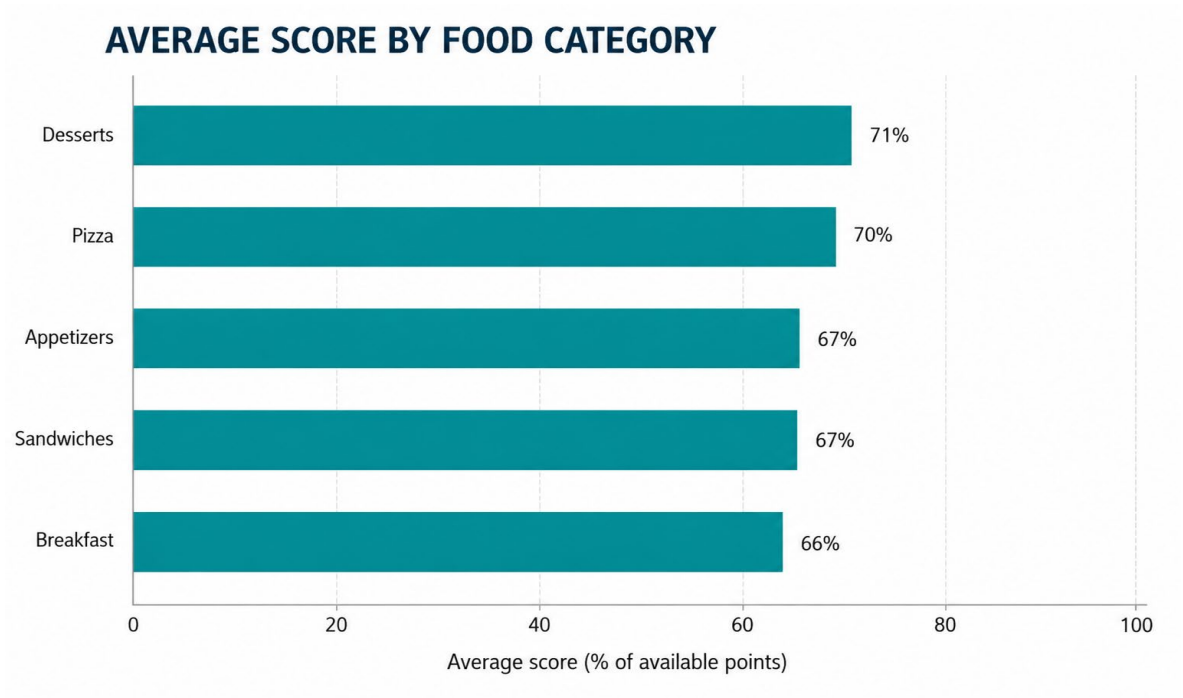


Figure 9: Average Score by Food Category





## + Food Item Insights

Food item results reveal the operational details that category averages can hide. Some foods are easy for many ovens; others expose specific weaknesses such as poor underside bake, loss of crispness, uneven heating, or filling blowout. We use this chart to identify which menu items should be prioritized during a real product demo.

The most challenging item was mozzarella sticks at 12.53 out of 25. This exposed a classic speed-oven challenge: heating the filling enough to satisfy expectations without blowout, oiling, sogginess, or weak exterior texture. Products with breading, fillings, cheese, and high-moisture interiors often reveal the difference between fast reheating and controlled finishing.

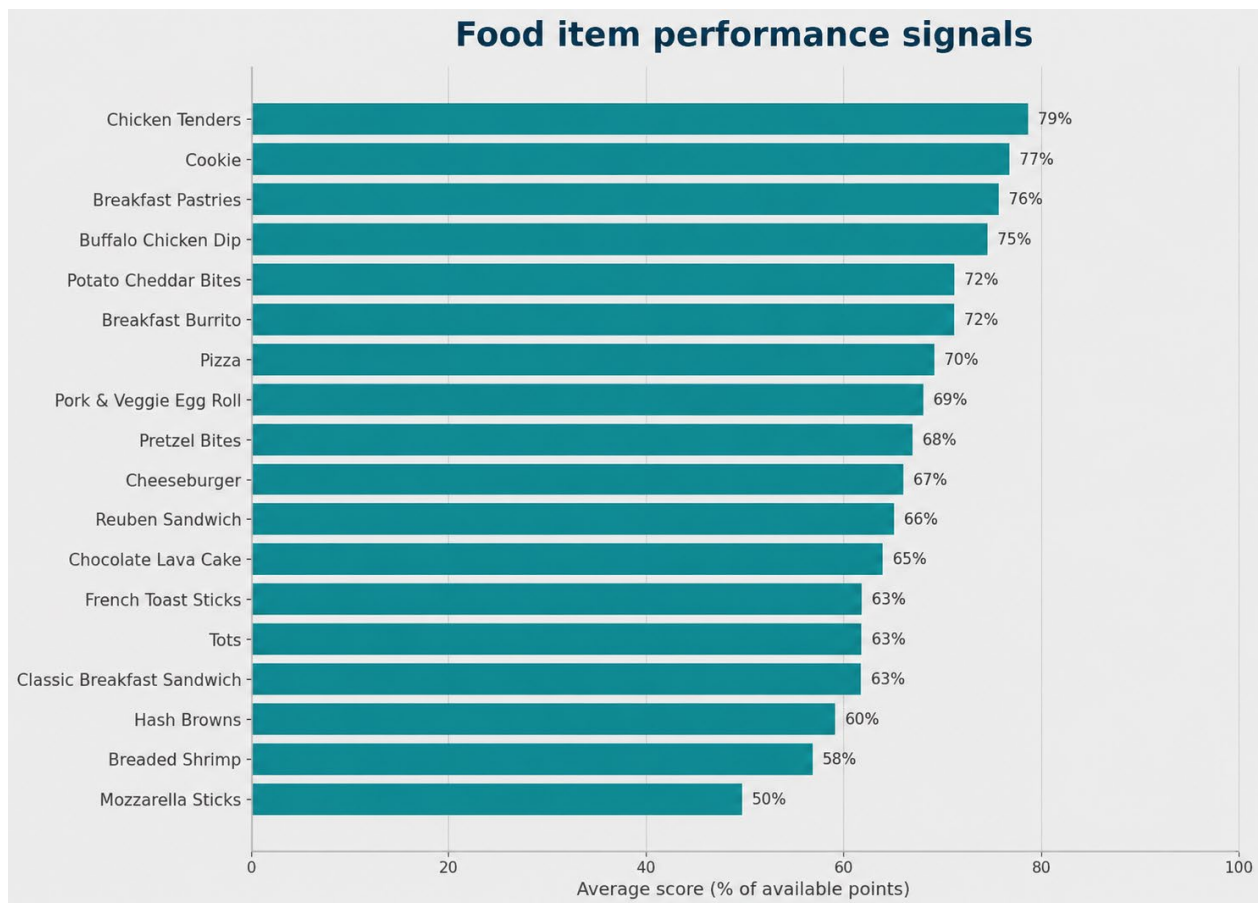


Figure 10: Food Item Performance Signals

## + Criteria-Level Findings

Criteria-level results help explain why certain items are separated. Moisture retention was the strongest breakfast criterion, while cheese-melt was more challenging. This suggests that several ovens preserved product tenderness more reliably than exterior crunch for breakfast items.

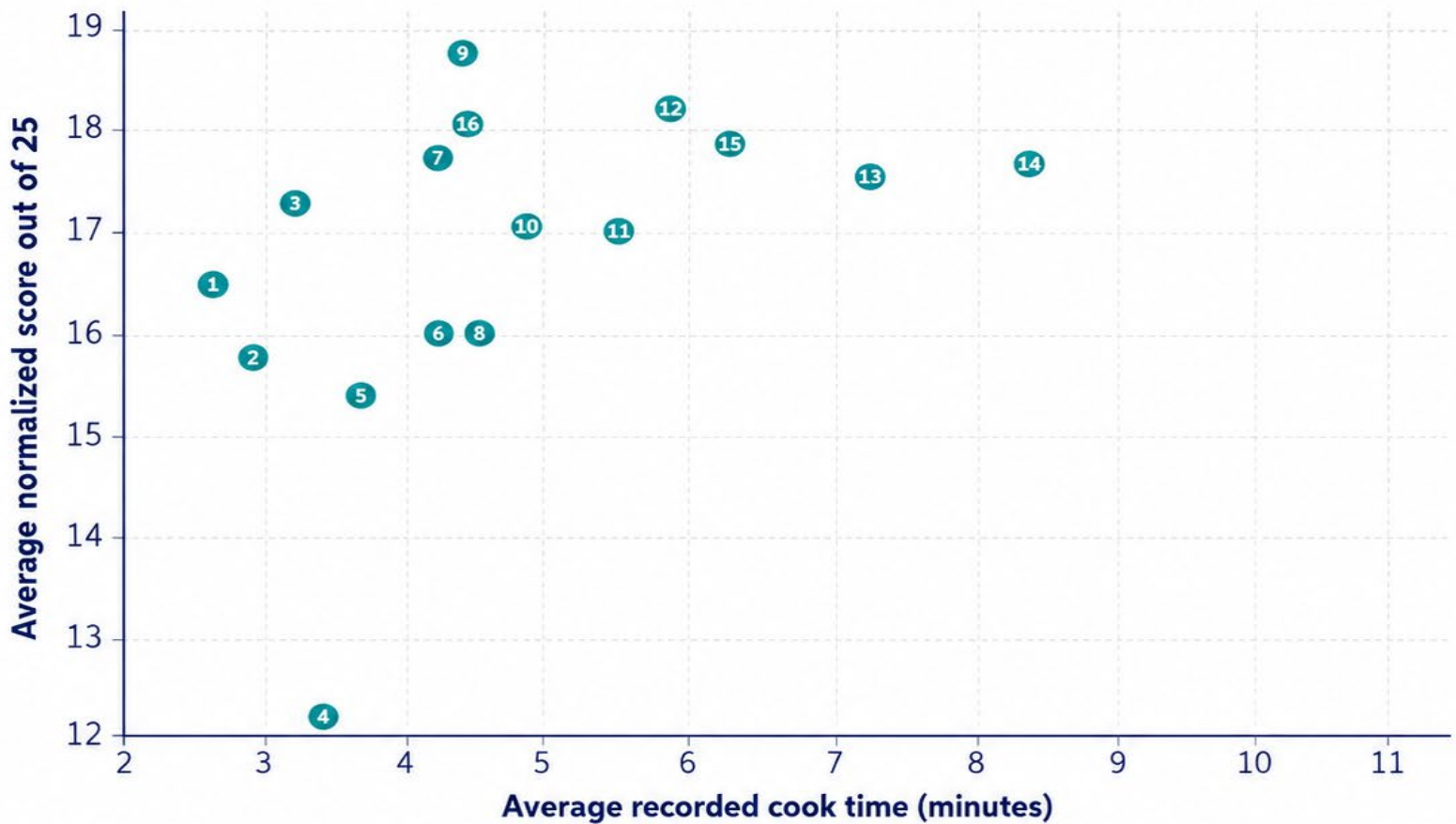
In appetizers, temperature was relatively strong, but texture and crispness were more variable. That pattern confirms that many ovens could heat quickly, while the final exterior texture and filling stability were harder to control. Pizza also showed strong heat-through, while heat uniformity and underside development remained important differentiators.

| Category   | Strongest signal          | Lowest signal           |
|------------|---------------------------|-------------------------|
| Appetizers | Juiciness (4.20)          | Cheese Pull (1.56)      |
| Breakfast  | Moisture Retention (3.74) | Cheese Melt (2.54)      |
| Desserts   | Crispness (3.98)          | Interior Texture (3.02) |
| Pizza      | Temperature (3.86)        | Heat Uniformity (2.47)  |
| Sandwiches | Browning (Bread) (3.61)   | Texture (3.20)          |

Table 7: Criteria-Level Findings



# + Speed, Throughput, and Score Relationship



## How to read this chart

Cook time reflects the average shown in each oven's Oven Data sheet, including the Throughput Challenge where recorded.

Score reflects average normalized product-quality performance.

Faster is not automatically better, and slower is not automatically worse.

Shorter cycles can support throughput, but only if the product still meets the intended quality target.



**16**

ovens tested



**2,790**

valid scorecards

## Rounded Cook-Time and Score Key

Point numbers correspond to the scatter chart.

| # | Oven                               | Avg cook time | Avg score | #  | Oven                        | Avg cook time | Avg score |
|---|------------------------------------|---------------|-----------|----|-----------------------------|---------------|-----------|
| 1 | ACP - XpressChef 4i                | 2.67 min      | 16.56/25  | 9  | Ovention - Shuttle          | 4.41 min      | 18.77/25  |
| 2 | Ovention - MiSA                    | 2.90 min      | 15.79/25  | 10 | MerryChef - Connex 12       | 4.68 min      | 17.03/25  |
| 3 | UNOX - Speed X                     | 3.12 min      | 17.29/25  | 11 | Ovention - MiLO             | 5.33 min      | 17.04/25  |
| 4 | Electrolux - SpeedDelight          | 3.41 min      | 12.02/25  | 12 | Prática - FIT Express       | 5.60 min      | 18.16/25  |
| 5 | ACP - XpressChef 3i                | 3.61 min      | 15.37/25  | 13 | Lincoln - Aperion           | 7.13 min      | 17.58/25  |
| 6 | TurboChef - Bullet Rapid Cook Oven | 4.13 min      | 15.97/25  | 14 | TurboChef - High h Conveyor | 7.86 min      | 17.67/25  |
| 7 | Rational - iHexagon                | 4.15 min      | 17.93/25  | 15 | Prática - FIT XL            | 5.68 min      | 17.90/25  |
| 8 | MerryChef - Connex 16              | 4.34 min      | 16.01/25  | 16 | UNOX - Speed Pro            | 4.32 min      | 17.97/25  |

## + Overall Performance

Overall averages ranged from 12.02 to 18.77 out of 25. The spread of 6.75 points is larger than the spread observed in the Combi Challenge, which is not surprising because SpeedOvens vary more dramatically by heating platform, accessory package, product compatibility, and intended workflow.

The overall chart is useful for context, but it should not be used as a purchasing shortcut. Some ovens with lower total averages still showed strong performance in specific applications. Some ovens with higher averages also had narrower scorecard coverage or operational considerations that should be evaluated before specification.

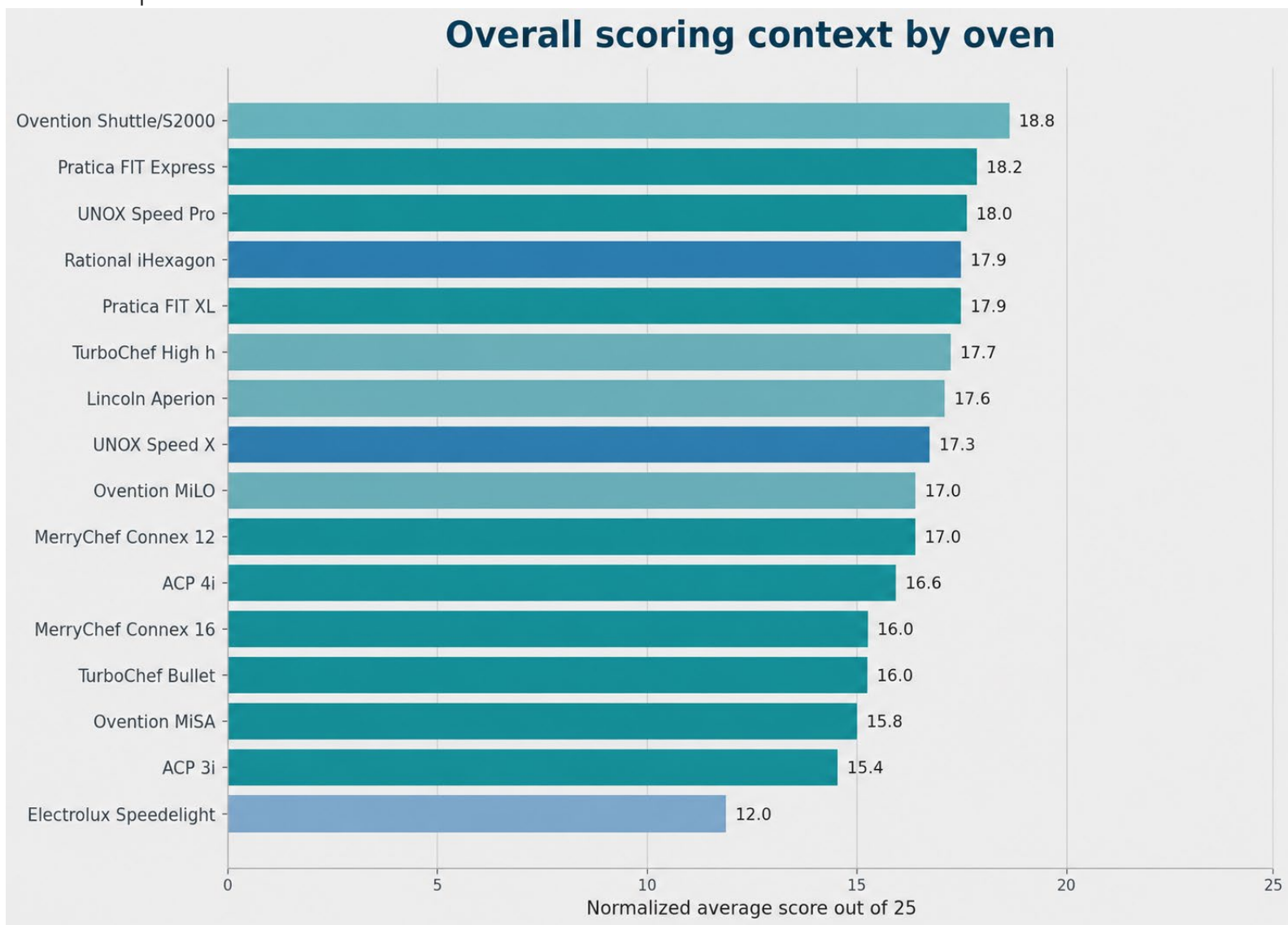


Figure 11: Overall Scoring Context by Oven



## + Raw Data

The raw-points view provides a useful check against the normalized averages because it shows both earned points and available scoring opportunity. In this analysis, each oven's point total reflects only the menu items it completed and the scorecards that produced valid scoring data. This matters because not every oven was evaluated across the full menu in the same way. Ovens that completed all 18 items had a broader opportunity to accumulate points across multiple applications, while ovens with fewer completed items should be understood through a more focused application lens.

For example, the Electrolux SpeedDelight completed 10 of the 18 tested items, which means its raw-point total reflects a narrower field of evaluation rather than a broad-menu performance profile. This distinction is important. The SpeedDelight should not be interpreted as a poor performer simply because it did not participate equally across every application. Its data suggests a more specialized oven anatomy, better suited to specific surface-contact, finishing, or targeted menu applications rather than the full range of products tested in this challenge.

### Raw Points by Oven

Earned points out of available scored points, with completion context

**11**  
Completed all items

**67.2%**  
Overall score

**3**  
Partial completion

| Oven                               | % of available points        | Raw points    | Items | No score |
|------------------------------------|------------------------------|---------------|-------|----------|
| Ovention - Shuttle                 | <div><div></div></div> 75.0% | 2,262 / 3,015 | 18/18 | 4        |
| UNOX - Speed Pro                   | <div><div></div></div> 71.8% | 3,479 / 4,845 | 18/18 | 2        |
| Prática - FIT Express              | <div><div></div></div> 72.5% | 3,459 / 4,770 | 18/18 | 5        |
| Rational - iHexagon                | <div><div></div></div> 71.1% | 2,220 / 3,125 | 18/18 | 0        |
| Prática - FIT XL                   | <div><div></div></div> 71.5% | 3,462 / 4,845 | 18/18 | 2        |
| TurboChef - High h Conveyor        | <div><div></div></div> 70.7% | 1,219 / 1,725 | 10/18 | 1        |
| Lincoln - Aperia                   | <div><div></div></div> 70.3% | 4,174 / 5,935 | 18/18 | 12       |
| UNOX - Speed X                     | <div><div></div></div> 69.0% | 3,345 / 4,845 | 18/18 | 2        |
| Ovention - MiLO                    | <div><div></div></div> 68.1% | 1,986 / 2,915 | 17/18 | 1        |
| MerryChef - Connex 12              | <div><div></div></div> 68.0% | 4,070 / 5,985 | 18/18 | 10       |
| ACP - XpressChef 4i                | <div><div></div></div> 66.2% | 3,927 / 5,935 | 18/18 | 12       |
| MerryChef - Connex 16              | <div><div></div></div> 63.9% | 3,732 / 5,840 | 18/18 | 16       |
| TurboChef - Bullet Rapid Cook Oven | <div><div></div></div> 63.7% | 1,983 / 3,115 | 18/18 | 0        |
| Ovention - MiSA                    | <div><div></div></div> 63.0% | 1,963 / 3,115 | 18/18 | 0        |
| ACP - XpressChef 3i                | <div><div></div></div> 61.4% | 3,534 / 5,760 | 18/18 | 19       |
| Electrolux - SpeedDelight          | <div><div></div></div> 47.9% | 1,539 / 3,215 | 10/18 | 9        |

Figure 12: Raw Points by Oven

# +Certifications and Code Considerations

For speed ovens, certification stamps such as cETLus and KNLZ (UL710B standard) are important because they help establish whether the oven can be treated as a ventless appliance rather than equipment that automatically requires a traditional Type I grease hood.

This matters because many speed ovens are intended for locations where a grease hood may not be practical, such as café counters, front-of-house service points, office pantries, kiosks, breakrooms, convenience formats, and small support kitchens. When an oven carries the appropriate listing, it can often support a hoodless installation strategy, reducing infrastructure requirements and giving operators more flexibility in where the equipment can be placed.

For this study, the certification category should be read as a feasibility and installation indicator rather than a cooking-performance score. A ventless-listed oven may simplify placement, reduce venting needs, and make the equipment easier to integrate into nontraditional foodservice spaces. The key question is not just “Does the oven cook well?” but also “Can this oven be installed where the operation needs it?”

## Certification

*Listing by oven model*

9 KNLZ

7 cETLus

| Manufacturer             | Oven model                         | Certification |
|--------------------------|------------------------------------|---------------|
| ACP/Amana/XpressChef     | XpressChef 3i Series (MRX2)        | cETLus        |
| ACP/Amana/XpressChef     | XpressChef 4i Series (MXP22TLT)    | cETLus        |
| Electrolux Professionals | Speedelight                        | cETLus        |
| Lincoln Foodservice      | Aperion                            | KNLZ          |
| MerryChef                | Connex 12HP                        | KNLZ          |
| MerryChef                | Connex 16                          | KNLZ          |
| Ovention Ovens           | MiSA-12                            | KNLZ          |
| Ovention Ovens           | Milo14                             | KNLZ          |
| Ovention Ovens           | S2000                              | KNLZ          |
| Pratica USA              | FIT Express                        | cETLus        |
| Pratica USA              | FIT XL                             | cETLus        |
| Rational                 | iHexagon                           | KNLZ          |
| TurboChef                | Bullet: ENC-9600-812-KW            | KNLZ          |
| TurboChef                | HIGH h CONVEYOR 2020: HTC-9500-510 | KNLZ          |
| Unox                     | SPEED.Pro model XASR-03HS-EDDS     | cETLus        |
| Unox                     | XAPA-0523-SXLS                     | cETLus        |

Figure 13: Certification by Oven

# + Remote Menu Management

Remote menu management is an important operational feature for speed ovens because these ovens rely heavily on programmed cook settings. A single menu item may use a specific combination of time, temperature, microwave energy, fan speed, impingement, infrared, or belt speed. Small changes to those settings can affect browning, crispness, internal temperature, moisture retention, and overall finished quality.

For operators, remote menu management allows recipes and cook programs to be created, updated, and distributed from a central platform rather than being manually entered at each oven. This is especially useful for operations with multiple locations, frequent menu changes, seasonal rollouts, or staff who may not have deep culinary training. It helps protect consistency by making sure the same product is cooked the same way, regardless of shift, location, or operator.

This category should not be viewed as a cooking-performance score by itself. Instead, it is an operational-control indicator. An oven without remote menu management may still perform very well, especially in a single-site operation with a stable menu and trained staff. However, when consistency at scale matters, remote menu management can reduce programming errors, simplify training, speed up menu rollouts, and help keep multiple ovens aligned.

## Remote Menu Management

*Program control by oven model*

15 Yes

1 No

| Manufacturer             | Oven model                         | Remote menu management | Standard or optional |
|--------------------------|------------------------------------|------------------------|----------------------|
| ACP/Amana/XpressChef     | XpressChef 3i Series (MRX2)        | YES                    | STANDARD             |
| ACP/Amana/XpressChef     | XpressChef 4i Series (MXP22TLT)    | YES                    | STANDARD             |
| Electrolux Professionals | Speedelight                        | YES                    | OPTIONAL             |
| Lincoln Foodservice      | Aperion                            | NO                     | N/A                  |
| MerryChef                | Connex 12HP                        | YES                    | STANDARD             |
| MerryChef                | Connex 16                          | YES                    | STANDARD             |
| Ovention Ovens           | MiSA-12                            | YES                    | OPTIONAL             |
| Ovention Ovens           | Milo14                             | YES                    | OPTIONAL             |
| Ovention Ovens           | S2000                              | YES                    | OPTIONAL             |
| Pratica USA              | FIT Express                        | YES                    | STANDARD             |
| Pratica USA              | FIT XL                             | YES                    | STANDARD             |
| Rational                 | iHexagon                           | YES                    | STANDARD             |
| TurboChef                | Bullet: ENC-9600-812-KW            | YES                    | STANDARD             |
| TurboChef                | HIGH h CONVEYOR 2020: HTC-9500-510 | YES                    | STANDARD             |
| Unox                     | SPEED.Pro model XASR-03HS-EDDS     | YES                    | STANDARD             |
| Unox                     | XAPA-0523-SXLS                     | YES                    | STANDARD             |

Figure 14: Remote Menu Management

# + Specification and Operational Takeaways

- + **Match the Oven to the Dominant Menu Application**  
Pizza, breakfast, desserts, sandwiches, and appetizers favored different ovens. Do not rely on total score alone.
- + **Use Real Menu Items During Demos**  
Mozzarella sticks, hash browns, breaded shrimp, and lava cake exposed challenges that generic demos may not reveal.
- + **Separate Application Coverage from Cooking Quality**  
No-score entries show that some ovens may be excellent in narrower workflows but less universal across a broad menu.
- + **Treat Cook Time as One Variable**  
Cycle time must be considered alongside batch count, quality target, staging, and service throughput.
- + **Ask About Programming and Training**  
Small changes to microwave percentage, fan speed, belt settings, resting time, and accessories can alter results.
- + **Plan for Service and Lifecycle Support**  
SpeedOvens are high-use production assets. Parts, cleaning, venting, training, and local service access should influence specification.





## + Moving Forward

The SpeedOven Challenge provides a stronger basis for conversation than a traditional product demo. It shows that many SpeedOvens are capable, but not interchangeable. The clearest differences appeared when the menu was broken into applications and when scorecards separated heat-through, surface finish, moisture retention, and product structure.

Rather than identifying a single best oven, the goal is to provide operators, consultants, and designers with objective insights that support thoughtful equipment specification. Programming, workflow integration, accessory selection, training, service support, and long-term lifecycle considerations all play an important role in determining which oven is the right fit for a particular kitchen.

Future testing can build on this framework by adding repeated-day controls, standardized throughput loads, operator effort scoring, accessory documentation, cleaning observations, and post-test program optimization. As SpeedOven technology continues to evolve, FoodSpace remains committed to transparent, data-driven evaluation.



## + Manufacturers Specification Sheets

| Company / Manufacturer          | Oven Model(s)                      | Certification | Spec Sheets                |
|---------------------------------|------------------------------------|---------------|----------------------------|
| <b>ACP/Amana/XpressChef</b>     | XpressChef 3i Series (MRX2)        | cETLus        | <a href="#">Spec Sheet</a> |
| <b>ACP/Amana/XpressChef</b>     | XpressChef 4i Series (MXP22TLT)    | cETLus        | <a href="#">Spec Sheet</a> |
| <b>ElectroLux Professionals</b> | Speedelight                        | cETLus        | <a href="#">Spec Sheet</a> |
| <b>Lincoln Foodservice</b>      | Aperion                            | KNLZ          | <a href="#">Spec Sheet</a> |
| <b>MerryChef</b>                | Connex 12HP                        | KNLZ          | <a href="#">Spec Sheet</a> |
| <b>MerryChef</b>                | Connex 16                          | KNLZ          | <a href="#">Spec Sheet</a> |
| <b>Ovention Ovens</b>           | MiSA-12                            | KNLZ          | <a href="#">Spec Sheet</a> |
| <b>Ovention Ovens</b>           | Milo14                             | KNLZ          | <a href="#">Spec Sheet</a> |
| <b>Ovention Ovens</b>           | S2000                              | KNLZ          | <a href="#">Spec Sheet</a> |
| <b>Practica USA</b>             | FIT Express                        | cETLus        | <a href="#">Spec Sheet</a> |
| <b>Practica USA</b>             | FIT XL                             | cETLus        | <a href="#">Spec Sheet</a> |
| <b>Rational</b>                 | iHexagon                           | KNLZ          | <a href="#">Spec Sheet</a> |
| <b>TurboChef</b>                | Bullet: ENC-9600-812-KW            | KNLZ          | <a href="#">Spec Sheet</a> |
| <b>TurboChef</b>                | HIGH h CONVEYOR 2020: HTC-9500-510 | KNLZ          | <a href="#">Spec Sheet</a> |
| <b>Unox</b>                     | SPEED.Pro model XASR-03HS-EDDS     | cETLus        | <a href="#">Spec Sheet</a> |
| <b>Unox</b>                     | XAPA-0523-SXLS                     | cETLus        | <a href="#">Spec Sheet</a> |