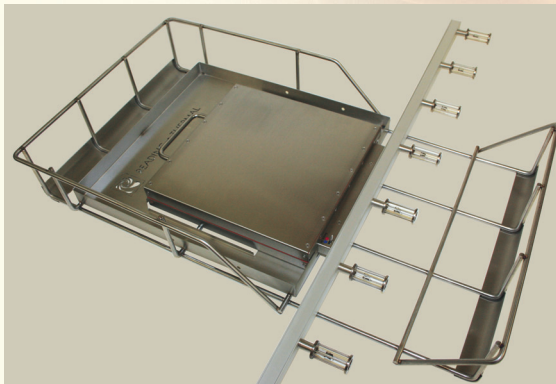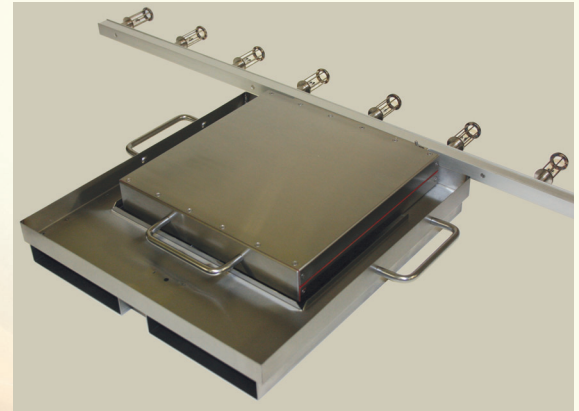# Bread & Bun Profiling Solutions

Specialized Carrier for Endless Conveyor Ovens (e.g. BakeTech)

Tray Style Carrier for SCORPION® 2 Equipment provides easy loading and unloading on endless conveyors. The carrier, with SCORPION® 2, is inserted into the product flow replacing a bread or bun pan. Stainless Steel Magnetic Base Tray 406mm (16") wide x 356mm (14") long x 51mm (2") high accommodates all SCORPION® 2 Equipment.

Specialized Carrier for Tray and Grid Conveyor Ovens (e.g. AMF, Turkington)

Basket Style Carrier for SCORPION® 2 Equipment provides easy loading and unloading on tray and grid conveyors. The carrier, with SCORPION® 2, is inserted into the product flow replacing a bread or bun pan. Stainless Steel Wire Frame Basket 381mm (15") wide x 635mm (25") long x 90mm (3.5") high accommodates all SCORPION® 2 Equipment.

Temp+Airflow Sensor Array

Designed to simultaneously profile temperature and airflow across the width of large tray and grid conveyor ovens. Array contains 9 Temp+Airflow sensors spaced evenly across the length of an aluminum bar. The array comes in 3 sizes to match the most popular bread oven widths. For easy transportation, the array folds to fit in a 1.4m (54") long case.
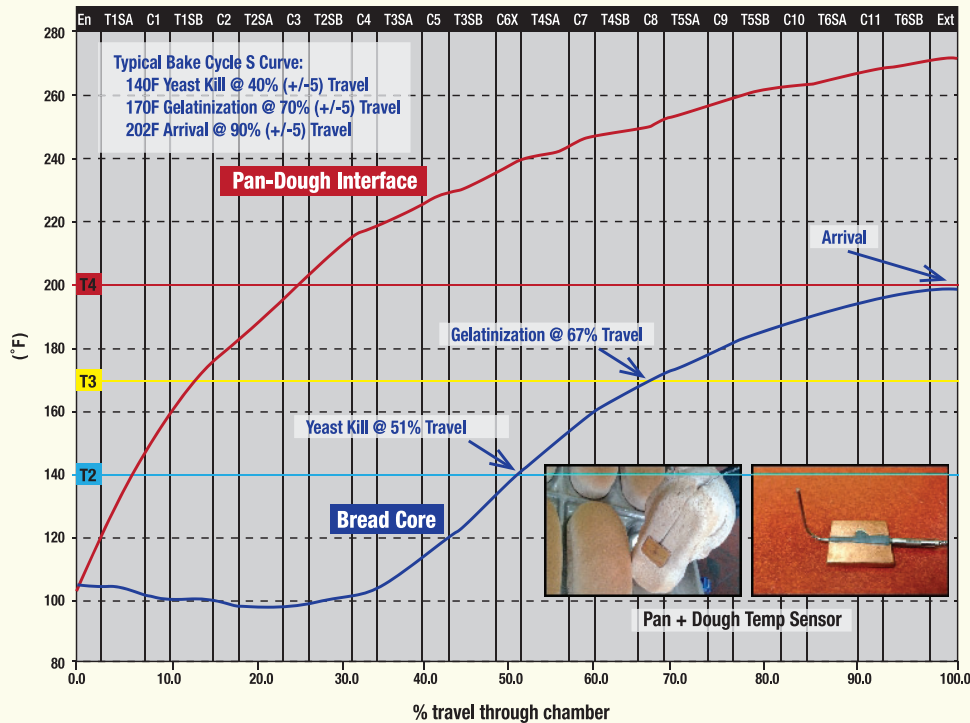
SMART SENSOR
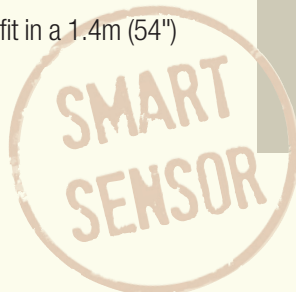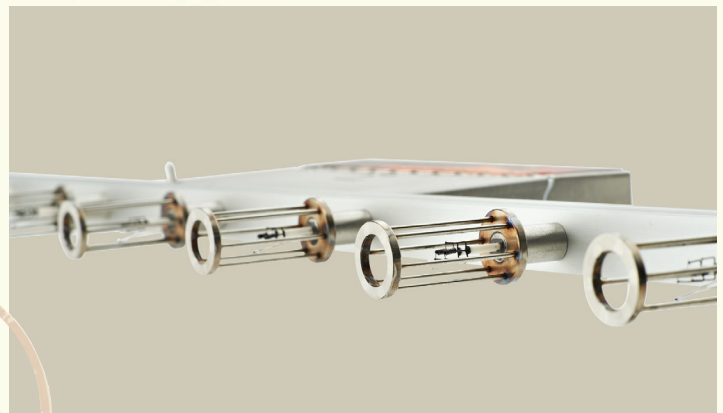
Pan+Dough Probe

This dual probe unit is placed under the bread or bun dough simultaneously capturing the pan/dough interface temperature and the dough core temperature. The copper spade is pressed against the pan by the weight of the dough, measuring the critical pan/dough interface temperature. The vertical stainless steel probe penetrates the dough to a fixed distance from the pan (1" to 3" in 0.25" increments), measuring the dough core temperature used to produce the Bake Cycle S-Curve. The Pan+Dough Probe provides accurate repeatable results unattainable with hand-placed thermocouples. It connects to the Temperature Interface device which can accommodate 5 Pan+Dough Probes.

Bake Cycle S-Curve Analysis

Bakers rely on Bake Cycle S-Curve Analysis to optimize the baking profile. This analysis provides critical insight needed to make adjustments to ingredients, bake time, and zone temperature settings. SCORPION® Software Version 8 (SV8) automatically calculates the three key S-Curve data points: Yeast Kill, Gelatinization and Arrival.

Pan-Dough Interface Temp & Bread Core Temp

En T1SA C1 T1SB C2 T2SA C3 T2SB C4 T3SA C5 T3SB C6X T4SA C7 T4SB C8 T5SA C9 T5SB C10 T6SA C11 T6SB Ext

Typical Bake Cycle S Curve:
140F Yeast Kill @ 40% (+/-5) Travel
170F Gelatinization @ 70% (+/-5) Travel
202F Arrival @ 90% (+/-5) Travel

Pan-Dough Interface

Arrival

Gelatinization @ 67% Travel

Yeast Kill @ 51% Travel

Bread Core

Pan + Dough Temp Sensor

Y-axis: (°F) — 80, 100, 120, 140, 160, 180, 200, 220, 240, 260, 280

X-axis: % travel through chamber — 0.0, 10.0, 20.0, 30.0, 40.0, 50.0, 60.0, 70.0, 80.0, 90.0, 100.0

READING THERMAL