

Proof of Concept:

8 Shelf Quarter Rack Chicken Tenders



Presented By
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PURPOSE

To demonstrate the 8-shelf quarter rack's capability to fry 64 chicken tenders efficiently and consistently, yielding a high-quality product that meets KFC standards for Original Recipe Chicken Tenders.



METHODOLOGY

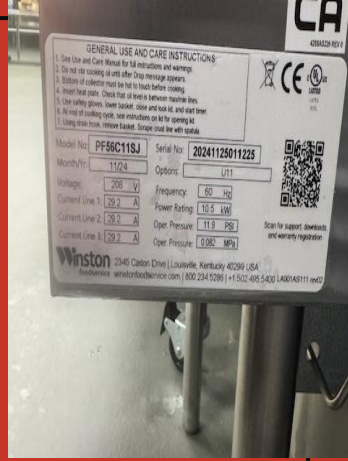
This methodology establishes a process for assessing the capability to deliver a brand standard chicken tender using an 8-shelf rack in a PF56 fryer.



Conclusion

The concept of an 8-shelf quarter rack basket has been proven successful in cooking 64 chicken tenders efficiently. Further testing should be conducted to validate setpoints based on brand standards.





Equipment Used:

- **Model**
EP57X32PJ
PF56C11SJ
- **Serial #**
20240904010074
20241125011225
- **Electrical Needs**
208 Volt

Digital Thermometer
Basket Hook
Heat Resistant Gloves
Full size sheet trays
AyrKing Breeding Station





Process

Test 1: Eclipse

8 Chicken Tender per Rack: 64 Total

Setpoints:

Stage 1: 4:45 330° P

Stage 2: 2:15 280° P

Stage 3: :45 300° P

Stage 4: :00 250° P

Based off KFC Color Chart, the final product was in the 'Too Light' stage. Multiple factors include tender size, and oil being at a lower temperature in the bottom of the fryer. The average final temperature range was 175°-185°.

Average size- 30-50g





Test 1 Photos



Process

Test 2: PF56

Stage 1: 4:50 359° P

Stage 2: 4:25 338° P

Stage 3: 3:50 302° P

Stage 4: 1:00 311° O

All tenders were in the 'Too light' to 'Light ok' stages. Possible factors affecting this outcome would be fresh oil, and tenders are larger than KFC spec tender size. Average temperature ranges were 160°-172°.

Average size- 60-75g



Test 2 Photos





Process

Test 3: PF56

**time increase by 30 seconds*

Stage 1: 5:20 359° P

Stage 2: 4:25 338° P

Stage 3: 3:50 302° P

Stage 4: 1:00 311° O

Although the tenders were larger than KFC spec, the final product was consistently in the 'Light Ok' stage throughout all shelves. The average final temperature range was 175°-187°.

Average size- 60-75g





Test 3 Photos

Additonal Testing

Control Cook

The 8-shelf quarter rack is capable of efficiently cooking 64 chicken tenders in accordance with KFC brand standards. However, additional testing with standard-size chicken tenders is recommended to officially validate setpoints and determine optimal serving parameters.

