

# CASE STUDY: TT2 TUMBLER TRIAL MARINATED DICED CHICKEN

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# **OBJECTIVE:**

To marinade chicken fillets with no deformation of product.

Must be a consistent mix throughout batch.

Chicken to be consistently seasoned throughout.

#### **INGREDIENTS:**

Diced Chicken Fillet, Liquid Marinade Sauce.

# **EQUIPMENT:**

CM Process TT2 Tumbler CM Process 400 lb Euro Buggy CM Process Euro Buggy Weighscale





# **BLEND COMPONENTS**





# **RESULTS:**

TEST NUMBER	TEST LOAD (lb)	TUMBLER VELOCITY (%)	CW ROTATION DURATION (sec)	DWELL TIME (sec)	CCW ROTATION DURATION (sec)	NO. CYCLES #	TOTAL BLEND DURATION (sec)	COMMENTS AND OBSERVATIONS
TEST 1	220	100	30	2	30	1	62	Well marinated chicken pieces at this fill level. Product was evenly and uniformly covered.
TEST 2	396	100	45	2	45	1	95	Some liquid was left in the bottom of the bin although a good even covering was evident.
TEST 3	396	100	50	2	50	1	125	Perfect marinade at all levels. No damage to chicken fillets at any level of tumbler.

# **CONCLUSIONS:**

# TEST 1:

Produced a perfect batch. Larger batch trial worth considering.

# TEST 2:

Proved that a larger quantity had not quite completed the marinade process. A longer period recommended for the same fill level.

#### TEST 3:

Proved that 396 lb of product can be mixed to the desired consistency with a cycle time of just over 2 minutes causing no damage to the product.

The mix produced a perfectly marinated batch of 396 lb in just over 2 mins, improving process efficiency and reducing production time.





# **FINISHED PRODUCT**

# THE SINGLE EURO BUGGY SOLUTION

The CM Process Solutions Single Bin Solution is the complete handling solution for processing food and food ingredients, utilising industry standard DIN 9797 Eurobins with the minimum amount of product transfer and manual handling.

# Weigh Mix Dump Rack and Stack Washdown

## **REDUCED MANUAL HANDLING**

From the initial batch weighing of ingredients, WIP storage, product mixing and finally tipping product onto process lines can all be done utilising a single DIN 9797 Eurobin. This greatly reduces the number of product transfer points and aids employee safety, helping prevent musculoskeletal injuries associated with manual handling.

# **INCREASED PRODUCTIVITY**

Changeover time between product batches is greatly reduced and with minimal handling transfers and only a single bin to clean at the end of the operation, this solution allows more time to be spent on manufacturing.

#### **HYGIENE**

Stainless steel hygienic design specifically for the food industry environment ensures all equipment can be washed down quickly and effectively.

# **FOOD SAFETY**

The complete process offers benefit to food safety standards by reducing product exposure and possible cross contamination associated with multiple product transfers.

#### **IMPROVED QUALITY AND REDUCED WASTE**

Streaming product handling utilising the Single Bin Solution range of equipment can offer significant reduction in product damage and increase product yield through repeated transfer.



