



Output and Yield on Spiral Pasta

Purpose: Test the effects of a processing aid on output and yield of spiral pasta for the European market (requiring Non-GMO ingredients).

Equipment: Extru-Tech E-750
Screw Speed (former) 50 RPM

Link to
Extru-Tech, Inc.

Processing Aid: ***Nu-RICE®***

Formulation: Wheat
Water
Processing Aid

**Use Rates/
Data**

Sample	Use Rates	Output kg / hr	% On Grade	Net Yield	Observations
Control	0	450	65%	293 kg	Sticky, Poor Spiral Shape, Checking, Blistered Surface (overheating on die)
<i>Nu-RICE</i>	1.0%	600	92%	552 kg	Decreased Stickiness, Good Spiral Shape, No Checking, No Blisters, Easier Extrusion, Increased Throughput

Observations: The ***Nu-RICE®*** increased the lubrication, which provided several visual benefits including: Increased output, Decreased blistering, Reduced Checking, Decreased stickiness and created a much more uniform spiral shape. The enhancement in consistent shape had a significant impact on the “On Grade Yield”.

Conclusion: The ***Nu-RICE®*** significantly enhanced the quality and lowered the production costs of the spiral pasta. These benefits were provided along with a clean “Non-GMO” label statement.

Cost Savings:		<u>Control</u>	<u><i>Nu-RICE</i></u>	
	Net Yield kg / hr	293 kg	552 kg	88% Increase
	Processing Cost	\$1.365	\$0.725 /kg	
	Processing Aid	<u>\$0.00</u>	<u>\$0.060</u>	
	Net Processing Cost	\$1.365	\$0.785	42% Decrease

***Nu-RICE®* Increased the Net Yield by 88% and
Decreased the Processing Costs by \$0.58 / KG (▼ 42 %)**