



## KEY CUSTOMER BENEFITS

### ARMOR INOX THERMIX SYSTEMS

#### **CONSISTENT QUALITY PRODUCT:**

- ✓ Extremely consistent product dimensions due to the patented Multimolds technology. Our typical variance on product dimensions is no more than +/- 1.5 mm for all the products of a tank throughout their length.
- ✓ Optimum uniform cooking with best heat transfer thanks to water immersion cooking and chilling technology.

#### **YIELD IMPROVEMENTS:**

- ✓ The highest possible slicing yields are achieved with the dimple design at both ends of each mold. This feature allows the clip to remain out of the meat area and give extremely flat ends. Extended log length (up to 60") automatically generates yield improvements. Typical improvements on D shape of 5 % between 45 " flat rack cooking and 60" molded product due to better ends and more even product section throughout the log.
- ✓ The possibility to cook the products with a very small delta T between the water and the targeted core of the product is the result of extremely accurate water regulation in each processing tanks.

#### **THROUGHPUT:**

- ✓ From 10 000 to 16 000 lbs/hour depending upon product formats.

#### **MANPOWER TO RUN THE SYSTEM:**

- ✓ Only 2 employees per shift (over 2 shifts) are required to process 250 000 lbs/day from molding to demolding of the products into racks or combos.

#### **FULLY AUTOMATIC PROCESS FOR OPTIMUM STAFF SAFETY:**

- ✓ Slow automatic handling movement, yet with high throughput, without operator handling for optimum staff safety and best product and equipment integrity



### **FLOOR SPACE UTILAZATION:**

✓ Up to 60 Million pounds can be automatically produced per year on a compact area of approx. 8 500 sq ft to completely mold - cook, chill - demold – move products into racks or combos – and wash the Multimolds for the next cycle.

### **THERMAL TRANSFER EFFICIENCY:**

✓ Water cooking and chilling by immersion gives best possible cycle times. Typically 4” x 6” cooked and chilled to 40 °F in 12 hours. Processing times can be shortened using brine chilling. Lower final core temperature can be achieved.

### **PROCESS CONSISTENCY:**

✓ No more than +/- 2 °F temperature variance within the processing tanks (no cold spots). No more temperature variance in the core of the products than +/- 1 °F

### **FOOD SAFETY WITH FULL REPORT OF PRODUCT PROCESS DATA:**

✓ Complete thermal process encompassing full traceability of the entire cook/chill cycles, normally ranging between 10 to 16 hours maximum to fully cook and chill to a 40 °F core, depending on the products.

✓ Full documentation of the entire cook, cool, chill cycle with full HACCP type report of the product process data batch per batch

### **SANITATION OF THE LINE:**

✓ Most advanced sanitary design principles integrated right from the engineering stage including on-line cleaning of the Multimolds after each use and dedicated rinse bars to help clean the walls of the process tanks when needed.

### **MAINTENANCE:**

✓ Very low maintenance cost (ownership cost) of the equipment due to slow speed movements of all the moving components (crane and conveyors). Allow P.M. for 4 hours/week max.

✓ The robust structure of the Multimolds is built without springs or mechanical parts. The Multimolds are exclusively handled in automatic mode. No risk of human error leading to deterioration of the molds.



### **SPARE PARTS:**

✓ Directly available in the USA by Wolf-tec with additional sets ready to go directly from Armor Inox at anytime.

### **SERVICE:**

✓ Trained local service technicians available in the USA by Wolf-tec, - preventive maintenance and training programs performed by service technicians can be offered.

### **PROVEN WORLDWIDE TECHNOLOGY + RESULTS:**

✓ Over 30 Thermix systems in operation worldwide both in Europe, USA and Asia with proven reliability for more than 15 years

### **NORTH AMERICANIZATION :**

✓ System developed specifically for the North American market with Rockwell PLC and components and standard electronic components that can be sourced locally.

### **HUMAN INTERFACE AND PLC RELATED SUBJECTS:**

✓ Fully developed easy to use window based human interface with personal access code and full traceability of all events and product database archive of all the batch reports.

✓ Source code developed in visual basic and run on a standard Rockwell PLC for easiest and fastest local hardware support.

✓ Program developed to minimize risk of product data loss during a cycle. Data duplicated between the PC and PLC to allow for backup import at the end of the cycle.

✓ Trouble shooting and debugging of the line is fast and simple with photos of each sensor and the replacement procedure on the supervision screen to help identify a faulty sensor.

✓ Off site remote access to the system is fully possible with PC-Anywhere for fast effective support.

### **FLEXIBILITY OF THE LINE:**

- ✓ 1 continuous entry point (molding), 1 continuous exit point (demolding), batch system in the middle for processing with fully independent tanks and piping allowing to process multiple products simultaneously.
- ✓ Possibility to process slicing logs (4" x 6", D shape, round...) and deli products (4" x 6", Virginia ...) simultaneously and to custom design your product shape.
- ✓ Modular design, which allows easy extension by adding processing tanks

### **ENERGY SAVING:**

- ✓ Up to 30 % saving in energy cost due to recycling of hot, cold and chilled water cycle after cycle into 3 external storage tanks

### **WATER SAVING:**

- ✓ Average water consumption of 800 US gallons of water for 15 000 lbs of processed product (1 process tank) - corresponding to both water used for the washing process and water used for the cooking & chilling process.
- ✓ « Shelf life » of the water in the 3 stock tanks can be extended using water treatment solutions such as ozone, filtration, chlorine or UV.

### **ROOM ENVIRONMENT:**

- ✓ No steam generation in the processing room and no necessity to refrigerate that room.