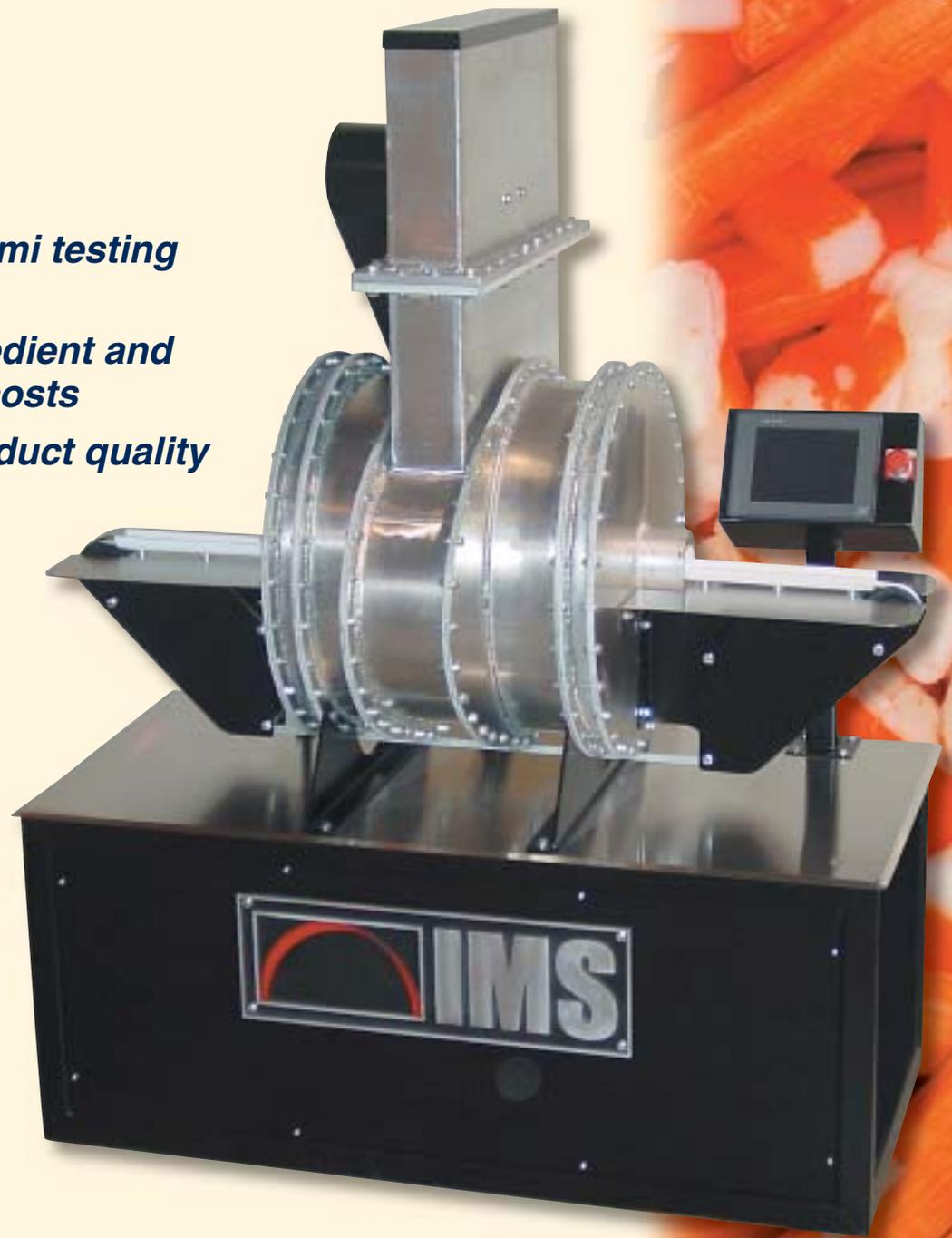


# IMS FAST Gel System for Surimi Testing

- *Increase surimi testing accuracy*
- *Reduce ingredient and formulation costs*
- *Optimize product quality*



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## What's wrong with water bath testing?

For years, surimi producers have accepted the disadvantages of the water bath testing method:

- Slow gelling rate
- Results don't accurately measure true gel strengths
- Results don't accurately reflect final product performance
- Use of undesirable protease inhibitors such as beef plasma

In the competitive, innovative surimi industry, water bath testing is an outdated, inadequate technology.

## What makes the FAST Gel System better?

### Accurate gel strength results

IMS' Formulation Assessment and Surimi Testing (FAST) Gel System uses microwave technology to simulate production line cooking. It heats surimi test gels from 10° C to 90° C (50° F to 194° F) in less than 2 minutes through a microwave exposure region of 30 mm (1.2"), resulting in an ideal temperature profile. Test example: With the water bath method, gel strengths were measured at 250. Using the same formulation, IMS' FAST Gel System measured gel strengths at 1000+.

### No need for protease inhibitors

Many producers add protease inhibitors to generate gel strength for water bath tests. This practice produces inaccurate results. Since the FAST Gel System can heat surimi at rates simulating production of surimi seafoods, almost any surimi blend can be tested for gelling performance under manufacturing conditions without the need to add beef plasma or other protease inhibitors.

### Higher quality, lower costs

The FAST Gel System is a powerful production diagnostic tool. Users can test the quality of each production batch before it's run. The fast, accurate grading of surimi production lots provides valuable feedback for adjusting processing parameters to optimize product quality. Additionally, users can optimize the type and amount of ingredients used for each batch (starches, sugars, water, proteins, etc.), and thus reduce ingredient costs.

# Could you save \$155,000 per million lbs. of finished product?

IMS' FAST Gel System heats surimi at rates comparable to production line cooking, replicating production line gel strength results without inhibitors. This advantage allows more effective substitution of lower and recovery grade surimi while maintaining the quality of the finished product.

## Example:

Substituting recovery grade Pollock for A grade Pollock can **save \$0.31 per pound** in ingredient costs with a 50% surimi content product. This results in **savings of \$155,000 per million pounds of finished surimi.**

Product	Water Bath Gel Strength	IMS Gel Strength
A Grade Pollock	795	802
Recovery Grade Pollock	198	780
FA Grade Hake	136	682

## More FAST Gel Advantages

### Accurate verification of surimi quality

Surimi processors can use the IMS FAST Gel system to accurately verify the quality of surimi purchased.

### Faster, economical new product development

Because the FAST Gel System simulates fast-cook production speeds, you can quickly test new product formulations without actually running the line.

### Ingredient substitution evaluation

You can also test different ingredients like starches, sugars, water and proteins at the product development stage without impacting your production schedule.

### Operator-friendly

Simple manual feed and control systems minimize training time for operators. In addition, the PLC-based control system provides consistent processing and allows for programmable recipes.





Dimensions: 54 inches (1370 mm) Wide  
36 inches (880 mm) Deep  
74 inches (1870 mm) High

Shipping Weight: 550 lb. (250 kg)



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