FMS FUMIGATION & MARINE SERVICES

BAKERY & GRAIN SILO FUMIGATION:

PROTECTING SOUTH AFRICA'S FOOD SUPPLY THROUGH PROFESSIONAL FUMIGATION



South Africa's food manufacturing industry relies on one critical expectation from consumers: that every bag of flour, loaf of bread and grain-based product reaches the market in a safe, high-quality condition. Behind the scenes, however, bakeries, flour mills and grain storage facilities face a persistent challenge that can threaten product quality, regulatory compliance and business reputation, in stored product pests.

Unlike common household pests, insects that infest stored grain and processed food products often go unnoticed due to the minuscule sized eggs they produce, until they have already caused significant contamination or financial loss. Once established, these pests can spread rapidly throughout storage facilities, making early detection and professional fumigation essential.

At Fumigation Marine Services (FMS), which is a specialist division of Flick Pest Control, we provide professional fumigation solutions that help protect food products, preserve commodity quality and support compliance with modern food safety standards.

EVERY STAGE OF THE GRAIN SUPPLY

chain presents opportunities for pests to establish themselves. Grain harvested from farms, flour delivered to bakeries, and finished products awaiting distribution can all become vulnerable if preventative measures are not in place.

Stored commodities provide insects with three essential requirements for survival:

- A readily available food source.
- Shelter within storage facilities.
- Stable environmental conditions that support breeding, including temperature and humidity levels.

Without a structured monitoring and fumigation programme, even a small infestation can develop into a widespread problem affecting multiple production areas.

ONE FLICK AND THEY'RE GONE

UNDERSTANDING STORED PRODUCT INSECTS

Stored Product Insects (SPIs) are among the most significant pests affecting grain storage and food manufacturing facilities worldwide.

Common species encountered in South African facilities include:

- Rice Weevils
- Granary Weevils
- Lesser Grain Borers
- Red Flour Beetles
- Saw-Toothed Grain Beetles
- Warehouse Beetles
- Indian Meal Moths

Unlike many other insects, these pests complete much of their life cycle within grain, flour or processed food products.

Female insects lay eggs inside or adjacent to stored commodities. As larvae develop, they feed within the product before emerging as adults capable of producing another generation. Because much of this development occurs out of sight, infestations often remain undetected until insect numbers become significant and out of control.

THE HIDDEN COST OF PEST INFESTATIONS

Many businesses only recognise the financial impact of stored product insects after products have already been compromised.
Potential consequences include:

- Product contamination.
- Downgrading or rejection of grain.
- Production interruptions.
- Customer complaints.
- Product recalls.
- Increased cleaning costs.
- Audit non-conformances.
- Damage to brand reputation.

For businesses operating within highly competitive markets, preventing these risks is considerably more cost-effective than responding to an established infestation.

WHY GRAIN SILOS REQUIRE ONGOING PROTECTION/ FUMIGATION

Grain silos provide ideal environments for insect development. Large volumes of stored grain, limited disturbance and favourable temperatures allow pest populations to multiply rapidly if left unmanaged.

While routine inspections are essential, many insect species develop deep within the grain mass where conventional surface treatments cannot reach.

Professional fumigation enables the fumigant to penetrate throughout the stored commodity, reaching insects hidden between grain kernels and within inaccessible areas.

This makes fumigation one of the most effective tools available for protecting stored grain quality over extended storage periods, and thus reducing stock loss.



BAKERY ENVIRONMENTS PRESENT UNIQUE CHALLENGES

Commercial bakeries operate in environments where ingredients arrive daily and production continues throughout the year.

Every incoming delivery introduces the potential for pests to enter the facility.

Flour, grains, sugar, bran, spices and other dry ingredients may already contain low-level infestations and/ or eggs that become established within storage rooms, processing equipment or finished product areas if not identified early.

Combined with warm production environments and continuous product movement, bakeries require proactive pest management programmes designed specifically for food manufacturing operations.

PROFESSIONAL FUMIGATION SUPPORTS FOOD SAFETY

Modern food manufacturers operate under increasingly stringent food safety standards.

Whether implementing HACCP principles or certified to internationally recognised standards such as FSSC 22000 or ISO 22000, effective pest management remains a critical component of every food safety system. Professional fumigation contributes by:

- **Reducing contamination risks.**
- **Supporting audit readiness.**
- **Protecting stored commodities.**
- **Providing documented treatment records.**
- **Demonstrating due diligence.**
- **Supporting customer confidence.**

Rather than responding to pest problems after they occur, proactive pest control services and fumigation forms part of a preventative food safety strategy.



PROTECTING EVERY SHIPMENT

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WHY EXPERIENCE MATTERS

Fumigation is a specialised discipline requiring technical knowledge, careful planning and strict adherence to safety procedures.

Every facility presents unique operational requirements based on:

- Commodity type.
- Storage method.
- Building design.
- Production schedules.
- Environmental conditions.
- Regulatory obligations.

Selecting the appropriate fumigation strategy requires more than simply applying a treatment, it requires understanding how pests behave, how commodities are stored and how operations can continue with minimal disruption.

An Integrated Approach Delivers Better Results
Successful pest management does not rely solely on fumigation.
The most effective programmes combine:

- Routine inspections.
- Pest monitoring.
- Commodity assessments.
- Housekeeping recommendations.
- Structural improvements.
- Targeted fumigation when required.
- Ongoing trend analysis.

This integrated approach reduces pest pressure while helping businesses maintain consistently high food safety standards.

WHY CHOOSE FUMIGATION MARINE SERVICES?

Fumigation Marine Services combines specialist fumigation expertise with the national support network of Flick Pest Control with over 50 years of experience in the field.
Our experienced technical and operations team understand the operational challenges faced by food manufacturers, grain storage facilities, flour mills and commercial bakeries.
We work closely with our clients to develop customised fumigation programmes that prioritise:

- Product protection.
- Food safety.
- Regulatory compliance.
- Operational efficiency.
- Long-term pest prevention.

Whether treating grain silos, storage warehouses, flour mills or food processing facilities, our objective is to help clients minimise risk while protecting their products and reputation.



PROTECTING EVERY SHIPMENT

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FREQUENTLY ASKED QUESTIONS

How often should grain silos be fumigated?

The frequency depends on factors such as grain type, storage duration, environmental conditions and pest activity. Regular inspections help determine the most appropriate treatment schedule.

Why can't surface insecticide treatments control stored product insects?

Many stored product insects develop deep within stored commodities where surface applications cannot penetrate. Professional fumigation fumigants reach pests throughout the stored product, providing more effective control.

Can fumigation help food manufacturers meet audit requirements?

Yes. Professional fumigation forms part of an Integrated Pest Management (IPM) programme and supports compliance with recognised food safety standards, including HACCP, ISO 22000 and FSSC 22000.

IS FUMIGATION SAFE?

When conducted by trained and registered fumigation technicians, which Fumigation Marine Services employs, and following strict safety procedures and product label requirements, fumigation is a safe and highly effective method of controlling stored product pests.

PROTECT YOUR PRODUCTS BEFORE PESTS BECOME A PROBLEM

Stored product insects can develop quietly, but the consequences for businesses can be significant. By investing in professional fumigation and preventative pest management, bakeries, flour mills and grain storage facilities can protect product quality, reduce financial losses and maintain customer confidence.

A proactive fumigation programme is not simply about eliminating pests—it is about safeguarding your products, your reputation and your business for the future.



ABOUT FUMIGATION MARINE SERVICES

Fumigation Marine Services (FMS) is the specialist fumigation division of Flick Pest Control, delivering professional fumigation solutions to the food manufacturing, agricultural, logistics and export sectors throughout South Africa.

Our services include bakery cold and thermal fogging & full fumigation services, grain silo fumigation, warehouse fumigation, container fumigation, stack fumigation, marine fumigation, ship fumigations and commodity protection programmes tailored to each client's operational requirements.

To learn more about our specialist fumigation solutions, visit our website:

- https://www.flickpest.co.za/our-solutions/fumigation-services/
- Or contact our experienced team to discuss a customized fumigation programme for your facility.

CONTACT US

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