

# The Klenzion™ Stock Washing System



Food Safety - Animal Welfare - Waste Reduction - Environmentally Friendly



**Klenzion™ Limited**





## Increased World Focus on Food Safety



### Customers worldwide are demanding that food products are safe

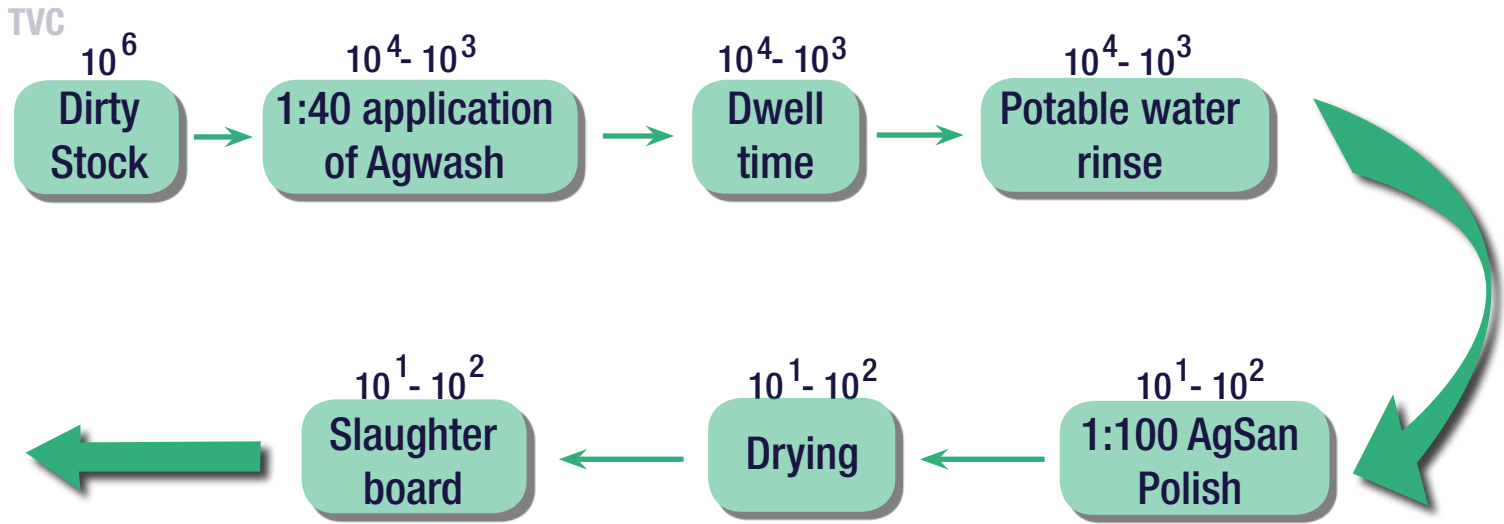
- International meat retailers are sourcing the safest product (with lowest bacterial counts).
- European supermarket buyers visit Australasia to inspect meat processing plants before purchasing product.
- International buyers require independent testing for pathogens on products from various meat processing companies before placing orders.
- Governmental Regulatory Authorities have required the introduction of Hazard Analysis & Critical Control Point Systems (HACCP) & Risk Management Programs (RMP) in to food production processes.

### Historical incidents of poor food safety control

- Dec. 2007: nationwide recall for 21.7 million pounds of ground beef products after reports of up to 32 cases of illness caused by suspected E. coli bacteria in eight states - Topps Meat Co. of Elizabeth, N.J.
- June 2007: recall of 5.7 million pounds of fresh and frozen beef that may be contaminated with the potentially deadly E. coli bacteria -Southern California meat-packer United Food Group LLC
- July 2002: 8.4 million kilograms of meat recalled after 1 death and many illnesses- contaminated with E. Coli O157:H7 - ConAgra Beef Company USA
- 1998: 5.6 million kilograms of meat recalled after 15 deaths and many illnesses- contaminated with Listeria - Sara Lee USA
- 1992: 'Jack in the Box Restaurant' - Lauren Beth Rudolph (6 yrs old) died after eating hamburger contaminated with E. Coli O157:H7
- Each year it is estimated 76 million of food-bourne diseases occur, resulting in 325,000 hospitalisations and 5,000 deaths as a result of pathogenic contamination of food (USA).



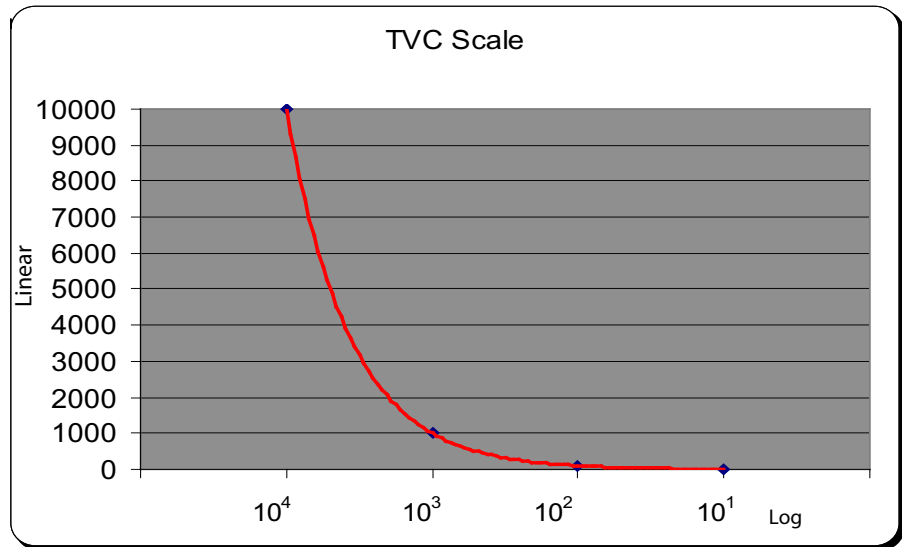
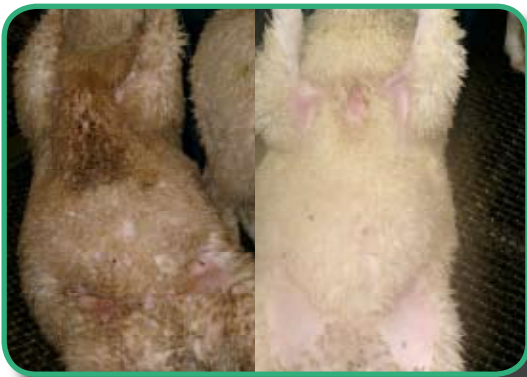
Typical Microbial reduction using the Klenzion™ Stock Washing System



\* TVC = Total Viable Count per square centimetre

Microbial Reduction Scale

Before & After



Before & After



Before



After





## The Klenzion™ Stock Washing System

- A New Zealand developed technology that combines chemical and equipment to effectively remove dirt/faeces from hide and fleece.
- Reduces pathogens to low levels before stock progress onto the slaughter floor.
- Provides a practical, cost effective solution for producing visually and microbiologically cleaner livestock.
- Is a controlled process, producing consistent quality.

### Klenzion Chemical Applicator



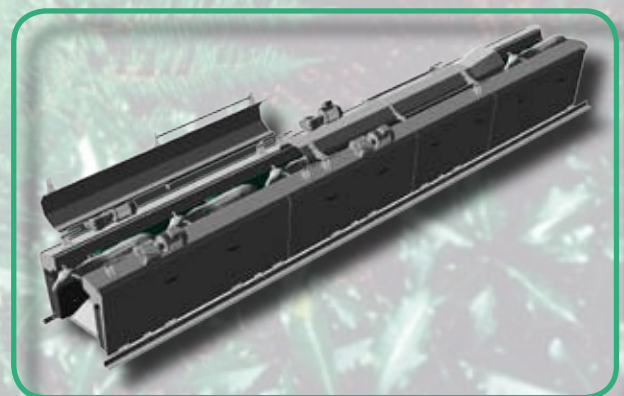
### Klenzion Drier



### Cattle Applicator



### Klenzion Wash Unit





# The chemical



## Klenzion Lite

Effective detergent cleaner for lightly soiled animals

## Klenzion

Highly effective detergent cleaner

## Agwash

Highly effective detergent cleaner combined with microbial agents to minimize pathogens on the hide or fleece.

## AgSan

Highly effective microbial agents to minimize pathogens on the hide or fleece.

### Some of the Pathogens that Agwash & AgSan are effective against

- |                         |                                  |                        |                           |
|-------------------------|----------------------------------|------------------------|---------------------------|
| Clostridium perfringens | Escherichia coli (Includes O157) | Staphylococcus aureus  | Salmonella brandenburg    |
| Klebsiella pneumoniae   | Enterobacter aerogenes           | Streptococcus faecalis | Salmonella choleraesuis   |
| Proteus vulgaris        | Aspergillus niger                | Streptococcus pyogenes | Salmonella schottmuelleri |
| Pseudomonas aeruginosa  | Listeria monocytogenes           | Vibrio cholerae        | Salmonella typhimurium    |
| Pseudomonas cepacia     | Bacillus subtilis                | Penicillium italicum   | Serratia marcescens       |
|                         | Brevibacterium ammonigenes       |                        | Shigella dysenteriae      |

## Contact Us

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