



Fire Suppression Investor Overview

George Oliver

*President, Safety Products and
Electrical & Metal Products*

David LeBlanc

Director, New Product Introduction

June 23, 2009

Agenda

- Overview of Fire Suppression
- Technology as a Growth Enabler
- Technology Solutions
- Product Demonstrations

1

tyco

Fire Suppression Overview

Water Segment (FY08 Revenue \$545M)



Mech Non-Fire Non-Res Sprinkler Mech Fire Residential

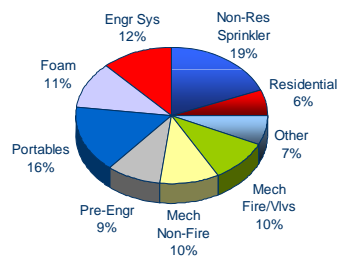
Chemical Segment (FY08 Revenue \$508M)



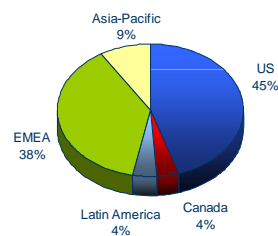
Portables Engr Sys Pre-Engr Sys Foam

Non-Fire Fire

FY08 Revenue by Product Line



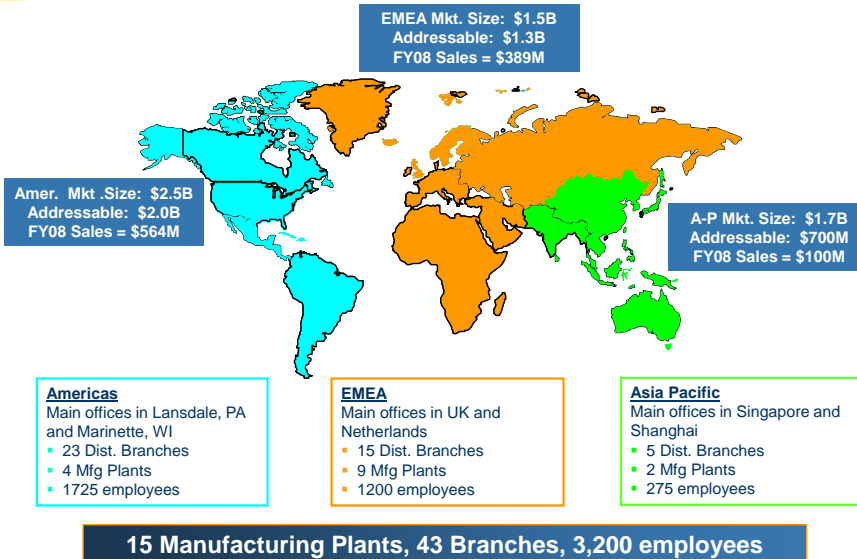
FY08 Revenue by Geography



2

tyco

Fire Suppression at a Glance

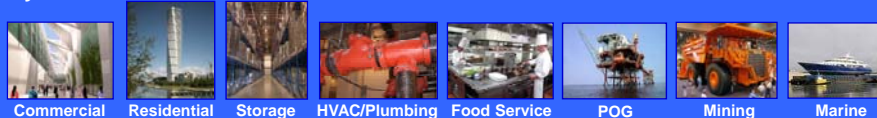


3

tyco

Key Markets, Channels & Competitors

Key Industries



Biggest Customers/Distributors



Major End Users



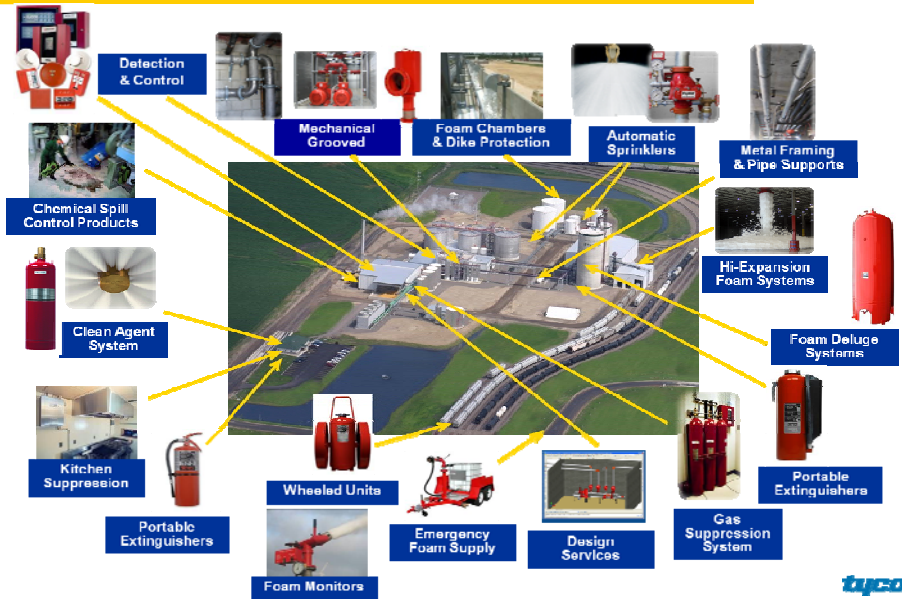
Key Competitors



4

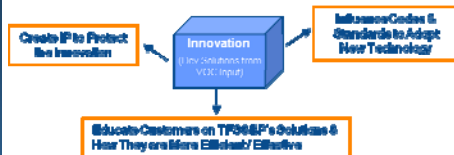
tyco

Bundled Product Solution/Bio Refinery



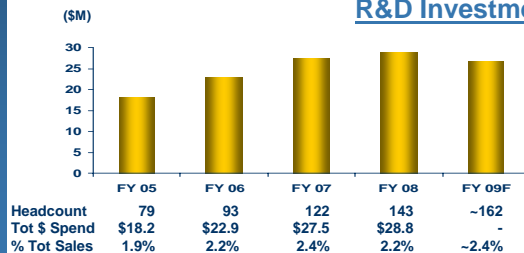
Technology As Growth Enabler

Strategy



- Integrate R&D with customer input to identify gaps
- Use technology to fill gaps with unique, value added solutions
- Influence codes & standards to drive fire protection requirements towards best technology
- Patent technology to improve margins & extend commoditization cycle

R&D Investment



- Accelerated R&D spend over last 4 yrs
- Maintaining near flat R&D investment in down FY 09 market
- Headcount up with cost down in FY 09 driven by off-shoring strategy

Enhanced Capability at Lower Cost with Shanghai & Bangalore COE Strategy

Fire Suppression R&D Locations



7

tyco

Strategically Aligned Research Laboratories

- Specific purpose laboratories to develop strategically critical science & technology
- Organic Synthesis Lab established to develop proprietary chemicals and polymers critical to the fire fighting foam business
- Future potential research capability targeting proprietary clean agent molecules



Organic Synthesis Lab
Marinette, WI

- State of the art distribution & testing facility
- Strategic partnerships with approval agencies
- World class training facilities
- Shared resources of chemical, metallurgical & elastomeric PhDs



Fire Test Lab
Cranston, RI



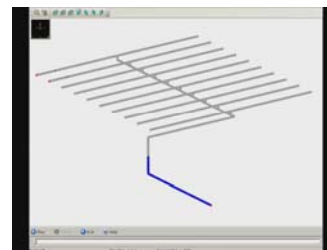
Flow Distribution Lab
Cranston, RI

8

tyco

Revolutionary Design Tool Fluid Delivery

- First analytical method of predicting water delivery following 140 years of “heuristically” estimating
- Patented proprietary FDT calculation software
- Sparked a major code change by NFPA
- Allows performance-based designs



Tyco Patented Performance-based Design Method

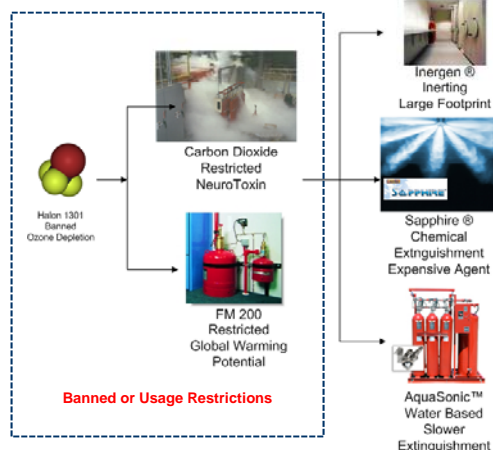


9



Environmental Solutions Through Technology

- Water consumption and groundwater contamination during fire fighting operations & system inspection
 - Impact on foam formulations
 - Impact on suppression system water requirements
- Impact of agents on global warming & ozone depletion
 - Ban or restrictions on many clean agents
- Impact of agents on people exposed to discharge
 - Agents need to be safe for both the environment and people



Growing environmental & health considerations driving innovation



10

AquaSonic™

Preparing for a Greener Fire Suppression Future

- Generates extremely small water droplets capable of extinguishing high challenge fires
- 100% safe for people and the environment, using only water and Nitrogen
- Platform technology with a wide range of potential future applications under development
- Technology proprietary to Tyco Fire Suppression & Building Products



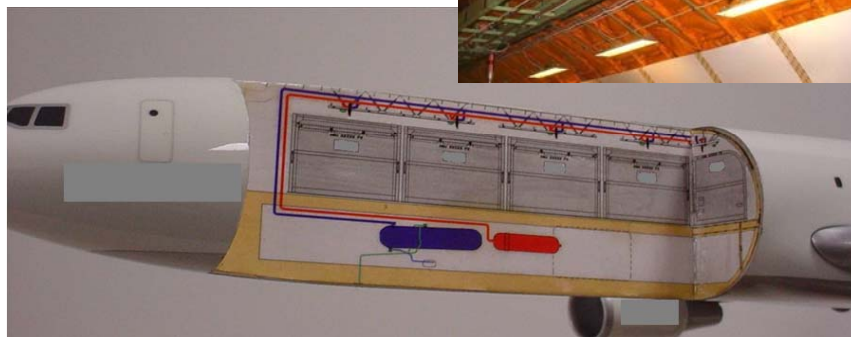
Each AquaSonic atomizer is capable of producing enough surface area out of 1.5 gallons of water to nearly cover an entire Olympic sized soccer field every minute!

11

tyco

Aircraft Fire Solution

- Aircraft cargo container fire extinguishing system developed for express delivery carriers
- To be fitted on 250 aircraft

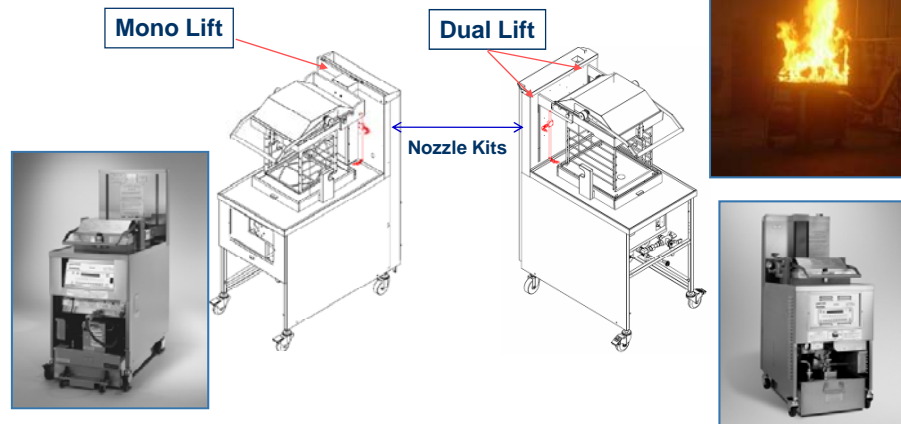


12

tyco

Technology Solves Problem with Henny Penny Fryer for KFC & Others

HP Nozzle Assembly Mounted on Appliance



13

tyco

Restaurant System Innovations

Flexible Conduit Components



Nozzle Protection



Flexible connection



- Patent Pending
- Ease of Installation
- Replaces components that we do not sell

14

tyco

Rapid Response Sprinklers Mitigate Structural Collapse in Light Weight Construction Fire

- Results indicate that unsprinklered structures fail in less than 10 minutes (danger to occupant and firefighter)
- Structures fitted with fire sprinklers did not fail
- Supports residential code initiative



Unsprinklered Basement



Floor Collapse –
10 min fire exposure



15

tyco

Quell™ Technology

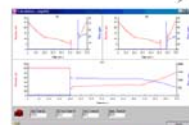
Quell™ Design Method
PATENTED



QRS™ Electronic
Accelerator
PATENTED



Allows the fire to operate a
target number of heads to
“Surround” the fire



SprinkCAD SprinkFDT™
PATENTED



DV-5 Deluge Valve
PATENTED



Discharges a significant volume
of water from these operated
sprinklers to “Drown” the fire

Integrated, Patented Solution

16

tyco

Demonstration Agenda

- **Double Interlock Preaction Fire Demonstration**
 - Highlights the convergence of multiple proprietary technologies to solve fire protection challenges
- **High Expansion Foam Fire Demonstration**
 - Highlights the value of integrating the Water Based and Chemical Fire Protection Segments
- **Mechanical Demonstration**
 - Following a discussion on the labor cost and cycle time savings associated with the use of grooved vs. welded or other piping connection methods, highlights a secondary benefit of growth – lower vibration and a less noisy piping system
- **Spray Distribution Demonstration**
 - Highlights the range and breadth of the types of products developed in the Cranston R&D facility
- **Residential Fire Sprinkler Video Demonstration**
 - Demonstrates the effectiveness of RapidResponse™ sprinkler technology in controlling typical residential fires
- **Flashover Fire Demonstration**
 - A rare opportunity to observe the complete evolution of a typical residential fire from ignition through rapid growth and ultimately “flashover”. Illustrates the very short time that a fire can reach the dangerous and life threatening condition of flashover in an unsprinklered structure

17



tyco

Q&A