Pioneers in cellular materials technology
Who we are & what we do

ZOTEK®
Disruptive technology replacing non-foam materials. Made possible by applying the unique foaming process

MuCell
Licenced & patented microcellular foam technology delivering generating royalty of customer cost savings

AZOTE®
High-performance, high quality polyethylene sheet and block foams for demanding applications in a range of markets

T-FIT®
Manufacture & sales of T-FIT® technical insulation systems

ZOTECFOAMS
Zotefoams worldwide

Zotefoams Midwest
Tulsa, OK, USA
Foam cutting

MuCell Extrusion HQ
Woburn, MA, USA
Licences MuCell technology to end users

Zotefoams Plc
Croydon UK
AZOTE® and ZOTEK® block foam manufacturing site

AZOTE® Asia Limited
Hong Kong
Sales Joint Venture

Kunshan ZOTEK KingLai Co Ltd.
Kunshan, PRC
T-FIT® products manufacturing site

Zotefoams Inc AZOTE
Walton, KY, USA
AZOTE® block foam manufacture

Zotefoams Operations Limited
Phuket, Thailand
T-FIT® Global Sales Office

AZOTE
ZOTEK
T-FIT
MUCELL

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Efficacy of Insulation Systems in Aseptic area's and facilities:

(A practical guide to facility cost reduction)
A global leader in cellular materials technology:

• A pioneer in cellular materials with a legacy of innovation that stretches back to 1921.

• Zotefoams is the world’s largest manufacturer of lightweight cross-linked polyolefin block foams

• Zotefoams products and technologies are based around unique, environmentally friendly processes (nitrogen expansion/autoclave technology)

• Our technically advanced ZOTEK® range of closed-cell foams are superior in strength, consistency, quality and purity to foams produced by any other method. PVDF & PA6

• Unique Process = Unique Product
2008-2017 Case studies:
Unreliability:

Bulky & Crushable

Cracks Easily
Open Cell & Inherent Leak Paths

Absorbs Moisture

Allow Bacteria Growth
What’s happening underneath?

Condensation & Bacteria Growth
Concealed:

Heat & Moisture Damage
Extreme Cases

Mould & Bacteria Growth

Disintegration
The current situation:

OPEN CELL TECHNOLOGY
  ABSORBS MOISTURE
  NON-STERILE
  UNHYGENIC
  PARTICLE SHEDDING

ALLOWS MOULD & BACTERIA GROWTH
ANTI-MICROBIOLOGICAL AGENT NOT ENOUGH!

ALLOW CONDENSATION
  ENHANCED RISK OF BACTERIA GROWTH!

COSTLY UNSCHEDULED DOWNTIME...
ADDITonal, UNEEDED OPERating COSTS
Zotefoams Mission?

Assist in ‘Cleaning up’ aseptic area’s & reduce your facility cost

Prevent this...
How & Why are Zotefoams products different?

Unique Autoclave nitrogen gassing & expansion technology…

Engineering & high temperature plastics, PVDF & Polyamides

In use & perfecting since 1921…

Guarantee fine, closed cells…

Product average 0.17 – 0.25mm cell size

Inherently clean technology insulation solution…
Stage 1: High quality extrusion and cross-linking of solid polymeric sheet

Base resin and additive ingredients are fed into an extruder. This produces a wide, continuous sheet of crosslinked plastic, from which precise size slabs are cut.
Stage 2: Nitrogen gassing – impregnation & saturation

The extruded slabs are loaded into a high pressure autoclave. The plastic is heated above its softening temperature and subjected to a high pressure dose of pure nitrogen - upwards of 14,000psi…
Stage 3: Expansion & foaming

The nitrogen charged slabs are loaded into a low pressure autoclave. The material is again heated above its softening temperature under a moderate air pressure; then the pressure is removed. Without the pressure, the nitrogen expands, physically foaming the soft plastic in a uniformed fashion.
Result...

True closed, fine cell, inherently hygienic foam – ASTM G21-96 (revised 2002)
Your Alternative:

CLEAN TECHNOLOGY INSULATION
STERILE – HYGENIC - HYDROPHOBIC

DOES NOT ALLOW BACTERIA GROWTH

MINIMIZES CONDENSATION
ELIMINATE THE RISK OF BACTERIA & MOULD GROWTH

QUICK – CLEAN - EASY
¼” Standard Wall thickness (6.5mm)

REDUCTION IN BOTH SCHEDULED & UNSCHEDULED DOWNTIME.
Wyeth Pharmaceutical Industries contacts UFP Technologies Inc. (USA) for specific insulation requirement. ZOTEK® F identified as the solution.

ZTF & UFPT collaborate to develop T-TUBES® product as clean-room specific, process insulation material.

T-TUBES® introduced to worldwide market, using ZOTEK® F42HTLS with ZTF as exclusive distributor outside North America.

Worldwide distribution network established & success at major Biotech, Pharmaceutical & Semi-conductor companies.

King Lai (KL) established as distributor for China market. Strategy to develop ZTF manufacturing base in Asia.

ZTF/KL establish a 51:49 JV (KZKL)

T-TUBES® rebranded T-FIT®. ZTF becomes 100% owner of KZKL.

Manufacturing starts in KZKL KunShan; PRC

T-FIT®
Steam generation units (3br)
Clean - Safe - Simple

Long & short pipe runs – valve insulation

T-FIT®
A Zotefoams plc brand
Intricate & close pipe runs

6.35mm wt allows very close connexion
Hygienic – Hydrophobic – High Performance
Hygienic & aseptic range of inherently clean technology insulation products to suit every application between...

-80°C to +200°C

- Save Energy
- Reduce Risk
- Reduce Downtime
- Reduce your facility Cost