

TOPICAL REPORT PROGRAM OVERVIEW

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- Exceptions to Acceptance Criteria
- Review Fees
- Exemptions to Fee Recovery Requirements
- Summary of Review Process Steps

General Information

- Program Purpose

Increase efficiency of the licensing process and reduce burden on licensees by minimizing the time and resources that industry and NRC could expend on repetitive reviews of the same topic.

- Pertinent Regulations:

- 10 CFR 170.11
- 10 CFR 2.390
- Regulations relevant to the subject matter of the report

- Lead Project Manager (PM) Assigned to program
- Individual PM assigned to vendor/owners groups

Summary of Criteria for Topical Report Acceptance

Must meet all of the following:

1. Report deals with a specific “safety-related” subject regarding a nuclear power plant that requires a safety assessment by the NRC staff or performance testing of components/systems that can be evaluated independently of any specific license application.
2. Report is, or is expected to be, referenced in a number of applications.
3. Report contains complete & detailed info on specific subject presented.
4. NRC approval will result in increased efficiency of the review process.

* See LIC-105, Rev 3 for complete details

Summary of Exceptions to Acceptance Criteria

Reports not meeting all criteria may be accepted if:

1. Results in savings to the industry,
2. Contributes to closing a safety-related subject,
3. Presents advanced technologies that would maintain safety or reduce unnecessary burden.

NOTE: If report does not meet all acceptance criteria, applicant should provide a justification for an exception to the acceptance criteria.

* See LIC-105, Rev 3 for complete details

Review Fees

- TRs normally subject to fees based on full cost of the review (see 10 CFR 170.12(d))
- Average cost per professional staff-hour charged per 10 CFR 170.20.

Method of Payment:

- U.S. Funds
- Electronic fund transfer, check, draft, money order, credit card.
- Payable to U.S. Nuclear Regulatory Commission
- Coordinate payment w/ License Fee and Accounts Receivable Branch, (301) 415-7554

Note: DO NOT send payment to licensing project manager.

Review Fees

Exemptions to Fee Recovery Requirements:

- Case-by-case basis,
- Criteria provided in 10 CFR 170.11(a)(1)(i) – (iii),
- Applicant must provide justification
- If Requested:
 - Must be requested, in writing, and approved before NRC staff review of TR begins, ...
 - Unless applicant agrees (in the fee waiver application) to pay the fee if the fee exemption request is denied.
- Fee exemption request should be separately addressed to the Chief Financial Officer (CFO) with copy to the Document Control Desk.

Summary of Review Process Steps

1. Pre-application meeting,
2. Applicant submits report:
 - Address to: Document Control Desk
 - If proprietary info included: submit proprietary version, non-proprietary version, and withholding request with affidavit per 2.390.
3. NRC in-processing
4. NRC Initial Review (~ 45 days)
 - Technical staff acceptance review for completeness
 - Teleconference to establish agreed-upon schedule and estimated costs
 - Fee exemption review (if applicable)
 - Issue Acceptance Letter
 - Issue proprietary determination letter (if applicable)

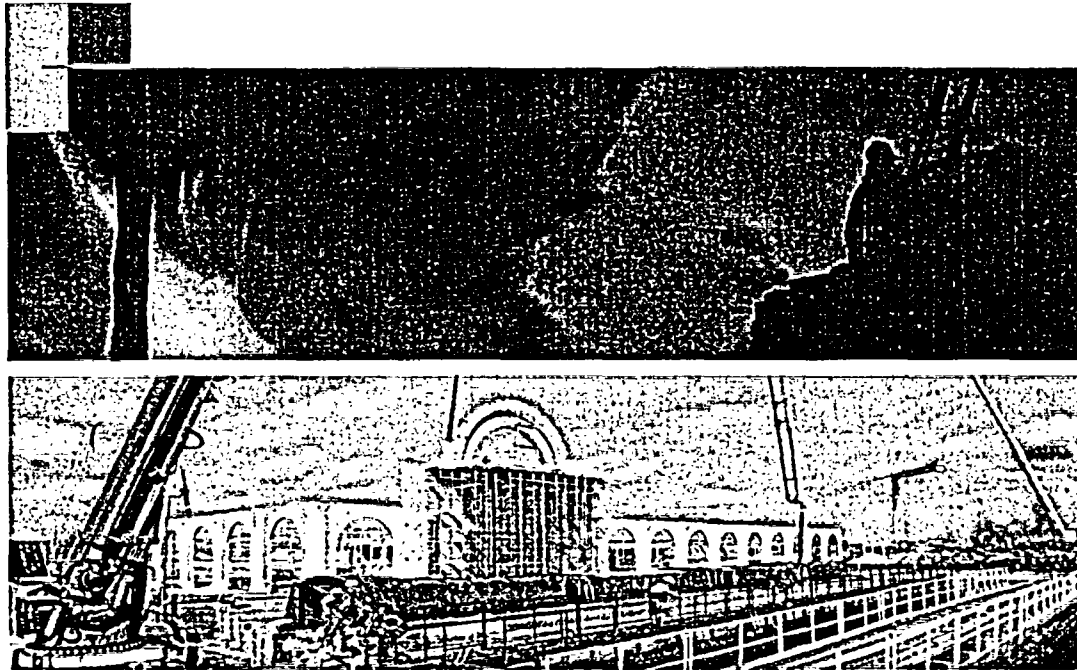
* See LIC-105, Rev 3, Section 4.2 for complete details

Summary of Review Process Steps

5. Requests for additional information (RAI) transmitted from tech staff to PM,
6. PM coordinates conference calls and issues formal RAI,
7. Applicant responds formally to RAI,
8. Technical staff completes review and sends safety evaluation (SE) to PM,
9. NRC issues DRAFT SE
 - Once draft SE issued, individual licensees may rely on topical report in plant-specific applications

Summary of Review Process Steps

10. Applicant provides comments on draft SE
 - 10 working days for proprietary info,
 - Additional 10 working days for factual errors or clarity issues
(not a time for presenting new information)
11. NRC staff addresses comments
12. NRC issues Final SE
13. Applicant submits approved version of report (within 3 months)
 - Includes copy of final SE letter, final SE, all RAIs and their responses



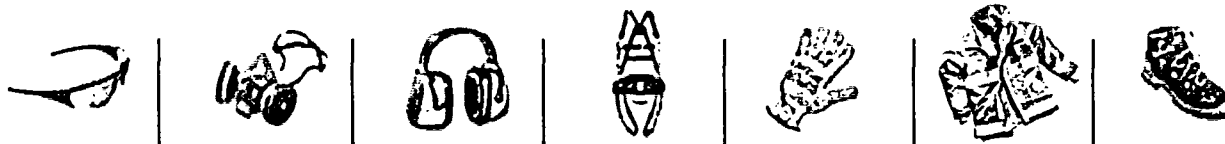
*The World Leader
in Personal Protective Equipment*

**Bacou-Dalloz**

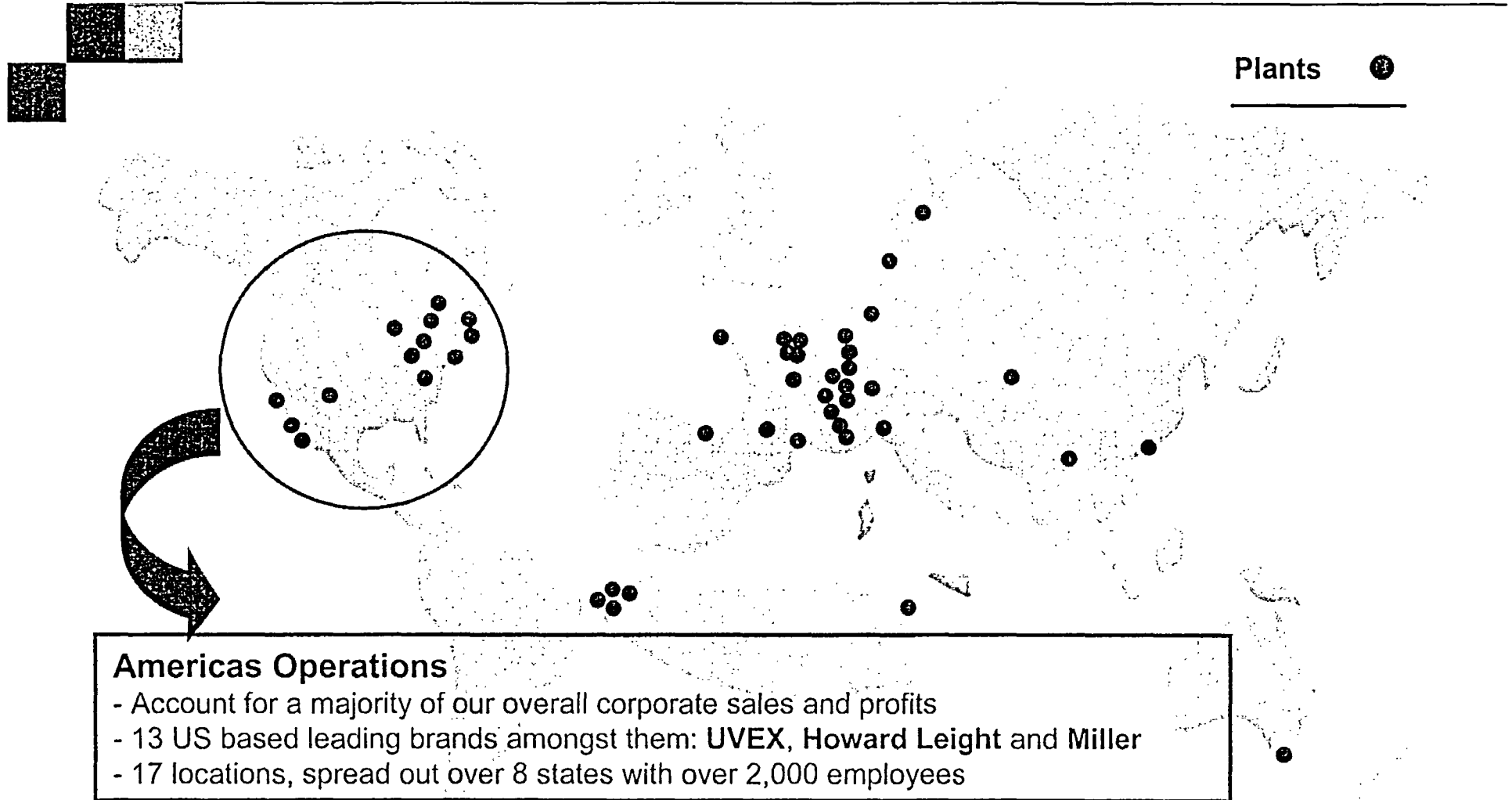

DELTA PROTECTION

Bacou Dalloz and NRC Meeting Objectives

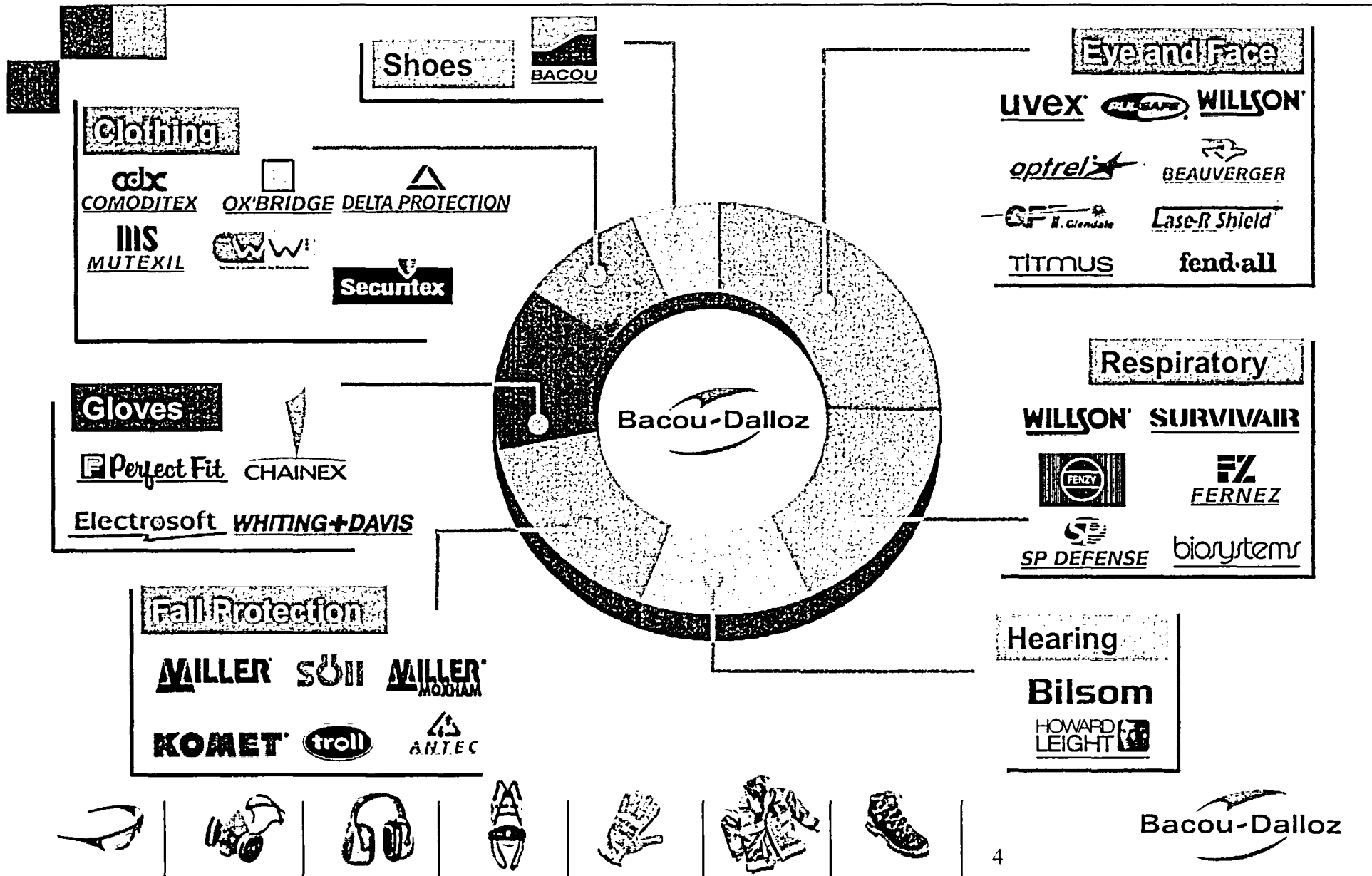
- Introduce Bacou-Dalloz/Delta Protection Family to the NRC
- Review Delta Protections Active Participation with the Licensees
- Present Delta Protections Mururoa BLU “Self Fed” Suits
- Review the BLU’s Performance
- Establish the Steps, Costs and Timelines for Technical Review and Approval
- Determine time lines regarding “Licensee Use” after NRC Acceptance



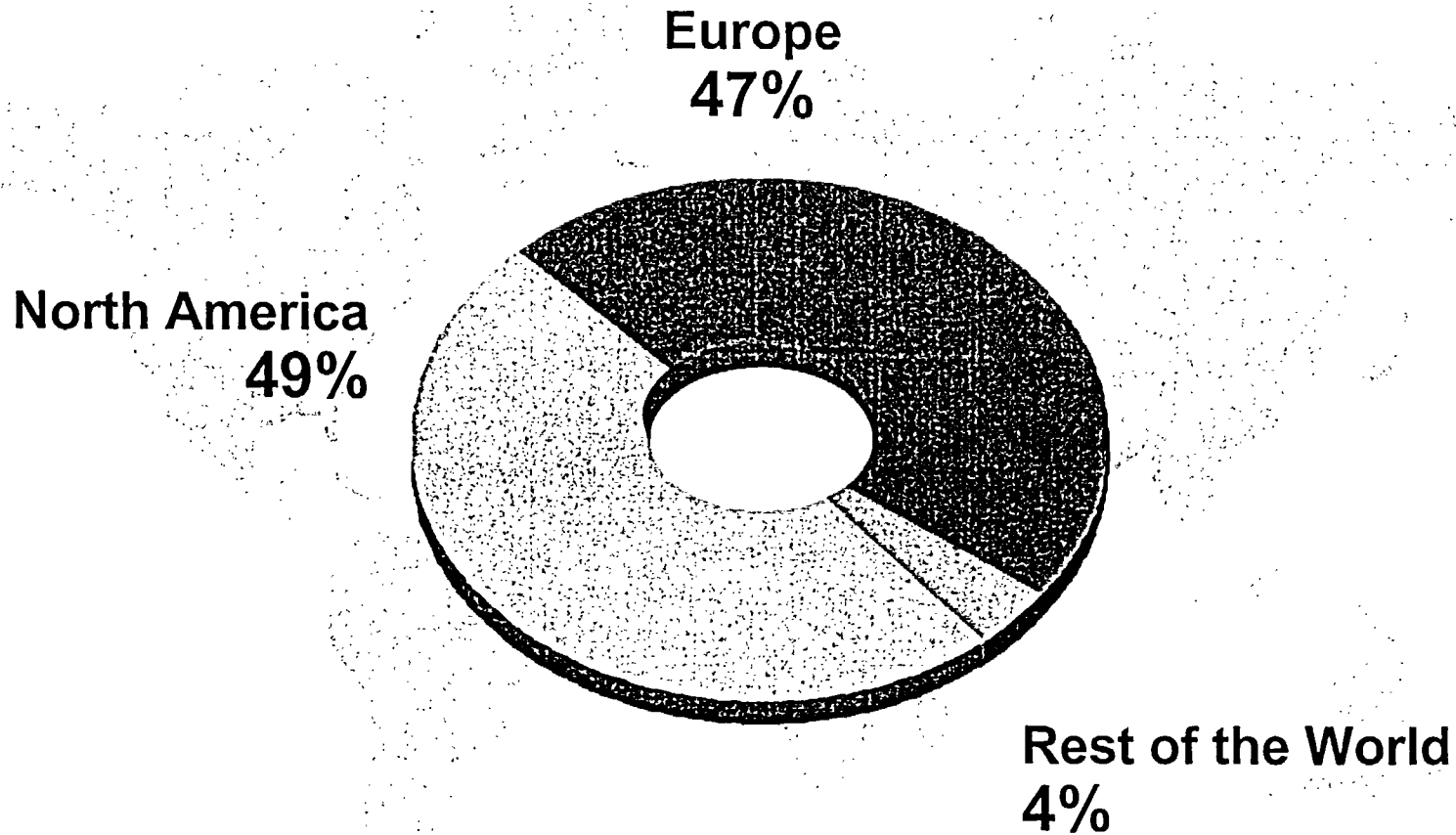
Global Presence



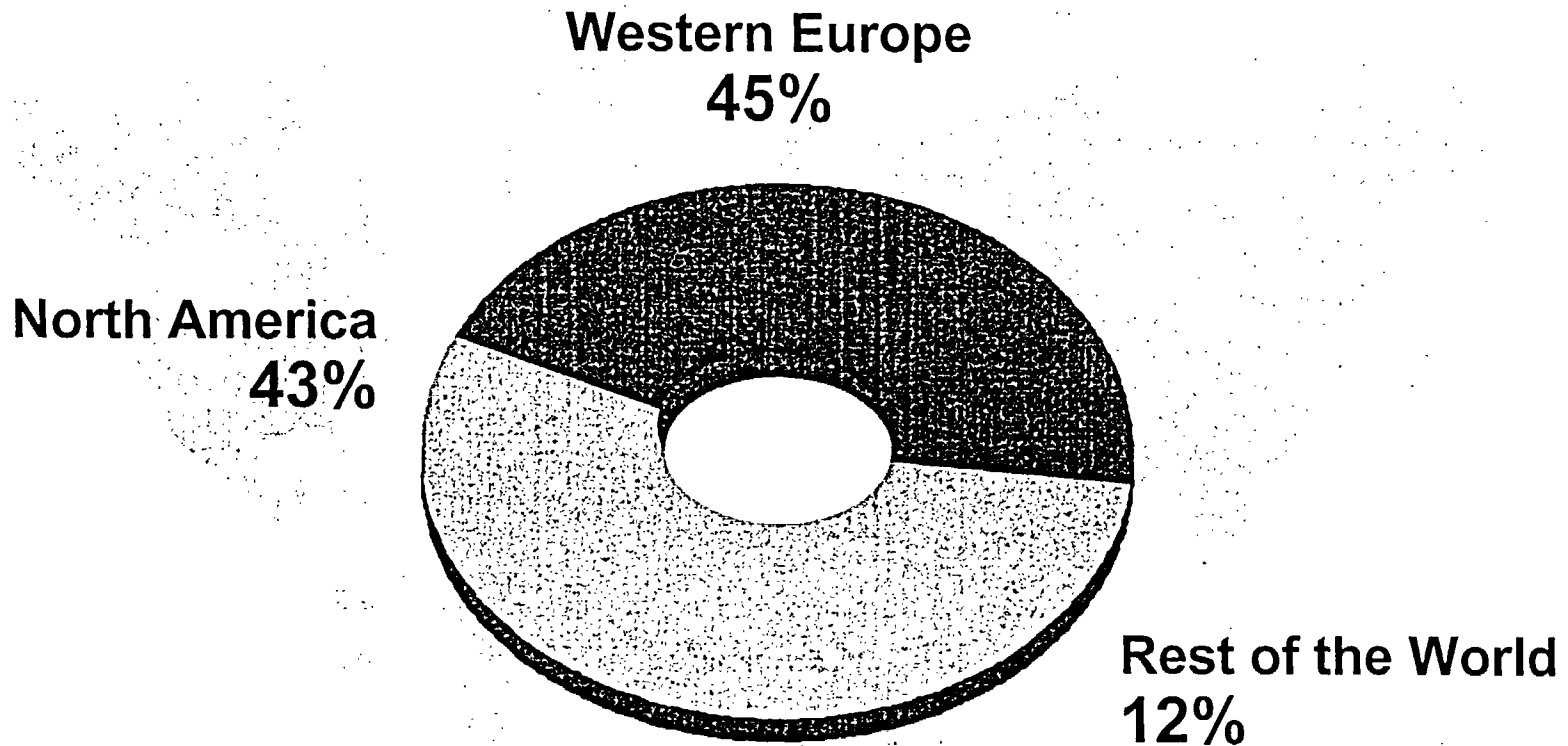
Strong Brand Portfolio



Sales by region in 2004



Geographical breakdown of employees



Bacou Dalloz in the Americas



I have been working with Bacou-Dalloz for over 12 years.

Was responsible for business development of Securitex Inc.(PPE Firefighters) since 1992.

Accepted the position of Business Development Manager for Delta Protection for the Americas in Dec '03

A multi-national company with world wide resources



Delta Protection Worldwide



World's Premier Supplier of Anti-Contamination Clothing for 30 years

100,000 Encapsulating Suits 50,000 Hoods Manufactured Annually

ISO 9001 Registered

Over 90% of the products are Nuclear Fuel Cycle specific.

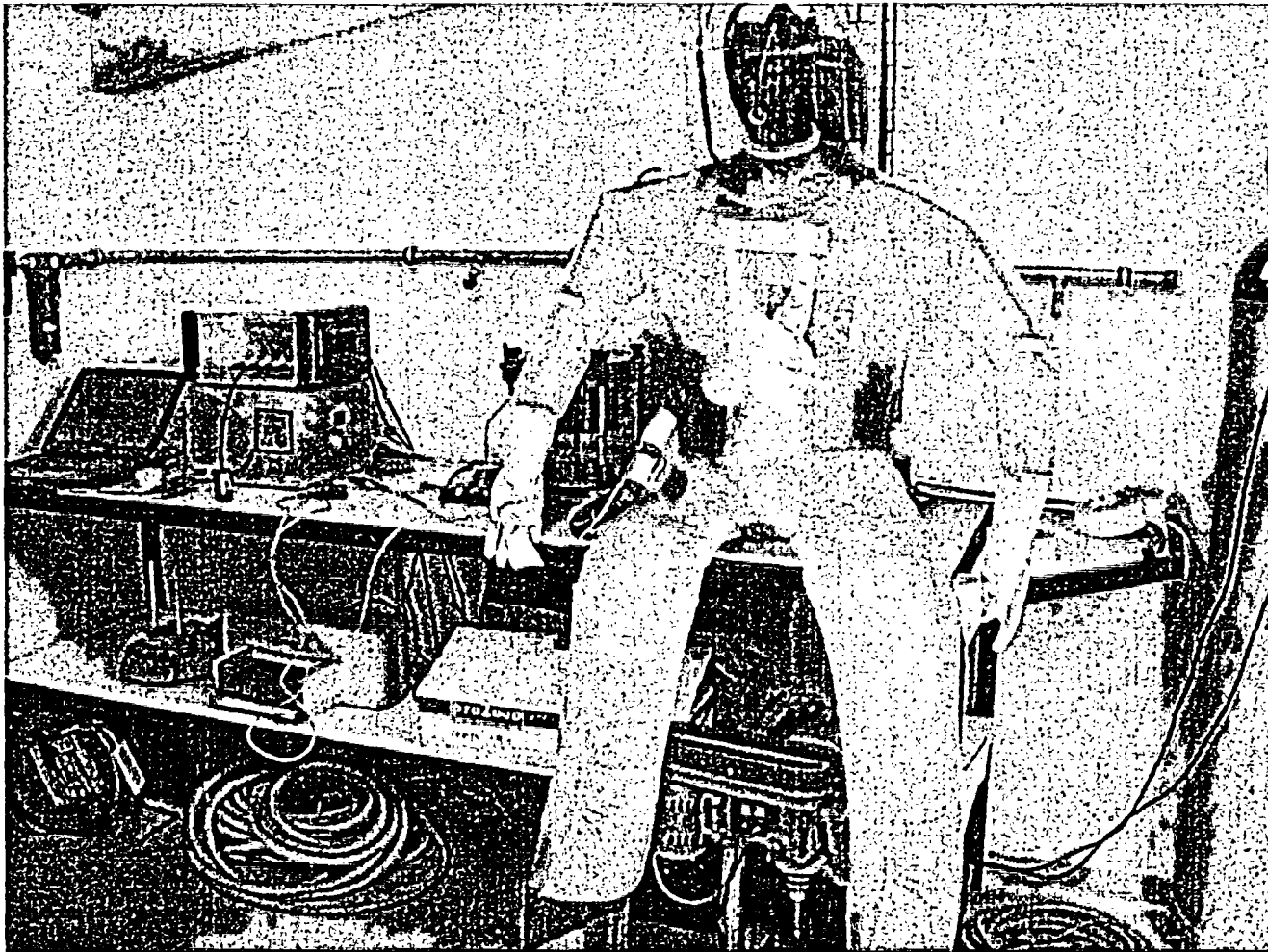
Target markets are Nuclear, Biological, Pharmaceutical, Hospital



Delta Protection Manufacturing



Research and Development



Delta Protection Americas "Resource Focus, Key Accomplishments"



Commercial Power Plant Industry

Sustained, consistent sales and marketing efforts for 2 years
Established Key Distribution Support Mechanism (Frham Safety)
Overwhelming success in the commercial power plant industry
Some 50% of reactor sites have received NRC approval for use.
Spring outage power plant use was approximately 40%

Power Plants that Are Using Our Suits

Duke Power , Exelon
Entergy South , First Energy
Florida Power and Light , Progress Energy
Tennessee Valley Authority , Dominion
San Onofre, Nuclear Management Corp.



Delta Protection Americas Diversification



Biological Level 4 Laboratories

-Center for Disease Control (Atlanta, San Antonio, Winnipeg)

USAMRIID in Fort Detrick MD

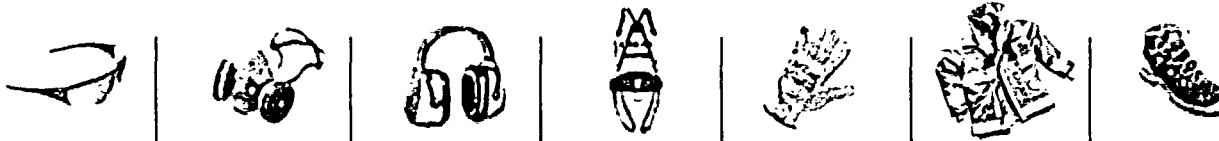
-National Institute of Health, Rocky Mountains, Montana, Bethesda.

Pharmaceutical Market

-GENPHARM

-APOTEX

-PFIZER



What to Use in "High Risk" Environments

Implement a "total systems solution approach" Based on four (4) distinct quadrants

- 1) Respiratory Protection (less Risk)
- 2) Contamination/Cross Contamination Control
- 3) Heat Stress Reduction (full body Cooling)
- 4) Manpower utilization efficiency (eliminate standby rescue person), high speed dress outs

-Encapsulating Suit System represents the total solution



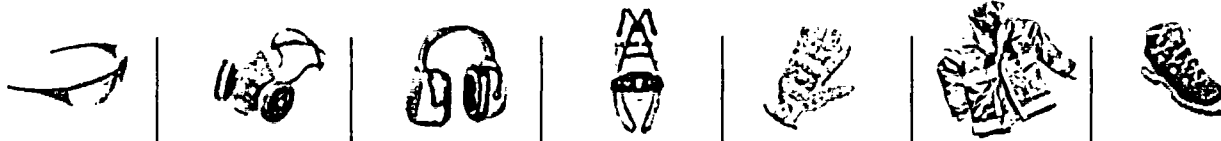
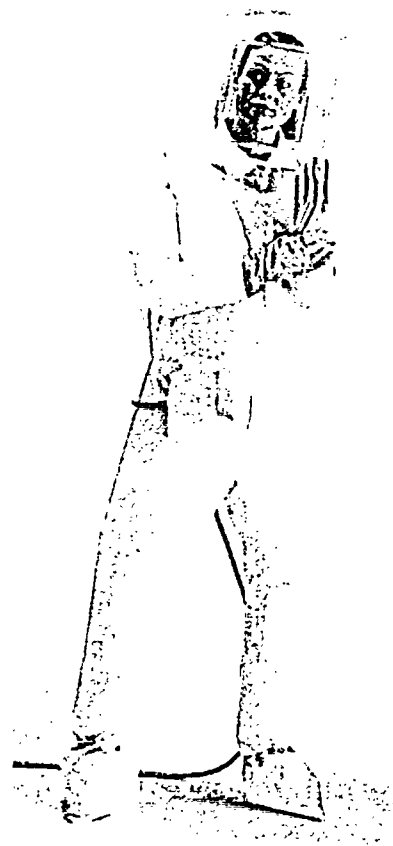
Delta Protection Mururoa Positive Pressure Single Use Encapsulating Suits


DELTA PROTECTION



Delta Protection MTH2 Positive Pressure Single Use Encapsulating Suits


DELTA PROTECTION



Delta Protection Positive Pressure Encapsulating Suits (Advantages)



- Uncompromised full body cooling Reduces heat stress
- Highest Level of Respiratory Protection.
- High Speed donning and doffing < 3 minutes
- No interface concerns (encapsulating)
- Unique exclusive undressing strip eliminates nuisance contamination events.
- Lightweight with high mobility
- Ergonomically designed for maximum mobility
- Exceptional Field of Vision



Delta Protection Positive Pressure Encapsulating Suits (Options)

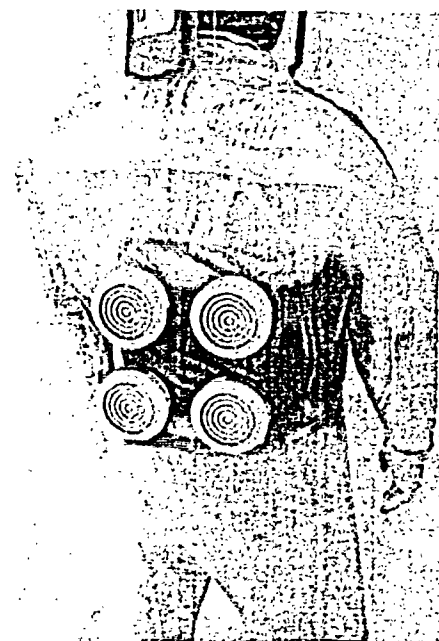
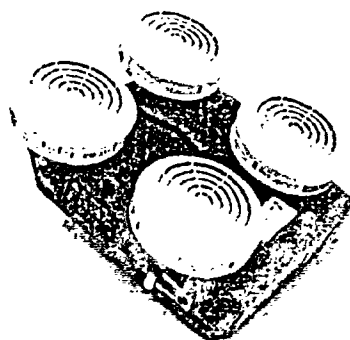
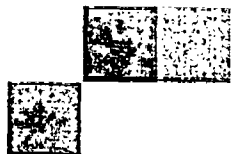


- Harness Sleeve for Scaffolding Applic.
- “DeltaFlow” smart valve for pressure variations 35-100 PSI
- Available with HEPA filter prior to distrib. manifold to reduce contamination risk when connecting/disconnecting.
- Rigid Ring at Cuff for Customer Gloves
- Welded Boots
- Alternative Fabrics and colors



Delta Protection BLU Positive Pressure Self Fed Single Use Encapsulating Suits


DELTA PROTECTION



Delta Protection BLU Positive Pressure Self Fed Encapsulating Suits



- The best of both worlds (SAR, suits and PAPR)
- Full body protection and cooling
- Resistant Free Breathing
- Very high Protection Factor >20,000
- Two speed air supply (4 or 8 hour usage)
- Blower unit is protected from the environment
- 4 liquid and solid particle cartridge system for maximum protection
- Designed for mobility in highly contaminated environments (no supplied air)



Delta Protection BLU Positive Pressure Self Fed Suit Blowing Unit



- Rechargeable NIMH (over 500 cycles)
- Recharging Time of 7 hours
- Long Life Brushless Motor (Lifetime)
- Patented Constant Air Flow System
- Alarms for low battery and low flow
- 4 hour usage at 21 CFM air flow



Delta Protection BLU Positive Pressure Self Fed Encapsulating Suits



- $\leq 0.003\%$ inward leakage Average of all exercises.

- Noise level < 70 DB at 21 CFM

- Air Flow rate maintained despite cartridge resistance

- CO_2 levels $< 1\%$ in the breathing zone



Delta BLU "Self Fed" Suits Mirrors Air Fed Suit Performance



Test Requirement EN 1073-1 V4F1 Results

Inward Leakage (Fit Factor), Protection Factor

CO2 Concentration of Inhaled Air <1% by volume

MTH2 and Mururoa

Class 5 >50,000

< 0.8% by volume at 550 L/min

Mururoa BLU PVC & Ethyfuge Results

Class 4 > 20,000

<0.6% by volume at 400 L/min

Noise Level < 80 DBA at Max Flow Rate
Pressure Inside the Suit <1000 Pa avg.
<2000 Pa Peak

<80 DBA at Max flow rate

70.5 DBA at 600 L/min

Min. <600 Pa, Max <1700 Pa

Min < 170 Pa, Max < 300 Pa

Air Flow Rate Min Max

Min 500 L/min, Max 1100 L/min

Min 400 L/min Max 600 L/min

Abrasion Resistance

Same

Same

Puncture Resistance

Same

Same

Tear Resistance

Same

Same

Material Flammability

Same

Same

Suit Practical Performance Test

Same

Same

Seams/Welds Testing

Same

Same



Delta BLU "Self Fed" Suit System Performance/ (PAPR Proposed Std)

Test Requirement PAPR

General Construction Requirements

Breathing Tubes

Harnesses; Installation Construction

Head Harnesses

Respirator Containers

Respirator Inlet Coverings

Inhalation and Exhalation Valves

Low Pressure Indicator

Low Flow Indicator

Full and Low Battery Indicator

Air Flow and Positive Pressure

Mururoa BLU PVC and Mururoa Ethyfuge Results

A self fed suit with two audible alarm indicators

Not Applicable

Not Applicable

No Head Harnesses needed (Positive Pressure Helmet)

Containers and Packaging constructed to permit easy use.

Not Applicable

No inhalation, Exhalation Valves are magnetic and specific in use

N/A Pressure controlled by valves. No pressure= low flow

Audible intermittant Alarm (.05 sec interval)

Full charge indicator on charger, Battery Low is represented by continuous alarm. 15 min duration, then auto "shut Off" feature.

Consult our Suit Pressure results



Delta BLU "Self Fed" Suit System Performance/ (PAPR Proposed Std)

Test Requirement PAPR

Air Flow and non-Positive Pressure

Noise Levels <80 DBA

Service Time Limitations

PAPR Shelf Life Limitations

Particulate Filter Efficiency Level. Penetration of 0.05%

Exhalation Valve Leakage test

CO2 machine Test min. requirements <0.5%

CO2 Human Test min. requirements <2.0%

Battery Life Test

Laboratory Respiratory Protection Level >10,000 PF

Chemical Cartridge Test

Mururoa BLU PVC and Mururoa Ethyfuse Results

Not Applicable

Consult our Noise level 70.5 DBA at 600 L/min

4 hour duration at 600 L/min, can go longer at 400 L/min

Described in our Users Instructions

Maximum penetration of 0.004% or 99.996% efficiency after clogging (Dust Accumulation) tests performed with NaCL and oil at max output

Not Applicable. Valves control PP in the suit and are suit specific

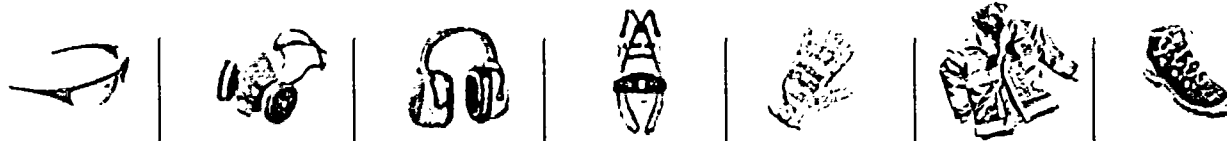
0.58% by volume based on BR of 25/min at 2 L/stroke at 400 L/min.

0.58% by volume based on BR of 25/min at 2 L/stroke at 400 L/min.

According to Manf. Specs 500 charges minimum

Class 4 >20,000 PF; internal leakage of 0.005% in any test

Not Applicable



Delta BLU "Self Fed" Suit System Performance/ (PAPR Proposed Std)



Test Requirement PAPR

End of Service Life

Low Temperature Fogging

Mururoa BLU PVC and Mururoa Ethyfuge Results

Not Applicable

Based on Proven Application Experience (refer to user instructions)

* All suits are subject to preconditioning prior to testing



Delta BLU "Self Fed" suits Additional Testing (Suits and Miscellaneous)

Test Requirement

Mechanical Strength

Thermal Strength (filters)

Flame Resistance

Connections and Interconnections (gloves, sleeves)

Multiple filter testing (output Volume must be equal)

Helmet Visor Strength Test

Exhaust System Testing

Mururoa BLU PVC and Mururoa Ethyfuge

Met with requirements

Met with requirements

Met with requirements

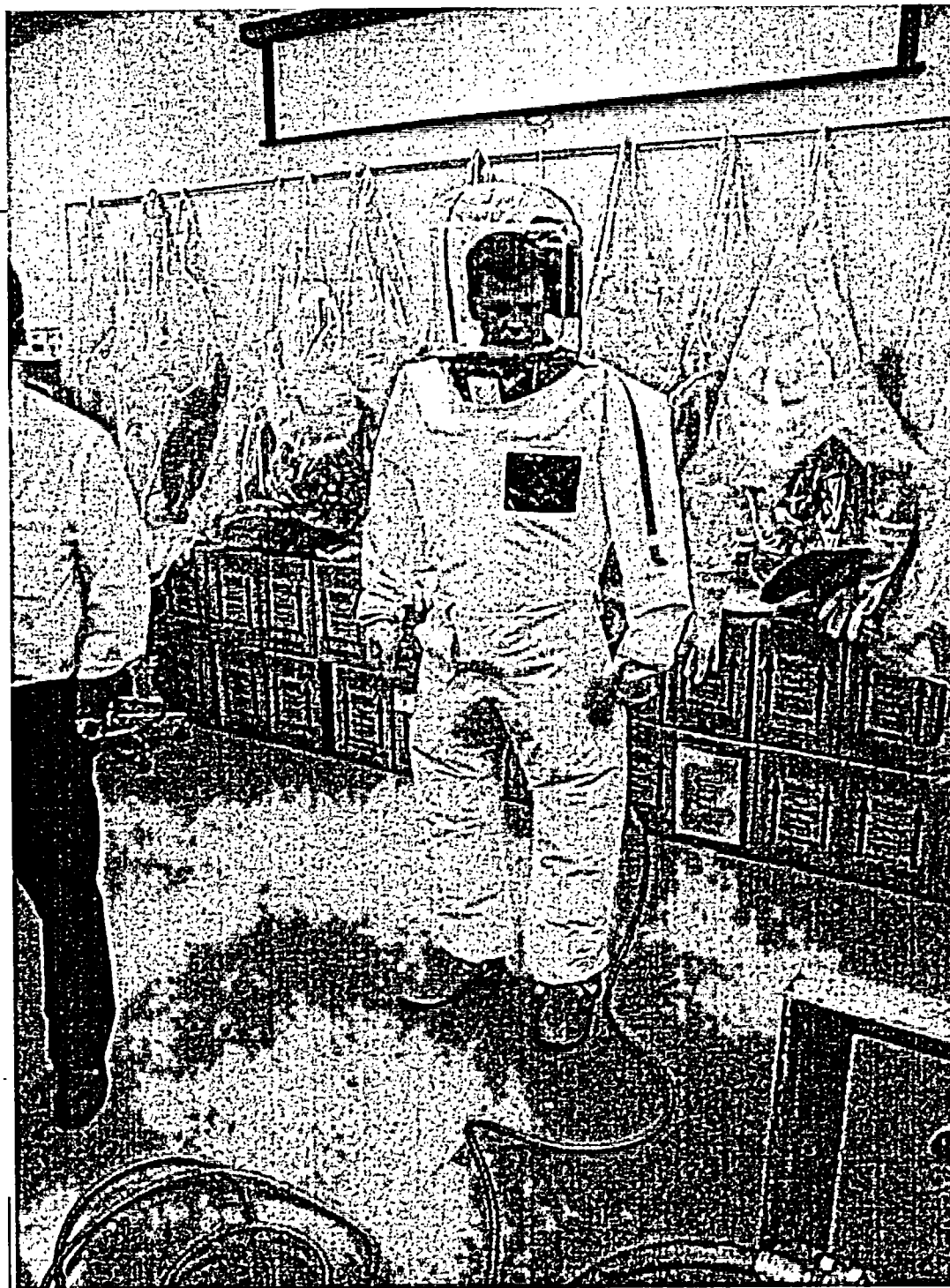
Met with requirements

Output volume of 150 L/min were met

Met with requirements

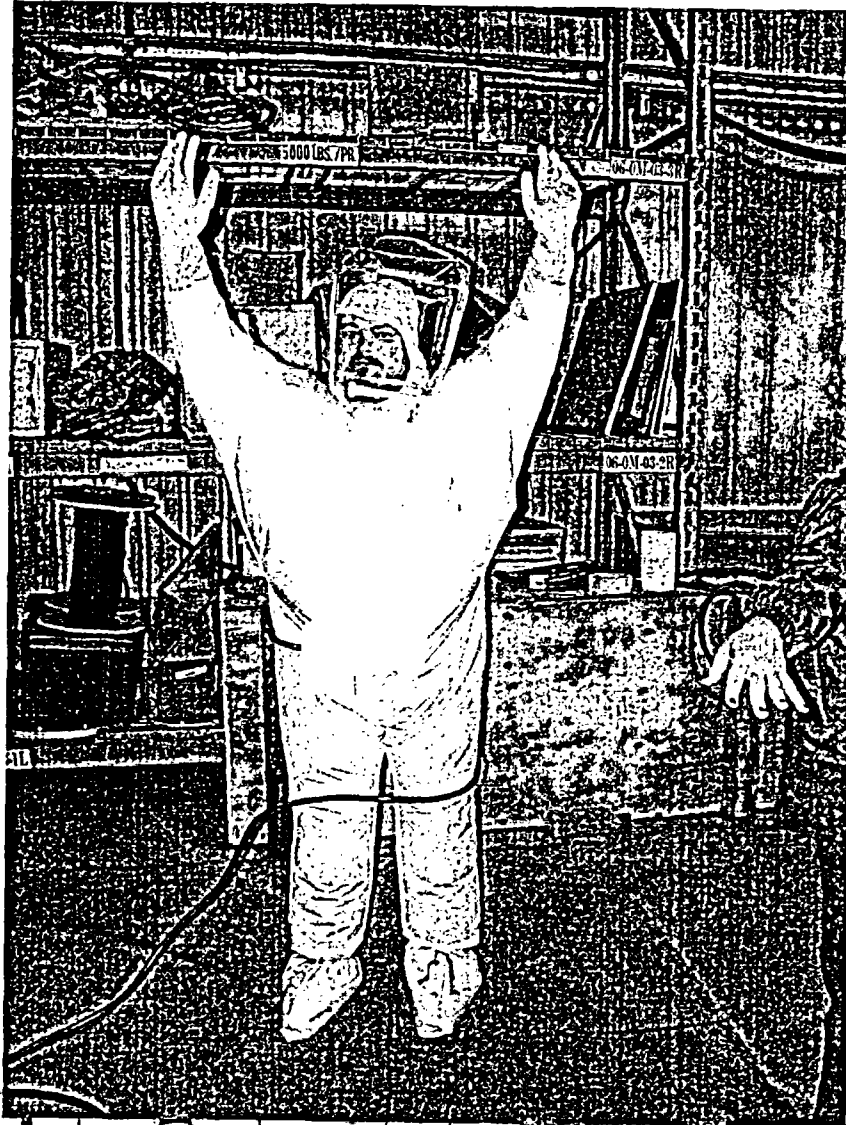
Met with requirements







Duke Power Steam Generator Mock Up



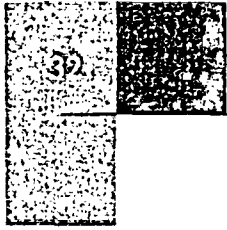
Duke Power Steam Generator Mock Up



Bacou Dalloz and NRC Meeting Objectives

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Bacou-Dalloz

THANK YOU

VERY MUCH

