



PRESENTATION

<u>ON</u>

TECHNICAL TEXTILES

INDIAN NAVY



SCOPE OF PRESENTATION

- > OVERVIEW
- > TECHNICAL PROTECTIVE TEXTILES IN NAVY
- DESIRED COLLABORATION WITH INDUSTRY / FICCI / BIS
- > PROJECTS UNDERWAY



INDIAN NAVY: AN OVERVIEW

STRENGTH

- 5TH LARGEST NAVY IN THE WORLD
- APPROX 1.5 LAKH INCLUDING OFFICERS, SAILORS AND DEFENCE CIVILIANS

CLOTHING INVENTORY

- 409 DISTINCT ITEMS
- INCLUDES PROTECTIVE CLOTHING, SAFETY FOOTWEAR, TECHNICAL TEXTILE AND EXTREME WINTER CLOTHING ITEMS

BUDGET

APPROX Rs 100 CRORES





FIRE RETARDENT ACTION OVERALL (FRAO)

- EXISTING SPECS
 - 50% ARAMID
 - 50% FR VISCOSE
- ANNUAL REQUIREMENT 95,000 NOS
- EXPECTED USAGE LIFE 12 MONTHS
- RATE CONTRACTS CONCLUDED FOR 1-3 YEARS





DIGITAL CAMOUFLAGE

- DIGITAL PIXELATED PRINT
- DEVELOPMENT ORDER 400 PAIRS
 - POLYESTER / COTTON (50 : 50)
 - POLYESTER / COTTON (20:80)
 - NYLON / COTTON (50 : 50)
- NOS INITIAL ANNUAL REQUIREMENT 60,000
- EXPECTED USAGE LIFE 18 MONTHS



OVERALL CE



- SPECIFICATION CHANGED TO POLYESTER/COTTON 67/33
- WEAVE CHANGED FROM PLAIN TO MOCKLENO
- INCLUSION OF ANTI-MICROBIAL PROPERTIES
- DESIGN CHANGED TO INCORPORATE VENTILATION FLAP ON BACK
- ANNUAL REQUIREMENT 50,000 PAIRS



RAIN SUIT



- OLD SPECIFICATION OF 2001 VINTAGE FOR RUBBER COATED MATERIAL
 - IMPROVED SPECIFICATION FOR VIZ. 100% POLYESTER LAMINATED UNDER FORMULATION.
 - TWO LAYERED FABRIC INCLUDING MESH & TAFETA FOR BETTER BREATHABILITY
 - SELF PACKABILITY IN POCKETS
- ANNUAL REQUIREMENT 30,000 PAIRS



RUCKSACK – 90 LTRS



- BASIC FABRIC NYLON
- IMPROVED DESIGN
 - TORSO ADJUSTABILITY
 - TOP OPENING WITH LOCKABLE ZIPPER
 - PARTITION AT BOTTOM FOR FLEXIBILITY
- PRESENTLY UNDER USER TRIAL
- INITIAL REQUIREMENT 60,000 NOS
- ANNUAL REQUIREMENT
 12,000 NOS









FABRIC – 100 % COTTON

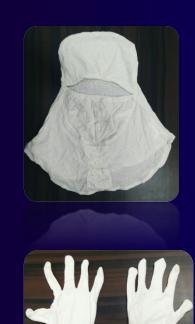
ANTI FUNGAL TREATMENT/ NON-WOVEN

USED ONBOARD SUBMARINE

ANNUAL REQUIREMENT - 10,000 PAIRS



ANTI FLASH HOOD & GLOVES



FABRIC – INHERENT FIRE RETARDANT

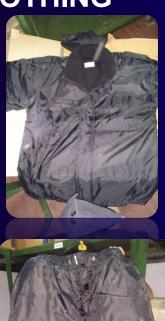
ANTI FUNGAL TREATMENT/ NON-WOVEN

USED ONBOARD SHIPS/ SUBMARINE

ANNUAL REQUIREMENT - 25,000 PAIRS



EXTREME COLD CLIMATE (ECC) CLOTHING



THREE LAYERED

-40 DEGREE CENTIGRADE

 USED BY PERSONNEL WHEN DEPLOYED IN EXTRA COLD REGIONS

ANNUAL REQUIREMENT - 1,000 PAIRS

• EXPECTED USAGE LIFE - 36 MONTHS



MARCOS OVERALL DARK BLUE



 COMPOSITION – 93/5/2 (META ARAMID/ PARA ARAMID/ ANTI STAT

USED BY MARCOS

ANNUAL REQUIREMENT - 1,000 PAIRS

EXPECTED USAGE LIFE – 12 MONTHS



ALUMINISED FIRE PROXIMITY SUITS



• COMPOSITION – MULTI-LAYERED CLOTH COATED ARAMID ALUMINISED

 USED BY SHIPS/ SUBMARINES/ ESTABLISHMENTS

ANNUAL REQUIREMENT - 300 PAIRS



FIRE SUIT FOR FIRE FIGHTERS



 COMPOSITION – MULTI-LAYERED META ARAMID, ANTI STATIC, MICRO POROUS/ OLEOPHOBIC POLYMER, NOMEX

 USED BY SHIPS/ SUBMARINES/ ESTABLISHMENTS

ANNUAL REQUIREMENT - 400 PAIRS

EXPECTED USAGE LIFE — 60 MONTHS



USAGE OF GENERAL TEXTILES

GENERAL SERVICE UNIFORM FABRIC



- COMPOSITION 70/30 (POLYESTER/ VISCOSE)
- 4.5 LAKH METERS WHITE
- 2 LAKH METERS NAVY BLUE
- 2 LAKH METERS LIGHT BLUE
- FOCUS AREA
 - (A) WHITENESS RETENTION
 - (B) BREATHABILITY & ANTI WRINKLE
 - (C) GOOD CREASE RECOVERY ANGLE



EXPECTATIONS FROM INDUSTRY / FICCI / BIS

- ➤ INNOVATION HIGH QUALITY PRODUCTS AT COMPETITIVE PRICES
- FIELD PARTICIPATION IN DEVELOPMENTAL ACTIVITIES
- > FACILITATE PRODUCT SPECIFICATIONS
- > PARTICIPATION IN INSPECTION AND QUALITY ASSURANCE PROCESS
- > TEXTILE PRICE INDEX FOR LONG TERM RC
- > SHARING OF EXPERTISE



PROJECTS UNDERWAY

- > FIRE RETARDANT ACTION OVERALL (FRAO)
- > DIGITAL CAMOUFLAGE
- > OVERALL CE
- > RAIN SUIT (02 PIECE)
- > RUCKSACK (90 LTRS CAPACITY)



INDIAN NAVY

THANK YOU

CONTACT DETAILS: TEL: 011-21410464

E MAIL: dcv@navy.gov.in

<u>ADDRESS</u>: IHQ/DCV, MOD (NAVY), DCV, ROOM NO. 103, FIRST FLOOR, TALKATORA ANNEXE BUILDING, TALKATORA STADIUM, NEW DELHI - 110001