

Ergonomically Designed Backpack (70 Lt)

Background:

Literature reviewed from different parts of the globe revealed that distributed mode of load carriage increases fatigue and risk of injury, causing increments in the incidences of occupational accidents. The studies carried out at the inventors' laboratory indicated that such load carriages increase stress on physiological and biomechanical systems of human body as compared to single unit mode of load carriage.

Novel features of the Backpack and their Potential benefits:

- Ergonomically designed using indigenous anthropometric data of Indian soldiers.
- Made up of 6.6 Nylon
- Integrated Hydration Pack (1 litre)
- Provision to hook-on haversack
- Outer surface is provided with the facility of pouch attachment ladder (PAL) system
- Well cushioned padding at shoulder strap, waist strap, and throughout the length of spinal column.
- Adjustable shoulder strap is the unique design feature that allows the adjustability of the back support for different size populations
- Removable internal Aluminium plate at the back portion of backpack for better support.
- Integrated rifle carrying facility on both sides of the backpack
 - ❖ Option of carabiner for carrying / holding climbing equipment.
 - ❖ Facility to hold skis on both side of backpack.
 - ❖ Options for carrying climbing shoes.
 - ❖ Facility to cover whole backpack during rain, snow, sandstorm etc.

Scope of Usage

This backpack will be highly useful to carry military loads during marching, training and military exercises.

