



TECHNICAL DATASHEET

UDK04

U-HOIST RESCUE KIT

STANDARD: CONFORMING TO EN 341:2011, EN 1496:2017

Product Introduction:

The U-Hoist Rescue Kit is an integrated mechanical system engineered for reliable vertical and horizontal movement of loads, specifically optimized for personnel evacuation in confined space, emergency rescue operations. Designed for lifting, lowering, and pulling applications, the kit ensures safe and efficient handling in high-risk environments.

Features:

- **Modular Design:** Constructed from High-grade aluminium alloys to balance strength and portability.
- **Mechanical Advantage Compatible:** Can be configured in 5:1 mechanical advantage systems for efficient load lifting or rescue operations.
- **No Internal Brake Required:** Its unique design eliminates the need for a dedicated internal brake, allowing for multiple arrest cycles between service intervals.
- **Integrated over Speed Brake:** Automatically activates when abnormal acceleration occurs (e.g., in a fall), locking the pulley and arresting the descent.
- **Load-Rated Components:** Engineered and tested to withstand defined load limits for reliable operation.
- **Easy Deployment:** Enables fast, hassle-free installation for immediate use.
- **Multi-Function Use:**
 - Works as a RPD (Rope Positioning Device) in suspension applications.
 - Suitable for rescue operations and lifting materials in industrial environments.
- **Compatibility:** Interfaces with common fall arrest, retrieval, and confined space entry systems.





Product Specifications:

Model:	UDK04
Housing Material:	Aluminium
Rope Material:	Kernmantle
Rope Dia:	Ø11mm
Breaking Strength:	25 KN
Breaking Force:	Less than 6kN
Fall Arrest Distance:	Totally Controllable
Nominal Load:	282kgs
Minimum Load:	50kgs
User:	2 Persons
Hook Type:	Aluminium double action Snap hook
Rope Length:	150 Meter
Working Length:	25 Meter
Maximum Descent Height:	100mtr
Maximum Descent Speed:	0.5mtr/sec
Weight:	2.9kgs (Approx. Without Rope)

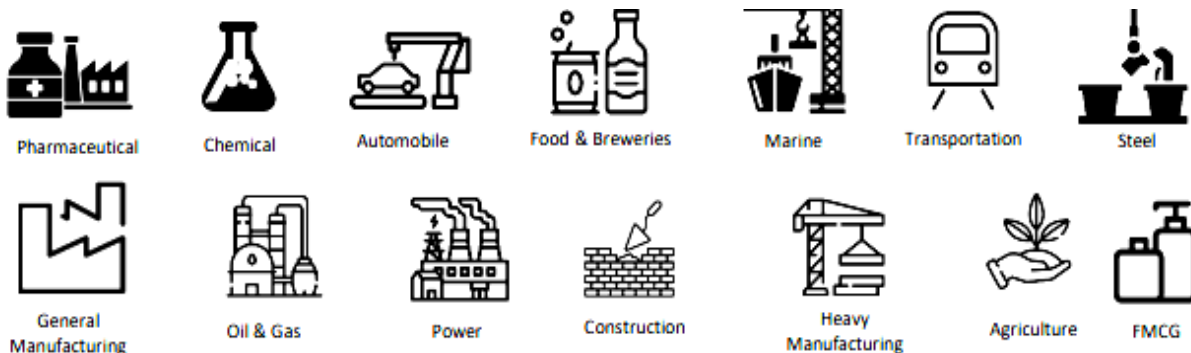
Benefits:

- **Rescue operation:** emergency retrieval and controlled descent of victim during rescue operation.
- **Work on suspension:** Acts as a rope positioning device(RPD), enabling workers to position themselves securely on work at height scenario.
- **Improved Safety Compliance:** Meets key safety regulations and standards ensuring workplace safety.
- **Material handling and lifting:** can be used for material lifting, and positioning under specified load capacity.
- **Automatic over speed brake:** Automatically engages upon abnormal speed increase.
- **Multiple arrest cycle:** It is designed to withstand multiple operations (raising/lowering cycles).
- **Dual use:** Personnel and material handling.
- **Versatile Application:** Suitable for use in confined space entry, vertical rescue, industrial maintenance and emergency response scenarios.
- **Reduced Setup Time:** Pre-set assembly, save assemble time during emergency.
- **Minimized Physical Strain:** 5:1 Mechanical system reduce manual effort, lowering the risk of rescuer fatigue or injury.
- **Compact and Portable:** Lightweight components and compact storage case facilitate easy transport and storage.
- **Reliable Load Control:** 5:1 mechanical system with integrated friction mechanism provide precise control over lifting, lowering, and load stabilization.
- **Durability in Harsh Conditions:** Corrosion-resistant materials and robust construction ensure reliable performance in extreme environments.

Applications:

- **Confined Space Entry & Rescue:** Ideal for evacuation from tanks, silos, manholes, and underground vaults.
- **Industrial Maintenance & Shutdowns:** Used during high-risk operations such as plant turnarounds, inspections, or equipment servicing where fall protection and retrieval are critical.
- **Emergency Response Operations:** Rapid deployment in rescue, disaster relief, and remote access rescues by trained emergency personnel.
- **Construction & Utility Work:** Applied in work-at-height scenarios including bridge work, tower climbing, and utility pole operations requiring fall arrest and retrieval capabilities.
- **Mining & Tunnelling:** Supports on rescue and material movement.
- **Wind Energy & Renewable Sector:** Facilitates retrieval from turbine nacelles, ladders, and elevated platforms till 25-meter height.
- **Telecommunications & Infrastructure:** Ideal for rescue on towers, and elevated installations.

Industries:



Safety Information:

- Ensure all operators are trained and competent.
- Use only with approved anchor points and fall protection systems.
- Do not exceed the rated Working Load Limit (WLL).
- Reduce the slag to avoid dynamic impact.
- Do not modify or change kit components.
- Follow manufacturer maintenance and inspection schedules.

Usage Instruction:

- **Inspection:** peruse, periodical and interim inspection is mandatory. The inspection should focus on detecting any signs of distortion, cracks, dents, or improper installation.

Storage:

- Always keep the kit in a clean, dry and protected environment away from direct sun light. Also, it Can be stored and transported in their original cartons to avoid wear & tear due to atmospheric moisture, excessive heat or cold.