

VHS

The Safe-Away[®] Variable Height Stair (VHS) has been designed to improve safety and access for operational and maintenance personnel working on drill rigs. Due to the height variations in drill rig positioning, the stair treads automatically compensate for stair angles between 22° & 45° to the horizontal.



Safety & Efficiency

The **Safe-Away® Variable Height Stair (VHS)** has been specifically designed to suit a wide range of drill rigs. Features:

- The VHS offers easier access for maintenance personnel when accessing the vehicle and while carrying tools.
- Includes complete stair assembly, handrails, mounting bracket and installation kit.
- The fixed handrail system provides for three points of contact.
- Electric/hydraulic movements are controlled via the 24 volt Safe-Away Series 2009 VHS Power Pack.
- When the drill rig is operational or mobile the VHS is safely retracted to the horizontal position.
- A Maintenance Prop is provided for use on the Cylinder Rod, to enable work to occur under the stair with safety. The Maintenance Prop prevents the Hydraulic Cylinder from retracting, holding the stair in the raised position.
- Park Brake Interlock Kit provides additional protection by raising the ladder automatically when the park brake is released. (Note: not applicable with Momentary operation configuration).
- Safety Bypass Valve to manually release the stair lowering it to the down position.

Innovation

The **Safe-Away® 2009 Series Access Control System** manages all stair operations.

It provides:

- Simple downloading of day to day logged data to a USB.
- Sequential reports on all events with time and date stamps:
 - Raising and lowering,
 - Fault indications.
- Operational history data logs.
- Diagnostics and error reporting accessed directly from the Incab control digital display.



Access Control System Features

- Incab control panel with a digital touch pad display showing:
 - Access system status; UP, DOWN and IN MOTION.
 - Detailed fault indication with audible alarm and system event log.
 - 3,000 point event data log with download via USB connection to the side of the Incab control panel.
- View downloaded log files as summary and/or full log data in Microsoft® Excel using the supplied SLA to XLS file converter.

The **Safe-Away® 2009 Series VHS Power Pack** is driven by the Access Control System. The stainless steel VHS Power Pack cabinet houses the main control hydraulic and electrical components.

It includes:

- Harnesses and leads.
- Battery Circuit Breaker Kit.
- The Reservoir Heater ensures the viscosity of the oil is maintained to raise and lower the ladder in cold climates.



Log Index	Event Label	Event Code	Date
1	Ladder Down	254	01/09/2000 11:31:47 PM
2	System Voltage Below 18V	18	02/09/2000 12:15:21 AM
3	Ladder Up	255	02/09/2000 12:20:20 AM
4	Ladder Down	254	02/09/2000 01:38:03 AM
5	Ladder Up	255	02/09/2000 01:40:34 AM
6	Ladder Down	254	02/09/2000 04:38:29 AM
7	Ladder Up	255	02/09/2000 05:21:04 AM
8	Ladder Down	254	02/09/2000 06:37:10 AM
9	System Voltage Below 18V	18	02/09/2000 08:42:51 AM
10	Ladder Up	255	02/09/2000 07:19:39 AM
11	System Voltage < 18V During Movement	17	02/09/2000 07:19:48 AM
12	Ladder Down	254	02/09/2000 08:00:52 AM
13	System Voltage Below 18V	18	02/09/2000 08:01:40 AM
14	Ladder Up	255	02/09/2000 08:08:12 AM
15	Ladder Down	254	02/09/2000 08:22:30 AM
16	System Voltage Below 18V	18	02/09/2000 08:24:54 AM
17	System Voltage Below 18V	18	02/09/2000 12:34:00 PM

Designed to suit your fleet

The **Safe-Away® VHS** is suitable for all OEM drill rigs and/or equipment with a deck height of up to 126 inches.

The Safe-Away VHS may be varied to accommodate your requirements for specific mount points, platform handrails, infiles, site and/or OEM colors, and Power Pack locations.

VHS Compatibility

Compatible OEM models include:

DMM2	DMM3	DM25	DML	DML 60	D40KS	D45KS	D55SP	DR460
D60KS	D75KS	D90KS	D90K	1190E	DR460	Pit Viper 235		Pit Viper 271
Pit Viper 275		Pit Viper 351						

The Safe-Away VHS can be adapted for other equipment.



Manual Ladder 2 (ML2)

The Safe-Away® ML2 ladder is a manually operated ladder that has been designed as an additional access option to improve safety for operators and maintenance personnel working with drill rigs.

The **Safe-Away® ML2 Ladder:**

- can be easily raised or lowered by one person from the deck area or the ground.
- when not in use the ladder is retracted to a vertical position above the ground to reduce the possibility of physical damage.
- comes pre-assembled and ready to fit.



For more information on the ML2 see the separate Specification Sheet.

Optional extras

1. Additional Raise and Lower Control Panel Kit



A remotely mounted control panel designed to enable the raise and lower operation from outside of the vehicle's cab, or at a position accessible from ground level.

2. Boarding Light and Audible Alarm



An LED boarding light (left) and audible alarm (below) are activated by pressing the up or down directional switch. The light will stay on for an adjustable/preset period.



3. Inhibit Kit

A relay with connecting harness for customer only installation of machine inhibit functions independent of the standard Safe-Away® in-built ladder safety functions.



4. Momentary Operation

Safe-Away® Access Systems can be supplied with momentary operation.

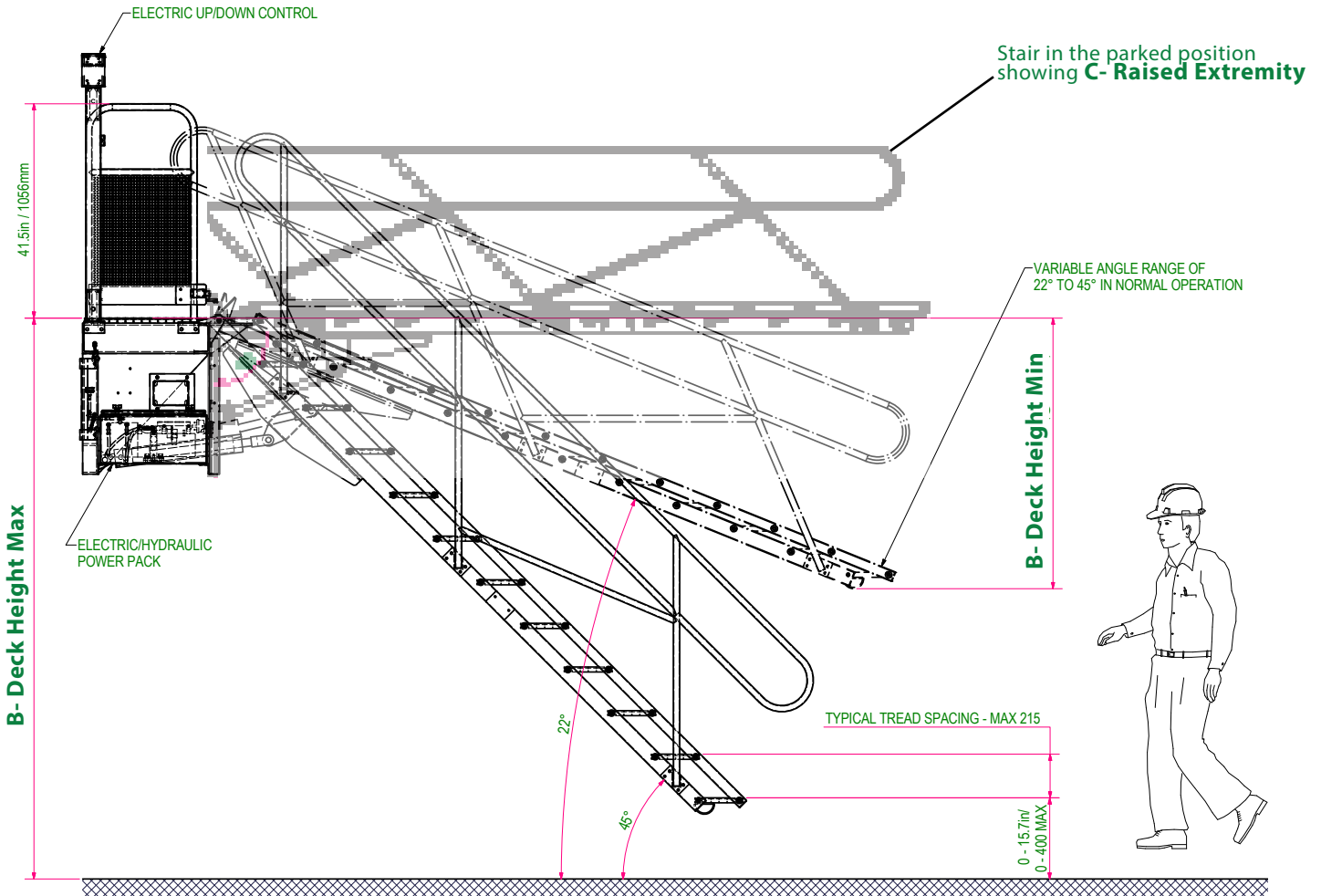
Specifications

This Safe-Away® VHS has been designed and manufactured to comply where practicably possible with the relevant sections of the following standards when in the 45 degree position:-

SAE J185_200305 ISO 2867:2011 ANSI Z535.4-2007 ANSI A14.2-2007 AS 3868-1991 AS1657-2013

VHS Dimensions						
Steps	A- Deck Height Max @ 45°		B- Deck Height Min @ 22°		C-Raised Extremity	
9	83.5in	2120mm	39in	992mm	108.8in	2765mm
11	100.4in	2550mm	48in	1220mm	130.1in	3315mm
12	108.8in	2765mm	52.5in	1334mm	140.2in	3562mm
13	117.3in	2980mm	57in	1448mm	154.1in	3916mm
14	125.8in	3195mm	61.5in	1562mm	166.1in	4220mm

Dimensions (approximately)		
D Stair width	27in	688mm
E Platform length	24.7in	629mm
F Platform width	32.4in	823mm O/A



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