

### ***New Products: Stabfast XL Stabilisation***

The brand new Stabfast XL has arrived, specially designed for stabilisation of heavy vehicles, such as buses & trucks. The system allows full stabilisation of any vehicle in any configuration (on its wheels, side or roof) in less than 60 seconds when used by trained operators. The system's ease of use is further enhanced by the fact that it can be used on any surface.

The operation of the system is identical to the current standard sized Stabfast system; however the XL version contains two large struts, each rated at 2.5 tonnes, as opposed to the three smaller legs in the standard system. The large struts have a collapsed length of 150cm, and can extend out to 250cm.

To stabilise a vehicle, place a stabiliser leg against the vehicle at an angle of 30-50 degrees. Attach the hook to a stable point as low as possible on the vehicle, and tighten the strap using the ratchet on the stabiliser leg. This will form a triangle between the stabiliser leg and the vehicle, causing a small portion of the mass of the vehicle to be shifted to the foot of the stabiliser leg, distributing the mass of the vehicle over a broader area.



The system makes use of the inherent mass of the vehicle to be stabilised. Once the vehicle is stabilised, the system will not obstruct the rescue of casualties, whilst also preventing any further movement of the vehicle, reducing the danger to both casualty and rescuer.

In upcoming issues of the newsletter we will be running a series of articles on Stabfast XL training. In the meantime, if you require any further information on this product, or would like to see it in use, please do not hesitate to contact us.

### ***Special Pricing on Selected Items***

We are pleased to announce that selected Quarterly Specials from last quarter have been extended until the end of the Financial Year. These Specials can be seen on our website.

They include:

- PT Rescue Gloves from \$40.00 per pair
- Lukas Ram Supports from \$560.00 each
- Special Pricing on selected Lukas Cutters, Spreaders, Combi Tools & Pumps.

All prices above do not include GST. Please look at our website for more information

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# Vetter Lifting Airbags

Vetter's range of Lifting Airbags is very useful for Rescue and other lifting and spreading operations. They can develop their lifting power in the narrowest of spaces, and with insertion heights as low as 25mm, operating pressures of up to 8 Bar (116psi) and a lifting capacity up to 68 tons, the variety of uses for Vetter Airbags is nearly endless.

The bags can be used to lift, prise, push, press and split, all done jolt-free and silently. The use of Vetter controllers allows all of these operations to be done with millimetre precision. The bags are manufactured with a multi-layered design, re-enforced with ultra-light, high strength kevlar, making them anti-static & self-extinguishing. The surface profile improves grip between both the ground and the bag, and the bag and the load.



**Vetter Low Pressure Airbag Lifting System, consisting of two airbags, inflation hoses, dual chamed controller & pressure regulator**

## Vetter Low Pressure Airbags



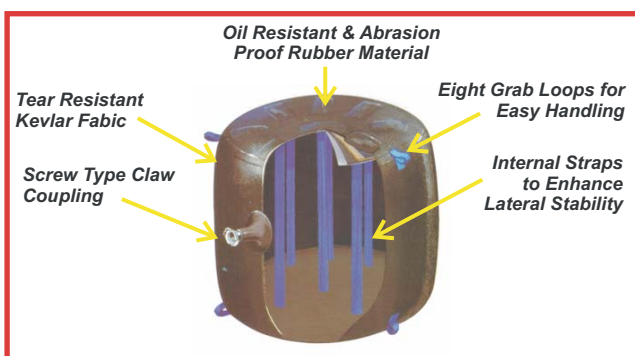
**Vetter Low Pressure Airbags being used to right an overturned vehicle**

### Advantages

- Lifting power up to 24 ton for two set bag
- Low insertion height of 3cm
- Lifting height up to 110cm
- Continuous, noiseless & jolt free lifting with same lifting force over entire range
- Bags adapt to uneven surfaces, even rocks and rails
- Useable on sloping surfaces

### Maintenance

- The bag system should be checked after every use to ensure all parts are complete and nothing is damaged.
- If all is well then the bag should be inflated and washed with warm soapy water.
- Check the bag for:
  - Cracks, wear, cuts and leaks during the washing process.
- Minor damage can be repaired by the user by using the repair kit that is part of every kit:
  - Select a patch that is approx 5cm bigger than the damage on the sides
  - Roughen up the surface of the bag and one side of the patch
  - Apply a thin layer of the adhesive on the bag and the patch and allow to dry
  - Press the patch firmly onto the bag and leave for 48 hours before inflating the bag



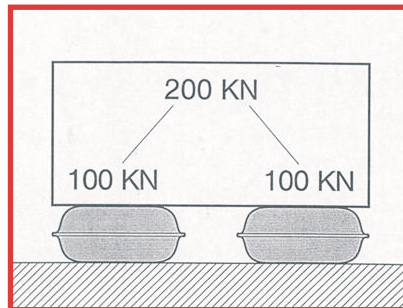
**Internal construction of a Vetter Low Pressure Airbag**

# Vetter 8.0 Bar Lifting Airbags

## Using Two Airbags Side by Side

The sum of the airbag capacities becomes the maximum load that can be lifted. For example, if you need to lift a 30t load using only a 12 and a 24 ton bag put them side by side and your lifting capacity will be 36 ton.

- Before commencing the lifting operation, ensure you have sufficient Cribbing & Stabilisation.
- Backup all lifting operations using cribbing so that you have no one single point of failure.



Vetter's Airbags have lifting capacities ranging from 1 - 68 Ton

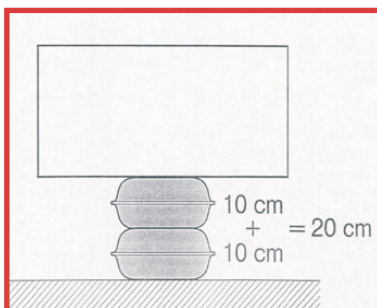


Vetter Airbag being used in a Lifting Application

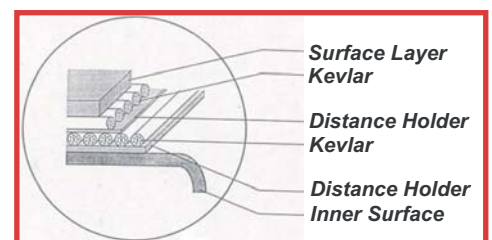
## Using Two Airbags Stacked

The sum of the air bags lifting heights becomes the maximum height that can be raised. However, it is important to note that the load which can be lifted is the capacity of the smallest bag. Using the previous example, if a 12 Ton & 24 Ton airbag are stacked one on top of the other, the maximum load which can be lifted is 12 Ton.

- Always inflate the lower bag first, and if bags of different sizes are being used, always have the bigger bag on the bottom.
- Never stack more than two bags, never place anything between or on top of the bags as there is a chance that the object will be ejected during lifting.



What not to do! Never place objects between the bag & the load as they have the potential to be ejected



Internal Construction of a Vetter 8.0 Bar Airbag

# Around the Rescue Scene

As a part of our customer service support function, PT Rescue provides a range of training support activities, including Hydraulic Tool training operation and techniques; Airbag Training; Petrogen training; Preventative Care Maintenance Programs for Lukas and Vetter products; as well as tailored programs for customers. Last quarter proved to be a busy one, with a selection of some of the training programs undertaken highlighted below.

## **ARRO Challenge 2009**

PT Rescue provided Lukas Rescue equipment and support to its users during this event held in Sydney. Although the event was reduced in the number of participating teams from past years the level of skills and knowledge demonstrated by teams was of the highest caliber.

PT Rescue would also like to thank ARRO departing President Lee Johnson for his support and leadership as the head of ARRO and welcome in new President Steve Rothwell from QLD Fire and Rescue Service.



## **AFAC Conference 2009**

The 22nd - 24th September saw PT Rescue attending the Australasian Fire & Emergency Service Authorities Council (AFAC) conference on the Gold Coast. PT Hydraulics has been a long-term supporter of this event, having attended the show each year for over 10 years.

The conference was a fantastic opportunity to exchange knowledge, spend some time with customers & display new products. PT Rescue exhibited the new Lukas Concrete Crusher which has recently been receiving much praise from the South Australian SES, as well as a Lukas Insulated Combi Tool designed for rescue operations on Hybrid Vehicles. We look forward to again supporting AFAC at the 2010 Conference in Darwin.



## **Australian Antarctic Division (AAD) - Technical Rescue Training**

Training was conducted in Tasmania for members of the AAD Rescue Team. The team's role in the Antarctic will be to provide a range of emergency response functions covering fire fighting, medical/medical evacuation and technical rescue with the key emphasis on responding to aircraft incidents.

Antarctica is serviced by an Airbus A319 (carrying 19 passengers and cargo) supported by two C212-400 Ski Planes and a AS-350BA Helicopter. The Airbus will operate out of Wilkins Runway. In addition to aircraft accidents other risks include vehicle accidents; heavy machinery and industrial accidents.



## ***Tasmania Fire Service - Construction of New Rescue Appliance***



PT Rescue in support of Tasmania Fire Service assisted with the design and development of a new Rescue Appliance for Triabunna Volunteer Road Crash Rescue Brigade. The new concept composite appliance is specially designed based on the roles and functions of the brigade.

Rescue assets include twin Electric hose reels; Lukas Trimo pump; range of Lukas Streamline Rescue Tools; Stabfast Vehicle Stabilisation, all supported by a 6 x 500 Watt Command light.

## ***South Australia CFS - Stabfast Train the Trainer***



Members of the SACFS RARTO Group attended a program on New Vehicle Technology and Stabfast. On completion of this program RARTO's were assessed as competent to train members of the SA CFS in the safe use of the Stabfast Vehicle Stabilisation System.

The Stabfast Vehicle Stabilisation System is building momentum within the CFS with Coonalpyn CFS, Aldinga Beach CFS and Cummins CFS having all purchased a set.

## ***South Australia SES - Vetter Airbag Training***



PT Rescue conducted High Pressure Airbag Training for the SA SES at Noarlunga SES USAR Training Facility. The Training was based on both theory and practical applications of the Vetter 8 Bag Air Bag Systems. PT ran two programs for around 22 Participants concentrating on the Basic Operation & Safety Requirements. We were also able to showcase and demonstrate the new Lukas Concrete Crusher with very impressive results.

## ***Victoria CFA & SES Region 14 Joint Training Day***

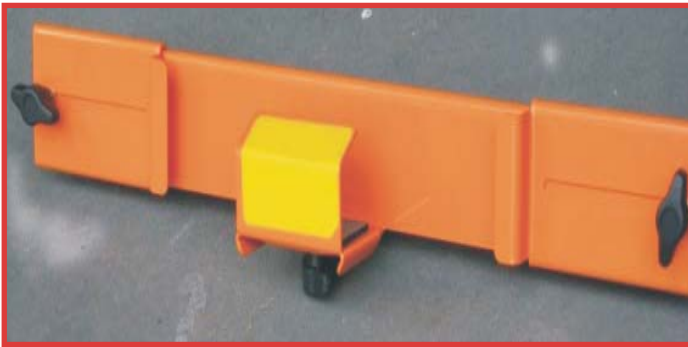
In support of the Victorian CFA, PT Rescue was again invited to participate in the VIC CFA Region 14 Training Day which has become an annual event. This year was well attended with Melton, Werribee & Plenty CFA's as well as a number of SES Units which included Bacchus Marsh who gave a polished demonstration of Rapid Intervention Techniques.



PT Rescue then gave training on New Rescue Techniques concentrating on New Vehicle Technology and the Stabfast Vehicle Stabilisation System in both the Standard and XL Configurations. The afternoon included realistic rescue scenarios with all participants gaining valuable experience.



# Ladder Safe



PT Rescue presents the Ladder Safe, an easy to attach and remove ladder / gutter device for all rung type ladders. A must have for all ladder users.

- Limits ladder movement for confident use
- Australian designed product
- Powder coated
- Rubber seals for gutter protection
- Light Weight construction

**Special Introductory Offer:**

**\$75.00 + GST**

# Lukas Simultaneous Operation Pumps

PT Rescue is pleased to introduce the Lukas range of Simultaneous Operation Pumps. These pumps allow greater flexibility at the scene of a rescue, allowing two tools to be used at the same time. This is especially useful in time-critical rescues. The P620SG Petrol Simo pump has been available for over 12 months, and in that time has become our most popular power unit. Lukas have now added two more compact Simo pumps to this range, with an Electric Simo Pump (P620SE) and a Diesel Simo Pump (P620SD), especially useful on mine sites or other locations where the use of Petrol is prohibited.



## Lukas P620SG Petrol Compact Simo

|                             |                         |
|-----------------------------|-------------------------|
| Motor                       | Gasoline engine 1.9kW   |
| Oil Delivery, Low Pressure  | 2 x 2.6 litres / minute |
| Oil Delivery, High Pressure | 2 x 0.6 litres / minute |
| Usable Oil Capacity         | 2.7 litres              |
| Dimensions (l x w x h)      | 470 x 315 x 455 mm      |
| Weight                      | 24.8 kgs                |



## Lukas P620SE Electric Compact Simo

|                             |                          |
|-----------------------------|--------------------------|
| Motor                       | Electric engine 1.3kW    |
| Oil Delivery, Low Pressure  | 2 x 2.5 litres / minute  |
| Oil Delivery, High Pressure | 2 x 0.66 litres / minute |
| Usable Oil Capacity         | 2.7 litres               |
| Dimensions (l x w x h)      | 530 x 310 x 430 mm       |
| Weight                      | 30.0 kgs                 |



## Lukas P620SD Diesel Compact Simo

|                             |                          |
|-----------------------------|--------------------------|
| Motor                       | Diesel engine 3.3kW      |
| Oil Delivery, Low Pressure  | 2 x 2.84 litres / minute |
| Oil Delivery, High Pressure | 2 x 0.64 litres / minute |
| Usable Oil Capacity         | 2.7 litres               |
| Dimensions (l x w x h)      | 630 x 435 x 500 mm       |
| Weight                      | 54.0 kgs                 |

# Maintenance of High Pressure Airbags



High pressure airbags are a frequently used tool that require regular maintenance. These are robust, powerful tools used to lift, push, press, prise and support the heaviest loads in any rescue situation or natural disaster. Airbags and their accessories require regular visual and functional checks to ensure correct and safe operation. These should be carried out after each use at any incident or training prior to stowage. Visual checks should cover all items, including the airbag, hoses, regulator, controller and air source. Areas to inspect include couplings and connection nipples (free from damage, easy connection and disconnection), hoses (free from cracks, kinks, abrasion, hardening, effects of chemicals and heat), valves (move smoothly, signs of abrasion), gauges (free from damage) and of course airbags (surface free from cuts, punctures, cracks and heat or chemical marks)



Both visual and functional checks are outlined in detail in the Vetter High Pressure Airbags Daily Care & Preventative Maintenance Manual.



It is a requirement that airbags are hydrostatically tested every five years. This is conducted in our Melbourne workshop. Upon completion of a successful test, a Manufacturers Certificate of Conformance is issued, and the airbag is again deemed safe to use. Finally, airbags are constructed of rubber and are subject to natural ageing processes. Even if the bags show no signs of wear or damage they should be replaced after 15 years

For further information, a copy of the Preventative Maintenance Manual or to organise hydrostatic testing of your airbags, please contact PT Rescue's Head Office or your Regional Sales Manager.

Over the past 5 years, PT Rescue has greatly expanded it's product range, to keep up-to-date with the latest in Safety & Rescue equipment. Below is a short list of our most prominent brands, and the products they provide. If you require any further information about products or services offered by PT Rescue, please do not hesitate to visit our website at [www.pthydraulics.com.au](http://www.pthydraulics.com.au) or call our Head Office on (03) 9562 8800.



**Lukas (Germany)** A world leader in hydraulic rescue equipment.



**Airshore (Canada)** Shoring & stabilisation equipment



**Stabfast (Netherlands)** Vehicle stabilisation & racking equipment



**Vetter (Germany)** High tonnage lifting air bags & environmental protection equipment



**Petrogen (USA)** Pioneering the use of Petrol as a fuel in Oxy-cutting torches



**Turtle Plastics (USA)** Cribbing equipment & safety flooring



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