

Lifting bags

Trelleborg Ridderkerk BV



Trelleborg The Company

Trelleborg Ridderkerk is your partner in the design and production of engineered rubber products. Our focus is on the markets of civil engineering, offshore oil and gas, dredging, sewage, building and industry. Trelleborg Bakker is a member of the Trelleborg group – a global industrial group offering leading-edge expertise in polymer technology combined with advanced industrial know-

how of functional solutions and systems to meet our customers' requirements. The Group has approximately 20,000 employees in some 45 countries. The Group's Headquarters are located in Trelleborg, Sweden. Trelleborg AB was founded in 1905 and the Trelleborg share has been included in the Stockholm Exchange A-list since 1964.



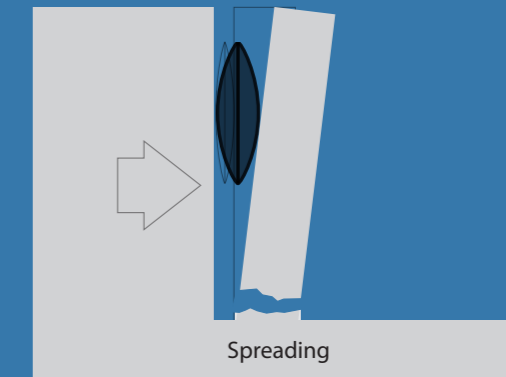
Introduction

Based on 30 years of production experience with these products, Trelleborg Bakker has developed a completely new line of lifting bags for a wide range of industrial applications. The use of high quality materials and craftsmanship in combination with stringent quality control ensures safe operation. The Trelleborg Lifting Bags (TLBs) are capable of lifting loads up to 67 tons with

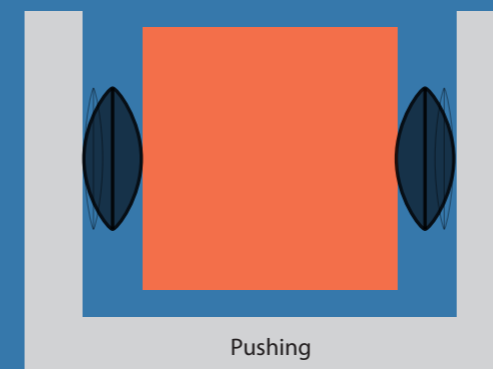
compressed air at a pressure of only 8 bar. In comparison with conventional jacking equipment, lifting bags have major advantages such as the very small insertion height of approximately 3 cm, fast operation, light weight and practically maintenance-free. Typical applications include lifting, moving, spreading and fixing.



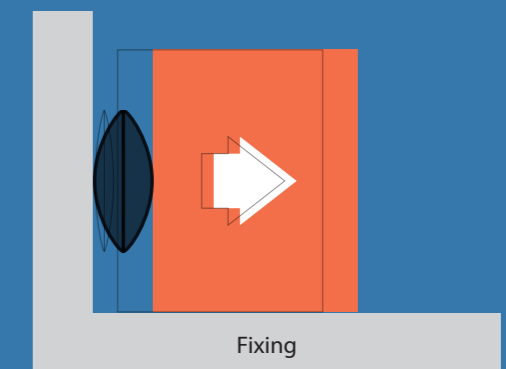
Lifting



Spreading



Pushing



Fixing

Quality, environmental and health and safety policy

The policy at Trelleborg Bakker B.V. is to design, produce and supply rubber products to match the desires, requirements and expectations of the customer.

The basis of our policy is the Trelleborg Group 'Code of Conduct' policy statement on our web site www.trelleborg.com. During the design of products and processes, the environment and health and safety comprise key aspects of the process.

Trelleborg Bakker B.V. uses an integrated management system in line with international standards such as ISO 9001, ISO 14001 and SCC** 2008/05 Petrochemical



Principle

TLB lifting bags operate as inflatable bags at a maximum pressure of 8 bar. They function according to the following principle: Force (F) = Pressure (P) x Area (A). So the lifting capacity is proportional to contact area. Because the contact area decreases as the bag is further inflated, the reaction force also decreases. Lifting bags are usually inflated with compressed air and in some cases with water or grout.

The amount of energy in compressed air can be enormous and to avoid potentially dangerous situations it is very important to follow the operation instructions and check all parts before use.

Properties

TLB lifting bags are thin and light lifting devices made of high quality materials. The rubber compounds are reinforced with Aramide fibres. These fibres are stronger, lighter and more flexible than steel. The bags are provided with profiled external surfaces to enable safe stacking of two bags on top of one another

to effectively double the jacking height. We strongly discourage using more than two bags on top of each other. The bags have quick-release couplings for connection to the air supply or accessories.

Advantages

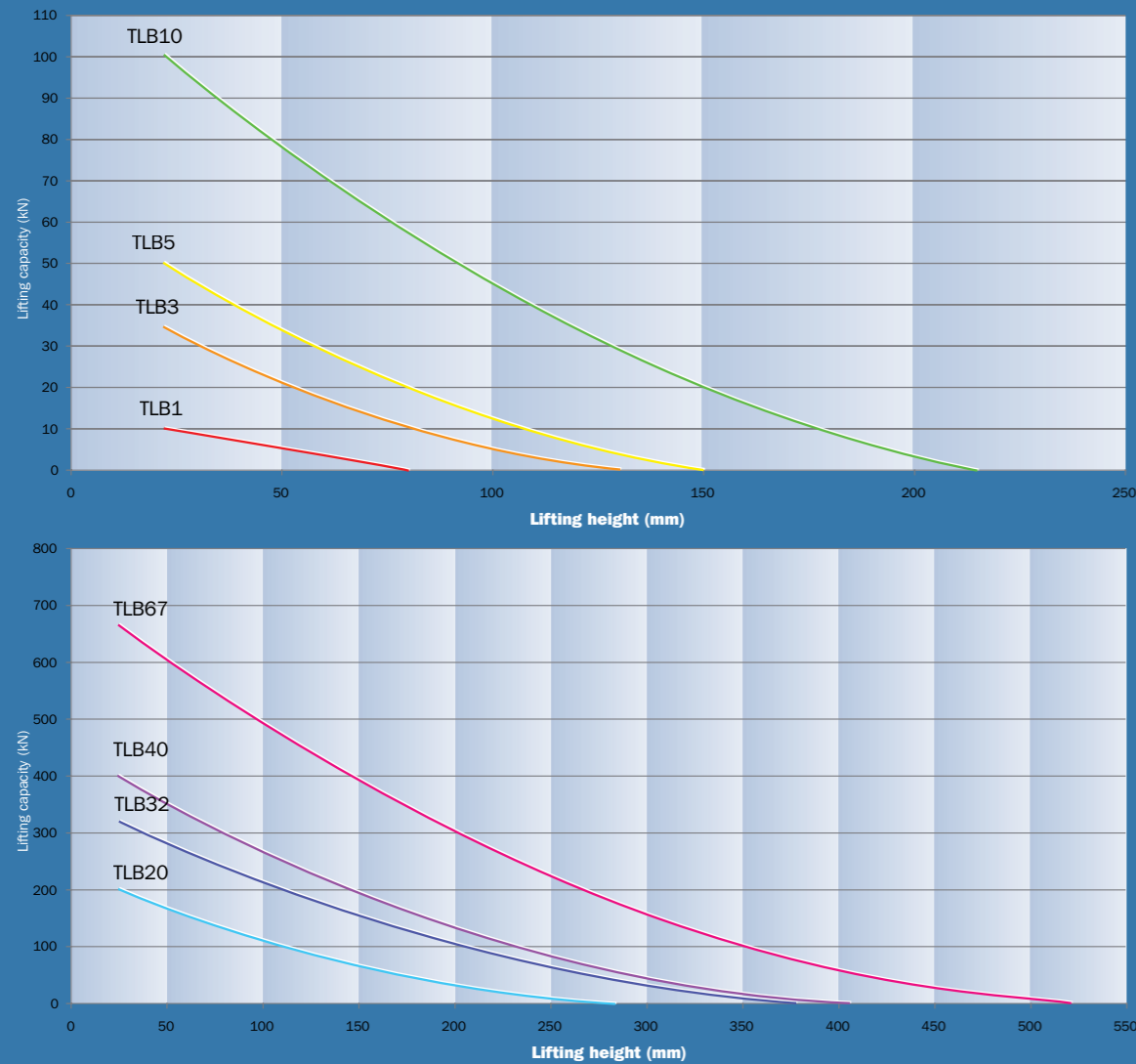
- Can be used in the smallest of spaces because the bags are very thin;
- Light and easy to handle compared with other jacking equipment;
- Simple and quick to use with compressed air;
- Maintenance-free because they have no sliding parts.



Type	Article code number	Dimensions (Length x breadth x height)		Maximum Lifting capacity		Maximum Lifting height		Air volume	Water volume	Weight
		mm	inch	kN	Lbs	mm	inch			
-	-									
TLB 1	761.10.01	150 x 150 x 22	6 x 6 x 0,87	10	2248	80	3	6,3	0,7	0,6
TLB 3	761.10.02	228 x 228 x 22	9 x 9 x 0,87	32	7194	130	5	16,2	1,8	1,5
TLB 5	761.10.03	270 x 270 x 22	11 x 11 x 0,87	50	11240	150	6	22,5	2,5	2
TLB 10	761.10.04	380 x 380 x 25	15 x 15 x 0,98	100	22480	215	8	76,5	8,5	4
TLB 20	761.10.05	508 x 508 x 25	20 x 20 x 0,98	200	44960	290	11	189	21	7
TLB 32	761.10.06	658 x 658 x 25	26 x 26 x 0,98	320	71936	380	15	450	50	13
TLB 40	761.10.07	708 x 708 x 25	28 x 28 x 0,98	400	89920	405	16	558	62	15
TLB 67	761.10.08	908 x 908 x 25	36 x 36 x 0,98	670	150616	520	20	1206	134	24

Explanation of lifting diagrams

The lifting capacity decreases as the inflation height increases. Please check the lifting diagram in order to determine the force that can be achieved at a specific height.



Accessories

Trelleborg Ridderkerk also offers a comprehensive range of accessories that promote the safe and durable use of Trelleborg Lifting Bags.

A single control box is used to inflate the lifting bag. This sturdy unit, manufactured from aluminium, is equipped with two pushbuttons and an integral pressure-relief valve set to 8 bar. A convenient twin control box is available for the

simultaneous inflation of two lifting bags. This control box is equipped with a belt that is worn around the waist to enable the operator to use both hands to operate the lifting bags' controls. The pressures indicated by the two manometers can be read at a glance. The control box is enclosed in a plastic housing and, self-evidently, is also equipped with an integral pressure-relief valve set to 8 bar.



Safety

The safety of such inflatable products is of the utmost importance. All our lifting bags are pressure-tested and thoroughly examined before delivery. Robust technical design,

high quality materials and craftsmanship in combination with strict quality controls ensure that TLBs provide years of reliable service.

We recommend the use of hoses of different colours to avoid confusion when operating the controls of the two lifting bags. In addition, we recommend that these same colours are used for the hoses connecting the compressed-air supply to the control box. Our range of accessories includes air hoses in three different colours.

We also supply shut-off valves to maintain the pressure in the lifting bag on disconnection of the air supply hose.

Description	Artikel nr.	Note
Single control box, CS-1	761.11.02	Set to max. 8 bar
Twin control box, CS-2	761.11.04	Set to max. 8 bar
Shut-off valve	761.11.11	
Air hose, red	761.11.21	Length 10 m, rupture pressure 25 bar
Air hose, blue	761.11.22	Length 10 m, rupture pressure 25 bar
Air hose, yellow	761.11.23	Length 10 m, rupture pressure 25 bar



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