

# Operating Instruction Manual



Road Plate
Lifter &
Weld On
Plate





Manufactured and tested for and on behalf of:

**Hoisting Equipment Specialists Pty Ltd** 

31 Mangrove Lane Taren Point NSW 2229 Australia Phone: 1300 792 464 www.hesgroup.com.au www.ozblok.com.au Our Road Plate Lifters meet or exceed AS 4991



### **FIVE YEAR LIMITED WARRANTY**

OzBlok products are guaranteed to be free of defects in materials and workmanship. If this Road Plate Lifter fails during the first 5 years of operation due to defective materials or workmanship it will be repaired or replaced at our discretion. Normal wear and tear on moving parts is excluded from this guarantee. This guarantee does not apply to any product showing signs of misuse, overloading, alteration or improper maintenance.

### **WARRANTY POLICY**

Any product for which there is a warranty claim, must be returned prepaid to an authorised OzBlok warranty depot along with proof of purchase.

For further information on OzBlok products, please contact your local distributor.



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### SAFETY INFORMATION

It is the responsibility of the owner/operator to install, inspect, test, maintain and operate OzBlok Road Plate Lifter in accordance with Australian Standard AS4991.

These general instructions deal with normal installation, operation and maintenance situations encountered with the product description herein.

This product should not be installed, operated or maintained by any person who has not read all the contents of these instructions. Failure to read and comply with these instructions or any warnings or limitations noted herein can result in serious bodily injury ordeath, and/or property damage.

Only trained and qualified personnel shall operate and maintain this equipment.

Equipment described herein is not designed for, and should not be used for lifting, supporting or transporting people.

Modifications to upgrade, re-rate or otherwise alter this product can only be authorised by the manufacturer.



The OzBlok heavy duty Road Plate Lifter is the perfect solution for the effortless and safe handling of heavy steel road plates. The dovetail design ensures optimal user safety, job efficiency and equipment reliability.

Simple yet effective in design, each OzBlok Road Plate Lifter system compromises of a receiver plate and a lifting tool. Each steel trench plate has the receiver flush welded at the centre of the plate, greatly reducing potential trip hazards and allowing for the plates to be stacked on top of one another for convenient storage.

To lift a plate, the lifting tool is inserted into the receiver at the centre of the plate and locked into position before a hook is attached to the middle of the lifting tool. With no additional shackle required, use of the Road Plate Lifter is simple, quick and most importantly safe. With the lifter connecting directly with the plate, maintenance of threads is eliminated, and no additional routine is maintenance in required.

Due to the design of the OzBlok Road Plate Lifter, the potential for serious injury to the user is eliminated as there is no longer any need to reach under the road plate, nor use tools such as crow bars to lift the plate. The lifting tool and receiver plate are both heat-treated to satisfy all applicable Australian Standards and have a working load limit of 5 tonnes with a minimum 5:1 safety factor.







### **WORKING REQUIREMENTS**

The OzBlok Road Plate Lifter is not suitable for side pulling or pushing and should only be used straight up and down in a vertical line.

The bottom 'dove tail' portion of the lifter will become stressed if the tools are pulled or pushed to the side or along the ground when attached to a steel plate. This could result in breakage or cracking, and/or pinching of the centre plate.

The Road Plate Lifter's longevity will be limited if it is misused, with the working load limit of the tool compromised and unknown.

### LARGE PLATES

For stability and to reduce stress, it is advised to use two Road Plate Lifters with a spreader bar when working with extra long plates. The longest section of the plate should be divided into thirds, with a weld in plate inserted on each third division. In some circumstances, for additional rigidity, road plates can be fitted next to one another.

### **WELD IN PLATE**

The female connector on the weld in plate can be effortlessly welded onto road plates that are being manoeuvred. When installed correctly, the weld in plate reduces trip hazards by sitting flush to the road plate and also allows for easy storage.

The weld in plate is designed for quick and easy installation, taking approximately 20 minutes for a 25mm thick Grade A36, A50 or A992 steel road plate.

We recommend load testing of the plates once welding is complete. Please contact Hoisting Equipment Specialists on 1300 792 464 to arrange on-site testing.

### **MAINTENANCE AND INSPECTION**

In accordance with Australian Standards, the Road Plate Lifter should be inspected annually (and tested if required). No additional ongoing maintenance is required.

### Road Plate Lifter







Bevel Angle:

Root Gap:

Root Face:

40° Inc.

1.5-3mm

Pipe Diameter:

Thickness Range:

Combined Thickness:





# **WELDING INSTRUCTIONS**

Project: Compar	ny Standard	d Procedure	PQR No.: 1851	WPS No.: 1851		
Welding Code:	AS/NZS 15	54.1-2014, 1554.5-2014	Material Grade:	AS3678 Gr. 350 to AS1442 M1030		
Welding Process:	GMAW		Thickness:	16 to 20mm		
Position:	1G (PA)		Material Type No. / Group No.	o. 4 / 5 to Unassigned		
Joint Type:	Single Beve	el Partial Pen. (13.5mm)	Material Heat No:	n/a		
	Joint Pre	paration	Pass Sequence			
16mm	3mm 1.5mm	20mm	3 2 1			
Joint Tolera	inces	Diameter - Thio	kness Range	Thermal treatment		

Preheat °C:

P.W.H.T.:

Inter-pass °C:

n/a

8-32mm

Max 64mm

≥10°C See note

≤300°C

				Con	sumable	Details a	nd Welding	Parameters	3			
Consumable Classification:			B G 49A	B G 49A 3U C1/M21/M24 S6			Technique:		Forehand / Push			
Trade Name:				n/a	n/a			Electrode Stickout:		12-18mm		
Batch No:				n/a	n/a			Metal Transfer:		Globular		
Tungsten Type/Size:				n/a	n/a			Purge Gas / Flow Rate:		n/a		
Shielding Gas:				Argon / 1	Argon / 16% CO2 / 3% O2			Interrun Cleaning:		Grind / Brush		
Flow Rate:				17-21Lp	17-21Lpm		Flux Class / Batch:		n/a			
Run No.	Side	Pos.	Size	class	Gas/FI ux Type	Amps	Volts	Polarity	Travel Speed mm/min	Interpass Temp °C	Heat Input Kj/mm	
1	1	1G	0.9mm	G 49A S6	Argon / CO2 / O2	167-203	25-27	DC+	244-330	Max 300°C	0.74-1.39	
2	1	1G	0.9mm	G 49A S6		176-214	27-29	DC+	296-399		0.69-1.30	
3	1	1G	0.9mm	G 49A S6		179-217	27-29	DC+	234-316		0.89-1.67	

