

Introduction

The Otraco Sealing Clamps provide a safe, consistent and time effective method of achieving an air-seal for tyres mounted on double gutter and OVM / integral gutter type rims.

Tyres fitted to double gutter and integral gutter/OVM type rims can sometimes be difficult to seal due to the inability of the pre-mounted bead seat bands to come into contact with the sealing o-rings on the rim.

Otraco Sealing Clamps enable the outer facing bead seat band to be secured against the outer o-ring, whilst the tyre handler manipulates and secures the inner bead seat band against the inner o-ring, allowing an air-seal to be achieved. When an air-seal is achieved, the tyre can be inflated safely and efficiently, without the need to employ other 'trouble-shooting' methods.

The plate thickness on the 6th Generation design has been increased to support higher working loads and minimise the likelihood of damage as well as to reduce fatigue. The screw shaft diameter has also been reinforced to handle higher levels of stress compression.

The Otraco Sealing Clamps have a combined working load limit of 1,500 kgs (500 kg/unit).

The set is comprised of 3 units for installation in a "Y" pattern and ensure an even load distribution on each clamp.

Features and Benefits

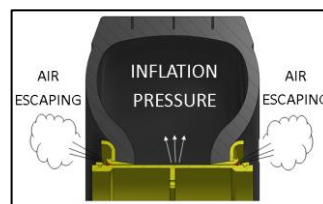
- Provides a reliable and guaranteed method for sealing a tyre efficiently.
- Minimises the interaction between personnel and tyre handler with a positive effect on safety.
- Minimises downtime considerably. The task of sealing a tyre without adequate tooling can take hours.
- Eliminates the use of non-Fit-for-Purpose equipment to complete the task i.e. bread breakers, bead breaker jaws etc.
- The tool is universal and fits a variety of rim specifications on site. Suitable for IGLR, DGS, SVM, OVM and Topy.

Technical Data

Operating Data (per unit)	Metric	US
Work Load Limit	500 Kg	1,102 lb
Tare Weight	6.5 kg	14.3 lb
Operating Temperature	-40°C to 80°C	-40°F to 176°F

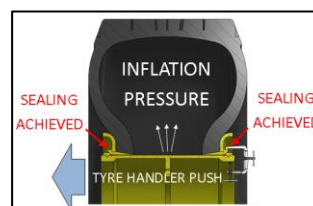
Technical Data	
Material	Steel
Finish	Plain
Maximum Aperture	150 mm (5 7/8")
Maximum Depth	90 mm (3 1/2")
Temperature Range	-40°C to 80°C
Application	Earthmover tyre and rim assemblies on double-gutter configurations Titan OVM, Rimex MES DGS/IGLR & Topy
Warranty	Defects in material and workmanship

Application



1. A tyre that is difficult to seal. Inflation air escapes from the tyre between the pre-mounted bead seat bands and o-rings on both sides, preventing an air-seal from being achieved.

2. Three Otraco sealing clamps are applied to secure the outer facing bead seat band against the outer o-ring.



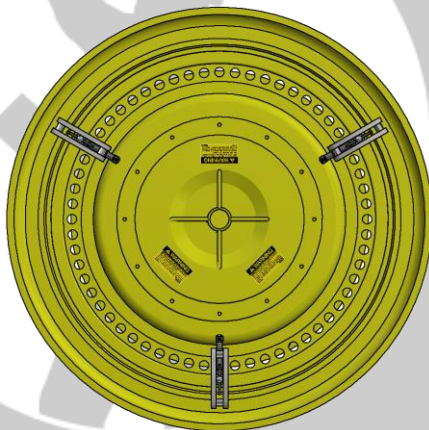
3. The tyre handler is used to grab and move the tyre and bead seat band towards the inner o-ring. Result - an air-seal is achieved and the tyre is able to be inflated.

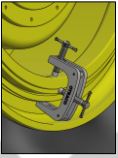


Installation

Three clamp units are required per application, installed 120° apart for an even load distribution (refer picture below).

Two clamps shall be installed on the top half of the assembly. Always ensure that the clamps are sitting square on the rim base. The bottom throat of the clamp's body should be parallel to the edge of the rim and the threaded shafts perpendicular to their contact surface.

Failure to ensure a square sitting can cause the tool to dislodge unexpectedly resulting in damage or injury to personnel.



- Once the pre-mounted tyre is on the rim and the lock-ring is installed, grab the tyre with tyre handler and pull it back firmly to ensure that the bead seat band is in full contact with the o-ring.
- Engage the clamp's jaw on the bead seat groove and move the clamp into position. Ensure both screw shafts are wound back sufficiently to allow enough clearance for the clamp's body to be in a square position against the rim base. 
- Whilst holding the clamp in a true vertical and square position against the rim base, screw in the radial shaft until firm contact is made with the rim base and the clamp is secured in position. 
- Screw in the lateral shaft until firm contact is made with the rim. Adjust both screw shafts as required to achieve a square seating and secure attachment to the components. Do not over-tighten. 
- Repeat the clamp installation procedure for the remaining two clamps.

Tyre Sealing Operation

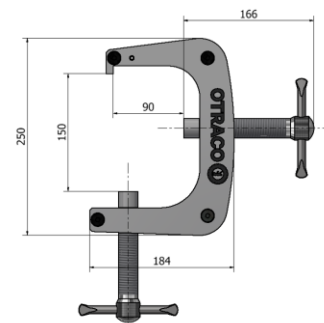
- Connect the tyre inflation tool to the valve assembly and turn the air supply on at the remote inflation station or device to begin sealing the tyre.
- While grabbing the tyre in the centre of the tread with tyre handler, slowly move the tyre forward so that the inner bead seat band is in contact with the inner o-ring and air seal is achieved.
- The tyre handler operator shall release the grab on the tyre and reverse the tyre handler back.



WARNING

- Incorrect installation or failure to remove components after the task is completed can result in serious damage to equipment and/or injury to personnel.
- Serious injury or fatality may occur if rim components disassemble whilst personnel are in the line of fire during inflation. Never stand in the line of fire when a tyre is being inflated, nor leave the inflating tyre unattended.
- The inflation pressure can cause a mechanical failure of the tyre handler arms with potential for serious injury if the tyre is squeezed by the arms during inflation. Never use a tyre handler to hold an inflating tyre once the beads are sealed (or an air-seal has been achieved).
- Falling objects have the potential for serious injury and/or equipment damage. Always ensure that tooling that will remain attached above head height is properly secured according to the operating instructions. Wear head protection and do not place yourself in the line of fire.
- Use correct manual handling techniques such as keeping back straight, knees bent, secure grip and keeping load close to body. Always use mechanical aids if possible and seek help to lift objects that are beyond your personal capacity.

Dimensions



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