

Our Experience: Sling & Hoist Compatibility

Pelican Manufacturing has been making and supplying Slings throughout Australia to government and private hospitals, nursing homes and special care organisations since 1989. We are constantly working with our customers to make specially designed, one-off slings for disabled people. We provide Slings for virtually all brands of hoists, i.e. Metal Hook attachments, Tilt Frame Keyhole Plate attachments, and Stand-Up Hoists. Our designs include Toileting Slings, Full Body Slings, Slings to be left under patients, and Stand-Up Slings. The weight tests we have completed exceed the Australian Standard 3581.



Australian, New Zealand and International Standards



Pelican Manufacturing is a Quality Endorsed Company working to:

Australian, New Zealand and International Standard AS/NZ ISO 9001 Quality Management Systems

This is a Standard with regard to the running of a company, which Pelican has had for over fifteen years. Pelican also do NATA weight testing (National Association of Testing Authorities, Australia) to exceed the Australian Standard for our slings.

All slings made or sold in Australia should be made to:

Standard	Year	Name
AS 3581	1988	Mechanical aids for patient lifting and moving – safety requirements
AS 2569.2	1988	Selection and use of mechanical aids for patient lifting and moving
AS ISO 10535	2002 updated in 2011	Hoists for the transfer of disabled persons – requirements and test methods

AS ISO 3581 is based on the British Standard BS3827 from 1979 – Mobility, Manually Operated Patient Lifting Devices. Section 3.2 (b) states that the sling label shall include “the model number or name, of the hoist for which the sling was designed and the safe working load of the sling”. This requirement clearly fails in two areas:

- 1) It fails to take into account the considerable cost implications for Sling manufacturers such as Pelican, to print new labels on expensive, specially designed launderable material, each time a new hoist manufacturer comes into existence.
- 2) It fails to recognise and allow for companies buying out other companies and the implications for their sling/hoist recommendations.

AS 2569.2 does not mention anything about sling labeling. We have been told by Australian Standards that this has been superseded by AS ISO 10535.

AS ISO 10535 does not include this requirement under Section 4.11.2 – Marking (for the hoist and body support unit). Section 7.9 – Marking (for the non-rigid body support unit) states that “if the body support unit is designed only to be used on one dedicated type of spreader bar, a marking shall indicate this”. Pelican complies with this requirement.

Liability Insurance & Manufacturer's Responsibility

All products made by Pelican Manufacturing are covered in our Product Liability Insurance Policy. Claims by any hoist manufacturer's representative, stating they would not be responsible if the hoist manufacturer's sling is not used on their hoist, may be very misleading, or possibly unlawful, implying a restrictive practice. Ask for written confirmation and if this is provided, contact Pelican. Also ask if their slings can be used on other manufacturers' hoists. The hoist manufacturer could be responsible if there is a fault with their hoist and likewise Pelican Manufacturing could be responsible if there is a manufacturing fault with a Pelican Sling.

Definitive Conclusion

When the British Standard BS 3827, which Australian Standard AS ISO 3581 is based on, was first made over 30 years ago, possibly firms making hoists also made their own Slings. Since then other industrial sewing companies, like Pelican, have designed their own Slings to work safely with a variety of different hoists. The Standard needs to recognise this and not allow a restrictive practice to continue for Australian companies.

The mention of using the same manufacturer's Sling on the same manufacturer's hoist is only in the 1988 Standard AS ISO 3581, and is it not referred to in the AS 2569.2 and the more up-to-date ISO 10535 from 2002.

With any Australian Standard, it must be remembered that any requirements stated in the Standard are only relevant to satisfying that Standard. They are not law. Any requirements set out by the Australian Government TGA (Therapeutic Goods Administration) **is law**. There is no Australian Government or TGA ruling stating that only the hoist manufacturer's slings must be used on their hoist.

The American Association for Safe Patient Handling & Moving conducted a meeting in 2013, the results of which can be found here: <http://aasphm.org/wp-content/uploads/AASPHM-Sling-Meeting-Notes-2013.pdf>

Pelican Notes

Imagine if only the hoist manufacturer's Sling could only be used on their own hoists.

A hospital or nursing home may have five different brands of hoists. They may need a medium sling for a patient, but the hoist for this sling may be in another section of the hospital. Should the nurse then leave the patient to try to find the correct hoist? On another occasion the medium Sling may be in the wash and there may be another Sling in the room that is suitable for the patient. Should the nurse use this suitable sling on a different brand of hoist or should they wait for the sling to be returned from the laundry? To insist on having the same brand hoist is unrealistic and unnecessary.

Pelican make many Slings that may be more comfortable, or a better fit for the patient than the different hoist manufacturer's Slings. The nurse may prescribe a Pelican Sling for the patient as it can be more suitable for the patient's condition. We do not make hoists as we are a specialised sewing company, not an engineering company. Many of the engineering companies who make hoists, have their Slings made by outside contractors.

Pelican also make many special custom-made Slings for disabled people, something the larger hoist manufacturers may not be able to provide. Some of the larger Australian manufacturers have their Slings made in China or other countries overseas, so making a special size is not an option for them.

Many years ago a large government hospital wanted to buy several Tilt Frame Hoists but the Slings were very expensive, so the government hospital asked Pelican to make the Slings to use on the hoists. The hoist manufacturer did not like this as they were charging a very high price for their Slings as they did not have any competition for the Slings. If you could only use the same brand Sling and hoist the cost of replacement Slings could be expensive as the hoist manufacturer has a captive market.

If a hoist manufacturer is trying to sell their new brand of hoist to a hospital, the hospital may ask them if they can still use their old slings or will they need to throw them away and buy new slings. We imagine the hoist supplier would not be able to sell their hoists if the hospitals had to buy a whole range of new Slings to go on their hoist.

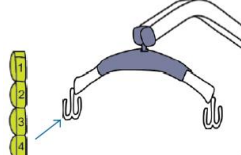
To fit a Sling to a hoist there are normally two main methods. The standard method is to use webbing loops that attach to hooks on the spreader bar. The other method is to have a Tilt Frame. These have little metallic mushroom lugs on them that a Keyhole Plate Sling clips onto. The TGA Ruling states that the correct webbing or Keyhole Plate Sling is used on the correct hoist designed to take these fittings – See the warnings below.

Some years ago the motor industry tried to scare the public by saying that non genuine spare parts or servicing would invalidate the warranty on their brand of cars. The Consumer and Trade Practice Departments had to be quite firm with the car manufacturers as it was misleading to claim this. The petrol, oil, tyres and other items that can be on a car will affect a car far more than fitting a webbing loop on to a hook on a hoist. Imagine if you could only use Ford petrol in a Ford car or Holden tyres on a Holden car. When a nurse is selecting a Sling for a patient, it is important to be able to select from a large variety of the different manufacturers and they should not be restricted to only the type of Sling the hoist manufacturer makes.

Pelican Warnings that are printed on the sling labels

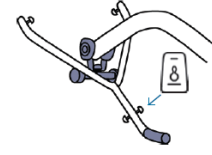
'Coat Hanger Yoke' Style uses Webbing Loops

Slings with webbing loops must be used on a Lifting Hoist that has lifting hooks. Select the loops to give a safe sitting upright or reclined position.



'Tilt Frame' uses Keyhole Plate Slings

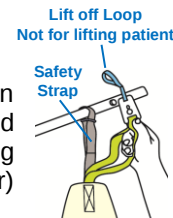
Slings with plastic Keyhole Plates must be used on a hoist that has a 'tilt frame' with four mushroom lugs which the Keyhole Plates click onto.



It is very important that the correct Sling attachment is used on a hoist. This should be the information which the Australian Standards and any authorising body should be trying to reinforce in their documentation and advice. If in doubt, contact Pelican for guidance.

Pelican Keyhole Plate Safety Straps

Keyhole Plates attach to various Tilt Frame Hoists that have a mushroom lug type fastening. There have been many accidents around the world with loose Keyhole Plates coming off or breaking. The Keyhole Plates should give a firm 'click' when applying and removing. If they are a loose fit, they should be replaced, as loose fitting Keyhole Plates may accidentally come off or be dislodged by patients. The Pelican Safety Straps (patent applied for) which are fitted to all Pelican Keyhole Plate Slings, help prevent a serious accident.



Key points:

- <http://aasphm.org/wp-content/uploads/AASPHM-Sling-Meeting-Notes-2013.pdf>
- **No Government or TGA ruling states that only the hoist manufacturer's Slings must be used on their hoist**
- **Use Webbing Loop Slings on Metal Hook 'Coat Hanger' type hoists**
- **Use Keyhole Plate Slings on Keyhole Plate Tilt Frame type hoists**
- **Claims by any manufacturer or anyone else that the same manufacturer's sling has to be used on their hoist may be misleading and deemed a 'restrictive practice' and therefore unlawful under Australian Law**