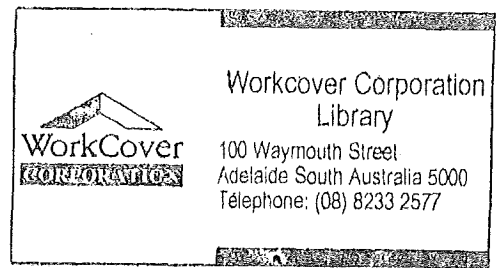


# **"Do-it-yourself" Roll Out Tarps Project Final report to WorkCover**



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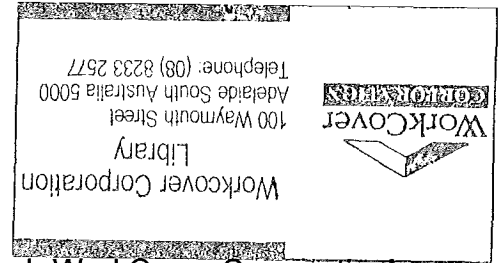
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## Executive Summary

The *Do It Yourself Roll-Out Tarps Project* was funded through WorkCover Corporation's Small Grants Projects using funds designated for projects aimed at improving health and safety in South Australian workplaces.

A total of \$9,900 was allocated to the South Australian Farmers Federation.

The aim of the *Do It Yourself Roll-Out Tarps Project* was for the South Australian Farmers Federation and Ausbulk Limited to work collaboratively to produce a brochure encouraging farmers to use roll out tarps to cover their loads, thus preventing the hazard created by the practice of climbing on top of their truck to manually secure the tarp.

The objectives of the project were to:

- Improve the awareness of farmers carting grain in regards to the dangers of climbing on top of their trucks to secure tarps over loads
- Create cost effective and soundly engineered designs for converting a tarp to a "roll-top" or "roll-out" (ie ground operated) device
- Making these designs widely and freely accessible to the farmers of South Australia, and thus working toward reducing the number of injuries caused by this identified hazard.

Strategies of the project were to:

- Approach local engineering firms to produce simple and cost effective designs for roll out tarps that could be made by the farmers themselves
- Have these designs converted into technical drawings and tested for their soundness
- Develop a brochure that highlighted the dangers of climbing atop trucks to secure loads and provide the web-site addresses where the designs for the roll out tarps could be accessed (with hard copies available from the S.A. Farmers Federation)
- Collect verbal feedback from recipients of the brochure to ensure that the designs met expectations.

The implementation of the *Do It Yourself Roll-Out Tarps Project* has resulted in the production of a high quality brochure, launched around the state as a part of Farm Safety week and distributed to all Ausbulk Shareholders and branches of the Women in Agriculture and Business and the Advisory Bureau of Agriculture. The tarp designs are available on line at the AusBulk and WorkCover web-sites, and will be added to the SA Farmers Federation site as a part of its updating process in the following months.

The project has also led to the development of a close working relationship between the SA Farmers Federation, Farmsafe SA and AusBulk. Following the completion of the *Do It Yourself Roll-Out Tarps Project*, AusBulk and SA Farmers Federation have continued to work toward ensuring the designs are as easy to access and easy to construct as possible.

The brochures will continue to be dispersed at Managing Farm Safety courses and other safety events attended by the MFS course coordinator. They are also available at both the SA Farmers Federation and AusBulk Ltd.

The development of the *Do It Yourself Roll-Out Tarps Project* has demonstrated the effectiveness of collaboration within the industry to produce high-quality and farmer friendly safety material. The brochures and the designs were devised with the pooled knowledge of experts both in agriculture and engineering.

## **Background**

The South Australian Farmers Federation and Farmsafe SA are dedicated to reducing the large number of workplace related injuries that occur within the rural sector each year. The grains industry has been identified as particularly dangerous, possibly because of the variety of hazards the average grain farmer is exposed to in the course of their work. One such hazard occurs when grain farmers climb on top of their trucks to secure a tarp over a load of grain.

AusBulk Ltd has identified accessing the top of the vehicles as a major hazard. This is largely due to the frequency of this activity during harvest season, when there are approximately 300,000 truck movements at the silos.

There is a simple way of eradicating this hazard by converting the tarp to a ground operated ("roll-out") design, which enables the farmer to stay on the ground while covering their load. However, new tarps are expensive and therefore not likely to be purchased by farmers to secure their load.

The SA Farmers Federation and Farmsafe SA identified the need to inform grain growers of safe and cost effective ways to secure roll out tarps to their vehicles. It was decided that the most efficient way of disseminating the information to grain farmers was to create brochures featuring detailed and soundly based engineering solutions which could be implemented by the individual farmers or by the local engineering entity using their existing tarp (the tarp itself is a major component of the cost of a roll-out system). It was envisaged that these brochures would be handed out to grain farmers upon entering an AusBulk storage site, as well as being dispersed through various farming networks such as SA Farmers Federation, AusBulk, the Advisory Bureau of Agricultural and Women in Agriculture and Business.

In this way, farmers could access easy to make designs for roll-out tarps using their existing tarp and alter their vehicles at a minimum cost. This would result in the eradication of the hazard created by non roll-out tarps.

## **Methodology**

The target group of grain farmers who cart grain to silos was identified by AusBulk and SA Farmers Federation in July 2001.

Originally, Ms Corkhill of SA Farmers Federation was to be the Project Officer, but owing to her absence due to illness at the outset of the project, Ms Ann Price took over this role. Mr Steve Standen and Ms Elise Thomas of AusBulk offered their time, expertise and office equipment to assist with the development plan. Thus, the co-ordinating committee for this project was made up of Ms Price, Mr Standen and Ms Thomas.

The Committee met on a regular basis to discuss the content and form of the brochure.

The following description is an account of the activities undertaken during the Roll-out Tarps Project. Several aspects of the methodology had to be altered during the course of the project to ensure its pragmatic applicability.

### **Tarp Design**

Eight engineers around the state were contacted and briefed on the Project's aims. Of these, Bute Engineering and Brentwood Engineering responded with outlines of possible designs.

These designs were then forwarded to the Kondinin group. The Kondinin group provide information for agricultural enterprises through-out Australia. Kondinin redrafted the outlines into technical drawings and tested their engineering principles. They also established the suitability of both designs. As supporters of farm safety, they generously halved the fee that they would normally charge for such services.

Both Brentwood and Bute Engineering gave permission for their designs to be published on the AusBulk, SA Farmers Federation and WorkCover websites.

### **Brochure Design**

Representatives from SA Farmers Federation and Steve Standen of Ausbulk met regularly to discuss the designs and implementation of the project. Ausbulk undertook the design of the brochure (originally to be done by the WorkCover marketing department) as a part of its industry contribution.

Because the designs for the tarps were more complicated than first thought, and after speaking with designers and printers it was decided that it was impractical to put plans of the required detail onto a fold out brochure.

The most practical solution was to have the technical engineering designs put onto the AusBulk, SA Farmers Federation and WorkCover websites, as well as having hard copies available to be posted or faxed to those without internet access.

It was decided that the brochures would contain information relating to the safety aspects of the tarps explaining why they are a safer and easier option than the traditional tarps and encouraging their use. The website addresses and SA Farmers Federation's contact

address were to be highlighted so that the reader is still easily able to access the tarp design.

Cartoons were used to emphasise the safety issues that arise regarding the use of tarps on grain trucks. The coordination committee met with the cartoonist John Stoneham to discuss the most effective design for the brochure. It was decided that Mr. Stoneham would draw a series of cartoons depicting a farmer falling from the top of his truck while trying to pull a tarp over it, and a farmer standing safely on the ground using a roll top tarp. Ms Thomas completed the draft of the text to be included in the brochure.

With both WorkCover and SA Farmers Federation approval, 32,000 copies of the brochure were printed and launched at Farm Safety week.

The technical designs for the tarps are now available on line at the AusBulk and WorkCover websites. Initial feedback indicates that the designs require further information regarding the exact method of constructing the tarps should be added so that farmers with minimal engineering knowledge are still able to make the tarps themselves. The Coordination committee is currently working to address this.

## Outcomes and findings

The Project aimed to produce a brochure presenting information for farmers who cart grain to silos about ground operated tarps that could easily be converted from their non roll out tarps. Originally, the brochure was to contain designs for the tarps themselves, but as this proved impractical the designs were put into on line format (currently being placed on the relevant websites). Instead, the brochure focuses upon informing farmers of the benefits of the roll-out tarp.

Response to the brochure was vast, with Ms Price and Mr Standen receiving nearly 100 phone calls from interested farmers in the weeks following its launch.

The implementation of the "Do It Yourself Roll-Out Tarps Project" worked toward reducing the incidences of injury caused by the dangerous practices of climbing on top of the vehicle to secure the tarp through;

- Commissioning engineering firms to produce designs for roll-out tarps that are easy to make, cost effective and safely designed, and having these designs freely available via websites and hard copies at the SA Farmers Federation
- Producing brochures informing grain farmers of the benefits of using ground operated tarps in plain, easy to read English with accompanying cartoons.
- Promulgating the brochures through-out the grain industry to raise awareness of the dangers of manual tarping and the benefits of the roll-out tarp.

An unintended consequence of the project was that due to Ms Corkhill's extended illness Ms Price spent a large portion of her time pursuing various contacts and attending meetings with Ausbulk. Given the increased contribution from Ausbulk in the designing and printing, the project was to come in under budget. WorkCover therefore allowed an adjustment to be made in the project budget to pay for the time of the Project Officer, which amounted to a total of 20 hours (see Annexure A for budget details).

Another unforeseen aspect was last years late grain harvest, which resulted in the project beginning later than originally planned.

However, despite these setbacks the project was successful in producing informative and eye-catching brochures (see Annexure B).



## **Evaluation**

Throughout the project several evaluative processes were put in place to ensure that the project would reach its desired outcomes. These relied mainly on the direct feedback that the co-ordination committee collected over the course of creating and promoting the brochure.

Strategies for evaluation included;

- The Project Officer discussing safe tarping practices at various farm safety events she attended as part of her role as MFS course coordinator
- Liaising with Kondinin to ensure the technical drawings of tarp system conversion were engineered soundly
- Regular meetings of the co-ordination committee to discuss the progress of the brochure
- Circulating drafts of the brochure to the SA Farmers Federation Industrial Association, Farmsafe SA and WorkCover for feedback as to its effectiveness
- Speaking to recipients of the brochure about the technical designs and the brochure itself.

Following the initial mail-out to AusBulk shareholders, the co-ordination committee will meet to discuss the nature of the feedback that has arisen as a result of over 100 phone calls from interested farmers. Any modifications or refinements will again be circulated to WorkCover and SA Farmers Federation.

## **Feedback and reporting**

During the course of the project the Project Officer met regularly with Steve Standen and Elise Thomas of Ausbulk to discuss the brochure's lay out, text and production.

Progress reports were circulated to both Farmsafe SA and the SA Farmers Federation Industrial Association, and any suggestions duly incorporated.

The Project Officer also met with the SA Farmers Federation's Legal and Industrial Officer and the Industrial Assistant to update them on the progress of the project.

## Implementation

Some 100 calls were received by both SA Farmers Federation and AusBulk from farmers interested in pursuing a roll-out tarp mechanism for their trucks following the implementation of the *Do It Yourself Roll-Out Tarps Project*.

The project has been implemented through a variety of established networks. These networks included AusBulk, the SA Farmers Federation, Farmsafe SA, the Advisory Bureau of Agricultural, and Women in Agriculture and Business. All these associations are strongly committed to the promotion of farm safe practices in South Australia.

The brochure was launched as a part of Farm Safety Week 2002, which was held from the 15<sup>th</sup> – 20<sup>th</sup> July. This event toured around Kimba, Jamestown, Weetulta, Coonalpyn and Naracoorte, and was aimed at making farmers consider "what impact would a farming accident have on you?" Ms Price took this opportunity to leave brochures with local businesses such as machinery suppliers in each of the towns visited.

AusBulk have mailed a copy of the brochure to all its stake holders across the state.

The brochure has also been distributed to every branch of both the Women in Agriculture and Business and Advisory Bureau of Agricultural.

Both Ms Price and Mr. Standen reported an on-going high level of response to the brochure in the weeks following its launch.

## **Extension of Results**

The brochure is now available from SA farmers Federation, Ausbulk and various other farming businesses around the state.

Several discussions have occurred about the possibility of making the brochure available nationally. There is currently no standardization of tarping systems, and the brochures and designs developed by this Project could be of benefit to farmers who cart grain nation wide. It is foreseeable that Farmsafe Australia could, through their far reaching networks, make the brochure and designs accessible around the country.

## **Recommendations**

The joint approach by AusBulk and SA Farmers Federation with the support of WorkCover has resulted in the production of a resource that can be used directly to address an agricultural safety hazard. The promulgation of the brochure developed by the Project through wide spread farming networks has meant that awareness of the problem and its solution has risen amongst the state's grain growers. It is expected that during the harvest this year the brochure will again be drawn to the attention of farmers as they access AusBulk Silos.

The effectiveness of a unified effort by the involved parties to address a safety issue of this magnitude is demonstrated by the high quality of the product and the high level of response from farmers around the state.

It is recommended that the networks established as a result of this project be utilised to devise innovative ways of reducing incidences of injuries caused by other dangerous practices in the grain industry. WorkCover funding provided the opportunity to follow through with an initiative that has created positive results – the continued granting of funds to other projects within the industry will help further reduce the terrible impact that workplace accidents have on the farming community.

# **A N N E X U R E A**

*(financial audit not included)*

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# Safe Tarping Equals Safe Farming

*Get your Ground Operated Tarping System Today!*

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Thank you for showing an interest in improving the safety of your vehicle. Please find enclosed copies which illustrate designs of the ground operated tarping system.

|      |              |       |                                |
|------|--------------|-------|--------------------------------|
| A.0A | Front of Bin | A.03a | Universal Joint                |
| A.0B | Back of Bin  | A.03b | Universal Joint – Assembled    |
| A.01 | Roller       | A.04  | Bin Lip Profile – Front of Bin |
| A.02 | Cord Anchor  | A.05  | Bin Lip Profile – Back of Bin  |

This is a joint initiative of:

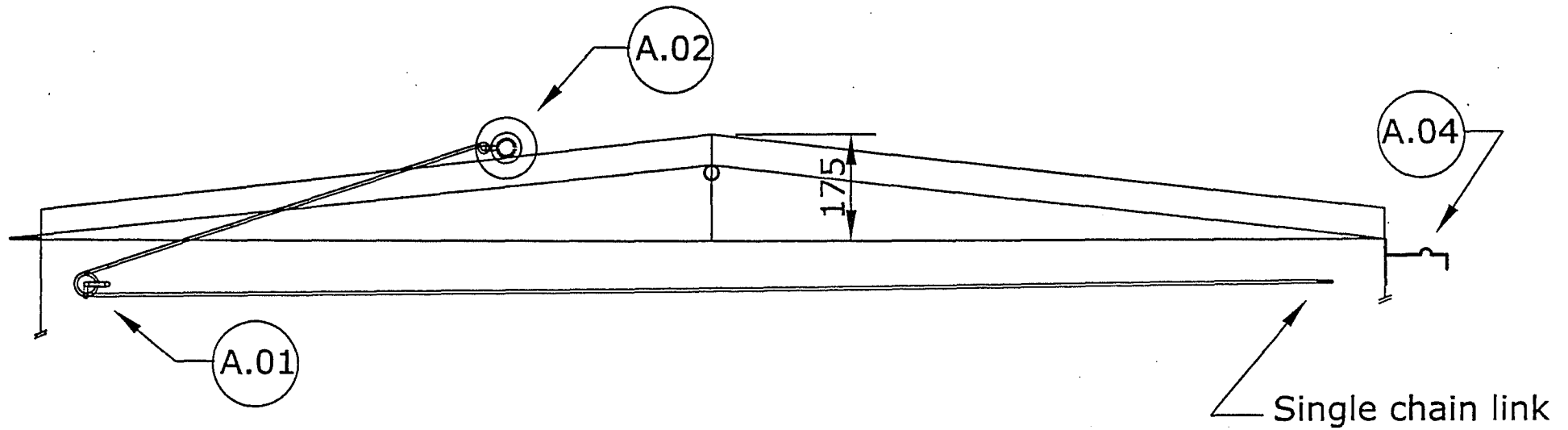


*Remember, it's your life and your business which is at risk!*

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# Front of bin

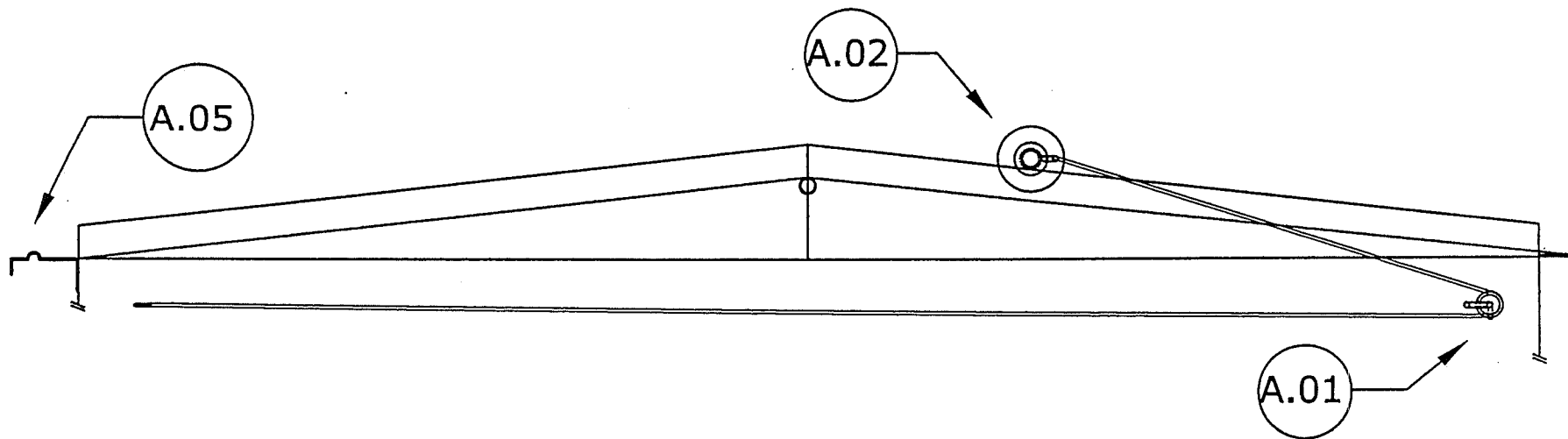
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|            |      |             | Date October 2001 |                        |  |

# Back of bin

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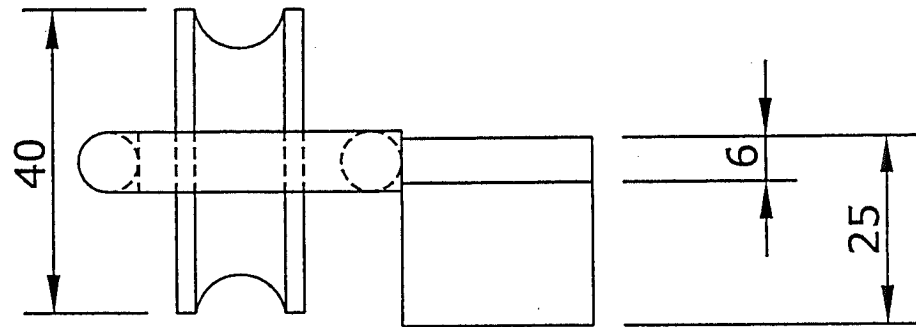
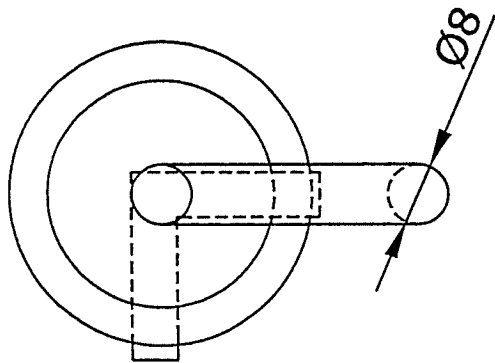
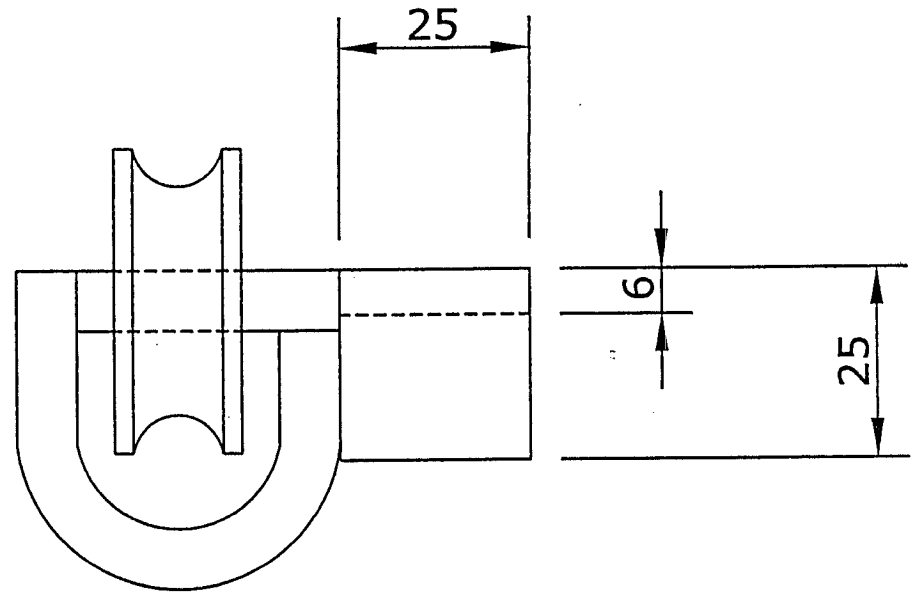


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# Roller

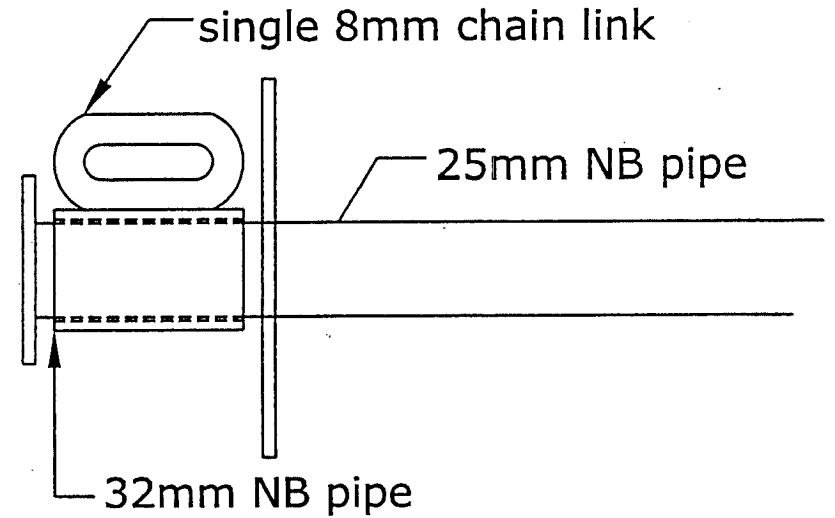
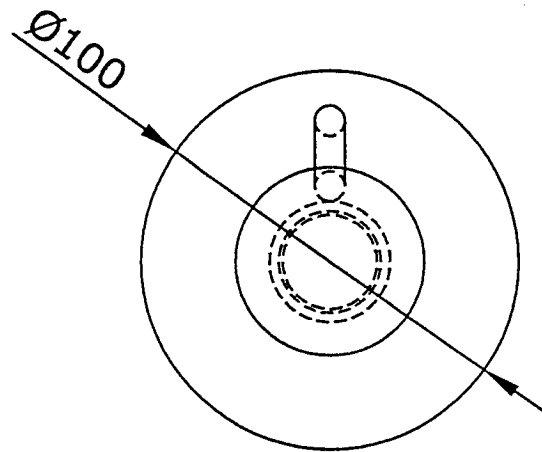
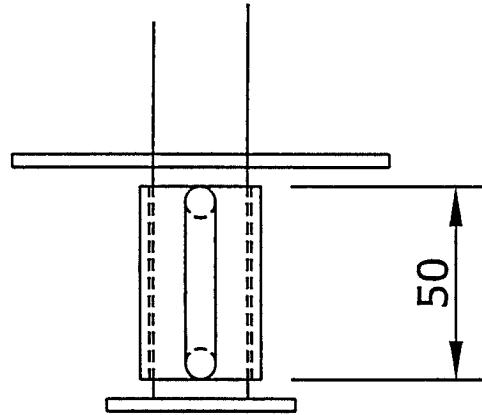
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# Cord Anchor

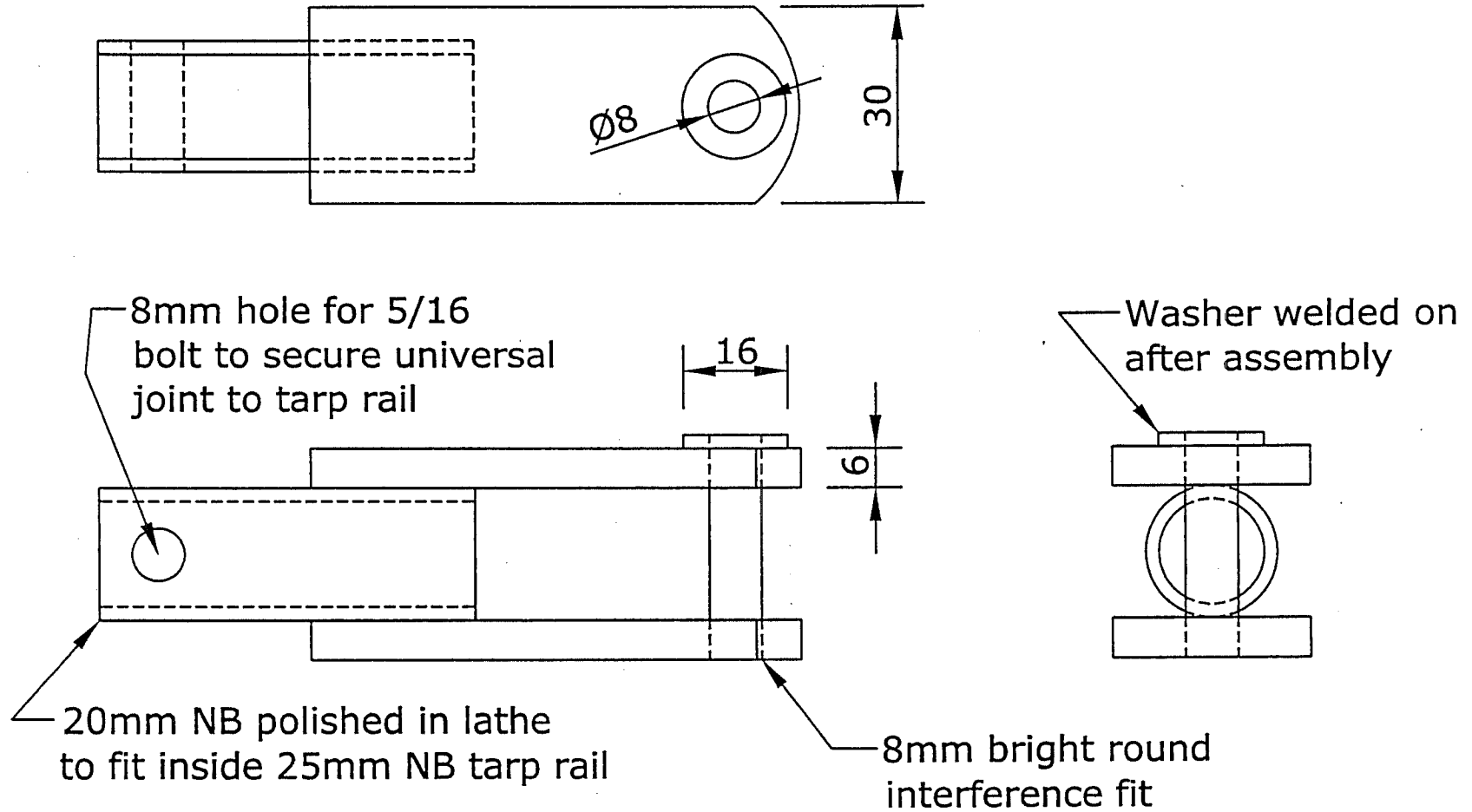
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|            |      |             | Date October 2001 |                        |  |
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# Universal joint

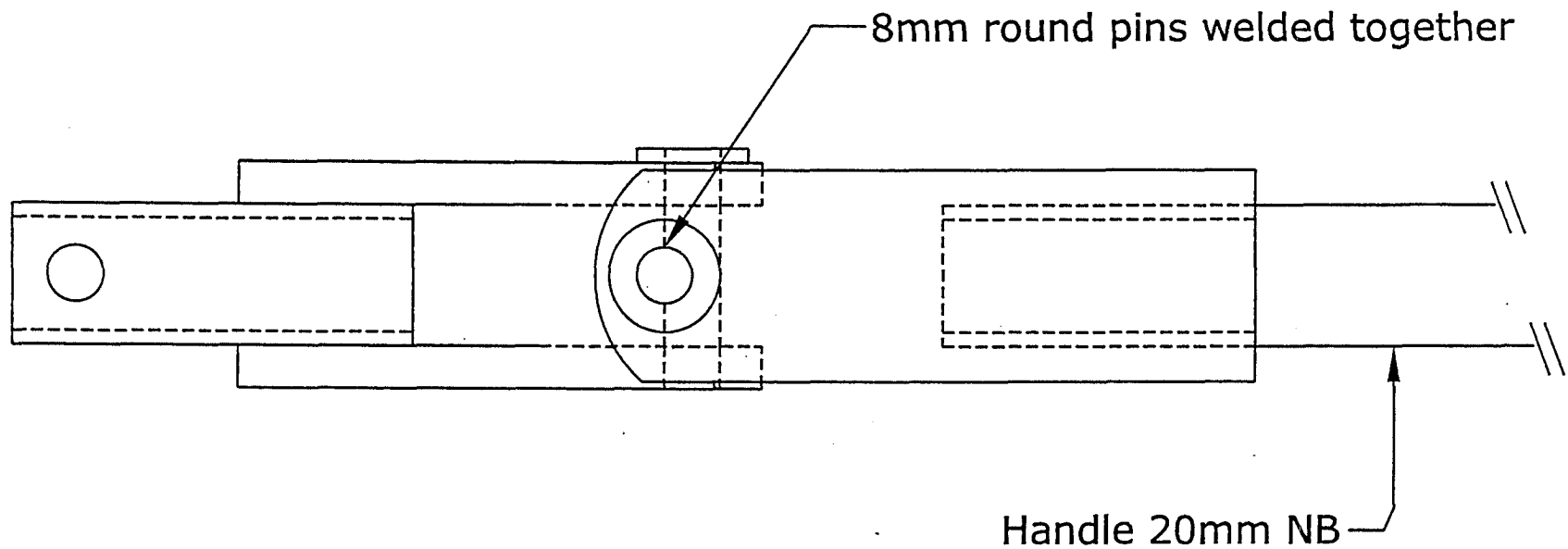
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# Universal joint - assembled

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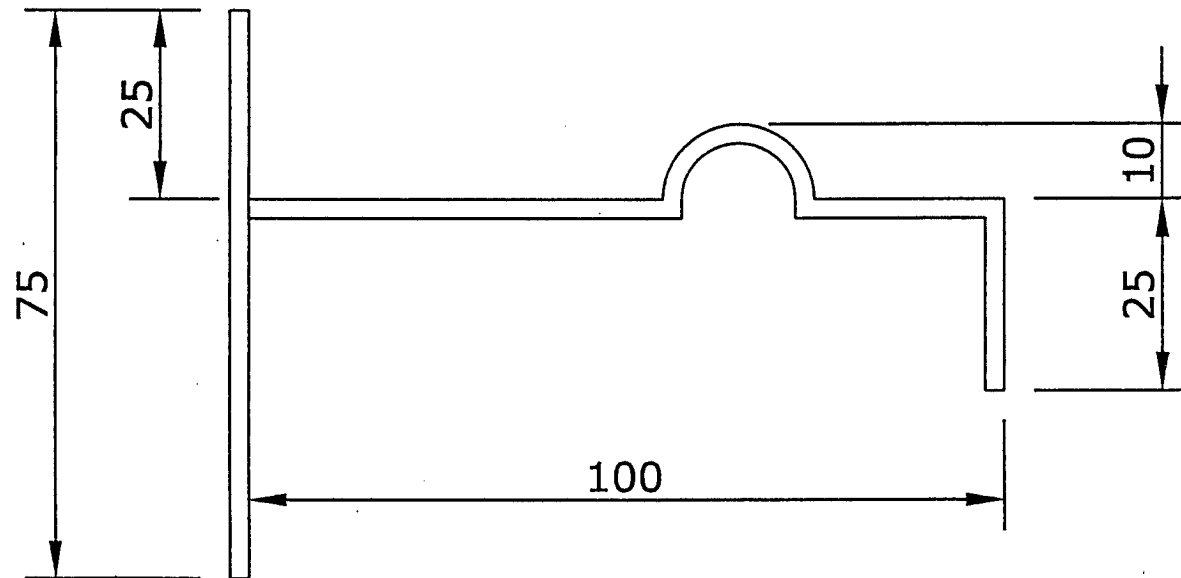


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# Bin lip profile

Front of bin

scale : 1:1

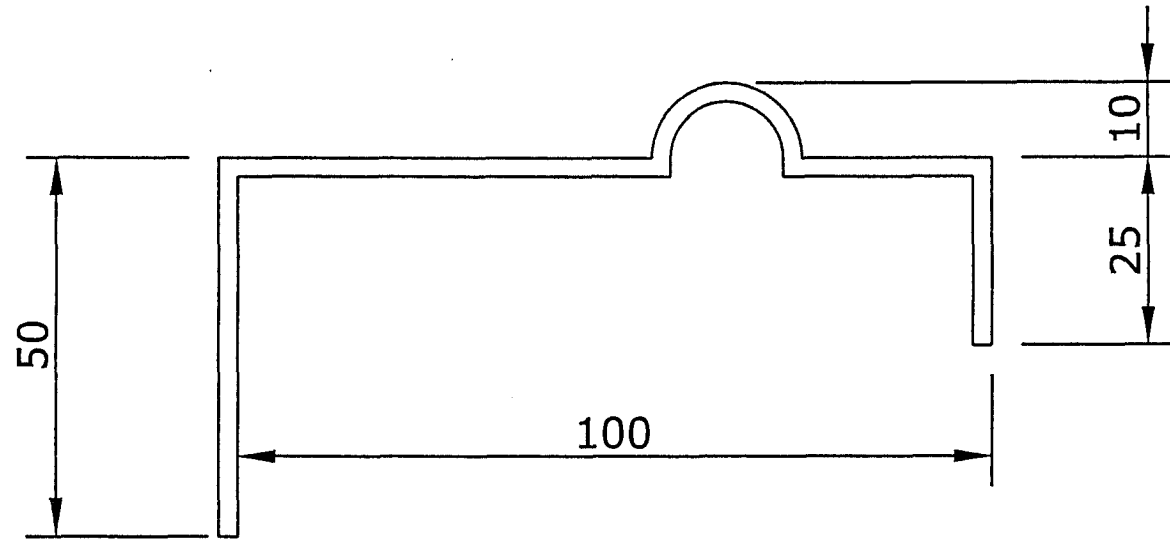


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|            |      |             | Date October 2001 |                        |  |

# Bin lip profile

Back of bin

scale : 1:1



| Amendments |      |             | Drawn Ben White   | Drawing     | Drawn For:   |
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|            |      |             | Date October 2001 |             |  |
|            |      |             |                   |             |  |

Get a ground operated tarping system today.

Want to find out how it's done?  
Log on to one of these websites for information  
and easy-to-follow diagrams to assist you.

For more information:



**AusBulk**

[www.ausbulk.com.au](http://www.ausbulk.com.au)



[www.ezigrain.com.au](http://www.ezigrain.com.au)



**SOUTH AUSTRALIAN  
FARMERS FEDERATION**

[www.saff.com.au](http://www.saff.com.au)



WorkCover Corporation of South Australia  
[www.workcover.com/grants](http://www.workcover.com/grants)



Supported by  
**Government  
of South Australia**

# Safe Tarping Equals Safe Farming

Get your ground operated  
tarping system **TODAY!**



Remember - it's your life and your  
business which is at risk!



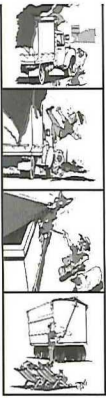
This is a joint initiative of:



Grants







Think about how a severe injury could affect your quality of life and your family. Consider the effect on your business if you were put out of action for eight weeks as a result of a fall while you were tarping up your grain truck. Consider how your business would suffer if you were incapacitated for months, or worse, suffered a permanent substantial disability as a result of a fall from heights.

Every year, a number of growers and transport operators suffer serious injuries as a result of falls from the top of vehicles. Placing a tarpaulin or cover over your load is a legal requirement but it does not have to be a dangerous exercise.

**Every time you climb on your vehicle you are putting yourself at risk.**



Fatal injuries have resulted from falls from heights much lower than the top of a truck. Most falls that result in a fatality occur at heights of around two metres. It is important that we not become complacent. You can't count on good luck when running a business.

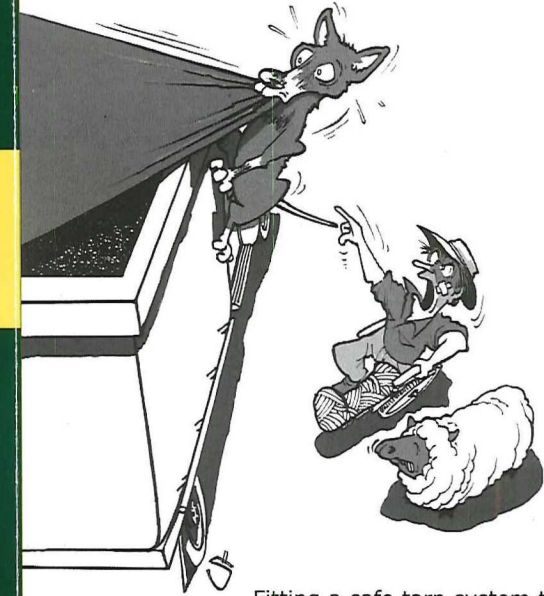
**The easiest way to reduce risk is to eliminate the danger.**

The underlying safety principle for the ground operated tarping systems is to minimise the risk of falls from height and the fatalities and injuries that do result as a consequence of these incidents.

Having to climb on top of your vehicle to place or remove a tarp for every load is not only dangerous but also a costly and inefficient waste of your valuable time. The cost of installing a ground operated tarping system should be considered as an investment in your own safety and the safety of your employees and family.

A number of goods receivers have already restricted access to vehicles which are not fitted with safe systems for access to loads. They will not allow any climbing of vehicles on their premises. In many circumstances, trucks will not be loaded or unloaded at the site in question.

**Use your existing tarps to make your own tarping system at a lower cost.**



Fitting a safe tarp system to your vehicle does not have to be a costly exercise. In many cases it does not even require a new tarp. If your existing tarp is in good condition it is more than likely that it can still be used as part of your ground operated system. Many of the components of the tarp system can be made by yourself at a low cost. Diagrams of the ground operated tarping system can be found on the websites listed on the back page. These diagrams can also be mailed to you, simply by contacting the following:

**AusBulk**  
Steve Standen 8304 5072

**SAFF**  
Ann Price 8232 5555

**WorkCover**  
Andrea Edwards 8233 2409  
13 18 55