

HOW OBESITY AFFECTS OUR INDUSTRY

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Background

The major effect of the trend toward obesity (described variously as a “global epidemic” and an “obesity time bomb”) on our industry is primarily one of increased risk of injury to staff, funeral directors, families and the general public. All this in a backdrop of a) increasing onus on all organisations including cemeteries and crematoria to provide a safe environment, b) national uniform Work Health and Safety legislation with attendant increases in responsibilities and fines and c) greater propensity for litigation generally.

Cemetery managers are aware of these risks (everyone has heard various unfortunate incidents associated with moving/lowering heavy coffins).

It is our view the industry must continue to make speedy advances and improvements in this area to avoid injury, prosecution and or litigation. As most readers are aware, WorkCover prefer engineered solutions to potential OH&S issues over administrative control measures where there is a chance of human error.

The obesity issue in Cemeteries and Crematoria is not restricted to Australia. There have been recent reports emanating from Europe where the cremation of obese bodies has resulted in a number of cremators suffering severe damage when “out of control” fires have overwhelmed their emergency procedures (see for example reports in Der Spiegel, Germany). There have been also documented cases (including in Australia) where obese bodies over a certain weight limit have been refused cremation on OH&S grounds.

It is also not a liability that can be contracted out. Even if funeral directors are moving coffins to the graveside, then interring, the cemetery can still be liable if there is an accident on their grounds.

A number of our client organisations are heightening their awareness and understanding of manual handling issues. There have been suggestions the industry should aim to become a “no lift” industry from the time of first receiving the coffin.

Apart from OH&S operational challenges the obesity trend also poses economic considerations. Cremation of very large bodies result in substantially longer cycle time (up to three times as long) resulting in increased costs including operator time. Is the Industry getting closer to a situation similar to the aviation industry, where consideration might be given to an additional charge on “over-size” bodies? This had proved very controversial in the context of the aviation industry but hasn’t prevented such occurrences becoming more commonplace.

Some recent examples of engineered solutions to oversize coffins are:

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Cremator Size and Operation

The trend for larger coffin sizes was recognised by Austeng in 2008 when it re-designed its “Joule” cremator to provide an “oversize” cremator for Allambe Memorial Park, Nerang Qld, (InvoCare Ltd) a “first” in the industry in Australia .This design has now become the new “standard” size in use. At the time, Austeng “exported” this design back to its licensor Furnace Construction Co Ltd of the UK as they face the same challenges and they also now use the new size as “standard”.

In addition, a number of our clients with the standard size “Joule” cremators have taken up the offer at the re-bricking stage to widen the opening so that, although not as large as the standard “oversize” option it is still bigger than previous.

With greater size, typically brings with its own challenges of greater energy content (see earlier).

Marcus Cowie, General Manager of Austeng comments that “The sophisticated control system of the Joule cremator ensures that the furnace keeps the cremation under control by ensuring that energy release rates are held pretty constant. To ensure compliance with UK emissions regulations PG5/2(95), the after chamber operates at a minimum of 850°C but we design the refractory to withstand 1300°C for short periods. Our largest cremation to date was delivered to the Albany Creek (InvoCare Pty Ltd) crematorium with the undertakers note saying 320kg plus. The cremation was uneventful, completely finished in four hours. “

There are some good operator strategies to be used to keep things under control further comments Marcus Cowie. “Ensure that the bigger bodies are held over and cremated at the start of the day, before the furnace has had a chance to “get hot”. If you have the opportunity, vary between large and small caskets.

Auto Charge Biers and Coffin Trolleys

Over the last few years Austeng has progressively up-graded the weight limits on both its charge bier and coffin trolleys originally from 180kg to 250kg and now recently to 350kg. A recently manufactured “heavy duty” coffin trolley (SWL 350kg) for Metropolitan Cemeteries Board, Pinnaroo (WA) has a powered travel option (electric tug – see photos) so requires no lifting and no pushing.

Finally, another additional modification to our charge bier is to introduce a swivel top to increase accessibility for loading i.e. maneuvering heavy coffins from trolley to Charge Bier.

An example of a project is:

Bariatric Outdoor Coffin Trolley and Interment Device

Austeng has designed a bariatric outdoor coffin trolley and interment device at the request of and in conjunction with Eastern Suburbs Memorial Park, Sydney. The intent is for the trolley to transfer the coffin from hearse to grave along even narrow pathways, align itself with a grave, position the coffin over the grave by rotating and extending the upper deck and then automatically lowering the coffin into the grave.

I understand that Workcover NSW, in particular, has directly raised the issue of manual handling in this context and this is partially a response to that concern.

Design and preliminary engineering stages have been completed. The design meets the challenges of increased coffin weight working in old monumental areas and interring coffins all without manual handling.

The coffin lowering set-up is designed to have sufficient strength and stability to handle a bariatric coffin (350kg) when rotated through 90°. Designs can incorporate either the motor and operator located at the rear of the machine behind the coffin or the operator sitting on the equipment. It is suitable for use in confined access monumental areas as well as lawn areas. Photos are attached of the proposed equipment.

The idea behind the device is to contribute to completely removing manual handling from the industry. The device is now operating successfully and has received excellent reviews by both operators and stakeholders alike.

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