

Plastic bins help prevent accidents says H&S lab

Accident rates in the trade and domestic waste collection industry are four times the national average and fatalities are ten times the norm. The largest group of accidents involve manual handling. Every year, the UK economy loses 12.3 million working days due to back pain and the waste industry is one of the worst with one in four injuries resulting in musculo-skeletal disorders (MSDs) over 2003/4. Recent research by the Health & Safety Executive (HSE) indicates that using lighter materials in bins can help avoid injuries

"Whilst there is a high awareness of the risk associated with hazards such as transport and sharp objects, the perception of risks associated with manual handling is much lower," according to the HSE : *Health & Safety Executive Mapping Health and Safety Standards in the UK Waste Industry Research Report 240*, published in 2004.

The HSE's Laboratory (HSL) conducted extensive research into musculo-skeletal injuries in the waste industry and one of its prime recommendations is for manufacturers to use lighter weight materials for their bins. It particularly stresses the need for this in the larger 360 and 1,100 litre containers used in the commercial sectors.

The HSE believes plastic bins will reduce accidents in the waste industry.

Dr Andrew Pinder, who led the research on behalf of the HSE, said: "We were looking at the risk factors for musculoskeletal disorders which are a real problem in refuse collection. The study found plastic wheeled bins are preferable to metal ones as their lightness makes them easier to manoeuvre."

Ian Collins, Managing Director of Plastic Omnium, which lays claim to being Europe's leading bin manufacturer, said: "We supply both metal and plastic bins but plastic are definitely superior. They're more cost-effective, look better for longer, are quieter and more hygienic as they don't rust or corrode as metal ones do. We recognised long ago the ease with which plastic bins can be handled will result in fewer neck and back injuries and long-term sickness compared with metal bins, but it's reassuring that it's now been scientifically proven by a respected, independent authority."

Plastic Omnium Urban Systems Ltd is a leading company in the UK



Dr Andrew Pinder led the HSC research

market for waste containment solutions and provides a wide range of waste containers and services including wheeled bins, litter bins, banks, composters and sacks. It is part of the international Plastic Omnium Group, a world player in contract waste container solutions. The group has worldwide sales of more than €1.7 billion, of which 67% is outside France, and employs over 9,000 people in 25 countries, across four continents, in manufacturing and service solutions for the environment, automotive and performance plastic products markets.

European findings

Dr Pinder said: "The vast majority of research done on this matter is European and is consistent with our findings. Wheeled bins offer clear health and safety benefits over refuse sacks and plastic bins are preferable to metal ones. Refuse sacks don't protect operators from injuries from sharp objects in the waste and manually handling them is rife

Plastic Omnium 1,100 litre container – plastic is the material of the future for says the company's MD, Ian Collins



with risks for musculoskeletal disorders – operators' postures often involve awkward stooping and twisting as they lift and carry bags and often have to raise their hands above their heads as they toss bags into the back of the truck."

The HSL report says that the best bin for the job depends on a range of factors: volumes of waste, recycling systems, terrain, architecture, road layouts and traffic, local feeling on wheeled bins and the time of day of collections.

Mr Collins said: "Whether you're a local authority or a commercial operator, it pays to look after your team. You can actually measure how safety improvements add to your bottom line - safer staff makes for happier and more productive teams. Fewer absences, compensation pay outs and general higher morale are some of the payback from investments in health and safety.

"Safety should be considered an investment not the cost it's often seen as," he stated. "It's not about complying with the letter of the law but more the spirit. We believe where the HSE report leads, the law will follow and eventually you'll see plastic bins become the industry standard. There's a strong case for industry regulation which would choose the safest bin for the application rather than the one offering the highest commercial yield," the Plastic Omnium MD said.

He continued: "You also need to listen to what staff want or say they need to do their job safely. That's when they take ownership of the issue. You ask an operator which bin they'd prefer to move when it's full and I would wager all of them would vote for plastic."

Material for the future

"Plastic really is the material for bins in the future economy," Mr Collins added. "Apart from being recyclable, it's quieter to move or shut a plastic bin than a metal one. That's becoming more important in economies which operate around the clock so workers need to sleep at what were once considered 'odd' times of day.

"That factor may also affect the number of people we recruit to our industry in the future," he stated. "The HSE report explains the harsh working conditions inherent with waste collection - the walking, heavy manual work, few breaks and early starts involved. It's a hard job which means only the healthy and fit can do.

"The waste operatives retiring today may be harder to replace and there's an estimated 40,000 more needed by 2010 to meet the Government's 30% recycling target". The Plastic Omnium MD concluded: "As an industry, we need to smarten up our health and safety record if we're going to recruit good workers let alone driving up industry recycling standards."

The report can be viewed at:
http://www.hse.gov.uk/research/hsl_pdf/2002/hsl02-21.pdf