# FLY ASH REMOVAL

SITA UK's energy-from-waste plant improves maintenance efficiency with a DISAB BagVac

SITA UK has realised the benefits of using a DISAB BagVac™ to remove fly ash residue from the hoppers, and carry out the post outage clean, of the Energy from Waste plant in Huddersfield, saving both time and money on its six monthly maintenance programme.

SITA UK has a 25-year contract with Kirklees Metropolitan Council, which began in 1998 aiming to achieve a minimum 60% diversion from landfill. As part of the contract, SITA UK took over five household waste recycling centres and developed an energy-from-waste facility with an attached materials recycling facility, processing 136,000 tonnes of waste each year and generating around 10 MW of electricity, enough to power 15,000 homes annually.

In order to meet the Environmental Agency's standards and routine inspections, the EfW plant is closed twice a year for major maintenance, part of which is removing several tonnes of fly ash that builds up as a result of the incineration process and the maintenance work carried out on various areas of the plant. Previously this was dealt with both manually and with small industrial vacuum equipment, but this year site Operations Manager, Mark Ryan arranged for a demonstration of a DISAB BagVac™. Impressed with the DISAB BagVac's™ capabilities on site, Mark hired one for the bi-annual outage, as he explains:

- *Improve housekeeping*
- *Increase recycling*
- *Cut downtime*
- *Save money*
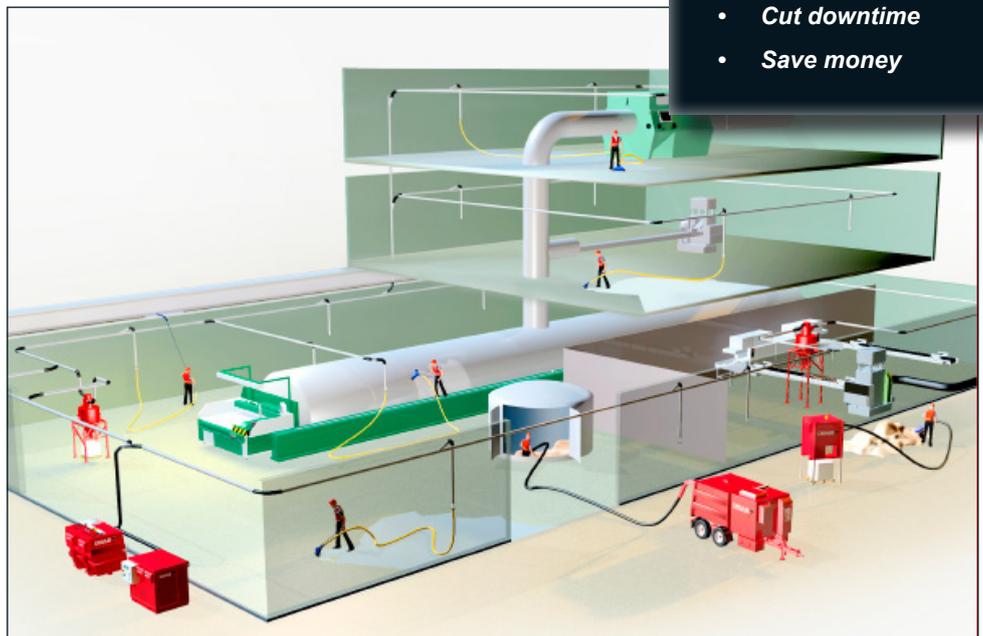
"Typically the fly ash build up would have to be dug out manually and residual dust in the boiler house swept down on each level starting at the top, until it was in a position to be removed manually from the lower surfaces and ground floor levels. I was hoping the BagVac™ would render this unnecessary, enable my team to become more efficient at removing all the fly ash, and do so in a safer manner."

"Hiring the BagVac™ for a month enabled my team to remove two to three tonnes of fly ash and general dust build up from around the EfW plant well within the timing of the maintenance outage we'd planned. It was much faster, and more time was spent cleaning than emptying things or moving equipment around!"

The DISAB BagVac™'s large capacity bag means more time can be spent cleaning than empting, a regular issue that crops up with smaller vacuum eqipment.

Mark continued, *"DISAB UK gave a good service from start to finish. Dave Mills had shown us what the BagVac™ could do, and it was impressive. He gave us good advice and when the hire unit came along, he trained up my operatives as well, so that we could all be sure we knew how to get the best out of the BagVac™."*

"Our EfW operatives all found the BagVac™ very easy to use, and collected and removed significantly more dust in far less time than usual, by comparison to using brooms, brushes and barrows and the smaller industrial vacuum equipment we'd normally use."

The DISAB BagVac™ comes with a 60' flexible suction hose, extension pipes and cleaning nozzles, which, when combined with the unit's massive suction power, makes all sorts of nooks and crannies around complex plant like an EfW site a lot easier to access and remove. Whether it's overhead or down in hoppers, accessing and removing every scrap of fly ash/dust becomes a simple and more importantly faster job to do in complete safety. The entire vacuum process from cleanng head to bag is enclosed eradicating the airborne dust created using brushes and brooms, and any dust exposure for the operatives at the sharp end. Mark's now looking into purchasing a DISA BagVac™:

"It would give us a major 24/7 cleaning tool, and we'd be able to use it for the regular housekeeping programmes. Moving it around with a forklift would give us the flexibility to deal with the transfer station as well and the MRF next door will also be a consideration. The BagVac™'s shown us all sorts of possible opportunities, and it's a big step forward for the way we do things in terms of meeting the Environmental Agency's requirements."