

Weightron in Action



ATEX weighbridge plays important role at Gasrec's LBM plant

Weightron Bilanciai have supplied a bespoke ATEX certified pit mounted weighbridge to methane reclamation specialists Gasrec for weighing gas tankers at their flagship recovery plant at Albury landfill site in Surrey.



ATEX weighbridge plays important role at Gasrec's LBM plant

Weightron Bilanciai have supplied a bespoke ATEX certified pit mounted weighbridge to methane reclamation specialists Gasrec for weighing gas tankers at their flagship recovery plant at Albury landfill site in Surrey.



Gasrec is a leading producer of Liquid Bio Methane fuel (LBM)*, utilising gas generated by the decomposition of biomass. The Surrey landfill site, which receives the majority of Surrey's domestic waste,

began producing gas in 2008 and is capable of producing around 5,000 tonnes of LBM per annum, enough to power either 100 HGVs or up to 500 LGVs per annum.

The 50 tonne, 15 metre Eurodeck weighbridge is a special 4.5 metre wide version, specially designed to allow adequate vehicle manoeuvrability at the entrance to the site. The weighbridge, which is located in a designated Zone 2 hazardous area, is fitted with Weightron's ATEX certified CPD digital load cells. These are connected via a safe area interface box to their versatile D800 weight terminal, mounted some 50 metres from the weighbridge in the safe area. A large external digital display, located in the safe area, provides drivers and operators with a clear indication of the weight as the tankers are being filled. The fully sealed, stainless steel, CPD digital load cells have a proven track record worldwide and provide a number of set-up and service related operational benefits. Individual load cell health checks can easily be carried out, either locally or remotely via optional Ethernet connectivity.



Safety is of paramount importance in such applications and the installation is designed so that there is a clear airflow underneath the weighbridge deck to prevent any build up of gas in the unlikely event of spillages during the filling process. Rows of holes drilled along the length of the weighbridge deck provide further ventilation from below.

The Eurodeck design has an excellent reputation for strength and durability in the harshest of environments and the weighbridge features a special restraint system to minimise the potentially damaging effects of harsh vehicle braking. The main structural beams, which



support a robust durbar deck, run length ways in line with traffic flow and have sufficient depth so that they do not need stiffening plates. This gives a consistent, well-drained weighing surface, avoiding any build up of condensation. The unsupported span between these beams is only 165 mm, which means that with maximum loading in the centre of a standard module,

there is minimum deflection. The modular construction means that non-standard lengths and widths can readily be accommodated to meet specific customer requirements.

Gasrec's Director of Engineering and Operations Satish Kler is very pleased with the overall installation and as he concludes: *"This installation set a number of challenging design and conformance criteria. However Weightron worked closely with us throughout the project and were able to meet all our requirements, including the special instrumentation connectivity. The benefits offered by the digital load cell technology give us added peace of mind."*



*In creating and selling the fuel product, Gasrec recovers the latent energy stored in material discarded by society. LBM is a commercially competitive and environmentally sound fuel that can be directly substituted for both CNG (compressed natural gas) and LNG (liquefied natural gas) for use in gas-powered or dual-fuel vehicles. It can also be used to generate electricity or CHP (Combined Heat and Power).



www.gasrec.co.uk

WEIGHTRON BILANCAI

INDUSTRIAL WEIGHING SPECIALISTS



BILANCAI GROUP

Weightron Bilanciai are leading suppliers of weighbridges, weighbridge peripherals, industrial scales, process weighing systems, load cells, hazardous area weighing systems, crane scales, weighing software, liquid filling machines, radiation detection systems and laboratory balances.



Weightron Bilanciai Ltd
Titan Works
Bridge Way-off Broombank Road
Chesterfield Trading Estate, Chesterfield
Derbyshire S41 9QJ
Tel: 01246 260062 Fax: 01246 260844

www.weightron.com sales@weightroncb.co.uk