

Written evidence submitted by the Batched on Site Association (VCM0001)

The BSA represents manufacturers and operators of Volumetric Concrete Mobile plants (VCMs) and estimates that our sector contributes c£385 million a year to the economy and employs over 15,000 skilled workers.

In contrast to standard old-fashioned drum mixers – which are the backbone of the construction industry – VCMs are specialist mobile plants that overcome the major deficiency of drum mixers, whose loads must be used within 2 hours of being loaded at the depot, so they set hard and are wasted. VCMs carry all the ingredients to make concrete on board – cement, aggregates, sand and water. They are heavier than traditional drum mixers because they carry heavy mixing equipment and a conveyor belt system, and sufficient ingredients to be able to provide multiple strengths of concrete to multiple customers on one circuit from the depot – a milk-run, which drum mixers are not capable of. Additionally, VCMs are not time limited when supporting emergency roadside repairs. Finally, they produce concrete with zero waste and use far less water for cleaning than drum mixers do.

Before VCMs were invented in the 1970s, customers had to rely on drum mixers. A frequent complaint was having to pay higher prices for smaller deliveries of concrete, with the price doubling if two different strengths of concrete were required, since that requires two drum mixers. VCMs took this lucrative business from the drum mixers, but needs heavier vehicles to do it. The main beneficiaries of drum mixers are mainly foreign multinational concrete conglomerates, and they devoted many years campaigning to hamstring VCMs by cutting their permitted weights. These attempts were rejected by nine UK Governments between 1975 and 2018.

In 2018 the Government announced a drastic cut in VCM weights - after 43 years - down to 32 tonnes as part of their *one-size-fits-all* weight policy. Prior to 2018, VCMs had been operating at above 41 tonnes, were not subject to tachographs or MOT tests and gave cause for concern. The BSA was established to address such concerns and its membership rules required VCM operators to comply with a strict safety regime in the years leading up to 2018. This was codified in 2018, so that every VCM is subject to recorded daily

checks, a 6-weekly inspection equivalent to and MOT, as well as the MOT test and tachograph.

In 2018 the BSA agreed with the DfT that 44T on 5 axles – permitted throughout the EU, and 38.4T on 4 axles were safe weights, although higher weights are allowed in other EU countries. These weight limits were agreed after a study by Highways England on possible bridge damage found 44T VCMs were fully compliant with UK and EU limits, but that 41T VCMs complied with EU requirements, but fell below UK requirement – by a very small margin. As a result of Highways England’s report, weight limits of 44T and 38.5T were recommended.

The BSA’s discussions in 2017 and 2018 with the Minister Sir John Hayes and officials indicated that 44T and 38.4T (rather than 38.5) would be a permanent arrangement. VCM manufacturers and operators were taken aback when the SI mandated a phasing down of weights over the next ten years, down to 32T, especially since the first option in the DfT consultation document was a permanent arrangement for the 44T and 38.4T weights.

Six years on we are not aware of our VCMs operating at 44T and 38.4T during the ‘phaseout’ have caused any safety problems. This may be because, since 2018, VCMs have one of the safest regulatory regimes in the UK with the equivalent of 6-weekly MOT tests.

The BSA welcomes the DfT’s support for an increase in the weight of all-electric HGVs from 32T to 34T, which demonstrates that the 32T limit is not set in stone.

The BSA commissioned a report from the environmental consultancy REGENERIS. Forcing the weight-cut adds 20% more lorry journeys to deliver the same amount of concrete, adding 14 million more VCM/lorry-miles to UK roads, 598,000 more VCM/lorry journeys each year, 200 more VCMs on roads to make up for carrying smaller loads, pumping 120,000 additional tonnes of CO₂ into the atmosphere with a 20% increase in CO₂, nitrogen oxide and particulates, and generating extra carbon costs in excess of £7 million pa.

And compared to drum mixers, VCMs are lower carbon construction vehicles

Summary of “Why VCMs?”

- Specialist alternative to Drums, mixing the ingredients to order on site.
- Zero waste – whereas, if a Drum Mixer is delayed, its load goes to landfill.
- If a customer under-estimates or over-estimates the concrete needed, only a VCM can mix and pour exactly the right amount on demand.
- If the customer needs 2 or 3 strengths of concrete on the same site, only one VCM is required vs 2 or 3 Drum Mixers, creating only 1/2 or 1/3rd the journeys AND zero waste.
- Waiting more than two hours beside the road or railway or powerline for the emergency services to solve their repair problem poses no issues to VCMs.
- Especially useful in remote areas for jobs more than 2 hours distant.
- VCMs travel from site to site without the need to waste journeys returning to base to refill each time. They can do up to 8 jobs without returning to base.
- VCMs can carry on-board pumps to eliminate the extra vehicle when site is a tight fit – this counters lorry congestion.

The strength of drum mixers

- Shifting concrete from A to B – to construction sites at volume.
- Standard load of 8 cubic metres, all the same strength of concrete day in day out.
- *Concrete must be poured within 2 hours of leaving the depot.*
- *It's one-size fits all – you can't carry strong and medium concrete together.*
- *Any left-over concrete is wasted and often landfilled*
- *Problems in rural areas more than 2 hours from the depot*
- *If the customer under-estimates or over-estimates the concrete needed, only a VCM can mix and pour as much or as little on demand for no extra cost.*
- *Smaller deliveries (<8m³) are expensive (which is why VCMs were invented).*
- *Each drum mixer uses hundreds of gallons of water for its daily clean.*
- *No more holding local builders to ransom.*

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