

Heidelberg Materials

Concrete site plant solutions

Who we are

Heidelberg Materials is one of the world's largest integrated manufacturers of building materials.

In the UK, the company is split into five business lines – aggregates, cement/GGBS, concrete, asphalt and recycling – and employs more than 4,000 people at over 300 manufacturing and distribution sites.

We are committed to decarbonisation and the circular economy with an ambition to reach net zero by 2050.

Investment in digital innovation is enabling us to improve our product supply chain and better engage with our customers. We are an inclusive employer and recognise the importance of social value and supporting the communities where we operate.

As a global company, Heidelberg Materials, employs around 51,000 people and is represented in over 50 countries.

Our operations



2,000+ Heidelberg Materials-liveried vehicles



150+ ready-mixed concrete plants

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50+ sand, gravel and rock quarries



35+ asphalt plants



25+ rail depots and wharves supplied by road, rail and sea



10+ waste transfer stations



3 hazardous waste treatment sites





8 packed product sites



4 marine dredgers







3 grinding plants making Regen GGBS (ground granulated blastfurnace slag)



1 joint venture rail company, Mendip Rail





Benefits of site plants

Heidelberg Materials UK is one of the country's leading producers of ready-mixed concrete. We have a wealth of experience in all aspects of concrete production and have successfully managed a large number of site batching plants throughout the UK. We are experienced in designing, installing and running site batching plants of all sizes. From small, temporary plants to long-term ones on Britain's largest infrastructure projects.

Dedicated on-site concrete batching plants with back-up

- A site plant provides surety and continuity of supply throughout the project's lifecycle
- Site plants are supported by our dedicated fleet of company and franchised concrete delivery vehicles.
- Concrete production team collaborates closely with the project team increasing efficiency.
- Our national network of over 150 ready-mixed concrete plants can provide back-up for any additional volume requirements.
- Immediate concrete call off from the plant.
- 36% reduction in HGV traffic on local road network.
- Versatility to adapt to daily program changes.

Consistent, quality assured ready mixed concrete

- Our modern plants provide highly accurate mixing for quality concrete, batch after batch.
- We can formulate bespoke mixes for every type of job, including high flow/high strength concrete for pumping.
- We can offer a wide range of wet batch production capacities, from 50 to 150 cubic metres per hour.
- With our supply chain partners we can offer a full range of steel and polypropylene fibres, and admixtures including pumping aids, retarders and waterproofers.
- All our plants are certified by the Quality Scheme for Ready Mixed Concrete (QSRMC). Our experienced in-house technical staff will be on hand to advise on all aspects of quality and performance.

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Batch production capacities





Site batching plant set up

We have the right plant for the job

We will be able to provide a bespoke plant which matches your project's requirements and specifications. We have a fleet of existing site plants, and can invest in additional units as required.

Minimal site preparation needed

For all but the most demanding jobs, preparing the site is simple. Where appropriate, we can supply site plants with integrated steel foundations to keep site preparation to an absolute minimum.

General site requirements are shown opposite.

Quick set up

Many of our plants can be moved to any part of the country by truck. Once on site, we will arrange for the plant to be set up. The time for assembly and commissioning depends on the type of plant being used.

Materials supply

Our fully integrated supply provides a wide range of aggregates, sand and gravels, cement and ground granulated blastfurnace slag, with fully managed deliveries to site by road, rail and water.

Experienced plant operators

We will provide fully trained and experienced staff to manage the day to day operation of the plant.

Stringent health and safety standards

All our site batching plants are run to the same high safety standards as our static operations. All operations are regularly inspected.

Site requirements

Depending on the project and the site plant we recommend, exact site requirements will vary. Our team will be happy to advise on what is needed to prepare the site.

Customers need to provide:



Approx 2,500 square metres site area, including sunken catchpit, washout bay, and space for aggregate storage as necessary.



Mains power with 300kVA 3 phase or as dictated by plant spec. We can also supply generators if required.



Mains water - min 50mm mains pressure. We can also import water if required.



Telephone - digital connectivity



Heidelberg Materials UK will provide:



Mobile plant such as loading shovel



Washout/settlement/drainage



Staff



Concrete plant



Truck mixers



Materials - cement, Regen GGBS, aggregates

Our experience

We have established and operated site plants for every size of project.

Teesside

The construction of a large monopile factory in Teesside presented an exciting opportunity for us as we are perfectly placed to deliver the project drawing on our extensive major project experience and having a GGBS plant conveniently located next door.

Services provided:

- We efficiently scaled up concrete supply to meet the increased demand, on track to deliver 250,000m³ of concrete, surpassing the initial target of 140,000m³.
- Our proactive approach and quick decision-making enabled us to set up two brand new mobile concrete plants to accommodate the volume demands. The addition of the third mobile concrete plant further solidified our ability to meet the project's requirements.

- By leveraging the GGBS plant located on-site and sourcing aggregates locally from Forcett quarry, we reduce transportation distances, minimising carbon emissions associated with logistics. This local supply chain approach also enhances efficiency and reduces costs.
- The establishment of our own marine sand wharf enables us to procure sand locally, reducing reliance on distant sources and further lowering the carbon footprint.
- We use a waste recycling system, to responsibly manage and recycle construction waste generated during the project. This collaboration minimises waste sent to landfills and promotes sustainable construction practices.



Isle of Grain

As part of the programme to expand the UK's Liquefied Natural Gas (LNG) storage capacity, a new LNG storage tank was commissioned at the Isle of Grain LNG storage facility. Located on the Kent coast, 60km from London, this is the largest LNG terminal in Europe and represents one of the UK's key infrastructure assets, with the capacity to store and deliver at least 25% of Britain's gas demand.

Services provided:

• Working with the client and primary contractor (Vinci Construction Grands Project's) to develop a concrete mix that meets the strength and quality requirements, whilst also being workable enough for consistent application across the length of the slip-form.





Thames Tideway

London relies on a 150-year-old sewer system built for a population less than half its current size. As a result, millions of tonnes of raw sewage spills, untreated, into the river Thames each year. The Thames Tideway project consists of a 25km super sewer under the Thames to intercept those contaminated discharge and clean up the river.

Services provided:

• We were selected to supply all concrete requirements into the Central and East sections. To deliver the required concrete we set up three bespoke onsite concrete plants as well as produced the concrete for the pre-cast segments at a forth offsite concrete plant at Thamesport.

- In total we delivered around 450,000m³ with a rejection rate of less than 0.2%
- We worked closely with our clients to develop bespoke solutions for each project sites, which included the set up of a tailored on-site concrete plant, developing a spoke supply chain model that takes the individual constraints (such as noise reduction) into account, and developing technical concrete mix solutions that meet the stringent specification requirements.



- Guaranteeing materials quality in challenging temperature conditions, during a 40°C+ heatwave.
- By placing two mobile plants at the project site, we were able to give peace of mind to both the National Grid and the primary contractors on the project, as we were able to produce concrete even in the event of a breakdown on one of the plants.
- Putting in place all necessary back-ups to ensure supply of concrete for 21-day period.



Jaguar Land Rover

Mercia Park a major new highquality employment park in north west Leicestershire adjacent to junction 11 of the M42. Jaguar Land Rover and DSV Group will be the principal occupiers of the 238-acre employment park.

Services provided

- Set up and operation of a mobile concrete plant with a reclaim system to eliminate washout waste.
- Supply of over 90,000m³ of concrete over 44 weeks.
- Provision of all necessary building materials - aggregates, cement and GGBS.
- Ensuring that all produced concrete meets the stringent quality requirements.
- Reduced truck movements by ~4,600 and reduced CO_2 emissions by over 300t due to using an on-site concrete plant



Thames Tideway - Kirtling Street

Kirtling Street is a significant part of the Thames Tideway Project. A shaft with the same diameter as the dome of St. Paul's Cathedral has been constructed, serviced by a site batching plant located in Cringle Street.

Services provided

- Designed a bespoke, acoustically clad, concrete plant to fit an extremely tight footprint. The plant consisted of 500t overhead aggregate storage, 300t powder storage, heating and chilling systems along with high specification quality systems to ensure each batch conformed fully with requirements. The washout of plant, truck and placing equipment was handled through a system supplied by Heidelberg Materials UK.
- Supplied over 67km³ of steel fibre reinforced, 4 hr retarded, flowing secondary lining concrete with high early strength, delivered concrete 24/7.
- Aggregates were delivered by river and cement via rail, reducing the project's carbon footprint and removing trucks from the roads.
- Extensive technical support to develop the mix designs and ensure quality standards were met day-to-day.



Renaker Towers

Deansgate Square Manchester (Owen Street development) is the single most high profile residentialled development the city. It is the tallest tower outside London and ranks as the tallest residential building and the 5th tallest building in the UK. Four sleek glazed towers will reach as high as 67 stories, providing 1508 luxury apartments and exclusive penthouses.

Services provided

- 110km³ of high strength and ultra high performance concrete supplied. Strengths in excess of 120mpa achieved on lower level support columns.
- Dedicated site testing team provides ongoing quality assurance support and development for future projects.
- Integrated approach with design team to maximise overall structural performance and project efficiencies through value added engineering.
- Bespoke suite of robust mix recipes capable of being pumped under high pressure in excess of 300m.



Hinkley Point C Case Study

Heidelberg Materials UK is involved the construction of the Hinkley Point C nuclear power station, a critical national infrastructure project. For this we have:

• Worked with the client to specify and design the site plant compound to supply concrete with 'relentless predictability', a requirement of the quality-focused nuclear culture.

• Employed a dedicated team to manage the project and ensure that every single batch of concrete meets those rigorous standards, without any interruptions.

• Established four site plants, each capable of making 2200m³ per day or 90m³/hr, of readymixed concrete without replenishment.

• Delivered over 6.9m tonnes of aggregate, including 1.8m tonnes deliveries by sea to a purpose-built 500m wharf.

• Delivered 431,000 tonnes of Regen, and 215,000 tonnes of cement.

• Completed Europe's largest ever reinforced concrete-pour of over 9,000m³ in one go on the site's common raft.

Major project support

We will provide operational and technical advice through the early site planning process and continuous support through the whole of your project's lifecycle.

We can offer advice on all aspects of the concrete supply, from the suitability of site batching, to helping you plan the site layout for optimal efficiency and advising on mixes and pumping. We will ensure you receive the right concrete supply for your project at competitive rates.

Major projects team

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