

**> HANSON UK
SITE BATCHING
SOLUTIONS**





WE ARE HANSON UK

Hanson UK is a leading supplier of heavy building materials to the construction industry. We produce aggregates (crushed rock, sand and gravel), ready-mixed concrete, asphalt, cement and GGBS and operate around 300 sites in the UK, employing over 3,500 people.

We have a comprehensive UK-wide spread of production sites that enable us to supply contracts of all sizes, while minimising transport costs and ensuring the efficient transfer of our materials.

OUR OPERATIONS

Hanson UK has operation sites nationwide, manufacturing concrete, aggregates and cement.



300+
manufacturing sites
across the UK



6,000+
deliveries
every day by
road, rail and water



1,200+
Hanson-liveried
vehicles



10 packed
products plants



178 ready-mixed
concrete plants



6 marine
aggregate dredgers



47 sand, gravel
and rock quarries



3 cement plants



34
asphalt plants



3 grinding
plants making
Regen GGBS



19 rail depots and
wharves supplied by
road, rail and sea



1 joint venture
rail company,
Mendip Rail

PART OF A GLOBAL BUSINESS

We are part of the HeidelbergCement Group, one of the largest building materials manufacturers in the world, which employs over 60,000 people at 3,000 locations across 60 countries. The Group is the global market leader in aggregates and also has leading positions in cement and ready-mixed concrete.

- No. 1 in aggregates (No. 2 UK)
- No. 3 in cement (No. 1 UK)
- No. 3 in ready-mixed concrete

No.1 in the UK in
ready-mixed
concrete



WHY WE ARE THE SUSTAINABLE SUPPLIER OF CHOICE

We understand that sustainability is the highest priority when delivering any construction project.

The Hanson UK 2030 Commitments define the key topics and core principles of our corporate sustainability strategy. They will drive us to continually improve as we contribute to building a better world for 2030 and beyond.

2030 COMMITMENTS

1. Business and product innovation

We will ensure continuous business improvement through the effective management of all processes and resources and the continuing innovation of products and services.

2. Health, safety and wellbeing

We will ensure Hanson is a safe and healthy place to work and are committed to continuously enhancing the health, safety and wellbeing of our employees and contractors.

3. Environmental responsibility

We are committed to fulfilling our share of the responsibility to keep the global temperature rise below 2° Celsius; and we will continue to reduce our impacts on air, land and water.

4. Resource use and the circular economy

We will conserve natural resources by avoiding or reusing waste and by continuously increasing the use of alternative resources as substitutes for natural raw materials.

5. Being a good neighbour

We are committed to making a positive contribution to the communities around our operations and ensuring transparent communication to all our stakeholders.

6. Fairness, inclusion and respect

We will be a fair, respectful and inclusive company; encouraging a culture that values openness and transparency and recognises individual achievement.

We have clear targets within these topics and report annually on progress and performance.

Health and safety

Hanson's workforce is committed to achieving the highest standards of health, safety and welfare for our colleagues, customers and the general public. Right through the business, health and safety is a top priority and our target is zero harm.

Details of our Sustainability Strategy, Action Plan and our latest report, following the guidelines of the Global Reporting Initiative (GRI) can be found at hanson.co.uk/sustainability/report

We focus on the physical and mental health of our workforce and are a corporate partner of Mates in Mind, and industry charity campaigning for greater awareness and support for mental health issues.



REGEN THE STRENGTH BEHIND LOW-CARBON CONCRETE

Concrete is generally regarded as a high emissions product but using Regen can significantly reduce its energy use and carbon emissions.



Regen is a by-product of iron-making and its manufacture requires much less energy and produces around one tenth of the CO₂ emissions of Portland cement. As a result, replacing one tonne of Portland cement with one tonne of Regen in concrete reduces the embodied CO₂ by around 780kg.

Each year, the UK uses over two million tonnes of GGBS as a replacement for cement. This:

- Reduces CO₂ emissions by almost 1.56 million tonnes
- Reduces primary energy use by 1.6 million MWh
- Saves approximately 2.7 million tonnes of new materials being quarried.



Regen CEM II A-LL is a lower-carbon cement type which replaces a proportion of clinker with limestone, reducing the amount of carbon it contains.

- Can replace all of the CEM I in a concrete mix
- Attains the same strength levels as concrete made with CEM I
- Compatible with Regen GGBS and admixtures

37% of cementitious material used in our concrete mixes is a low carbon substitute

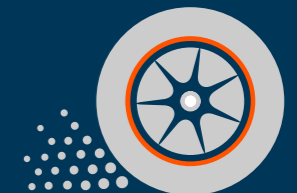
A sustainable solution



On-site batching is a dedicated supply, delivering the material right where you need it. This reduces local vehicle movements by about a third, keeping trucks off the road and transport costs to a minimum.



Recycling units can be supplied with all our plants – these can recover water and aggregate from truck and plant washing, and from returned concrete, which reduces waste which would need to be removed from site.



Noise and dust can be minimised by cladding the site plant. This is often a planning requirement so is available on all projects.



➤ BENEFITS OF SITE BATCHING

Hanson 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 operations 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

- A site plant provides continuity of supply throughout the project's lifecycle.
- Site plants are supported by our dedicated fleet of nearly 800 franchised concrete delivery vehicles.
- Our national network of over 170 ready-mixed concrete plants can provide back-up for any additional volume requirements.

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.

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 below.

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



Mains water – min 50mm mains pressure



Telephone – digital connectivity



Fuel point

Hanson will provide:



Mobile plant such as loading shovel



Silos



Washout/settlement/drainage



Truck mixers



Staff



Materials – cement, Regen GGBS, aggregates

OUR SUPPLY CHAIN

Ensuring a consistent supply of material to site plants is essential to their success and efficiency. Our network of cement and Regen plants, quarries, and wharves coupled with our supply chain expertise and extensive fleet means that we can offer bespoke solutions for each site plant

Road

Our fleet is large and diverse, using the latest EURO6 compliant vehicles to deliver cement, Regen GGBS and aggregates, with our fleet of ready-mix concrete trucks able to support projects where additional capacity is required. Deliveries can be made 24/7 according to the planning consents applicable to the site. For efficiency and sustainability we will always endeavour to deliver from our nearest quarry or works.



Rail

Rail is one of the most efficient ways to move aggregates and cement in vast quantities. We deliver aggregates by rail from our quarries in the north and south west, and all three of our cement plants are fully rail-linked.



Sea

The site batching plant at Hinckley Point C has been serviced with aggregates delivered by sea. Hanson Marine and other international operations have a fleet of dredgers delivering aggregates to our wharves around the south and east coasts, as well as into London and other coastal cities.



OUR EXPERIENCE

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



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 Hanson.
- 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 residential-led 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.



Jaguar Land Rover

Mercia Park a major new high-quality 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

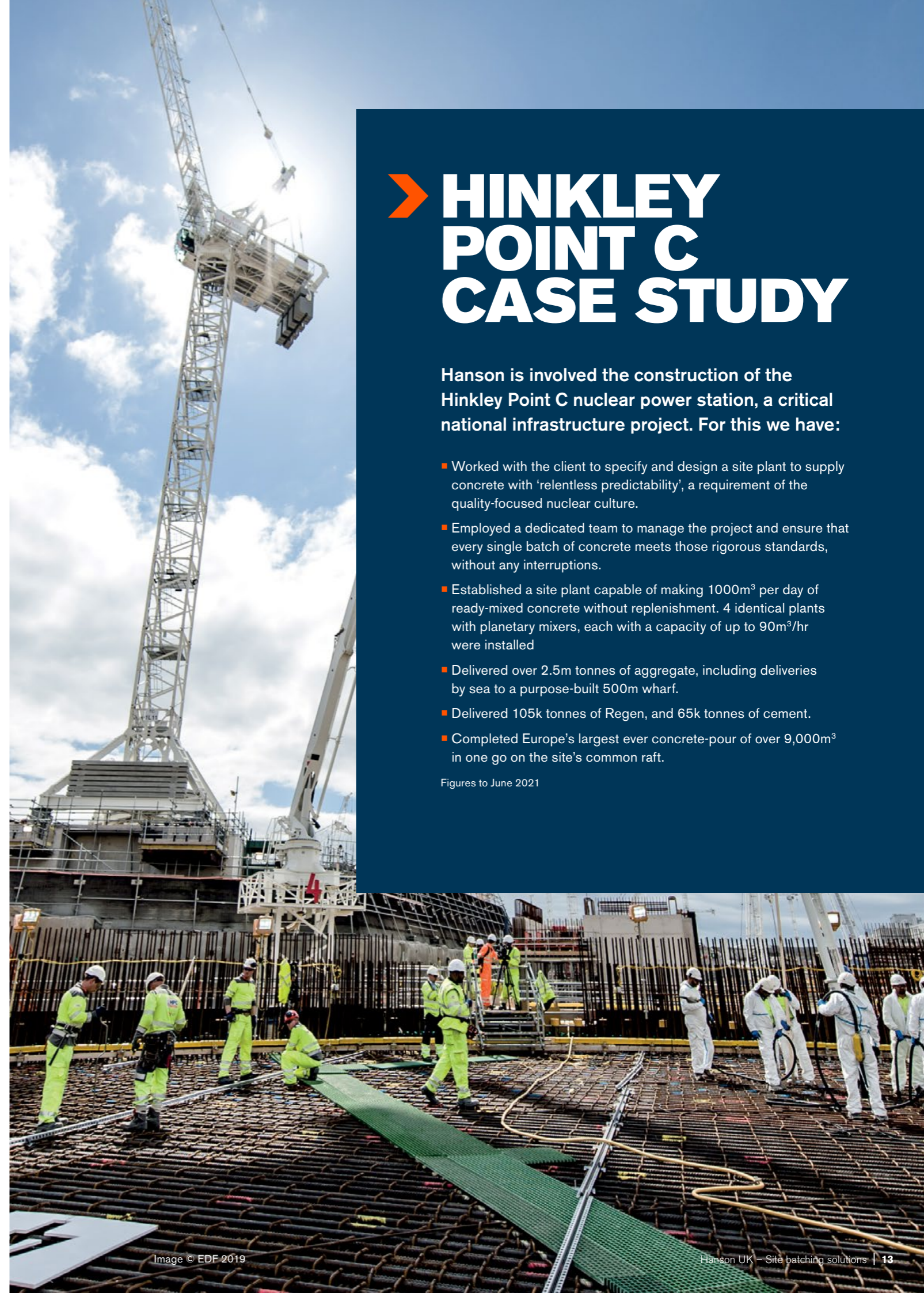
- Set up and operation of a mobile concrete plant with a reclaim system to eliminate washout waste.
- Supply of over 90,000m³ of concrete over 44 weeks.
- Provision of all necessary building materials – aggregates, cement and GGBS.
- Ensuring that all produced concrete meets the stringent quality requirements.
- Reduced truck movements by ~4,600 and reduced CO₂ emissions by over 300t due to using an on-site concrete plant

HINKLEY POINT C CASE STUDY

Hanson 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 a site plant 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 a site plant capable of making 1000m³ per day of ready-mixed concrete without replenishment. 4 identical plants with planetary mixers, each with a capacity of up to 90m³/hr were installed
- Delivered over 2.5m tonnes of aggregate, including deliveries by sea to a purpose-built 500m wharf.
- Delivered 105k tonnes of Regen, and 65k tonnes of cement.
- Completed Europe's largest ever concrete-pour of over 9,000m³ in one go on the site's common raft.

Figures to June 2021



➤ 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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