



**Introducing a new
era[®] in asphalt**

**50% less CO₂ ■ up to 50% recycled content ■
 faster completion of resurfacing work ■
 reduced binder ageing ■ enhanced durability ■
 available from selected plants nationally ■
 improved health & safety ■**

era[®]
 today's **greener** asphalt

today's **greener** asphalt

era[®] is the new energy reducing asphalt from Hanson UK, which takes asphalt technology into a new age.

The micro-foaming production process of Hanson *era[®]* reduces the level of carbon emissions associated with asphalt production for road laying by up to 50 per cent, while enhancing durability and improving health and safety for contractors.

The Hanson *era[®]* production process allows a wide range of Hanson's base, binder and surface course asphalts to be produced at a temperature of 80-95°C – giving a reduction in carbon emissions of up to 50 per cent compared with equivalent hot-mix materials.

It can also use up to 50 per cent recycled content, while the asphalt itself is 100 per cent recyclable, producing a greener asphalt to help meet the environment targets of today's road building projects.

The impressive temperature reduction results in no loss of performance. In fact, material produced this way can be more durable than traditional hot-mix materials.

This is because the reduced production temperatures result in the retention of many of the more volatile bitumen fractions which are lost during traditional hot-mix asphalt (HMA) manufacture.

This means that the binder retains much of its flexibility and reduces binder ageing.

As well as the increased sustainability credentials, the lower temperature of Hanson *era[®]* asphalt allows faster completion of resurfacing works, minimising time on site for contractors and disruption for motorists.

The material is laid by conventional asphalt paving equipment and we offer a full production and installation service using our Hanson Contracting team.



Hanson was the first company in the UK to produce and lay ERA (Energy Reducing Asphalt).

Hanson *era[®]* products have good compaction and workability and provide a more comfortable laying environment for contractors due to the lower temperature and reduced steam.



● Hanson *era*® has to be where the asphalt industry is going in the coming years. ●

Andrew Morris, Newport City Council

Hanson and Newport City Council

The Hanson *era*® production process can help local authorities reduce waste and carbon emissions and meet sustainability targets. Newport City Council has become one of the first to use it to resurface a heavily trafficked bus route.

The project involved producing, transporting and laying 110 tonnes of AC 20mm HDM binder course, manufactured at Hanson's local Penderyn plant, using the Hanson *era*® production process.

Hanson Contracting was impressed by the material's compaction and workability characteristics as well as the speed of laying, as the reduced temperature meant that it required less cooling time between courses.

Andrew Morris, chief highway engineer at Newport City Council, said: "Using Hanson *era*® allowed the site to be planed out, resurfaced and reopened to traffic within a very short window of time.

"Testing has shown that the resistance to deformation is equivalent to standard hot-mix asphalt. Hanson *era*® has to be where the asphalt industry is going in the coming years. We believe that adopting this new surface technology will help us meet our sustainability targets while providing durable, longer lasting roads for our community."

..... The 110 tonnes of asphalt used in Newport contained 20 per cent recycled material and was produced at a temperature of 95°C. This reduced carbon emissions by 1200 kilos compared with standard hot-mix, which is the equivalent of driving 8900km in a standard family saloon car – about the distance from London to Los Angeles.

taking asphalt into a new age





today's greener asphalt

tech spec

Hanson era® offers:

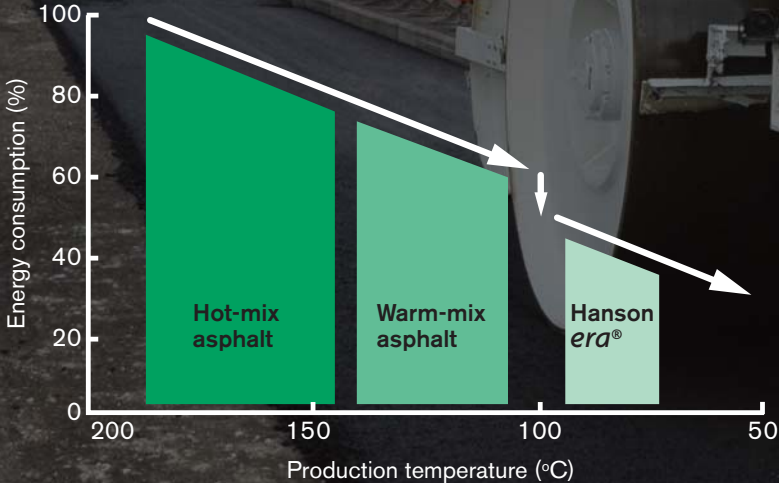
- 50% reduction in CO₂ emissions
- Up to 50% recycled content
- Reduced binder ageing
- Enhanced durability
- Faster completion of resurfacing work
- Improved health and safety
- Availability from selected Hanson asphalt plants across the UK
- Manufacture in accordance with ISO 9001 and Sector Scheme 14
- Proven performance using LEA process technology
- Technical support service available

Trial results for Hanson era® AC20 Dense Bin 40/60

tested to the Specification for Highways Works clause 929:

Characteristic	Result	Specification
Maximum density (kg/m ³)	2561	–
Air void content (mean of 6)	3.7%	0.5 – 7.0%
Indirect tensile stiffness module (ITSM) MPa	3002	> 1800
Wheel tracking to BS 598-110		
Wheel tracking rut rate @ 60°C	3.6	< 5mm/hr
Wheel tracking rut depth @ 60°C	3.9	< 7mm
Wheel tracking to BS EN 12697-22 (procedure B)		
Mean wheel tracking slope (WTS air)		0.33
Mean proportional rut depth (PDR air) @ 10,000 cycles		7.76%

dramatically reducing energy consumption




Hanson Quarry Products 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 cement-related materials. We are part of the HeidelbergCement Group, which has leading global positions in aggregates, cement and concrete. Hanson UK is split into four business lines – aggregates, concrete, asphalt and contracting and cement – which together operate around 300 manufacturing sites and employ over 3,500 people.

For detailed information on all areas of Hanson and our products visit hanson.co.uk


Bulk cement

- Regen (GGBS) 
- Grey
- White

Aggregates

- Sand and gravel
- Crushed rock
- Bulk decorative aggregates
- Agricultural lime
- Rock armour
- Silica sand

Asphalt

- Era – low temperature asphalt 
- Durafalt
- Tuffgrip
- Tuffpave

Concrete

- EcoPlus 
- Grey – CEM I, II, III
- Ready-mixed concrete
- Ready-mixed mortar
- Screed
- Coloured concrete – Colourcrete
- Piling concrete – EasyPile
- Watertight concrete
- Sprayed concrete
- Reinforced concrete – Fibrecrete

Contracting

- Highway maintenance
- Road surfacing

Packed products

- Cement 
- Ready-to-use mortar
- Ready-to-use concrete
- Asphalt
- Construction aggregates
- Decorative aggregates
- Sands
- Rock salt



SMARTPHONE SCAN CODE

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