

## A LOCAL BUSINESS SUPPORTING ISLAND DEVELOPMENT AND REGENERATION

Granite Products has been operating a granite quarry since 1946. We've had a strong presence on the island for over 75 years, employ over 50 people directly or indirectly and work hard to be a considerate neighbour and respected member of our Jersey community. We supply the local construction market with ready mixed concrete, aggregate and blocks.

With a granite quarry, high capacity concrete batching plant and block making facility, we have supplied some of the islands most prestigious infrastructure, housing and civil engineering projects.

As part of our local community in St Peter's Valley we not only take care of the land we

work but also ensure our operations and way of working are as sustainable as possible.

Team ideas and effort have resulted in product innovation, good practice, and a commitment to recycling and minimising waste. These are all cornerstones of our approach to reduce our carbon footprint.



### Low carbon concrete

We produce a range of low carbon concrete mixes that offer a reduced carbon footprint and are delivered in Euro 6 compliant vehicles.



### Non alkali-silica reactive

Uniquely for Jersey our aggregates are non alkali-silica reactive being the preferred aggregate for concrete in many high profile contracts.



### 1 million concrete blocks

We produce in excess of 1 million concrete blocks per annum complying to the highest standards of BSEN 771. These are available for collection by the public from our St Peter's Valley quarry or delivered to site on our own trucks.



### 125,000 tonnes

We extract approximately 125,000 tonnes of granite per annum and the material is processed in to aggregates for external sale and for use in our ready mixed concrete, block making and bagged aggregates, 20kg and bulk bags, for delivery or collection.



### Recycled aggregates

We also recycle material from development sites to produce 'secondary' aggregates, suitable for reuse in construction applications. Any inert residual materials that cannot be recycled will be used to restore previously worked areas of the quarry.



## Water, waste and energy reduction and recycling

- We use all borehole and recycled water (no mains water) for 100% of production on site of ready mixed concrete, blocks and dust suppression.
- We are reducing our use of water too. Currently we use 2.6 million litres of recycled water and this will increase to c4 million litres p/a in early 2023 - a 54% reduction in borehole water usage.
- We dry batch concrete resulting in significant reductions in electricity usage by avoiding using the pan mixer.
- A new vehicle wash out has been installed with a timed water addition which only allows 3.5m<sup>3</sup> into the mixer for wash out reducing borehole water usage by 50% for our fleet of 10 vehicles per annum.
- Timers have been installed on lighting throughout the site.
- Electricity use for batching has been reduced from 20 to 6 minutes using efficient production techniques.



## Low carbon concrete and recycled materials

- We produce low carbon ready mixed concrete using between 50 and 80% of GGBS (Ground Granulated Blast-furnace Slag) in our mix designs which reduces the high carbon Cem 1 (100% cement mix) usage by up to 30% depending on the mix and specification.
- Crushed glass is used in the production of non-structural, collect at quarry, concrete replacing 35% of granite sand.
- All returned concrete is recycled either into mega blocks or re-crushed into pipe bedding using our own crushing plant.
- Granite Products has planning permission to take in inert construction waste for recycling.
- Planning permission has been granted for an inert landfill site which will receive materials that cannot be recycled and which will be used for the future restoration of the site.



## Plant and equipment

- We recently installed a new block plant process controller improving product quality and reducing wastage by 30%.
- Plant improvements through planned preventative maintenance has reduced unplanned down time on average by 60%.
- Our RMC plant has the latest energy efficient motors and fully computerised control system.
- All mobile plant within the quarry is fully compliant with emission regulations.
- All road vehicles have euro 6 engines which meet carbon emissions regulations.
- Internal vehicle movements on site have been reduced from 12,500 to 5,000km per annum by siting the aggregate feed hopper for the new plant adjacent to the crushing plant saving a total distance of 7,500km per annum which is the equivalent of traveling from Jersey to South America.