



COGRI GROUP

Global Flooring Solutions...

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COGRI NEWS

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Wishing You a Merry Christmas and A Prosperous New Year



VNA Laser Grinding in Australia

Concrete Grinding Ltd has successfully carried out their third Laser Grinding contract in Australia, working for CoGri Australia Pty Ltd, formed at the end of 2010. The client, an international perfumery company, required 7 aisles of 48m (336m total) to be upgraded to suit VNA operation. Face Consultants Pty Ltd had already carried out a Profilegraph survey to TR34 (Appendix C) DM3 which showed the full length of every aisle would require grinding. The Laser Grinding technicians completed whole aisle width grinding to 1.8m wide which was done following the installation of racking. The client opted for this format of grinding so that other materials handling equipment such as hand pallet trucks could easily be operated within the aisles.



Ground narrow aisle using the Laser Grinder®

CoGri's Floor Acknowledged Amongst Other Initiatives by 2011 Green Supply Chain Award

A global supermarket chain's DC at Jiashan scooped the Green Supply Chain Award in November 2011 in Shanghai, held by The Global Supply Chain Council, Asia's leading professional organisation in supply chain. The Logistic Centre was acknowledged for many environmentally friendly technologies including the floor, which was constructed to a high standard aiming to provide long life and low maintenance. The Jiashan Green Logistics Centre is built to the retailer's design standard but adapted to comply with Chinese regulations.



Top: Jiashan DC. Below: Construction in progress

Face Consultants carried out the structural analysis and the design of pile interfaces and jointing details in December 2008. CoGri Asia began building the floor 18 months later using advanced techniques such as a joint less Steel Fibre Reinforced (SRFC) floor on piles. The floor is 275mm thick steel fibre reinforced, joint less and fully suspended, thus providing a flat floor with very high load bearing capability and low maintenance due to absence of saw cut joints.

The construction methodology of the flooring system uses less steel, concrete, manpower and employed a shorter construction program in comparison to other conventional construction practices. An estimate of 2,200 tons carbon emission was saved with the adopted construction technique. This is equivalent to travelling around the globe 16 times in a mid size car at 21MPG.

In addition, Material Handling Equipment (MHE) at the Logistic Centre is able to



operate more efficiently due to the flatness tolerance of the flooring while maintenance to the MHE will also be reduced to a minimum.

This large 55,600m² DC was the retailer's first purpose built facility in the area, and CoGri were awarded this project due to their recent successes on other SFRC projects in Malaysia and Thailand.

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A Specialist's Approach to Floor Joint Repairs



From top: Damaged floor joints; Clean arris edges with dowel bars installed; Completed floor joint repairs

CG Flooring Systems have recently completed a substantial joint repair project at a warehouse in Milton Keynes for a Building and Property Consultancy whose aim is to set the standards and deliver excellence in all areas of their business. The Consultancy were acting as the project manager on behalf of their client and the warehouse occupier, an international high quality tyre company, and invited CG Flooring Systems to submit a proposal for the repair works.

The repairs were required on two expansion joints, each of 70 metres in length that run the entire width of the warehouse, mainly in Free Movement (FM) Areas but also included a 35 metre section through the Very Narrow Aisle (VNA) Area of the warehouse. A previous repair method had been carried out on both joints however, these repairs exhibited excessive signs of premature wear and degradation once subjected to operational traffic from the customers Material Handling Equipment (MHE). After a period of consultation between all parties agreement was reached on an appropriate repair detail and a programme to execute the repair works.

With the emphasis on ensuring the joint repair works could proceed with minimum impact to the customers ongoing operations, the repairs were to take place over 4 Phases. This meant treating half the length of each joint at a time. Based on good engineering practice the new repair detail involved cutting back to sound concrete within the existing floor effectively forming a channel. The old and damaged concrete was cut into blocks, which in turn were lifted out and removed for disposal. This method of removal ensured a virtually dust free process without the need for erecting structures to prevent dust from contaminating warehouse stock. The newly formed clean arris edges to the concrete slabs then had holes drilled into them at regular intervals, into which dowel bars were resin fixed in order to provide a load transfer mechanism to prevent differential vertical movement at the joint, which can be caused by the movement of MHE across the joint. Consolidation of the sub-base, application of a physical damp proof membrane and a layer of reinforcement mesh completed the preparation works. An early strength, micro-silica concrete was then poured into the channel which received a power floated finish.

There were a number of reasons for choosing this repair detail, mainly the use of a concrete mix of this nature ensured the floor could achieve a very high standard of abrasion resistance within a short period and be returned to the customer within 7 days of each phase being completed. This compares favourably with a significantly longer period of 28 days if a standard concrete mix was used. The installation of the load transfer mechanism will not only provide better support for daily operations, it has the very strong potential to reduce future maintenance costs for both MHE and floor repairs.

This project demanded a considered and measured approach in order to deliver the high standard of repair required, within an acceptable time frame. Each phase was completed over one working week and this could only be achieved by adopting a dynamic approach with clear communication paths and undoubtedly, an understanding warehouse occupier. The appointment of a specialist industrial flooring contractor whose knowledge and understanding of not only concrete floors, but experience of warehouse operations to work in tandem with a thoroughly professional Project Management Company, demonstrate in no small way the benefits of what can be achieved by using specialists on challenging projects.

New Appointments

The CoGri Group welcomes Jane Xia and Darren Pinder to the team.

Jane Xia joined CoGri China Co., Ltd as Accounts & Administration Assistant and started working at their Shanghai office from October 2011. Jane has a Bachelors Degree in Textile Engineering from Wuyi University. Prior to joining CoGri, Jane worked as an Office Manager for a US and China based Fashion Company.

Darren Pinder joined CGFS as their new Estimator in November. Darren was previously working for a competitor as their Business Development Manager before returning for a third time to CoGri. Darren has previously worked for the Group back in 1990 and was one of the first Laser Grinding Technicians for Concrete Grinding Ltd. From 1993, Darren went to work for Abbey Hanson Rowe Architects as one of their Architectural Technicians. In 1996, he rejoined Concrete Grinding UK as their Operations Manager, as Technical Surveyor for two years and as Director for two years before leaving in 2005 to set up his own kitchens and bedroom refurbishment business.



From Left: Jane Xia and Darren Pinder

A Good Floor Repair

In October 2011, CoGri Asia successfully completed a warehouse floor repair for a leading manufacturer of power generation equipment in Singapore.

The repair work comprised of 142 linear meters of Type 1 & Type 3 joint repair as well as surface repairs to 136m² of floor. CoGri Asia is extremely thrilled as this repair job was awarded through a positive referral from a satisfied client who engaged us on a similar repair job completed in 2010.

The client specified that all repair work was to be completed in 2 weeks without causing any disruption to their warehouse operation. To accommodate these conditions, CoGri Asia carried out the repairs at night although this proved challenging as there was limited access to the most affected area where the repairs were required. In addition, the repair team applied waterproofing to the surface repair when they uncovered delamination which was caused by the corrosion of reinforced bar underneath the floor surface as water ran through the floor slab. Waterproofing helps to prevent further moisture from damaging the repaired floor area and can increase the life and durability of the repair solution.

CoGri Asia completed the project on time with no disruption to the operation.



Top: Delamination due to corrosion of rebar; Below: completed floor repair

FACE on Film

Face Consultants have been quite busy in the last quarter, working on several projects at numerous locations, filming of the FACE Team on-site, application for full membership with the UK Slip Resistance Group (UKSRG) and attending the Resin Flooring Association (FeRFA) Annual General Meeting (AGM) to name but a few.



Following a United Kingdom Accreditation Service (UKAS) surveillance visit, FACE has successfully been approved for UKAS Accreditation to BS.EN ISO/IEC 17025 'General Requirements for the competence of testing and calibration laboratories' to carry out floor flatness testing to the Concrete Society's Technical Report No. 34 (TR34), and accelerated abrasion resistance testing to check compliance with BS 8204-2:2003 for a further 12 months.

Duane Scarfe, Operations and Quality Manager of Face Consultants was accepted as a Full Member of the United Kingdom Slip Resistance Group in November. He has been an Associate Member of the UKSRG since he joined in March 2009. As a full member, he is looking forward to playing an active part in the development of new standards, sharing knowledge and expertise and keeping up to date with relevant technology within the Slip Resistance industry.

Photography and filming for the FACE marketing videos continued in East Midlands in September. Working for Stanford Industrial Concrete Flooring Ltd, FACE was able to demonstrate Free Movement



On-site filming and photography in East Midlands - Abrasion Resistance Testing

surveys, Bespoke Level surveys and Abrasion Resistance Testing on-site. Stanford's Managing Director Kevin Louch was also present and was able to add valuable testimony to FACE services on the day.

These productions, combined with footage collected from the filming in August at a DC in Milton Keynes, and at FACE HQ in Huddersfield, were used to

create the 'About FACE' video which is now completed and live on FACE and YouTube websites. To view the team in action, please visit www.face-consultants.com

On Friday 18 November, FACE attended FeRFA's Annual General Meeting which took place at the Belfry Hotel, Wishaw, SuttonColdfield, West Midlands. This provided an opportunity to network and exhibit FACE key floor testing services which includes:-

- Abrasion Testing • Slip / Skid Testing • Surface Micro Roughness Assessment • Drop Testing • Pull Off Testing • Surface Regularity Testing • Relative Humidity Testing • Crack Surveys or Crack Monitoring • Cover Meter Testing

For more information about FACE services please visit www.face-consultants.com or contact us on +44 (0) 1484 600090 email info@face-consultants.com

A Fresh Start for E-Mart

2011 has been the busiest year yet in the CoGri Group's 15 years of history in South Korea. Amongst numerous other projects completed, three very challenging and complicated concrete flooring projects have been completed by CoGri Korea for Shinsegae Construction which is part of the Shinsegae (literal meaning 'new world') Group. Shinsegae is the largest Retailer in Korea with its flagship store in Busan being the world's largest Department Store.



Completed Concrete Topping Floor at E-Mart Hypermarket

E-Mart is a subsidiary of Shinsegae and the largest Discount Store chain in Korea. In 2010 / 2011 E-Mart made the decision to switch the design of its flooring in its multi-storey hypermarkets from traditional vinyl to a Direct Concrete Finish, mainly for aesthetic reasons but also for reductions in long term maintenance costs.

After attempting to place a concrete floor finish in a couple of stores it became clear that placing aesthetic concrete flooring to multi-storey facilities was not so simple and Shinsegae Construction approached CoGri for advice.

Following detailed technical discussions between CoGri and Shinsegae, the preferred Concrete Flooring Solution was selected and in May 2011 CoGri was awarded its first project for E-Mart. Based on the clients key requirement for minimal cracking, an Unbonded Concrete Topping Solution was selected for the total 12,000 m² of floor space spread out over 3 storeys of the hypermarket. In order to provide the client with a single point of responsibility for the flooring quality, CoGri's scope of work included the supply and placement of all necessary materials, inclusive of supply and application of a Liquid Applied Hardener and temporary protection to the finished floor.

As expected, the logistical challenge of pumping the concrete to upper floors and basements with limited access points whilst dealing with many last minute changes to the store layout by the client – typical of such Fast-Track projects, required a very high standard of project management from CoGri Korea. With good teamwork, attention to detail and the usual high standard of quality control from CoGri, the end result was better than expected by both Shinsegae and CoGri Korea.

Following the successful completion of its first flooring project for E-Mart, CoGri Korea has since completed concrete flooring to two further E-Mart stores, both having actual improvements on the first project due to optimisation of the solution and improvements in communication between main contractor and the specialist flooring contractor. CoGri Korea looks forward to further developing its working relationship with Shinsegae and E-Mart in 2012.



New Laser Screed delivered to CoGri Middle East

Laser Screed Placed in Middle East

CoGri Middle East LLC has had a new arrival in Dubai in the form of a Somero Laser Screed. The arrival of the new machine means CoGri M.E. can be much more competitive when it comes to bidding for floor construction projects and help to strengthen CoGri M.E. presence in the region and broaden the range of services on offer. The Laser Screed will also be available to Contractors to rent from CoGri M.E. along with the necessary operator and support staff, allowing them to build floors much faster to a higher standard.

A flooring contractor is currently renting the Laser Screed to work along side their own on a project out towards the Saudi Arabian border in order to get the floor construction finished on time. The floor construction on the first phase of this project is due for completion just before Christmas.

Work continues to grow in the Middle East, following up on all the strong enquiries received at the Materials Handling Middle East Show as well as dealing with the usual flow of work.

For future work, CoGri M.E. received an order for a floor design for a chilled dairy foods storage warehouse and have had several enquiries from Qatar, a few leads in Abu Dhabi, in addition to the usual workload from Dubai.

Celebrations in Australia

FACE and CoGri Australia celebrated its first anniversary. Only a year ago the CoGri and Face Australian businesses were established and it has been quite a year since with a number of Laser Grinding contracts awarded, hundreds of linear metres of joint repairs completed and thousands of metres of aisles surveyed, including free movement surveying.

More recently, Face Consultants Pty Ltd have been engaged to oversee the construction of a number of new floors for a brand new DIY retail chain in Australia. The new chain is proposing to roll out 150 new stores and is set to become a driving force in home improvement in Australia. Face consultants were initially asked to give a critical review of the current floor specification and advise how to improve and streamline the specification whilst working with their project team. On-site Q & A will be carried out on the new floor by FACE.

FACE have also been busy doing Abrasion Resistance Testing, Core Sample reports and the Profileograph surveys remain busy with recent surveys of two new VNA installations on the outskirts of Sydney and Melbourne.

On the other side of the company, CoGri Australia have been kept busy with a number of projects and are soon to start their 4th Laser Grinding project for a major document storage company as part of their global roll out of VNA. CoGri Australia have also carried a number of remedial repairs to floors including Joint Repairs. At the end of November CoGri Australia finished laying its first 3 coat high build epoxy coating system to 619m² of floor for a major global 3PL company.

CoGri's global brand and reputation is really starting to spread with a spike in interest for its floor design services and enquiries are coming in from all over Australia.



COGRI AUSTRALIA PTY LTD
Global Flooring Solutions

FACE CONSULTANTS PTY LTD
Global Flooring Consultants

Design and build - 3,600m² Structural Slab

In September 2011, CoGri Asia successfully completed a structural slab in the Singapore warehouse of a leading distributor of steel pipes and tubing for the oil and gas industry.

As part of their expansion plans in Asia, the client acquired an existing warehouse which required installation of a flooring system suitable for their operations. This warehouse is used to store heavy duty steel pipes and tubes where the slab was subjected to heavy loading.

Providing the client with a cost effective flooring solution that met their requirements, CoGri Asia's work scope comprised of the construction of 3,600m² of a 200mm thick structural slab. The slab was designed by Fastrack Projects to sustain uniform loadings of 75 KN and 50 KN with FM2 floor flatness specifications in accordance to the UK Concrete Society Technical Report 34. In addition, CoGri Asia was also responsible for all administration and submission of the detailed design to the local authorities.

Working on a tight schedule, CoGri Asia had the slab reinforcement prefabricated in panels, lifted and installed on-site which substantially reduced construction time. The deployment of a copperhead during casting further improved the construction productivity by increasing the average output of slab cast to 900m² per day. As the client's warehouse was not new, the slab design had to take into consideration the best allowable load capacities of the existing ground beams. The project was completed to deadline.

CoGri Asia is committed to delivering high quality concrete flooring solutions and providing clients with peace of mind. Completing projects on time further adds to clients' satisfaction.



Photos from left: Rebar panel installation completed; High quality FM3 flooring

CoGri Raised Money for Charity

The staff at the CoGri Head Office in Huddersfield rallied together and set up a team of bakers, cooks, volunteers for waxing and raffle donations to help raise money for BBC Children In Need Charity.

BBC Children in Need is the BBC's UK corporate charity, providing grants to projects in the UK which focus on children and young people who are disadvantaged. The Children In Need Appeal is an annual event and this year took place on Friday 18th November.

The CoGri appeal began w/c 14th when instead of buying out for lunch and snacks, staff were encouraged to purchase buns, cakes and lunches from colleagues who have taken their time and money to bake / cook delicious buns and lunches throughout the week.

To mark the event, the non-Uniform / fancy dress took place on Children In Need day. All the CoGri ladies bought Pudsey T- shirts, ears and earrings to wear on the day. Jon Morris, CG Flooring Systems' (CGFS) Contracts Manager, turned up as Zorro and CoGri's Digital Marketing Executive, Thomas Rochford came as Captain Jack Sparrow from the Pirates of the Caribbean!

The scrumptious lunch on 'Pudsey Day' was followed by Alan Yuill, CGFS Director and Wesley Thompson, Concrete Grinding's Technician, having their back and legs waxed. At the same time, raffle tickets were drawn.

Overall, what started as a simple idea turned into a very enjoyable week for the CoGri staff, even though we suspect that most of the staff had gained an extra pound or two in weight! We helped to raise a fantastic £395.10 which will hopefully make a child's life a little easier.



Clockwise: Lynn Dare, Deborah Radcliffe, Gemma O'Toole, Louise Wibberley, Jon Morris, Thomas Rochford, Paul Altham, Elizabeth Stockdale and Susan Smith

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