













Large Scale Grain Handling, Processing and Storage Projects

Founded in 1832, T H White is today one of the UK's leading design and construction contractors for agricultural and industrial plants, specialising in grain and other free flowing bulk solids handling installations. We are the UK's largest independent specialist in the end to end design, procurement, project management, and construction of grain facilities for co-operative and commercial grain storage, malting, milling, human food production, and animal feed compounding industries.

Our strong reputation is based upon developing a thorough understanding of our clients' requirements and then applying an innovative approach to deliver the most efficient and cost-effective solutions. We tailor our approach to suit our clients' needs and can offer a complete turnkey design and build solution from concept right through to completion, and anything in between.

Being completely independent and with a wealth of practical knowledge held within our team built up through years of experience, our clients are able to benefit from our unbiased and highly competent advice in the collaborative and inclusive approach that we take on all of our projects. Whatever the size of your project, we always take the time to consider and discuss the alternative solutions that could



be considered. In seeking to understand where best value lies, alongside whole project costs and cost per tonne, we will also reflect on the wider factors that can impact on design and equipment specification. This would include duty rating, planning conditions, future proofing, aftersales support, and ease of use and maintenance etc.

All our projects are carried out using T H White's highly trained and experienced staff and the delivery of our projects is assured to be fully compliant with all current Construction Design and Management (CDM) regulations. No matter what the challenges, T H White's expertise will deliver a competitively-priced solution, finished to the highest standards, completed in accordance with robust ISO9001 Quality Management Systems.

T H White's capability

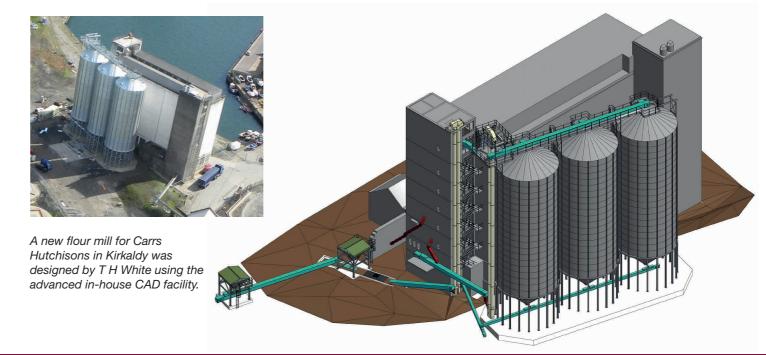
- Complete machinery / process towers, machine skids, gantries, catwalks, and platforms
- Steel frame buildings for industrial and agricultural bulk bunker stores etc.
- Round hopper bottom silos, flat-bottomed silos, bulk out loading silos
- Square bins, buffers, hoppers, hygienic twin-skin bins, waterproof pit liners
- Heavy duty full drive over rapid tip intake pits, hoppers and grids, as well as lighter duty back-up intake systems
- Rotary drum and reciprocating bed pre-cleaners, fine cleaners, indented cylinders, de-awners etc
- Colour sorters, gravity separators, and scouring equipment etc
- Elevators, chain conveyors, belt conveyors, screw conveyors and blowlines
- Continuous flow driers, batch driers, on floor, and in-bin driers
- Grinders, mixers, pellet presses, coolers, and sieves
- Samplers, weighbridges, in-process weighers, in-bin weighers
- Bulk bag packing, handling, and labelling equipment
- Bin dischargers and agitators vibrators, hydrascrews, sweep augers, and fluidised discharge systems etc
- Dust aspiration equipment, filters, cyclofans, cyclones, and extraction equipment
- Lined and unlined ducting for heavy or light duty applications
- Motorised and hand slides and valves for product duct systems
- Fuel tanks, gas tanks, pump sets and pipework
- Electrical control panels, SCADA, mains distribution, field wiring, and power factor correction



Steelwork is fabricated in our own workshops at Devizes. All production is managed in accordance with our ISO9001 Quality System, and all structural steelwork meets all current CE compliance standards.

Typically, our scope will include engineering design, equipment procurement, steel fabrication, and project management, together with site erection, plant mechanical and electrical installation and commissioning. We can also offer aftersales technical support, planned maintenance, and emergency breakdown response for complete peace of mind.

All the projects we undertake benefit from significant inhouse expertise and an impressive 3D CAD design facility. Using the Autodesk platform and latest versions of Inventor and AutoCAD software for our plant layouts we are able to interface with a wide range of other design packages where project design teams need to collaborate. Our steel detailing is also done in 3D using either Advanced Steel or Tekla, allowing automated detail drawing output and production of NC files that can be used to automate the production of our manufactured steelwork.





High capacity seed processing plant



This high capacity seed plant owned by Openfield, one of Britain's largest grain marketing and arable input businesses, was successfully designed and constructed from scratch by the T H White team and is one of the largest seed plants of its kind in the UK.

Strategically sited next to the A1 trunk road in Lincolnshire, this seed plant is within a 150-mile delivery radius of 70 per cent of Britain's total wheat acreage, facilitating effective, low cost distribution to growers in East Anglia, the Midlands and the North. The plant has the capacity to process over 500 tonnes of processed, treated, and packed seed per day.

The plant is based on a dual line system enabling two different products to be processed at the same time. The seed cleaning equipment includes sieve cleaners, de-awners, indented cylinders, de-stoners, and a gravity separator. Finished seed is then run through specialist chemical treaters, and in-stream batch weighing equipment that is built into the bulk bag packing assembly. By any standards this is an impressive and versatile bulk seed production facility, all built neatly into a redundant bulk grain storage building.

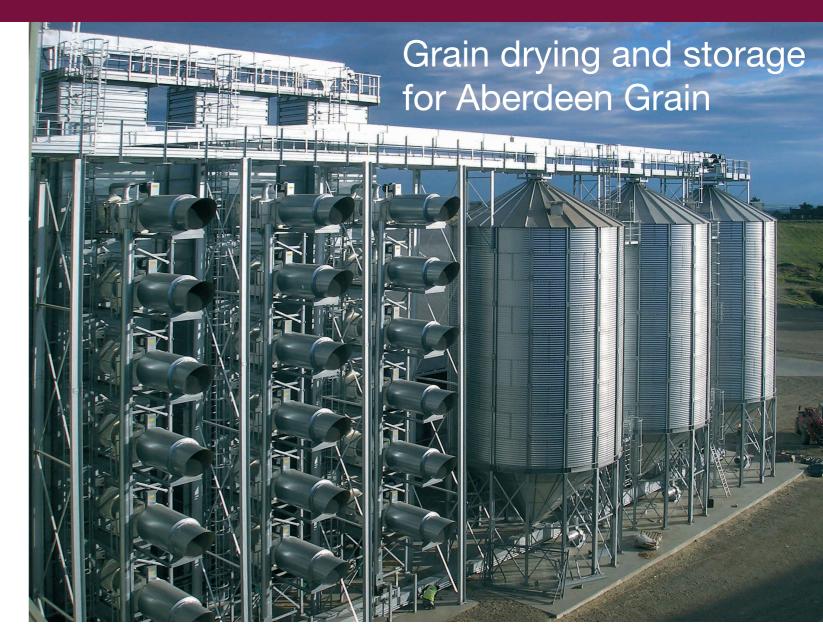
New Advanced Processing Centre for Camgrain



A supersized project for the large farmer owned co-operative store, Camgrain, constructed on the site of an old cut and fill quarry, designed and built from scratch by T H White under formal contract, truly is a cathedral for grain. With a double drive over rapid tip intake capacity of 600tph, and a bulk store capacity of some 70,000t of milling wheat in a heap that stands over 20m high, the infrastructure supporting this site includes a fully automated SCADA based control system that allows operators to manage the entire system centrally, and has remote monitoring / control capability built in. The whole system has a hungry appetite, with driers rated on milling wheat, and a cleaner that will swallow wheat at a rate of 360tph. The whole plant is fully future proofed and is designed with the rapid turnaround of lorries in mind to maximise haulage efficiencies, and ensure farmer members can send in grain to the store 24/7 – even in the most pressurised harvest campaigns.









A major design and build project for a large Scottish co-operative grain drying and storage business, Aberdeen Grain, has substantially increased intake, wet holding, grain drying and storage capacity.

An additional 400tph intake capacity, and 1,500t wet holding capacity in three hopper bottom silos allows for rapid intake through two separate tailgate tip pits. A pre-cleaning and drying system specifically designed to handle the high tonnages of malting barley that this plant routinely processes and stores is rated at 60tph on malting barley, and over 200tph on feed wheat.

This new infrastructure supports significant additional storage tonnage, all built under the same contract. A 40m x 78m steel-framed building provides on-floor storage split into eight 3,300t bunkers, giving a total capacity of 26,400t. A further flat-bottomed grain silo also provides an additional 1,600t of storage, complete with a sweep auger discharge system. This plant development, supported by European grant funding has given Aberdeen Grain the capacity to support their expanding farmer membership, whatever the weather throws at them at harvest time.



Case studies



Wiltshire Grain goes from strength to strength



When T H White planned and built the first phase of the new plant at Wiltshire Grain back in 1997, future proofing was built in by our design team. This forward thinking has made the majority of the new work to support their growing membership a simple task. In recent years, European grant funding was obtained, and the benefit of this foresight was fully utilised by the team. This phased build has now provided an additional 37,800t capacity across 21 storage silos, an additional 120tph cleaner and drier, and two 125t bulk out loading silos for rapid lorry loading.





Building for Angus Cereals in Montrose

T H White completed a two-phase quayside development for Angus Cereals at the Port of Montrose. Montrose is situated on the east coast of Scotland roughly midway between Dundee and Aberdeen, and in recent years the port has undergone considerable expansion, largely to serve the needs of the offshore oil industry. This sheltered haven at the mouth of the River Esk has excellent road and rail links in all directions and was selected by Angus Cereals as the ideal location for its grain facility.

T H White has a long history in the design and construction of large scale grain handling and storage facilities. Having pioneered the development of some of the early central storage facilities, we are proud to still be supporting many of these stores both in their progressive developments as well as refurbishments to this day. As a quayside store owned by a farmer membership, Angus Cereals is another step forward as

a strategically important store for the farmer co-operative to capture added value in the supply chain.

The first phase of the development by T H White at Angus was planned for completion to coincide with the extension and reconstruction of a new quay at Montrose. It provided total storage capacity of 26,000 tonnes in five bunker stores, with two 200tph intakes, three 720-tonne holding silos for wet grain and three high capacity mains gas-fired grain dryers.

The second phase, also designed and constructed by T H White, added a further grain storage capacity of 14,400 tonnes, with an additional 720-tonne holding silo and a 150-tonne bulk loading silo. Provision has also been made for future expansion with the addition of another 36,000 tonnes storage capacity, a further loading silo and two more high capacity grain dryers.

Ship loader at Shoreham Silo Services Ltd













After Sales

Once we have undertaken an installation we offer a range of services that will help to prolong the life of the investment.

At the heart of this is a programme of planned servicing and maintenance.



Planned Maintenance

A regular maintenance regime is important to ensure your plant continues to function efficiently and reliably with the minimum of down time. We can offer a comprehensive range of planned and preventative maintenance options for any grain plant. We understand the need to fit maintenance works around operational requirements and our approach to maintenance is both flexible and thorough.

The range of services offered extends from one off repairs and upgrades, to full contract servicing arrangements with rolling preventative maintenance programmes. In all cases we understand that cost is a key issue, and are always pragmatic. By working with our customers, we seek to avoid unnecessary replacement, yet maintain the plant in safe, sound, fully operational condition.

Winter Servicing Discounts

By carrying out servicing at times when our site teams are less busy, we are able to offer a stepped range of discounts. Our discounted servicing offer usually runs from October through the winter period. The highest discounts are available to those who book early and are able to make their plant available in the earliest part of this period.

Repairs and Upgrades

Whatever type of storage and handling system you are operating we would be pleased to quote for repairs, upgrades and improvements of any size. Working with our customers to optimise their grain plants and make the most of their existing facilities is a frequent undertaking by our experienced team.

Spare Parts and Emergency Call-out

We provide a comprehensive breakdown and emergency call out service for any grain storage and drying plant and run a full 24/7 service during the harvest season. We are able to source parts to suit equipment from most manufacturers and carry a stock of common spare parts ready for immediate despatch. We offer our call out service to new and existing customers alike, and always aim to provide an immediate response.

Safe Access Platforms

Safe access platforms are essential for compliance with the latest health and safety legislation when your workforce members are operating at heights. T H White designs and builds bespoke safe access platforms to suit any situation, whether these are to be fitted into new plants or retrofitted into existing plants.



Tel: 01380 723040
Fax: 01380 725707
Email: projects@thwhite.co.uk
William Road, Devizes, Wiltshire, SN10 3EW