



MARINE



HIGHWAYS



RAILWAYS



ENGINEERING

## TEMA Engineering - The Way Forward



Left to Right: Geriant Rowe, Gambit Corporate Finance, Steve Lloyd, Mark Donovan and Andy Marinos from TEMA

As of the 17th April 2009 the assets of Taylor & Sons Engineering were acquired by TEMA Engineering Ltd, a subsidiary of long established South Wales business Penarth Industrial Services.

"The Acquisition follows a multi-million pound investment in the TEMA Engineering Factory including the expansion of the headquarters building and represents a significant opportunity for TEMA to target new markets, offer greater

diversification and together the businesses will create a single concern with the financial strength, skills and customer base to create an enlarged and formidable concern", commented Andy Marinos, Operations Director.

The company will maintain its present structure and personnel and continue to provide the same service to clients as previously given operating in the short term from the same premises.

## Cemetery Footbridge Now Open

A project initially comprising the supply of one new bridge span and three refurbished was put on hold when it was found that extensive repairs were required following shot blasting. Subsequent discussions led to a decision to replace all bridge spans with new, maintaining only the historic cast iron bridge support columns for aesthetic purposes.

The new spans were completed and recently installed during a 24hr rail possession – the first installation project under the new TEMA name.



Cemetery Road Footbridge



TEMA ENGINEERING LTD

Tema's humble beginnings started in 1981. Situated on Penarth Dock in a small factory once occupied by Penarth Dock Engineering.



PENARTH INDUSTRIAL SERVICES LTD

In 2005, TEMA was purchased by Penarth Industrial Services who have been in the Engineering Industry for over 30 years, servicing the Utilities, Steel and Petrochemical Industries with fabrication, structural, piping, mechanical and machining services.

The two companies were brought together after a multi-million pound expansion of the workshops and offices, thus leading to a combined workforce of nearly 100 employees.

The acquisition of Taylor & Sons Engineering will increase the combined workforce of Penarth and TEMA to approximately 150 engineering tradesmen.

## Clients show confidence in new company

**WSM Grand Pier** – Owners place order with TEMA to carry out the repair and strengthening works on the Grand Pier following the devastating fire in 2008.

**Dean and Dyball** – Confirm their intention to place contract for new Lift Bridge with TEMA.

**Carillion** – Novate all existing contracts to TEMA.

**Manchester Ship Canal** – Confirm intent to place order for 2 new sluice gates with TEMA.



TIDAL GATES



FOOTBRIDGE



BOARDWALK



SECTOR GATES

## New lock at Boston

We are pleased to have been involved in the prestigious project at Boston where a new lock has been designed and constructed to re-open the South Forty Foot Drain to navigation.

A contract awarded by Jackson Civil Engineering following a Tender process where our previous experience of similar constructions was a major factor in being chosen as the preferred contractor.



Lock during construction

The scope of work included the manufacture and installation of the new Mitre and Sector gates, their control system, together with the Stop Logs, access footbridge, ladders and platforms, small floodgate and refurbishment of the existing sluice gate.

The official opening of the New Lock at Boston took place on the 20th March 2009 as scheduled.



Boston lock opening day

## Minworth Radial Gate a first for STW

We have successfully completed the design, manufacture and installation of a new Radial Gate for the BNM Alliance at Minworth STW. This is the first radial gate on a Severn Trent Water Treatment Works. The 5m wide x 4m high gate has been designed to provide enhanced flow control over a wide range of flows.



Minworth Radial Gate

"I have been very impressed with the group, it was interesting seeing the design develop. The installation team took a safety first approach and made a hard job look easy"

*Richard Thomson*  
BNMA Project Manager

## New Sluice Gate for Barton



A new client to add to our growing list of prestigious clients is Manchester Ship Canal, part of the Peel Ports Group, who following a tender process awarded the contract to manufacture and install a new vertical lift gate for Barton sluice, Manchester. The Gate 9.1m x 7.8m is the first of a series of gates to be manufactured with the client who has already confirmed their intention to place a contract for a further two gates during 2009.

## Denver Sluice Further Works



Denver Sluice

Following a previous successful contract to supply and install stop logs at Denver Sluice, We were awarded a contract by Birse Civils for phase 2 and phase 3 of the project. This included repairs to the existing Timber Mitre Gates, removal of the stop logs and installation of a de-silting system. This contract was briefly interrupted due to birds nesting in the recesses of the existing Mitre Gates; however the project went on to be completed in late 2008.

## New Slipway a success

Trials of the new Tamar Class Lifeboat at RNLI Angle have been completed successfully on the new tipping cradle and slipway manufactured and installed during 2008/2009. The new RNLI Lifeboat delivered to Angle in March 2009 enables the crew to mobilise and launch more rapidly than the previous lifeboat which enhances their existing first rate service.



Angle Lifeboat Station



FOOTBRIDGE



MITRE GATES



LINK SPANS



STOP LOGS

## Temporary Infill Deck

We have recently completed a contract to manufacture and install a temporary infill deck on the A34 Wolvercote Viaduct for Costain Ltd. The deck is an extension to the new concrete reinforced structure and will be utilised until the existing bridge is demolished and the new concrete section can be slid into position.



Wolvercote Viaduct

The structure was intricate and required a full trial erection in the workshop to ensure the exact orientation had been achieved. The workforce agreed to forgo some of their Christmas celebrations to ensure the works were completed on time and to the client's satisfaction.

## Sluice Gate Refurbishment

As part of the Environment Agency's continued programme of works to upgrade and refurbish existing flood gate structures, we have carried out extensive repair works to the sluice gate operating gear at Newbridge Sluice. The operating gear and platforms were disconnected from the gates which were then suspended on temporary lifting beams to enable them to be deployed in the case of an emergency. The operating gear and platforms were brought back to the workshops where they were stripped, refurbished and reassembled before being returned to site and reinstated. The contract also included site painting of the gates and guides.



Newbridge Sluice

## Repair Works on Iconic Bridge



Clifton Suspension Bridge

A contract awarded by Dean & Dyball to carry out intricate repairs on the iconic Clifton Suspension bridge in Bristol. The works included steelwork repairs and painting to a highways agency approved specification.

## A Challenging Project

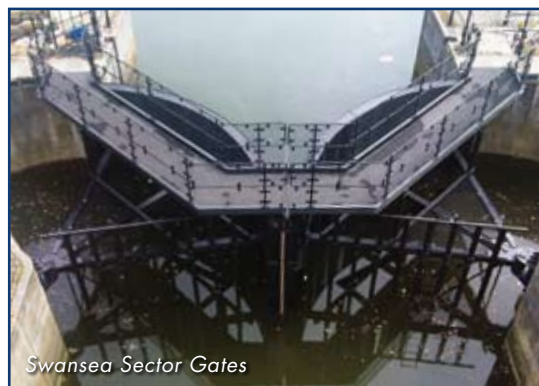
Penarth Industrial Services have recently completed the installation and commissioning of two new elevators together with an air slide conveying system at the Lafarge Cement Works in Aberthaw. A challenging project predominantly working at height with no safety incidents and delivered within budget.



## Sector Gate Refurbishment

Having been in service for a period of 20 years the existing Sector Gates at Swansea Marina were in need of refurbishment. Our tender was chosen as the one which gave the client confidence with our proposed method of works for the project. The construction of the gates meant that they could not be removed in one piece and therefore required careful planning to be dismantled before being returned to the workshops for the refurbishment work to take place.

A City & County of Swansea spokesman was pleased to see a seamless transition from Taylor & Sons Engineering to TEMA with no detrimental effect to the programme and quality of the project.



Swansea Sector Gates



VESSELS IN CARBON



VESSELS IN STAINLESS



SKID BASED PACKAGES



VESSELS IN DUPLEX

## TEMA Pressure Vessels



Tema's humble beginnings started in 1981. Situated on Penarth Dock in a small factory once occupied by Penarth Dock Engineering.

With connections within the local petrochemical plants Tema started manufacture of small pressure vessels and heat exchangers to service these clients, they also carried out many repairs.

Several years at Penarth location saw Tema expand into other avenues and increase their workforce. Tema also invested in a machine shop to service its own needs.

Tema's pressure vessel experience helped in breaking into the aviation fuel filtration industry, with vessels manufactured in large numbers.

By 1990 Tema were manufacturing pressure vessels on a small basis for the offshore oil and gas industries.

More investment in new technology i.e. drafting techniques and investment in welding plant and training meant Tema remained at the forefront of their business.

Within two years of the move Tema were to gain ISO 9000 accreditation, this further helped to establish Tema as a main supplier within the oil and gas industries.

In 2005, Tema was purchased by Penarth Industrial Services who have been in the Engineering Industry for over 30 years, servicing the Utilities, Steel and Petrochemical Industries with fabrication, structural, piping, mechanical and machining services.

The two companies were brought together after a multi-million pound expansion of the workshops and offices, thus leading to a combined workforce of nearly 100 employees.

*Photos show 3 off Skid Base Package comprising 8 off carbon steel vessels manufactured in accordance with PD5500 Cat II. Piping in accordance with ASME B31.3.*

Investment and growth still continues and the partnerships that Tema developed long ago remain today.

Today sees us manufacturing to ASME VIII, PD5500 and EN13445 including the requirements of the European pressure equipment directive 97/23/EC. Coded welders are on hand qualified in accordance with ASME IX and EN15614.

Contracts are undertaken in many materials including:

- Duplex UNS S31803
- Super Duplex UNS S32760
- 6Mo UNS S31254

Tema look forward and are ready for the challenges of the future.



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