

## **My career in industry – by Robin Shelley**

After completing my five year engineering apprenticeship and Higher National at Westinghouse Brake and Signal company in 1955 I eventually qualified for Institution of Mechanical Engineers membership. Initially I worked in the Colliery division in Westinghouse head office in Kings Cross but after about a year I joined Humphrey and Glasgow, at the suggestion of my elder brother who worked there. Their offices were based in Victoria. After a few days in the office I initially I worked as a site engineer completing the construction and assisting with commissioning an Onia Gegi catalytic oil gas plant at Fulham gas works until February 1956. Following national service for two years, largely at REME's 40 Base Workshop in Singapore, I rejoined H & G and was initially assigned as a site engineer on an underground gasification site near Chesterfield.

In May 1959 I was assigned as coordination engineer on a major construction project at Westfield near Kinross in Scotland for the Scottish Gas Board. This was the largest construction project of its kind that H & G's had done at that time. Quite a number of new staff were employed many of whom came from Foster Wheeler, including the site management team, having worked at Fawley refinery and the organisation was set up like a major petrochemical project. There were area supervisors and supervisors for the various trades. A maximum of about 300 people were employed. The site civil engineer and I were the only professionally qualified engineers on H & G's site staff.

The job I had was the responsibility for all keeping all construction drawings and specifications for site use up to date, liaison with head office engineering design and project management departments and setting up and maintaining FCO's (field change orders) to record extra costs, and producing monthly progress reports. Although the contract was on a cost plus basis careful check was maintained on expenditure against estimates.

The plant was for the gasification of brown coal brought from an adjacent open cast site by conveyor. When I joined the site, road and drainage work was underway prior to the main civil engineering work by a separate contractor.

The plant was a Lurgi high pressure gasification plant and would be exporting the gas produced into the newly established high pressure gas distribution pipeline. The gasification units were housed in a substantial steel structure and were water jacketed high pressure units of which there were two streams in the first phase. The initial installation of these units was with manual mechanical handling equipment and was very laborious. The layout of the whole plant was very much along the lines of a refinery with substantial pipe bridges connecting various sections of the plant and sophisticated instrumentation and control systems.

Oxygen for the gasification process was provided by a British Oxygen unit comprising compressors and vacuum equipment. After production in the Lurgi section, removal of CO<sub>2</sub> was by absorption in a Benfield unit which comprised 75 foot high 10 foot diameter pressure vessels for which the fluid was provided by high pressure pumps. Erection of the vessels was carried out using guyed gin poles and with diesel powered winches and tailing in

the vessels during lifting with a 50 ton capacity Lima crawler crane. Despite the supposedly skilled ex Foster Wheeler rigging supervisor there was an accident when lifting the first vessel when the sling connecting the base of the vessel to the crawler crane snapped and the crane jib sprang over the back of the crane and was severely damaged which caused considerable delay replacing the crane jib. The sling used was clearly too low a capacity.

Despite the supposed skills of the ex Foster Wheeler people there were times when they left something to be desired.

There was also a Benzene removal unit which comprised rather smaller pressure vessels than those on the Benfield plant.

The first stage comprising two streams took about two years to complete and commission and I was put in overall charge of the construction management of the second stage which comprised an additional stream increasing output by 50%. The whole experience at Westfield was extremely valuable for me. (Like many people at this stage I thought that I must be the best site construction manager in the world!)

Following the commissioning of the second phase I moved to Bristol to be responsible for the construction of an ICI designed nitric acid plant at Severnside works. The nitric acid was to be used to produce ammonium nitrate fertiliser at another part of the site. Waste gas from the plant was vented through a 400 foot high stack supported by a tubular steel structure erected by a subcontractor. As part of my supervisory duties I used to climb the structure to inspect it once a week and gradually got used to climbing the increasing height on a simple steel access ladder. Management of labour relations with employees was a main part of the job as was the case on many construction sites at that time. It was here that I first encountered Sparrows Crane Hire who I eventually joined in 1970.

After supporting the commissioning of the plant I was posted to supervise the construction of two pharmaceutical plants near Bombay (now Mumbai) in India, one for CIBA and the other for BDH. The Ciba plant was a multi purpose pharmaceutical plant using jacketed glass piping for heating and cooling liquids during manufacture. To learn about the installation of glass pipe work I went to Basel in Switzerland for two weeks, this special knowledge being my main qualification for a visa to work in India. Although I initially intended to work in India for Humphreys in Glasgow for about 8 years until the oldest of my two children went to secondary school, the ill health of my youngest child and the inadequate conditions of employment, were such that H & G's agreed that I should return home after completing these 2 units, which took about 11 months. I returned to Bristol to supervise the construction of a second nitric acid plant this time with a slightly different process and designed by H & G.

Following the commissioning of this plant I transferred to London to work in the construction department at Humphreys and Glasgow's head office during which time I went to Sydney Australia for three or four weeks to help them in the estimation of the construction cost for a project for which they were quoting.

I return to working in the construction department mainly on planning the construction of the many tubular ICI reforming gas plants which were being built prior to them becoming redundant after the discovery of national gas.

I was transferred to the sales Department to promote construction sales during which time I was involved with the successful sale of the construction of a Natural Gas liquefaction plant at Bandar Mahshar in Iran as site contractor for Badger. During the negotiation of the contract the customer's representative who worked for the Iranian oil company decided that the supervisor we put forward for the project was not satisfactory and suggested that I should manage the construction project. We set up a joint venture contract with a group of small Iranian companies. Although it was a single status contract the prospect of a major site job and the good salary were very attractive so I decided to do it. The procurement by Badger of the materials, especially the haphazard delivery of prefabricated steel work on the completion of which much other work depended, was very badly organised and progress was necessarily slower than programmed which was resulting in a lot of extra cost. We monitored and managed the recording of all the extra costs fairly well much to the disappointment of Badgers who eventually suggested to the client, Iranian Oil Company, that I should be replaced in return for agreeing substantial extra payments for the delays. H&G construction management in London agreed and I was replaced after six months into the contract. The London office project manager afterwards said this had been a major mistake as I obviously had the management of costs well under control and my successor did not do as well. The arbitration of the final costs of the project went on for a long time and even went to the Hague for final resolution, I believe.

After a year or so on project management in London office I left the company to join Sparrows Crane Hire to run their mechanical installation contracts division in Bristol. I did not want to continue site work and living in the west country was more attractive than working in London with all the daily commuting. The Sparrows division grew substantially and became a separate company, Sparrow's Contract Services Ltd where I was the managing director. The job involved the contract negotiation for the major crane hire contracts as well as the contract construction and installation work. I was involved with the negotiation for the provision of crane operators on BP's north sea oil rigs the management and development of which resulted in a new company Sparrows Offshore Services Ltd which became very successful in crane related work based in Aberdeen.

My scope also included negotiations across the world of contracts for the 500 tonne and 1000 tonne capacity mobile cranes which Sparrows purchased. I also took over responsibility for the negotiation of contracts for the hire of multiple cranes on several oil rig manufacturing sites in the UK and in Saudi Arabia which involved the provision of forklift trucks as well as cranes to handle containers and other equipment at Jubail port.

In early 1977 I made a mistake by accepting the very attractive offer of the job as sales and contracts director for Rigging International Ltd, the Wimbledon based UK arm of an American company, whose main activity was moving large pieces of manufactured structures, mainly prefabricated oil rig sections, using large crawler tracked self powered bogies. I was influenced by the advertisement by the recruitment consultant that the job

offered the opportunity to become managing director. I joined wrongly assuming that this would eventually happen only to discover that the other two directors had other ideas. I discovered after joining that the main problem was that my predecessor had left the company and formed a new company taking with him a number of essential members of staff. The new company used large rubber tyred bogies which were more flexible and easier to transfer from site to site than crawler bogies and more competitive, so they took most of the contracts when we were in competition. So obtaining contracts became very difficult and the profitability of the company took a hammering. I took on a couple of new staff but things were very difficult so I didn't move house as expected as I wasn't confident in the future and after about 18 months the American dominated board ended my contract which didn't come as much of a surprise.

I was invited to rejoin Sparrows as the group sales and contracts manager on a similar basis as before and eventually took over the marketing responsibility too. The job developed into mainly overseas sales and contract negotiation and I recruited three sales managers. The work involved crane hire contracts for multiple cranes on construction sites and specific lifting contracts including using the very large rubber tyred cranes. I became involved with lot of overseas travel including the Middle East, Japan, New Zealand and North and South America.

We did some work with a French company called Montalev, based in Grenoble, and eventually established a joint company with them to offer crane hire and to jointly own and operate the 1000 tonne capacity Gottwald crane.

In December 1982 I had a major difference with Sparrows' chairman, Alf Sparrow, over reimbursement for my excessive time away overseas and it ended with him firing me. After negotiation over wrongful dismissal I applied unsuccessfully for a number of senior jobs and eventually spent time as project manager for Bristol Churches Community Programme seeking and managing employment of long time unemployed personnel. In July 1984 I was invited by a head hunter to apply for a job as sales and marketing director for Morris Cranes in Loughborough which I started in September 84.

I discovered that the managing director, who was 38 and the predecessor in my job, was not happy about my recruitment which had been the decision of the chairman. The MD made my life difficult and eventually decided to appoint a sales and marketing consultant who was I believe, his preference for filling my job. In July 1985 the MD gave me notice and I left Morris and industry behind after 35 years.

I followed what I believe was God's calling and started training for ordained ministry in the Church of England at theological college near Nottingham in September 1985.