

LYDNEY PRODUCTS: THE LAST THROES OF A FACTORY ONCE ON THE LEADING EDGE OF SECOND WORLD WAR AIRCRAFT MANUFACTURING TECHNOLOGY

BY:

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1996-2004

1. INTRODUCTION

I first encountered Lydney Products Limited in 1997, not long after my appointment to lead a new team at Business Link Gloucestershire (BLG) to introduce and encourage international trade with small and medium-sized businesses in the county. This was part of a new Department of Trade and Industry (DTI) nationwide initiative delivered locally. The initiative was to bring in people with relevant private sectoral experience to apply their expertise. In my case this was 20 years' worldwide sales and marketing with Massey-Ferguson (MF). For at least half this time I was based at MF's factory at Banner Lane in Coventry, the old Standard Motors wartime plant (a Shadow Factory), and, at the time I was there, the largest tractor factory in the western world.

2. THE FIRST STEPS

I was first called by the management team at Lydney Products (LP) to talk to them about new export initiatives and the support available sometime in 1997. The company had taken over the factory in Lydney a few years earlier and was manufacturing and supplying interiors for buses. These components included seats, lighting, panelling, handles, etc, but especially plywood flooring, their speciality. At that time, they had two key bus-manufacturing companies as customers, one I believe in Teesside, the other in Scotland, if I remember correctly. LP had around 100 employees and occupied the 14-acre site known as Pine End Works next to Lydney harbour.

A visit was arranged, and I was duly welcomed by the Managing Director (MD) and his Business Development adviser at the plant. The MD was John Rook, who had extensive previous business experience, as had his adviser. The meeting quickly showed that the company qualified for a range of international trade development initiatives and an outline plan

was agreed. The meeting was followed by a tour of the facilities led by John himself.

The tour was, for me at least, a revelation. The factory was substantial, internally cavernous and dark. There appeared to be no skylights in the roof and the occasional areas of activity were lit only by overhead electric lights. The buildings themselves were seemingly constructed principally in re-enforced concrete. There were additional offices and storage areas. Gateway access was directly from the road running alongside the narrow harbour canal. Clearly there was more-than-adequate room for business expansion.

3. THE PLAN

This was threefold:

- An exhibition stand at an International Trade show at Olympia, London.
- A similar stand at a trade exhibition in Italy.
- LP to commission an Export Marketing Research study.

All assisted to some degree with DTI support

4. THE RESULT

Within 6 months or so, Lydney Products had the data available to set an international trade strategy and had won an initial actionable order to provide interiors for a new 200-carriage tram system for Turin, Italy. The company was well set for a new future.

5. THE BACK-STORY

At the time, my entire focus was to help LP build its export trade as part of its overall business development. It had real potential and the physical capacity to expand. I had only a limited knowledge of its history then.

Unfortunately, it is only now (2021) that I have had the opportunity to discover the real story.

The construction and role of the original factory and site is, perhaps, the most interesting and significant. The whole facility known as Pine End Works was built by the Ministry of Aircraft Production, starting in early 1940.

The wood products companies owned by Sir W J Mallinson were directly involved. They were already well established elsewhere in aircraft plywood construction.

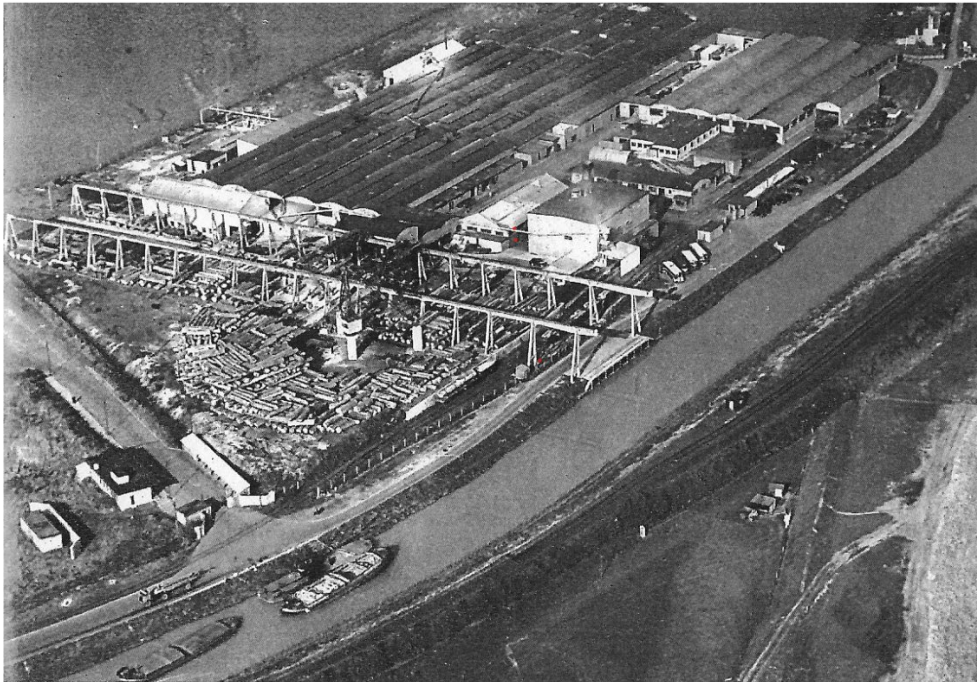
The factory was built in some eight or nine months and so designed for work around the clock in air-conditioned state. It incorporated the first

reinforced concrete barrel-vaulted roofs in the UK as a defence against incendiary bombs. The major operating machinery was sourced in the USA.

Its site itself was specifically chosen

- a) To produce aircraft plywood 24/7
- b) To be located west of a line from Southampton to the Wash
- c) Outside any built-up area
- d) To offer a reasonable supply of labour
- e) To provide access to existing engineering facilities, preferably with an aircraft bias
- f) To be waterside and served by more than two ports capable of discharging vessels of 10,000 tons or more.

Thus was Lydney selected!



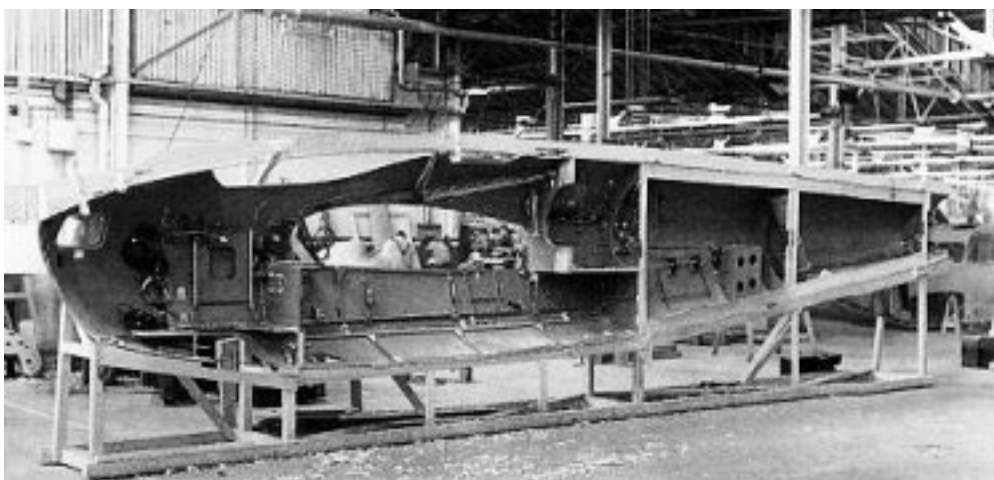
At its wartime peak it employed some 1,000 people and was even visited by Queen Mary in 1942.

Actual production began in April 1941 in the hands of Factories Direction Ltd. Wartime production was exclusively of plywood primarily for Mosquito fighter/bomber aircraft fuselage applications, but later also for 'Horsa' and 'Hamilcar' Troop Gliders. All of these applications were highly significant in their own right and possibly unique at the time. Its location next to Lydney Docks was also a key factor. Raw material in the form of large, mainly birch, tree trunks were imported through Avonmouth, Bristol from Canada. It was built very quickly, and in some secrecy, to supply a rather

revolutionary aircraft in WWII, the De Havilland Mosquito, which was built largely of wood. As a result, the Mosquito was the lightest and fastest of its kind in its time. Probably the most critical specification was its plywood fuselage which was moulded in two vertical halves and joined in the centre to provide the plane's intrinsic body strength. This was its critical innovation, and, I believe, Pine End Works its only supplier. Other structural wooden parts were supplied by a number of established furniture manufacturers. The availability of metals for aircraft production was extremely restricted of course.



The plywood mould



Half the story!



The Heart of the matter

After the war, Pine End Works became a major supplier of plywood to the house building industry, but other products were developed for flooring applications in the transport sector and even specialist shielding for the nuclear power-station at nearby Berkeley. It was then owned by Mallinson-Denny, eventually becoming Lydney Products in the 1990's.



The plywood factory intake (Photo: ©J.R. Simmons 16 May 1976, courtesy of Dr Ray Wilson, Gloucester Society for Industrial Archaeology)

6. SO NEAR, SO FAR

Shortly after the order from Turin became actionable, it became evident that the UK bus industry was in decline and not long after that their customer in Teesside withdrew from the business. It was then that LP's battle with cashflow began and my final visit to the company was when the MD invited me to meet the new Financial Director he had brought in to stave off what had probably become by then inevitable. LP closed in 2001.

The factory lay derelict for many years and was finally demolished a few years ago. I visited it again, briefly, at the end of August 2021, in pouring rain. It was a sad sight.

7. ADVICE AND INFORMATION RECOGNITION

Many thanks to

- Dr Ray Wilson, Honorary Secretary, Gloucestershire Society for Industrial Archaeology
- Mr Neil Parkhouse, Black Dwarf Publications
- Mr Chris Witts, Gloucester
- Peter Shallcross, Archivist, de Havilland Aircraft Museum

- Sue Johnson and John Belcher of Dean Heritage Centre

8. BIBLIOGRAPHY

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Neil Parkhouse: A glance back at Lydney Docks, Black Dwarf Publications, 2001

9. POST-SCRIPT

I have written and presented the above work in good faith, but any errors are clearly neither deliberate nor intended to confuse; quite the contrary. They are, however, my responsibility.

Any gaps and errors will be filled or corrected in future versions.

This is still not the full story!

However, any further revelations will hopefully be the subject of another paper.

STUART R THOMAS, APRIL 2022