

Anne McTaggart.

O.F.C. History.

Wednesday 1pm to 3pm.

Research Paper.

Rylands Brothers Proprietary  
Limited.

A.W.I. Holdings Pty Ltd is a fully owned subsidiary of the Broken Hill Proprietary Co Ltd. The directors of A.W.I. Holdings are the same as those for the BHP Co Ltd.

Australian Wire Industries Pty Ltd was formed in September 1958 to bring together a number of companies owned by BHP and engaged in wire and wire rope manufacture and wire rope distribution.

The name of the company was changed to AWI Holdings Pty Ltd on 14th November 1979, and on 29th November 1979 its largest subsidiary (Rylands Bros (Aust) Pty Ltd) changed its name to Australian Wire Industries Pty Ltd. The assets in all other subsidiaries involved in the manufacture of wire and wire rope were transferred to the new Australian Wire Industries Pty Ltd effective from 1st December 1979.

Extract from:

BHP Steel International Group.  
Wire Products Division.  
Handbook.

Economic and technological developments overseas influenced the evolution of the Australian wine market. Regular shipping <sup>schedules</sup> schedules, a decline in freight rates, a revolution in iron, steel and wire technology and practice, combined with the growth of American and European steel industries, all contributed to the growth of Australian wine usage.<sup>①</sup>

In the late 19th century large investments in the rural sector contributed greatly to the growth in wire and wire products. The crucial element in the growth of rural wire products was the rabbit. The wire fencing industry peaked in 1912 with the proven increase in wool and meat yields due to "paddocking" and "barrier fencing" for rabbits and dingoes.<sup>②</sup> There was also growth in domestic products such as nails, screws, wire and wire rope.

BHP began steel production in 1915. In 1917 it was decided to build a rod mill on land near the steelworks on behalf of the Austral Nail Company. BHP provided the money and production began in 1919.

In 1920, after a visit by H.H. Field of the English firm Rylands Bros, an agreement was made with Austral Nail to produce netting in Newcastle as a joint venture. The two merged to form

① A.H. Smith, History of Australian Wine Industries. In House Journal. p.1.

② Ibid.

Rylands Bros (Australia) in January 1921. The early part of the 1920's was a difficult period, but from 1923 expansion continued steadily. In 1924 fence post production started.

Disagreements between BHP and Rylands Bros (due to problems with the quality of BHP rods)<sup>③</sup> eventually gave BHP the idea of acquiring Rylands. In January 1925, after discussions with Rylands, BHP acquired all the shares of Rylands Bros (Aust) Ltd. Essington Lewis set about developing Rylands capacity to produce speciality wires.

Up until BHP acquired a controlling interest in Rylands, Rylands Bros had produced mainly plain wire, both black and galvanised. In terms of tons produced Rylands Bros was equal to a firm called Lysaght Bros which dominated the netting market.<sup>④</sup>

In 1929 BHP acquired Lysaght's. Plans were instigated to rationalise production. The Newcastle plant (Rylands) was the speciality wire producer and Sydney (Lysaght Bros) was largely a mural and rail producer.

Several factors, including market features and personal initiative, led to technical leadership in the 1920's. This came from Rylands and was partly due to rivalry with Lysaght Bros, even after

③ Ibid. p. 6.

④ Ibid.

both were incorporated into BHP.

Management played an important role in Rylands's success. The standard of technical supervision at all stages had to improve, as did BHP rod quality.

Overseas visits led to increased knowledge of wire production. In December 1931, Australian wire industry technology was projected into the front rank for the first time when a small team of engineers and metallurgists, including a former Rylands man, planned, installed and ran the first multi-hole machine.<sup>⑤</sup>

In 1935 Rylands Newcastle was drawing equivalent wires twice as fast as the best American mills and three times as fast as Britain's best.<sup>⑥</sup> Overseas mills began changing to Rylands practice.

During 1935 specifications were drawn up for the start of the next generation of equipment. Various new machines were installed which led to the Newcastle plant becoming the "most diverse in the southern hemisphere."<sup>⑦</sup>

In late 1924 a formal agreement was made between Rylands and Australian Wire Rope Works to supply wire. By 1929 Rylands was supplying 70% of wire requirements.<sup>⑧</sup> Rylands produced better quality feed wires and this allowed Australian Wire Rope Works to expand into more complex rope types with greater efficiency.

⑤ Ibid. p.9.

⑥ Ibid. p.10.

⑦ Ibid.

⑧ Ibid. p.11.

During the 1930's the plant was technically improved and enlarged so as the demanding market could be met. New machines were devised and old ones improved.

In 1934 Essington Lewis negotiated the sale of the British interests in Australian Wire Rope Works to BHP and also the sale to BHP of Bullivant's Australian Company, the ropery's distributor. By the beginning of World War two BHP had full ownership of the companies which now supplied the majority of Australia's wire needs with predominantly local product.

Before the war Australian Wire Rope Works was in the position to supply most wire requirements although there were specific areas where technology was lacking. During the war the industry's priority was providing products for military purposes. This and the loss of trained men left the industry in a weak position - both operationally and technically.

During the war the demand for wire products resulted in less wire being supplied to the rural sector. This led to another rabbit plague. Imports were scarce and there were post-war industrial problems at Lysaghts. The CSIRO successfully developed myxomatosis through examination of the myxoma virus.<sup>⑨</sup> This, increases in technology, and changes in fencing practice led to the market decline for wire in the rural sector.

<sup>⑨</sup> Ibid. p. 15.

Housing and construction industries were the main influences on the wire industry during the post war period. The rail wire market boomed as a result of the Government's priority for housing. Mattress and upholstery production increased also.

The motor industry and the agricultural machinery industry boosted the wire industry during the post war period. The motor industry had the greatest impact both technologically and in terms of tonnage. Both the agricultural industry and the motor industry were similar in that the range of components made from wire meant Rylands had to require new techniques

During the post war years technological advancement in consumer industries led to change. Open-cut mining was developed, as was the cable belt conveyor. These required ropes never made before and steel reinforcing of the conveyor belts. High rise buildings led to the design of elevator ropes. Ropes proved a vital part of the Snowy Mountains scheme.

Several overseas producers had made technological advances. Australia had fallen behind in a few areas including levels of productivity. "Overseas developments had eroded Rylands former technological leadership".<sup>(10)</sup> This raised the possibility of a new wire mill.

<sup>(10)</sup> Ibid. p.20.

In 1951 site work began at Geelong. Managerially it came under Newcastle, although a manager and engineers were appointed. Geelong expanded but Newcastle remained the centre of technical developments. Wire products were relegated to the background while wire drawing and processing, galvanising and patenting were concentrated on.

BHP's wire producing capacity and technology had been handled as four separate companies, i.e. Rylands, Lysaghts, AWRW and Bullivants. In July 1958, Australian Wire Industries Pty. Ltd. was incorporated and in March 1959, BHP transferred the whole of its shareholdings in Rylands Bros, Lysaght Bros, A.W.R.W and Bullivants Australia. The new A.W.I. was now the third or fourth biggest producer in the world by size and product range.

In the last ten years major advances have occurred in the areas of galvanising technology, rod preparation, the use of computers in administrative areas and the application of computer technology to process control.<sup>(11)</sup>

<sup>(11)</sup> Ibid. p 22.



## Bibliography.

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Taped Interview with Ken McTaggart,  
Research Manager for Australian Wire  
Industries.

There have been many changes at Rylands over the last forty years. Areas of change include technology, attitudes of workers, working conditions, quality, ecology and views on unionism and politics.

Over the years there have been vast technological changes. Forty years ago a man ran his hand over the wire. If there were steel splinters in it it meant it was <sup>not</sup> good enough. Now there is quality control. Wire is produced to a strict procedure. The customer is now more certain that the product he chooses will do the job effectively.

Forty years ago a stream of men ~~of~~ on bikes would be seen coming to the beginning of their shift. There was great mateship and a happy, pleasant atmosphere. These days everyone seems intent on work and keeping to themselves. There are less workers at the plant now and these people now drive to work.

Working conditions in the 1940's were tough. There was a lot of manual work as well as dirt and acid.

Today the work is much clearer and lighter with machinery doing the heavy work. The atmosphere is cleaner with no acid fumes.

With legislation of pollution control the pollution has lessened. Instead of acid being dumped into the river it is broken down.

There are fewer accidents in the 1980's than in the 1940's. The introduction of safety guards, company policies, elimination of unsafe practices and the Department of Labour Industry has helped lessen the number of accidents at the plant.

Politics and unionism have changed over the last forty years. The Rylands plant was once very pro labour. Everyone was encouraged to vote labour and most would have. These days the liberal influence is strong and political views aren't an issue. In earlier years the Australian Workers Union was the strongest. The Australian Metal Workers Union is now the main union. There are more strikes, more often without much discussion taking place. There is not as much interest in the unions as there once was.

As far as the future of the industry goes the tonnage and production is

expected to stay the same although five hundred men will be doing the work instead of over one thousand. The Wire Products division is expected to stay leaders in the world. Competition will be more difficult as off shore countries such as Korea and then probably China will enter the market.