

Chapter 2

Development and Structure of Powder Coating Industry in Malaysia.

2.1 Introduction Stage (1979-1990)

The Malaysian powder coating industry started in the late 1970s. Initially, the powder coating was brought in from Singapore to cater for small steel furniture market. In 1979, Oxyhin Sdn Bhd was formed in Petaling Jaya to trade in powder coating from Lea Hin, the Sister Company of Oxyhin in Singapore. Production commenced in 1989, after 10 years of trading, with a small capacity of 800 tonnes per annum.

In 1983, a Norwegian company, Jotun Powder Coatings (M) Sdn Bhd was set up in Shah Alam. However, the actual production only came on stream in late 1984. Similar to Oxyhin, Jotun begun by importing powder coating from an associate company in Thailand while waiting for production to commence.

In late 1980s, the growing presence of Japanese investments especially in electrical appliances sector prompted ICI Paints Malaysia to enter the market. In an effort to capture the Japanese customers, ICI Paints entered into a joint venture with NOF Corporation of Japan to form ICI-NOF Powder Coatings (M) Sdn Bhd in June 1989. The plant was located in Petaling Jaya with an initial production capacity of 500 tonnes per annum.

The introduction stage of the powder coating industry is characterized by slow growth. Customers were skeptical towards this new technology against the traditional liquid paints. Furthermore, a huge amount of capital was required to be invested to convert the coating line from liquid to powder. Jotun Powder Coatings, backed by the technical support from overseas invested much time and effort to convert the liquid paints users to powder coating and laid a strong foundation to become market leader in the country.

2.2 Growth Stage (1990 – 1995)

In the beginning of 1990s, Malaysia witnessed large inflow of foreign direct investments (FDI) into the manufacturing sector. The sector registered an average of 11.6% growth from 1990 – 1995. The Powder Coating industry had grown in tandem with the economic performance and achieved a growth rate of more than 15% per annum. During this period, Jotun, Oxyhin and ICI-NOF rushed to increase their production capacity to meet the demands of the market. The impressive growth rate has attracted a Holland based company Akzo Nobel to set up a 2000 tonnes per annum capacity plant in Pasir Gudang, Johor in August 1993. The competition became more intense. The existing players were under pressure to reduce the price in order to defend their market share. Fortunately, the size of the market has expanded to cushion the impact of an additional player.

Massive capacity build up was seen in the growth stage. The robust economy fueled the expansion of powder coating industry. Double-digit growth of the construction industry further created many supporting industries like furniture, electrical appliance and lights fittings which utilize powder coating. Inevitably, more capacity was added with the expectation of higher demand in the coming years. Customers became more confident using powder coating due to promotional efforts and the global trend of utilizing clean and environment-friendly technologies.

2.3 Saturation Stage (1995- 1998)

In 1995, Herberts Powder Coatings shut down their money-losing plant in Indonesia and shifted its operations to Shah Alam in May. The additional 1500 tonnes per annum capacity put constraints to the overcrowded market. Jotun has upgraded its old production line and Oxyhin further invested in a 200 tonnes per annum capacity in a new plant in Butterworth in 1997. The production capacity of the powder coating industry has expanded so much that it exceeded the market demand.

In June 1997, the currency crisis that started in Thailand had spread rapidly to Asia region including Malaysia. Suddenly, Malaysia's economy took a beating. The growth rate contracted from a positive 7.7% in 1997 to a negative 7.5% in 1998. The Powder coating industry registered its first negative growth since 1990. It was believed that the market size has contracted by 20%. All the manufacturers who were saddled with excess capacity from years of expansion were caught by the unexpected economic downturn.

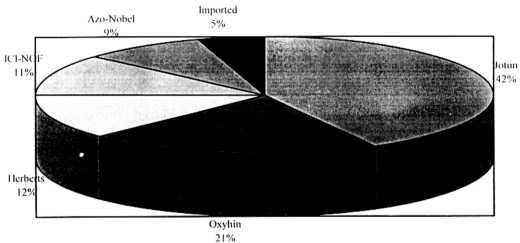
The powder coating industry was also severely affected by the depreciation of the Malaysia Ringgit. More than 95% of the raw materials was sourced from overseas. In Jan 1998, all the manufacturers announced a 12% increase in price and the increment did not face much resistance from the users. The second price increment of 10% was made in March 1998 in view of the further deterioration of the value of Ringgit. However, the increment was shortlived. Pressured by their customers and the further decline of market size in the second quarter of 1998, all the manufacturers scrambled to compete for market share to fill their production capacity. By June of 1998, the price of powder coating fell back to pre-crisis levels despite the tremendous increase in raw material cost. As a result, profitability slumped and the future looked uncertain.

The manufacturers tried to check the deterioration of price by jointly setting some minimum price agreement, but they could not implement this due to market forces. Although the minimum price was set, a few of the players like Herberts and Akzo Nobel violated the agreement in order to fill their excess capacity. Coupled with the aggressive price-cutting adopted by powder coating importers, the agreement broke off and set the market free for all.

2.4 Market Structure

2.4.1 Market Share

It is estimated that the size of powder coating market is about 6500 metric tons in 1998. Besides the five manufacturers, there is a small portion of powder coating being imported from Thailand and China mainly for the low-end market. Figure 2-1 shows the market share as held by the players.



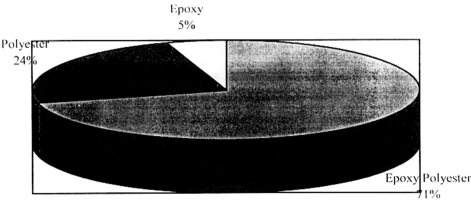
Source : Comprises market survey and resin suppliers' input

Figure 2-1 : Market share by Competitors, 1998

Jotun clearly emerged as the market leader with a formidable 42% share in the market followed by Oxyhin in the second position with a 21% share despite their early presence in the Malaysian market. The remaining three manufacturers have almost equal market share while imported powder constitute about 5% market share.

2.4.2 Product Mix

Generally, powder coating can be divided into three types; epoxy, epoxy polyester and polyester. The epoxy powder coating is mostly used on chemical resistance application and functional coating like natural gas pipe and steel rebar. The epoxy polyester powder coating is most widely used for indoor applications where exposure to sunlight is minimal. The epoxy polyester is the most popular grade in view of its low price. They are generally applied for furniture, light fittings, cable-trunking, etc. Whereas the polyester grade is mainly used for outdoor applications which include warranty coating for architectural applications, electrical appliances, fence poles and outdoor furniture.

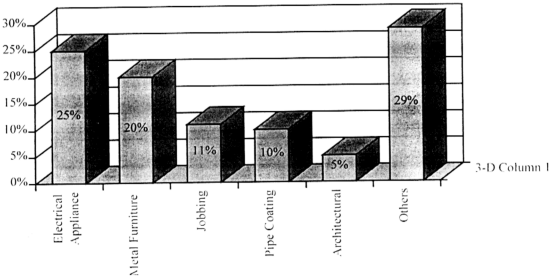


Source: Comprises market survey and resin suppliers' input.

Figure 2-2: Product Mix of Powder Coating, 1998

2.4.3 Market Demand

Powder Coating is replacing the liquid paints predominantly used in metal-based industry. Figure 2-3 below shows the breakdown of the applications:



Source: Comprises market survey and resin suppliers' input

Figure 2-3: Market Demand, 1998

Electrical appliances made up a quarter of market demand. This is no surprise as Malaysia is the world leader in room air-conditioner exporter. The metal furniture segment that was the earliest to convert to powder coating from wet paints follow behind with 20%. Pipe coatings and architectural applications, which felt the contraction most due to tail end of Petronas Gas Utilization project and slow down of construction industry, comprise 10% and 5% respectively. Jobbing which is the service of powder coating application provider to those do not own their coating facilities, forms a

commendable 11% market share. Others include light fittings, automotive parts, cable-trunking, racking and so on form the remaining 29% of market share.

2.5 Financial Performance of the Industry

The tough competition in the powder coating industry was well reflected in the financial performance of the players. New players like Akzo Nobel and Herberts have consistently registered losses and Akzo Nobel only managed to make a positive return after six years of operation. Before 1995, the market leader (Jotun) used to make more than 10% return on sales and on equity. However, after Herberts entered the market, Jotun's profitability has been eroded considerably due to price war. The year 1998 marked a very challenging year for the powder coating industry. The currency turmoil swept through Malaysia and the profitability of the powder coating industry eroded further.

In comparison with liquid paints industry, the profitability of the powder coating industry looked unattractive. Leading liquid paints companies like ICI Paints, Nippon Paints and Courtaulds Coatings used to register more than 15% return on sales. Even during the very difficult year of 1998, they still captured more than 10% of profit margin. The overcrowding of powder coating players in the small market is the major contributor to the low profitability.

Table 2-1 Sales Turnover (RM'000)

Company	1994	1995	1996	1997	1998
Akzo Nobel	1100	4088	5547	10812	14054
Herberts	NA	377	3466	NA	10477
ICI-NOF	11727	13477	13475	13046	11658
Jotun	32855	31912	38000	38448	35558
Oxyhin	NA	19302	23293	NA	28515

Source: Registrar of Company

Note: NA – Not Available

Table 2-2 Pre-tax Profit (RM '000)

Company	1994	1995	1996	1997	1998
Akzo Nobel	(1334)	(2523)	(1920)	(1040)	493
Herberts	NA	(419)	(1073)	NA	(955)
ICI-NOF	1225	799	964	1090	380
Jotun	5689	1130	4751	2647	620
Oxyhin	NA	1087	1367	NA	29

Source: Registrar of Company

Note: NA – Not Available

Table 2-3 Net-Profit (loss) Margin (%)

Company	1994	1995	1996	1997	1998
Akzo Nobel	(121.27)	(61.72)	(344.61)	(9.62)	3.51
Herberts	NA	(111.14)	(30.96)	NA	(9.11)
ICI-NOF	10.44	5.93	7.15	8.36	3.26
Jotun	17.32	3.54	12.50	6.88	1.74
Oxyhin	NA	5.63	5.87	NA	0.1

$$\text{Net Profit (loss) Margin} = \frac{\text{Pre-tax Profit (loss)}}{\text{Sales Turnover}} \times 100\%$$

Note: NA – Not Available

Table 2-4 Current Ratio

Company	1994	1995	1996	1997	1998
Akzo Nobel	0.28	0.20	0.16	0.41	0.36
Herberts	NA	0.56	0.59	NA	1.11
ICI-NOF	2.11	2.29	2.09	2.60	3.21
Jotun	1.43	1.23	1.53	1.56	1.92
Oxyhin	NA	0.85	0.93	NA	0.91

Current Ratio = $\frac{\text{Current Asset}}{\text{Current Liability}}$

Note: NA – Not Available

Table 2-5 Return On Asset (%)

Company	1994	1995	1996	1997	1998
Akzo Nobel	(22.68)	(25.34)	(14.46)	(5.83)	3.57
Herberts	NA	(32.89)	(22.59)	NA	(5.67)
ICI-NOF	11.15	5.16	4.29	4.98	1.74
Jotun	19.02	3.87	1.70	6.32	1.00
Oxyhin	NA	4.98	4.95	NA	1.50

Return on Asset = $\frac{\text{Profit (loss) After Tax}}{\text{Total Asset}} \times 100\%$

Note: NA – Not Available

Table 2-6 Return on Equity (%)

Company	1994	1995	1996	1997	1998
Akzo Nobel	(853.95)	(106.77)	(44.87)	(19.53)	3.52
Herberts	NA	(466.95)	(58.78)	NA	(15.54)
ICI-NOF	13.18	6.54	6.40	7.29	2.38
Jotun	44.76	9.87	3.79	14.89	1.97
Oxyhin	NA	21.38	25.94	NA	7.10

Return On Equity = $\frac{\text{Profit (loss) After Tax Before Dividend}}{\text{Total Equity}}$

Note: NA – Not Available