

Istituto nazionale
per il Commercio Estero

Guida pratica



MALAYSIA

MALAYSIAN PLASTIC PROCESSING MACHINERY MARKET REPORT

(updated October 2009)

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Overview of the Plastic Industry in Malaysia

The plastics and plastic product industry is one of the most dynamic and vibrant growth sectors within the Malaysian manufacturing sector. In fact, Malaysia is one of the largest plastics producers in Asia, with over 1,550 manufacturers, employing some 99,100 people. The country's plastic products are exported worldwide including the EU, China, Hong Kong, Singapore, Japan and Thailand.

The Malaysian plastics industry has developed into a highly diversified sector producing an array of products including automotive components, electrical and electronic parts, components for the telecommunications industry, construction materials, household goods, acrylic sheets, bags, bathroom accessories, battery casings, bottles, containers, toys, games and packaging materials.

Plastics in Primary Forms

Malaysia produces more than 60% of the resins used for the manufacture of plastics. Malaysia exports plastics in primary forms. China, Hong Kong, Singapore, Japan and Indonesia are the major consumers of Malaysian plastics in primary forms which include:

- Polyethylene (PE)
- Polypropylene (PP)
- Polyacrylonitrile-co-butadiene-co-styrene (ABS)
- Polystyrene (PS)
- Polyvinyl chloride (PVC)
- Polyethylene terephthalate (PET)

The abundant supply of nearly 2 million metric tonnes per annum of locally produced resins has contributed to the increase in value added finished products such as packaging materials, storage containers, auto parts, computer components, advanced polymer composites, engineering plastics, bottles, footwear, toys, thermal and acoustic insulators.

PVC compounds and thermoplastic elastomers (TPE) are widely used as materials for items such as cables and wires, hoses, tubes and automotive and motorcycle parts. In addition, PVC, PE, and PP are integral in manufacturing plastic engineering parts such as rods, sheets, pipes, fittings and valves.

Other derivatives of ethylene such as ethylene glycol, terephthalic acid, dimethyl terephthalate, and acrylonitrile are the raw materials used in the production of polyester, nylon, acrylic and other fibers and threads.

Etilinas is a notable trade name for polyethylene (PE) resins originating from Malaysia.

Plastics in Non-Primary Forms

The bulk of Malaysia's exports of plastic products is plastics in non-primary forms. Major export items are plates, sheets, films, coils, strips and pipes. Malaysia is also one of the world's leading suppliers of plastic bags, films and other flexible packaging materials to Europe, Japan and Australia.

Films and sheets

Malaysia produces Linear Low Density Polyethylene (LLDPE) film grades that are ideal as general purpose and heavy duty films. It also exports High Density Polyethylene (HDPE) film grades for the production of carrier bags and thin film applications such as shrinkable polyethylene films and bags.

Pipes

Polyethylene piping compound systems are manufactured for export as they offer significant advantages over 'traditional' iron, steel and cement systems. Significantly, polyethylene compound remains free from corrosion in all ground conditions. Being fusion welded, this system also significantly reduces leakage as a result of joint distortion. High Density Polyethylene (HDPE) black compounds are suitable for potable water, sewage and industrial applications, HDPE natural for ducting, while Medium Density Polyethylene (MDPE) yellow compounds are ideal for gas distribution.

Wire and Cables

Malaysia also manufactures Polyethylene and PVC wire and cable compounds for export. These are used in the telecommunications and power industries due to their excellent properties for cable insulation and jacketing.

Other Products

Major exports in the plastics industry include:

- plastic sacks and bags
- boxes, cases and crates
- carboys, bottles, flasks
- spools, cops, bobbins, similar supports
- stoppers, lids, caps, closures
- articles for conveyance or for packing goods
- tableware and kitchenware
- household and toilet articles
- office and school supplies
- builderwares
- plastic furniture

A wide range of plastic products such as bottles, disposable tubs, syringes, industrial containers, household wares, and crates are marketed under home-grown brands. As world class exporters of plastics and plastic products, Malaysian companies are also involved in contract manufacturing and supply of plastic parts and components to reputable multinational companies operating in Malaysia including Motorola, Intel, Matsushita and Sony. In addition, local companies supply plastic parts and packaging materials to international companies such as ICI, British Paints, Selleys and General Electric.

Developments

Plastics is widely used in the production of higher value-added electronics and electrical products such as digital cameras, computers, telecommunication equipment and televisions. Packaging will see new technological development such as the use of metallocene PP and PE as well as multi-layer barrier films. PET packaging is charting new growth milestones in the rigid plastic packaging segment. Forecasts predict an increased use of plastics to replace metal parts in car production.

Trends driving the use of plastics in the automotive industry include cost and weight reduction, production efficiency, better structural functions, noise reduction and aesthetics. Plastics will also be used to create advanced composites for the aerospace, aviation and military industries. Advanced polymer composites and engineering plastics will be deployed in aircraft owing to plastics' excellent qualities such as stiffness, dimensional stability and comparatively lighter weight vis-à-vis other materials.

Sources: Asean Sources and Malaysia Plastic Manufacturers Association (MPMA)

PERFORMANCE OF THE PLASTICS SECTOR

According to the market report of Malaysian Plastics Manufacturers Association (MPMA), the plastics industry recorded a total turnover of RM16.09 billion in 2008, representing an increase of 4.8% compared to the turnover of RM15.35 billion in 2007. Exports increased by 11.6%, from RM8.33 billion in 2007 to RM9.30 billion in 2008.

The growth in total turnover was considered moderate as it was more due to cost-push factors, arising principally from the high cost of resins which had increased by about 30% for the major part of 2008 before softening in September. In addition, cost of electricity, which is the second or if not the third major cost component, depending on the processing sub-sector, had increased by 26.6% in June. Other input costs including chemicals, additives and packaging materials had also increased substantially.

Exports growth was impressive in 2008, where exports to total turnover ratio was 57.8% compared to 54.3% in 2007. This is significant as it reflected positively on the Malaysian plastics industry's ability to compete in the competitive global market which has been influenced by cheap products from certain low cost producing countries.

However, export-related sub-sectors including films and bags as well as indirect export sub-sectors such as the electrical and electronics industries faced drastic decline in demand from the developed countries towards the fourth quarter of 2008. Given the bleak outlook of the global economy, this trend is expected to continue into the first half of 2009.

Source: Malaysian Plastics Manufacturers Association (MPMA)

Latest Development and Opportunity

Kertih Plastics Park (KPP)

The 40 ha Kertih Plastics Park (KPP) in the EAST Coast Economic Region (ECER), which was officially launched on 2 December 2008 is set to become Malaysia's first fully integrated plastics park and the third in Asia.

In Kertih, the oil and gas and petrochemical cluster is an established industry, having been initiated by Malaysian Petroleum Berhad (Petronas) 35 years ago. With this facility, it provides investors with the ability to create downstream product applications, especially in plastics and polymer. Its main attractions to plastics industry investors are its integrated approach. For example, with ready access to reliable and just in time feedstock supply from Kertih Integrated Petrochemical Complex (KPIC) which translates into saving in logistic and warehousing costs.

For more details regarding the Kertih Plastic Park, please refer to the website as follow: www.ecerdc.com

ASEAN Free Trade Area (AFTA) Zero Export Tariffs

Indonesia, Malaysia, Thailand, the Philippines, Singapore and Vietnam will have zero import tariffs for plastic finished product beginning 1 January 2010. The other four ASEAN member countries Brunei, Cambodia, Laos and Myanmar will be subject to the AFTA tariffs after 2015. Extra time frame is giving to them to facilitate the establishment or strengthen their domestic industries for regional competitiveness.

The Malaysian plastic industry is predicting to benefit from the zero export tariffs for finished plastics product from 2010. The industry also keeps eyes on expanded regional market of 550 million people by 2015, compared to Malaysia's current domestic market of 27 million people. According to Malaysia Plastics Manufacturers Association (MPMA)'s figure, 57% of the Malaysian plastics are exported. Malaysia is already Asia's largest stretch film producer and has modern technologies for injection and blow moulding.

The zero export tariff scheme will provide new room for the expansion of Malaysian plastic industry. Therefore, the Malaysian industry is expecting to upgrade manufacturing capabilities and improving design capabilities through more foreign collaboration to produce complete products and gain technical know how.

MALAYSIA PLASTIC PROCESSING MACHINERY IMPORT STATISTICS

Overview

The import of plastic machinery from Italy was in downward trend since 2007. According to the statistics, the import figures showed a weak performance especially in 2009. The total import of first five month was only EUR 4.13 million compared to EUR 4.52 million same periods in 2008, the decreasing rate was 19.04%

The market position of Italy plastic machinery was 7th (2007), 6th (2008) and 5th (2009 up to May). In 2008, the total import of plastic machinery, parts and accessories amounted to EUR 10.59 million, recording a moderate growth of 23.64% compared to 2007. In 2007, Italy was the 7th largest supplier of plastic machinery, parts and accessories to Malaysia (after Japan, Taiwan, China, Germany, US and Korea) with 3.14% market share equivalent to EUR 8.56 million.

The market share of Italy in 2008 was relatively small, only about 4%. Apparently, the Malaysian market is dominated by Japanese machinery, followed by Taiwan and China's machineries.

Table 1: Malaysia plastic machinery and accessories & Parts import statistic for year 2007, 2008 and 2009 (Up to May)

Country	Import							
	2007	Market share	2008	Market Share	2008 (Jan-May)	Market Share	2009 (Jan-May)	Market Share
	EUR	%	EUR	%	EUR	%	EUR	%
Japan	76,092,814	27.90	69,074,790	27.68	36,564,571	33.69	33,525,471	38.15
Taiwan	54,104,053	19.83	47,662,323	19.10	21,744,880	20.03	15,022,924	17.10
China	39,824,960	14.60	43,361,393	17.37	15,954,816	14.70	10,981,921	12.50
Germany	28,529,784	10.46	17,460,134	7.00	9,139,141	8.42	8,177,374	9.31
US	13,598,383	4.99	11,568,689	4.64	2,129,225	1.96	3,554,045	4.04
Korea	11,727,992	4.30	6,351,470	2.54	1,545,914	1.42	3,130,055	3.56
Italy	8,564,369	3.14	10,588,772	4.24	4,519,479	4.16	4,132,270	4.70
Total	272,782,760	100.00	249,591,949	100.00	108,535,226	100.00	87,872,740	100.00

Source: Department of Statistics, Malaysia

Exchange Rate: EUR 1 = RM 4.85 (for easy comparison, current year's exchange rate is used to convert all value in previous years)

Italian plastic machineries major challenges:

a) Pricing

Most of the Malaysia plastics products manufacturers prefer Japan, Taiwan and China's machineries due to the pricing factor. Although such machines come from China or Taiwan does not comparable with Italy intern of quality and durability, but the purchase behavior in Malaysia is more focus on pricing instead of quality.

b) Technical support

The local buyers have mentioned that normally they can get the better technical support from Japan, Taiwan than compare to Italy.

Besides, Japan organizes a lot of industrial training program for local manufacturers. All these types of training can be treated as part of promotion essential. The local manufacturers are very familiar with the Japanese machineries. Furthermore, the parts and accessories of Japanese machinery always uniform and able to substitute for different Japanese brand. It makes local manufacturers easier to access an alternative source for parts and accessories.

PLASTIC MACHINERY INDUSTRY OUTLOOK

Plastic machineries are divided into different types of machinery and serve for different operation.

HS 8477- Machinery for working rubber or plastics or for the manufacture of products from these materials

- 8477.10 Injection moulding machines
- 8477.20 Extruders
- 8477.30 Blow Moulding machines
- 8477.40 Vacuum moulding machines and other thermoforming machines
- 8477.51 For moulding and or retreading pneumatic tyres or for moulding or otherwise forming inner tubes
- 8477.59 Other
- 8477.80 Other machinery
- 8477.90 Parts

To further study about the market, please refer to the table below:

**Table 2: Italy's Plastic Machinery Export to Malaysia
(Breakdown as per HS Code classification)**

No	HS Code	Year			
		2007	2008	2008 (Jan-May)	2009 (Jan-May)
		EUR	EUR	EUR	EUR
1	847710- Injection moulding machines	308,829	365,099	0	212,823
2	847720- Extruders	3,936,471	2,479,518	437,269	55,275
3	847730- Blow Moulding machines	1,856,979	385,566	307,967	818,094

4	847740- Vacuum moulding machines and other thermoforming machines	784,334	5,549	0	2,149
5	847751- For moulding and or retreading pneumatic tyres or for moulding or otherwise forming inner tubes	0	87,837	27,192	0
6	847759- Other for moulding or forming	156,962	112,103	189,301	12,192
7	847780- Other machinery	814,304	5,394,117	3,184,148	2,121,446
8	847790- Parts	706,489	1,680,655	373,602	910,290
	Total	8,564,369	10,510,444	4,519,479	4,132,270

Table 3: Performance of export from Italy to Malaysia 2008 (Jan-May) and 2009 (Jan-May)

No	HS Code	2008	2009	Variation
		(Jan-May)	(Jan-May)	
		EUR	EUR	%
1	847710- Injection moulding machines	0	212,823	100
2	847720- Extruders	437,269	55,275	-87.36
3	847730- Blow Moulding machines	307,967	818,094	165.64
4	847740- Vacuum moulding machines and other thermoforming machines	0	2,149	100
5	847751- For moulding and or retreading pneumatic tyres or for moulding or otherwise forming inner tubes	27,192	0	-100.00
6	847759- Other for moulding or forming	189,301	12,192	-93.56
7	847780- Other machinery	3,184,148	2,121,446	-33.37

8	847790- Parts	373,602	910,290	143.65
	Total	4,519,479	4,132,270	-8.57

HS Code breakdown statistic

**Table 4: 847710- Injection moulding machines
Market share comparison for import countries**

Country	Import							
	2007	Market share	2008	Market Share	2008 (Jan-May)	Market Share	2009 (Jan-May)	Market Share
	EUR	%	EUR	%	EUR	%	EUR	%
Japan	36,749,120	49.28	37,224,674	53.47	22,351,091	60.68	16,477,624	59.30
Taiwan	7,764,753	10.41	7,327,273	10.53	3,360,633	9.12	1,647,412	5.93
China	14,680,837	19.69	11,721,676	16.84	4,432,094	12.03	3,769,338	13.57
Germany	5,020,152	6.73	3,549,467	5.10	2,278,665	6.19	1,056,726	3.80
US	1,066,440	1.43	1,393,412	2.00	165,527	0.45	284,664	1.02
Korea	3,041,680	4.08	2,073,472	2.98	433,461	1.18	343,699	1.24
Italy	308,830	0.41	365,099	0.52	0	0	212,823	0.77
Total	74,572,314	100.00	69,617,222	100.00	36,833,024	100.00	27,785,796	100.00

Source: Department of Statistic Malaysia

**Table 5: 847720- Extruders
Market share comparison for import countries**

Country	Import							
	2007	Market share	2008	Market Share	2008 (Jan-May)	Market Share	2009 (Jan-May)	Market Share
	EUR	%	EUR	%	EUR	%	EUR	%
Japan	4,486,664	13.17	2,965,048	12.08	2,342,455	22.21	3,297,044	46.59
Taiwan	5,329,562	15.65	3,760,331	15.32	1,763,071	16.72	536,602	7.58
China	5,874,594	17.25	1,494,417	6.09	1,456,508	13.81	1,702,354	24.05
Germany	5,014,606	14.72	590,486	2.41	1,697,053	16.09	636,855	9.00
US	4,435,717	13.02	939,428	3.83	165,527	1.57	0	0
Korea	130,494	0.38	1,455,014	5.93	90,252	0.86	0	0
Italy	3,936,472	11.56	2,479,518	10.10	437,269	4.15	55,275	0.78
Total	34,058,265	100.00	24,549,988	100.00	10,547,509	100.00	7,077,189	100.00

Source: Department of Statistic Malaysia

Table 6: 847730- Blow Moulding machines
Market share comparison for import countries

Country	Import							
	2007	Market share	2008	Market Share	2008 (Jan-May)	Market Share	2009 (Jan-May)	Market Share
	EUR	%	EUR	%	EUR	%	EUR	%
Japan	974,628	5.56	2,218,817	20.30	411,823	11.21	487,009	9.67
Taiwan	5,793,152	33.03	3,482,322	31.85	1,505,707	40.98	2,378,530	47.22
China	1,910,407	10.89	2,728,041	24.95	1,456,508	39.64	1,001,281	19.88
Germany	4,787,268	27.30	1,325,870	12.13	787,783	21.44	0	0.00
US	33,959	0.19	261,233	2.39	0	0.00	0	0.00
Korea	0	0.00	0	0.00	0	0.00	0	0.00
Italy	1,856,979	10.59	385,566	3.53	307,967	8.38	818,094	16.24
Total	17,537,890	100.00	10,932,648	100.00	3,674,307	100.00	5,036,871	100.00

Source: Department of Statistic Malaysia

Table 7: 847740 Vacuum moulding machines and other thermoforming machines
Market share comparison for import countries

Country	Import							
	2007	Market share	2008	Market Share	2008 (Jan-May)	Market Share	2009 (Jan-May)	Market Share
	EUR	%	EUR	%	EUR	%	EUR	%
Japan	342,322	4.35	141,333	3.00	26,744	1.35	274,384	20.33
Taiwan	2,812,228	35.77	1,007,500	21.36	366,025	18.42	259,004	19.19
China	644,561	8.20	559,640	11.87	395,712	19.92	152,444	11.30
Germany	1,393,424	17.72	254,627	5.40	217,568	10.95	0	0.00
US	577,970	7.35	236,487	5.01	969,888	48.81	1,238	0.09
Korea	100,382	1.28	877,016	18.60	317,204	15.96	248,899	18.44
Italy	784,334	9.98	5,549	0.12	0	0.00	2149	0.16
Total	7,862,934	100.00	4715,809	100.00	1,986,955	100.00	1,349,566	100.00

Source: Department of Statistic Malaysia

Table 8: 847751 For moulding and or retreading pneumatic tyres or for moulding or otherwise forming inner tubes
Market share comparison for import countries

Country	Import							
	2007	Market share	2008	Market Share	2008 (Jan-May)	Market Share	2009 (Jan-May)	Market Share
	EUR	%	EUR	%	EUR	%	EUR	%
Japan	1,707,336	46.88	71,080	3.78	8,018	1.46	51,880	4.92
Taiwan	210,676	5.78	52,227	2.78	11,807	2.15	18,987	1.80
China	334,303	9.18	547,386	29.13	64,270	11.74	50,433	4.78
Germany	0	0.00	0	0.00	0	0	861,424	81.75
US	0	0.00	3,708	0.20	0	0	0	0
Korea	4,138	0.11	33,026	1.76	7,235	1.32	0	0
Italy	0	0.00	87,837	4.67	27,192	4.96	0	0
Total	3,641,872	100.00	1,878,991	100.00	547,441	100	1,053,653	100

Source: Department of Statistic Malaysia

Table 9: 847759 Other for moulding or forming
Market share comparison for import countries

Country	Import							
	2007	Market share	2008	Market Share	2008 (Jan-May)	Market Share	2009 (Jan-May)	Market Share
	EUR	%	EUR	%	EUR	%	EUR	%
Japan	1,851,793	21.67	4,695,624	36.61	1,229,041	26.30	526,774	11.94
Taiwan	2,071,387	24.24	1,123,663	8.76	213,333	4.56	568,646	12.89
China	1,584,883	18.54	2,685,450	20.94	848,325	18.15	1,049,695	23.79
Germany	1,982	0.02	1,511,907	11.79	1,305,624	27.94	3,209	0.07
US	289,493	3.39	741,840	5.78	126,752	2.71	590,194	13.38
Korea	285,225	3.34	197,481	1.54	13,503	0.29	0	0.00
Italy	156,962	1.84	112,103	0.87	189,301	4.05	12,192	0.28
Total	8,546,469	100.00	12,825,658	100.00	4,673,326	100.00	4,411,593	100.00

Source: Department of Statistic Malaysia

Table 10: 847780 Other machinery
Market share comparison for import countries

Country	Import							
	2007	Market share	2008	Market Share	2008 (Jan-May)	Market Share	2009 (Jan-May)	Market Share
	EUR	%	EUR	%	EUR	%	EUR	%
Japan	11,136,857	20.68	9,096,496	16.14	5,141,373	22.54	6,244,334	29.17
Taiwan	10,943,582	20.32	7,084,673	12.57	2,324,901	10.19	2,505,113	11.70
China	9,738,954	18.08	14,537,301	25.79	6,979,345	30.60	2,566,013	11.99
Germany	8,839,941	16.41	6,236,380	11.06	1,174,271	5.15	3,248,480	15.18
US	1,398,679	2.60	5,324,227	9.45	229,599	1.01	1,559,382	7.29
Korea	2,088,523	3.88	361,271	0.64	93,928	0.41	101,661	0.47
Italy	814,304	1.51	5,394,117	9.57	3,184,148	13.96	2,121,446	9.91
Total	53,866,097	100.00	56,362,321	100.00	22,807,191	100.00	21,403,075	100.00

Source: Department of Statistic Malaysia

Table 11: 847790 Parts
Market share comparison for import countries

Country	Import							
	2007	Market share	2008	Market Share	2008 (Jan-May)	Market Share	2009 (Jan-May)	Market Share
	EUR	%	EUR	%	EUR	%	EUR	%
Japan	18,844,094	25.92	12,661,718	18.74	5,054,026	18.41	2,042,710	10.34
Taiwan	19,178,711	26.38	23,824,334	35.26	12,199,403	44.43	7,108,631	35.98
China	5,056,420	6.96	3,096,024	4.58	1,236,529	4.50	691,786	3.50
Germany	3,472,411	4.78	3,097,849	4.59	1,678,176	6.11	2,370,680	12.00
US	5,796,124	7.97	2,668,355	3.95	1,219,998	4.44	1,118,567	5.66
Korea	6,077,552	8.36	1,354,189	2.00	590,058	2.15	166,776	0.84
Italy	706,489	0.97	1,680,655	2.49	373,602	1.36	910,290	4.61
Total	72,696,918	100.00	67,558,534	100.00	27,456,015	100.00	19,754,997	100.00

Source: Department of Statistic Malaysia

Conclusion

The Malaysian plastics industry registered a moderate growth in turnover before 2009. The current economic downturn and financial crisis affected Malaysia seriously. In fact, the Malaysian plastic production relies on exports market due to strong overseas demand, particularly for packaging materials. This is due to stronger Euro and higher demand mainly from EU countries.

The prediction of economic recovery is expected to be in 2010. The growth of the future will focus on packaging material, particularly in export market. The electrical sun-sector will stabilize as not much new production plant will be established. The automotive industry is expected to stabilize as more sales could be stimulated by the introduction of new models by the local car producers. Overall performance of the plastic industry is expected to improve further compared to 2009.

Plastics processing machinery demand in Malaysian is predicted increasing in the future in parallel with the growth of the plastic industry. Injection moulding and extrusion machinery will still the main technology being applied in the industry.