

Istituto nazionale
per il Commercio Estero

Guida pratica



MALAYSIA

MALAYSIAN PLASTIC PROCESSING MACHINERY MARKET REPORT

(updated December 2010)

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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)
- Polysterene (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 RM14.6 billion in 2009, representing a decrease of 9.87% compared to the turnover of

RM16.2 billion in 2008. Exports also decreased by 10.75%, from RM9.3 billion in 2008 to RM8.3 billion in 2009.

Key data for the Malaysian Plastic Industry

	2006	2007	2008	2009	2010 (F)
Malaysia's gross domestic product (GDP)	5.9%	6.3	4.6	-1.7	6
Number of plastics manufacturers	1,500	1,500	1,450	1,450	1,500
Employment	84,000	85,000	85,000	82,000	83,000
Turnover	15.0	15.4	16.2	14.6	16.2
Export	7.8	8.3	9.3	8.3	9.5
% of export against turnover	52%	54%	57%	57%	58.6%
Resin production	2.0m MT	2.0m MT	2.0m MT	1.8m MT	
Resin import	0.7m MT	0.8m MT	0.9m MT	0.8m MT	
Resin export	1.0m MT	1.05m MT	1.12m MT	1.12m MT	
Resin consumption	1.7million MT	1.75 million MT	1.78miliiom MT	1.70 million MT	
Per capita consumption of resin	63KG	64KG	64KG	59KG	

Exports in 2009 to total turnover ratio was 57% and it remain status quo compared to 2008. 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.

Given the bleak outlook of the global economy, this trend is expected to continue into the first half of 2010.

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 2010. The total import of first five month was only EUR 1.1

million compared to EUR 4.27 million same periods in 2009, the decreasing rate was 74%

The market position of Italy plastic machinery was 7th (2007), 6th (2008) and 5th (2009 up to May). In 2009, the total import of plastic machinery, parts and accessories amounted to EUR 7.79 million, recording a decrease of 33.19% compared to 2008. In 2008, Italy was the 6th largest supplier of plastic machinery, parts and accessories to Malaysia (after Japan, Taiwan, China, Germany and US) with 4.24% market share equivalent to EUR 11.66 million.

The market share of Italy in 2009 was relatively small, only about 3.18%. 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 2008, 2009 and 2010 (Up to May)

Country	Import							
	2008	Market share	2009	Market Share	2009 (Jan-May)	Market Share	2010 (Jan-May)	Market Share
	EUR	%	EUR	%	EUR	%	EUR	%
Japan	76,115,039	27.68	61,942,438	25.24	29,401,759	30.38	22,344,609	20.48
Taiwan	52,520,168	19.10	42,393,773	17.28	15,022,924	15.52	17,046,276	15.63
China	47,780,878	17.37	41,399,329	16.87	10,983,344	11.35	23,950,134	21.96
Germany	19,239,708	7.00	25,216,104	10.28	8,177,374	8.45	2,703,618	2.48
US	12,747,794	4.64	10,034,612	4.09	3,554,045	3.67	9,359,411	8.58
Italy	11,668,002	4.24	7,795,059	3.18	4,232,270	4.27	1,100,040	1.01
Total	275,030,888	100.00	245,365,801	100.00	96,769,554	100.00	109,086,466	100.00

Source: Department of Statistics, Malaysia

Exchange Rate: EUR 1 = RM 4.4014 (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 form 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			
		2008	2009	2009 (Jan-May)	2010 (Jan-May)
		EUR	EUR	EUR	EUR
1	847710 - Injection moulding machines	402,311	440,882	212,823	4,082
2	847720 - Extruders	2,732,235	64,183	55,275	-
3	847730 - Blow Moulding machines	424,863	1,716,090	818,094	-
4	847740 - Vacuum moulding machines and other thermoforming machines	6,115	4,484	2,149	-
5	847751 - For moulding and or retreading pneumatic tyres or for moulding or otherwise forming inner tubes	96,789	-	-	1,136
6	847759 - Other for moulding or forming	123,529	1,248,11	12,192	77,176
7	847780 - Other machinery	5,943,897	3,726,867	212,1446	253,548
8	847790 - Parts	1,851,951	1,717,743	910,290	764,098
	Total	11,668,002	7,795,059	4,132,270	1100,040

HS Code breakdown statistic

**Table 3: 847710- Injection moulding machines
Market share comparison for import countries**

Country	Import							
	2008	Market share	2009	Market Share	2009 (Jan-May)	Market Share	2010 (Jan-May)	Market Share
	EUR	%	EUR	%	EUR	%	EUR	%
Japan	41,018,691	53.47	28,833,194	38.41	18,145,927	63.86	11,172,006	42.38
China	12,916,374	16.84	15,630,032	20.82	4,150,971	14.61	7,791,421	29.56
Taiwan	8,074,085	10.53	4,410,273	5.83	1,814,206	6.39	1,091,504	4.14
Germany	3,911,237	5.10	7,147,641	9.52	1,163,715	4.10	167,026	0.63
US	1,535,431	2.00	1,559,993	2.08	313,485	1.10	239,710	0.90
Italy	402,311	0.52	440,882	0.59	234,371	0.82	4,082	0.01
Total	76,712,757	100	75,066,470	100	28,413,135	100	26,356,590	100

Source: Department of Statistic Malaysia

**Table 4: 847720- Extruders
Market share comparison for import countries**

Country	Import							
	2008	Market share	2009	Market Share	2009 (Jan-May)	Market Share	2010 (Jan-May)	Market Share
	EUR	%	EUR	%	EUR	%	EUR	%
Taiwan	4,143,592	15.32	3,772,133	19.05	590,931	7.62	987,947	19.05
Japan	3,267,252	12.08	4,234,452	21.38	3,630,858	46.82	38,188	0.73
Italy	2,732,235	10.10	64,183	0.32	60,872	0.78	-	-
China	1,646,731	6.09	6,391,348	32.27	1,874,711	24.17	1,796,439	34.64
Korea	1,603,312	5.93	157,277	0.79	-	-	271,475	5.23
Germany	650,670	3.41	3,839,380	19.39	701,335	9.04	500,085	9.64
Total	27,052,175	100	19,803,816	100	7,754,895	100	5,185,730	100

Source: Department of Statistic Malaysia

Table 5: 847730- Blow Moulding machines
Market share comparison for import countries

Country	Import							
	2008	Market share	2009	Market Share	2009 (Jan-May)	Market Share	2010 (Jan-May)	Market Share
	EUR	%	EUR	%	EUR	%	EUR	%
Taiwan	3,827,247	31.85	5,612,980	36.76	2,619,348	47.29	2,421,258	46.29
China	3,006,089	24.95	3,640,618	23.85	1,102,657	19.91	1,740,413	33.00
Japan	2,444,963	20.30	1,199,481	7.86	536,317	9.68	916,343	17.37
Germany	1,461,005	12.13	915,836	6.00	-	-	-	-
US	287,858	2.39	7,729	0.05	-	-	-	-
Italy	424,863	3.53	1,716,090	11.24	900,924	16.27	-	-
Total	12,046,926	100	15,267,446	100	5,538,940	100	5,274,276	100

Source: Department of Statistic Malaysia

Table 6: 847740 Vacuum moulding machines and other thermoforming machines
Market share comparison for import countries

Country	Import							
	2008	Market share	2009	Market Share	2009 (Jan-May)	Market Share	2010 (Jan-May)	Market Share
	EUR	%	EUR	%	EUR	%	EUR	%
Taiwan	1,110,186	21.36	521,217	10.48	285,227	22.00	1,021,182	37.77
Korea	966,403	18.60	429,768	8.64	274,100	21.15	1,192	0.04
China	616,680	11.87	484,265	9.74	167,878	12.95	679,493	25.13
Germany	280,579	5.40	785,843	15.80	-	-	222,248	8.22
US	260,590	5.01	119,013	2.39	1,363	0.11	370,232	13.69
Italy	6115	0.12	4,484	0.09	2,366	0.18	-	-
Total	5,196,455	100	4,974,240	100	1,296,229	100	2,703,602	100

Source: Department of Statistic Malaysia

Table 7: 847751 For moulding and or retreading pneumatic tyres or for moulding or otherwise forming inner tubes
Market share comparison for import countries

Country	Import							
	2008	Market share	2009	Market Share	2009 (Jan-May)	Market Share	2010 (Jan-May)	Market Share
	EUR	%	EUR	%	EUR	%	EUR	%
China	603,177	29.13	196,901	13.74	55,539	5.01	632,953	57.19
Italy	96,789	4.67	-	-	-	-	1,136	0.10
Japan	78,325	3.78	68,497	4.78	57,132	5.15	317,319	28.67
Taiwan	57,550	2.78	91,188	6.36	20,910	1.89	64,535	5.83
Korea	36,392	1.76	-	-	-	-	-	-
Germany	-	-	949,222	66.23	948,640	85.54	15,894	1.44
Total	2,070,502	100	1,433,261	100	1,109,065	100	1,106,740	100

Source: Department of Statistic Malaysia

Table 8: 847759 Other for moulding or forming
Market share comparison for import countries

Country	Import							
	2008	Market share	2009	Market Share	2009 (Jan-May)	Market Share	2010 (Jan-May)	Market Share
	EUR	%	EUR	%	EUR	%	EUR	%
Japan	5,174,211	36.61	2,625,926	18.29	580,109	12.21	2,337,695	45.65
China	2,959,157	20.94	2,927,288	20.39	1,155,974	24.32	1,116,716	21.81
Germany	1,666,004	11.79	694,601	4.84	3,534	0.07	52,437	1.02
Taiwan	1,238,189	8.76	1,473,806	10.27	626,219	13.18	282,126	15.27
US	817,450	5.78	1,592,880	11.09	649,949	13.67	174,591	3.41
Italy	123,529	0.87	124,811	0.87	13,426	0.28	77,176	1.51
Total	14,132,876	100	14,356,743	100	4,752,883	100	5,120,815	100

Source: Department of Statistic Malaysia

Table 9: 847780 Other machinery
Market share comparison for import countries

Country	Import							
	2008	Market share	2009	Market Share	2009 (Jan-May)	Market Share	2010 (Jan-May)	Market Share
	EUR	%	EUR	%	EUR	%	EUR	%
China	16,018,973	25.28	7,428,179	13.96	2,825,813	13.19	5,879,070	18.11
Japan	10,023,631	15.82	15,167,186	28.50	6,876,552	32.09	3,771,975	11.62
Taiwan	7,806,758	12.32	7,090,007	13.32	2,758,747	12.87	3,302,005	10.17
Germany	6,872,005	10.84	7,066,555	13.28	3,577,377	16.69	439,854	1.97
US	5,866,884	9.26	3,450,771	6.48	1,717,264	8.01	7,445,383	22.94
Italy	5,943,897	9.38	3,726,867	7.00	2,336,236	10.90	253,548	0.78
Total	63,374,956	100	53,214,598	100	21,431,515	100	32,456,033	100

Source: Department of Statistic Malaysia

Table 10: 847790 Parts
Market share comparison for import countries

Country	Import							
	2008	Market share	2009	Market Share	2009 (Jan-May)	Market Share	2010 (Jan-May)	Market Share
	EUR	%	EUR	%	EUR	%	EUR	%
Taiwan	26,252,561	35.26	18,907,549	30.87	7,828,356	42.00	7,335,719	23.82
Japan	13,952,227	18.74	8,972,855	14.66	2,249,527	12.07	3,725,263	12.06
Germany	3,413,589	4.59	3,817,025	6.23	2,610,703	14.01	1,106,074	3.58
China	3,411,577	4.58	4,700,699	7.67	761,827	4.09	4,313,629	13.97
US	2,940,311	3.95	3,282,172	5.36	1,231,818	6.61	909,062	2.94
Italy	1,851,951	2.49	1,717,743	2.80	1,002,454	5.38	764,098	2.47
Total	74,444,243	100	61,249,225	100	18,640,178	100	30,882,681	100

Source: Department of Statistic Malaysia

Conclusion

The Malaysian plastics industry registered a decline in turnover in 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.