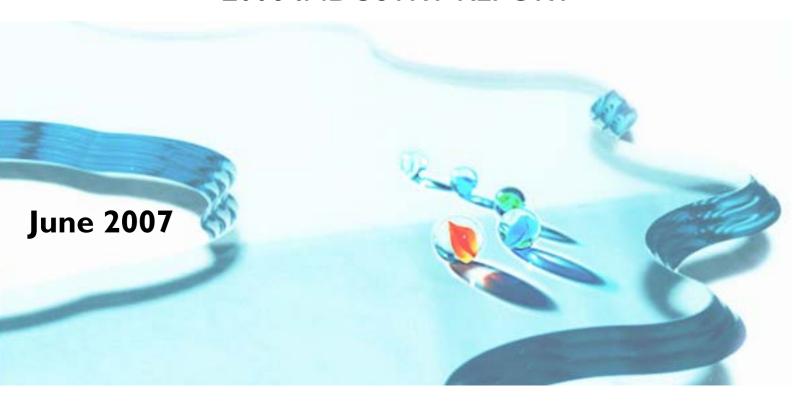


# ITALIAN GLASS-PROCESSING MACHINERY AND ACCESSORY SUPPLIERS ASSOCIATION

## **GIMAV**

### 2006 INDUSTRY REPORT





#### GIMAY, KNOWN AROUND THE WORLD

Established in 1980 by a small group of businessmen, GIMAV -- the Association of Italian manufacturers and suppliers of machinery, equipment and special products for glass processing – is known today as a guiding force for the industry in Italy and abroad. Its underlying goals are to safeguard the best interests of the industry, to foster the growth and expansion of its business culture, and to carry out activities that boost and support promotion of the Italian product around the globe. As a member of Confindustria, Federvarie and Federmacchine, in its 27 years of activity, Gimav has considerably strengthened its representative presence in the entire supply chain for the glass processing industry. Sales volume of GIMAV member companies makes up approx. 70% of the overall turnover of Italian manufacturers of machinery, accessories and special glass-processing products. The value and reliability of the initiatives that form the core of the Association's activities are evidenced by the exceptionally high degree of member loyalty and constant growth of the membership base over the years.

Industry giants have taken their place alongside the founding members of the Association, but it is the small and medium-sized businesses that etched their likenesses upon the industry. Recognizing the importance of each member nurtures mutual respect and gives everyone the opportunity to participate in and contribute to the Associations's political and management decisions -- a policy that has forged a cohesive group that wields some strong international muscle.

#### STATISTICAL SURVEY AND RESEARCH METHODOLOGY

As is customary at this time of the year, the Association presents the annual industry statistical survey, with the aim of providing a sufficiently complete picture of the sector and information about its structure, sales, production and export markets.

A time-tested research methodology was relied upon for data collection that makes it possible to capture a reliable image of a sector that is homogeneous in terms of final product destination, but dishomogeneous in terms of the categories of the companies that work in it. In fact, sales in the category called "GLASS PROCESSING" are generated by firms operating in the areas of chemistry, plastics, rubber, and many more. The common denominator, upon which the entire chain hinges, is the end client, the one who makes and processes glass. Given the complexity of the situation, it is quite clear that the only official source -- the Italian Institute of Statistics (ISTAT) -- supplies reliable but incomplete data because it is limited to imports and exports tied to two macro families, identified by Customs codes for machinery and tools that largely come from companies in the machine-building business:

- cold processing of glass (flat glass), divided into two categories,
- hot processing of glass (hollow glass), divided into three subcategories. Since there are no reliable institutional sources, the collection of data regarding domestic turnover is even more complicated.

To bridge the information gap mentioned above, Gimav distributes a detailed questionnaire to all of its members and to the very few large non-member firms, and also conducts phone interviews, when necessary. The return rate of completed questionnaires by members is very high and quite respectable from the others.



#### **ITALY'S MACHINE-BUILDING INDUSTRY**

Production figures for 2006 regarding the entire machine-building sector show a marked increase in all areas. In some cases the percentage increases went as high as two-digits.

Only the ceramics machines sector ended the year with a dip in production, likely due to the drop in demand from foreign markets. In fact, its export figures were also down.

All other sectors of Italy's machine-building industry posted outstanding increases in exports, amounting to 4.83% overall.

Despite a noticeable increase in foreign imports during 2006 (+ 9.38 over 2005), the industry maintained a healthy trade surplus, closing out the year with a difference of 11.920 billion euros.

Production (in millions of Euros)	2005	2006	06/06 diff.
Acimac – Ceramics machines	1,777	1,702	- 4.22
Acimall – Wood processing machines	1,540	1,820	+ 18.18
Acimga – Machines for the graphics and paper industries	1,640	1,670	+ 1.83
Acimit – Machines for the textile industry	2,532	2,680	+ 5.85
Assocomaplast – Machines for materials in plastics and rubber	3,700	3,850	+ 4.05
Assomac – Footwear, leather goods and tanning machines	488	n/a,	n/a
Gimav – Glass processing machines and products	1,176	1,238	+ 5.32
Assomarmomacchine – Natural stone processing machinery	1,120	1,250	+ 11.61
Ucima – Packaging and packing goods machines	3,120	3,276	+ 5.00
Ucimu – Machine tools, robots and automation	4,309	4,992	+ 15.85
Total	21,402	22,478	+ 5.03

Exports (millions of euros)	2005	2006	% Diff. 06/05
Acimac – Ceramics machines	1,320	1,244	- 5.75
Acimall – Wood-processing machines	1,262	1,492	+ 18.22
Acimga – Machines for the graphics and paper industry	1,265	1,301	+ 2.84
Acimit – Machines for the textile industry	2,000	2,091	+ 4.55
Assocomaplast – Machines for materials in plastics and rubber	2,184	2,267	+ 3.80
Assomac – Footwear, leather goods and tanning machines	348	n/a	n/a
Gimav – Glass-processing machines and products	85 I	893	+ 4.99
Assomarmomacchine – Natural stone-processing machinery	770	800	+ 3.90
Ucima – Packaging and packing goods machines	2,740	2,962	+ 8.10
Ucimu – Machine tools, robots and automation	2,368	2,787	+ 17.69
Total	15,108	15,837	+ 4.83



Imports (millions of euros)	2005	2006	Diff. 06/05
Acimac – Ceramics machines	n/a	n/a	n/a
Acimall – Wood-processing machines	148	174	+ 17.57
Acimga – Machines for the graphics and paper industry	775	861	+ 11.10
Acimit – Machines for the textile industry	571	568	- 0.52
Assocomaplast – Machines for materials in plastics and rubber	567	589	+ 3.88
Assomac – Footwear, leather goods and tanning machines	22	n/a	n/a
Gimav – Glass-processing machines and products	47	51	+ 8.5
Assomarmomacchine – Natural stone processing machinery	22	39	+ 77.27
Ucima – Packaging and packing goods machines	260	304	+ 16.92
Ucimu – Machine tools, robots and automation	1169	1,331	+ 13.86
Total	3,581	3,917	+ 9.38

Workforce	2005	2006	Diff. 06/05
Acimac – Ceramics machines	6,495	6,938	+ 6.8
Acimall – Wood-processing machines	12,000	12,000	0.0
Acimga – Machines for the graphics and paper industry	7,300	7,200	0.0
Acimit – Machines for the textile industry	23,000	22,000	- 4.3
Assocomaplast – Machines for materials in plastics and rubber	12,300	12,300	0.0
Assomac – Footwear, leather goods and tanning machines	6,200	n/a	n/a
Gimav – Glass-processing machines and products	4,500	4,500	0.0
Assomarmomacchine – Natural stone processing machinery	10,000	11,300	+ 13.0
Ucima – Packaging and packing goods machines	16,900	16,800	- 0.6
Ucimu – Machine tools, robots and automation	31,330	31,340	0.0
Total	130,025	124,378	- 4.34

Source Federmacchine



# THE ITALIAN INDUSTRY OF MACHINERY, ACCESSORIES, AND SPECIAL PRODUCTS FOR GLASS PROCESSING

Like the rest of the machine-building industry, the glass-processing machinery, accessories and special products sector also posted an increase in production for 2006, compared to the previous year.

After the ups and downs of the first quarter, sales settled into a pattern of steady growth, which led to very handsome year-end profits.

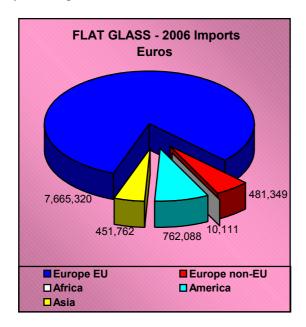
Even domestic sales, which had suffered a slump, took a significant leap ahead.

#### **IMPORTS**

Foreign imports as a whole took a turn for the better in 2006, compared to 2005, returning to the positive levels established in 2004 (+ 8.54%). Detailed analysis of the situation reveals two opposing trends: the flat glass sector imported less in 2005, while figures for the hollow glass sector were up considerably. Specifically:

- Cold processing machines and accessories (flat glass): -6.38%
   Hot processing machines and accessories (hollow glass): +12.53%
- On total imports amounting to just slightly more than 51 million euros, machines and accessories for flat glass totaled 9.3 million euros, while Italian companies that manufacture and process hollow glass spent 42.1 million euros on foreign capital goods.

The following table illustrates the trends over the last three years: 2004, 2005 and 2006, broken out by geographic area and origin of goods. The far right column shows the percentage differences between 2006 and 2005.



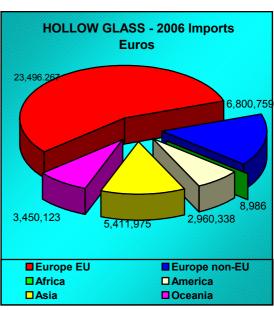




Table I - Imports 2006

IMPORTS OF MACHINERY, ACCESSORIES AND SPECIAL PRODUCTS				
F	OR GLASS PR	ROCESSING		
Sectors	2004	2005	2006	% Diff.
Areas of Origin	Euros	Euros	Euros	2006/2005
FLAT GLASS				
Europe EU	7,818,970	8,335,279	7,665,320	- 8.04
Europe Non-EU	505,150	761,533	481,349	- 36.79
Africa	101,641	-	10,111	100.00
America	863,820	403,628	762,088	88.81
Asia	834,291	503,870	451,762	- 10.34
Oceania	-	4,978	0	-100.00
Total Imports Flat Glass	10,123,872	10,009,288	9,370,630	- 6.38
HOLLOW GLASS				
Europe EU	36,326,360	27,399,633	23,496,267	- 14.25
Europe Non-EU	4,431,025	6,189,426	6,800,759	9.88
Africa	186,654	27,914	8,986	- 67.81
America	1,109,357	1,588,643	2,960,338	86.34
America				
Asia	778,036	2,198,344	5,411,975	146.18
	778,036 25,240	2,198,344 34,563	5,411,975 3,450,123	9.882.13
Asia				

Table 2 shows the leading countries of origin by geographic area and sector

Table 2 – Imports 2006, leading countries of origin

Or	Origin		at Glass
Geographic area	Country	Euros	% share of imports flat glass
	France	4,039,735	43.11%
Europe EU	Germany	2,858,262	30.50%
	Austria	393,545	4.20%
Europo non El l	Croatia	200,619	2.14%
Europe non-EU	Switzerland	151,222	1.61%
Africa	Morocco	7,111	0.08%
Airica	Tunisia	3,000	0.03%
America	United States	662,409	7.07%
America	Canada	92,347	0.99%
Asia	China	227,081	2.42%
Asia	Japan	120,010	1.28%



Table 2 (cont'd.)

Or	Origin		llow glass
Geographic area	Country	Euros	% share of imports hollow glass
	Sweden	11,512,848	27.33%
Europe EU	United Kingdom	4,286,867	10.18%
	France	2,766,518	6.57%
Europe non-EU	Croatia	5,600,899	13.29%
Europe non-EO	Turkey	807,100	1.92%
Africa	Tunisia	8,312	0.02%
America	United States	2,890,627	6.86%
	South Korea	2,066,406	4.91%
Asia	Japan	1,433,196	3.40%
	China	1,014,807	2.41%
Oceania	Australia	3,450,123	8.19%

#### Imports, leading countries of origin for the entire sector

Origin		Enti	re <b>S</b> ector
Geographic area	Country	Euros	% share of Total Imports
	Sweden	11,512,848	22.36%
Europe EU	France	6,806,253	13.22%
Lui ope LO	Germany	4,919,655	9.55%
	United Kingdom	4,289,385	8.33%
Europe non-EU	Croatia	5,801,518	11.27%
Lui ope non-Lo	Turkey	845,675	1.64%
Africa	Tunisia	11,312	0.02%
America	United States	3,553,036	6.90%
	South Korea	2,154,476	4.18%
Asia	Japan	1,553,206	3.02%
	China	1,241,888	2.41%

Source: Gimav processing of Istat data

The following table illustrates domestic consumption, the sum total of imports and domestic sales of Italian-made machines, equipment, accessories and special products.

The figures shown refer to the last three years, while the far right column indicates the amount of change, in percentages, between 2006 and 2005.



Table 3 – Domestic consumption

DOMESTIC CONSUMPTION					
Sectors	2004	2005	2006	% Diff.	
Product origin	Euros	Euros	Euros	2006/2005	
FLAT GLASS					
Imports	10,123,872	10,009,288	9.370.630	- 6.38	
Domestic production	242,538,285	247,801,366	260.008.024	4.93	
Total Flat glass	252,662,157	257,810,654	269.378.654	4.49	
HOLLOW GLASS					
Imports	42,856,672	37,438,523	42,128,448	12.53	
Domestic production	76,304,834	76,549,009	84,447,130	10.32	
Total Hollow Glass	119,161,506	113,987,532	126,575,578	11.04	
Total Flat + Hollow	371,823,663	371,798,186	395,954,232	6.50	

#### **EXPORTS**

Exports increased 4.99% overall, for a total of 893 million euros. Although the percentage amounts were significantly different, both sectors posted gains in their respective exports:

- machines, accessories and special products for flat glass + 6.46%
- machines, accessories and special products for hollow glass + 1.29%

The next table illustrates exports for the last three years, and compares the differences, in percentages, between 2006 and 2005.

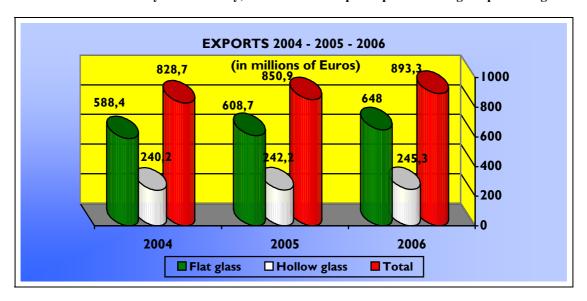
Table 4 - Exports 2006

EXPORTS OF MACHINES, ACCESSORIES AND SPECIAL PRODUCTS				
	FOR GLASS I	PROCESSING		
Sastana	2004	2005	2006	% Diff.
Sectors	Euros	Euros	Euros	2006/2005
Flat Glass	588,442,186	608,743,452	648,038,644	6.46
Hollow Glass	240,232,910	242,178,796	245,307,383	1.29
Total Flat + Hollow	828,675,096	850,922,248	893,346,027	4.99

Source: Gimav processing of Istat data



The Industry of Machinery, Accessories and special products for glass processing



A closer look at the flow of exports by geographic area shows that the European Union, with 40.26% of total exports, is still the primary destination for Italian goods, but the sharp increase in percentage share over last year (in 2005 it was 29.90%) can be partially explained by the entry of new countries into the European Community.

A detailed analysis of this area highlights a revival in growth of the German market, which has traditionally been one of the key outlets for domestic production, especially for the flat glass sector. The period starting with the late 1990s and the early part of 2000 had undergone a noticeable decline but, starting in 2004, the trend clearly began to reverse, and then strengthened in 2005, placing Germany among the five most important customers in 2006 for Italian products.

Among the non-EU countries, the leading European consumer is the Russian Federation, with 9.20%, followed by Turkey with 3.34. Both the Ukraine and Croatia appear to be making strong gains, as well.

Even though the Euro amounts themselves are still fairly modest, Africa posted an extraordinary increase, from 2.90% in 2005 to 5.42% in 2006. For the most part, this increase can be credited to South Africa, which absorbed 2.36% of total exports for the sector.

Taken all together, the Americas showed a dramatic increase over 2005, thanks in particular to the growth in sales of Italian products in the US, Brazil and Argentina. The decline in sales to Mexico went unchecked (0.98% of total exports), while Chile appears to be flexing its purchasing muscles.

The Asian market is in sharp decline, having fallen below the levels set prior to 2003. The percentage share of exports to this area has decreased from 30.11% in 2005 to 19.20% at the end of 2006, primarily due to the 10% plunge in Iran's share.

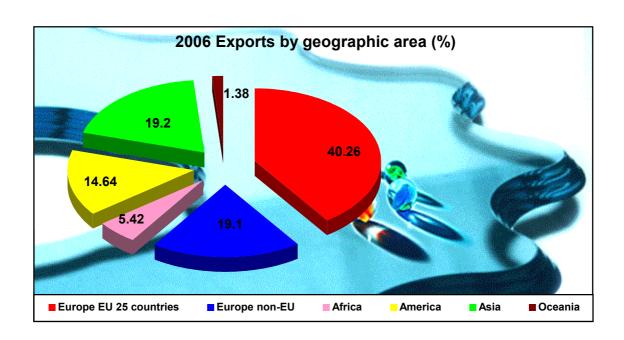


Table 5 illustrates the trend in percentage share of exports over the last three years in the various geographic areas for the entire sector (flat glass + hollow glass).

Table 5 - Export shares for the entire sector

% SHARE BY GEOGRAPHIC AREA EXPORTS FOR THE ENTIRE SECTOR						
Areas of destination 2004 2005 2006						
Europe EU	37.70	29.90	40.26			
Europe non-EU	19.87	22.89	19.10			
Africa	4.05	2.90	5.42			
America	13.01	12.25	14.64			
As ia	23.38	30.11	19.20			
Oceania and free ports	1.99	1.95	1.38			
Total Exports for the entire sector	100.00	100.00	100.00			

Source: Gimav processing of Istat data





The following tables list the leading destination countries for Italian goods, in each of the macro areas shown above, by sector: flat glass (table 6), and hollow glass (table 7).

Table 6 - Flat glass: leading destination countries in 2006

MACHINES, ACCESSORIES AND SPECIAL PRODUCTS FOR FLAT GLASS					
LEADING COUNTRIES	LEADING COUNTRIES OF DESTINATION BY GEOGRAPHIC AREA				
Coogmphicanos	Countries	% share of exports			
Geographic areas	Countries	flat glass sector			
	Germany	6.94			
Europe EU	Spain	5.44			
	France	3.65			
Other European countries	Russia	5.86			
	Turkey	3.49			
	Ukraine	1.48			
Africa	Egypt	1.67			
Airica	Rep. South Africa	0.90			
	United S tates	10.00			
America	Brazil	2.51			
America	Ca na da	1.05			
	Mexico	0.68			
	China + Hong Kong	11.02			
Asia	Japan	2.38			
	India	2.30			
Oceania	Aus tra lia	2.40			

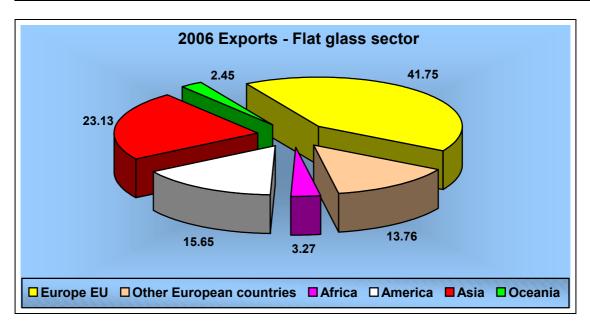
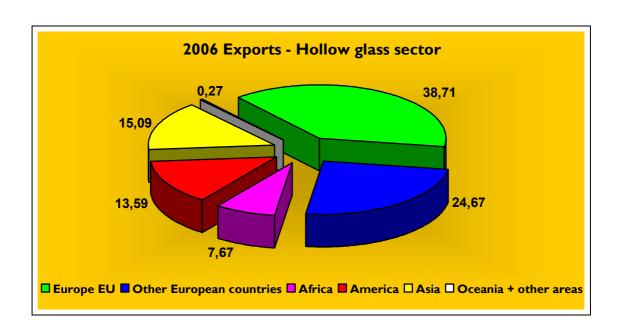




Table 7 - Hollow glass: leading destination countries in 2006

MACHINES, ACCESSORIES AN	tination countries in 2006  ND SPECIAL PRODUCTS	FOR HOLLOW GLASS			
LEADING COUNTRIES OF DESTINATION BY GEOGRAPHIC AREA					
Geographic areas	Countries	% share of exports			
Geographic areas	Countries	hollow glass sector			
	France	11.05			
Europe EU	Spain	4.06			
	Germany	3.49			
	Russia	12.68			
Other European countries	Turkey	3.18			
	Ukraine	2.91			
	Rep. South Africa	3.89			
Africa	Ethiopia	1.46			
	Angola	0.83			
	United States	3.90			
America	Argentina	2.19			
	Brazil	1.63			
	India	4.50			
Asia	China + Hong Kong	4.05			
	Japan	1.07			
Oceania and other territories	Australia	0.20			
Oceania and other territories	Other territories	0.06			

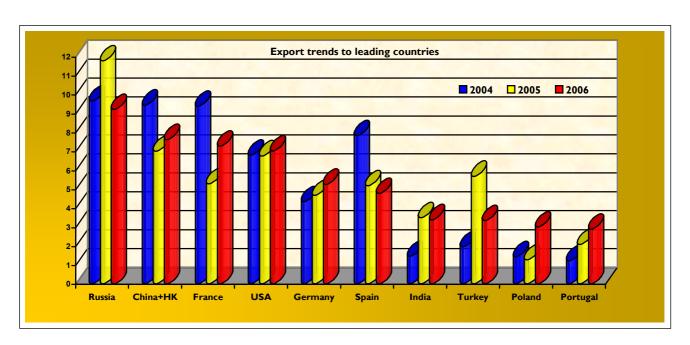




The following table creates a virtual ranking of the first 20 destination countries for Italian exports for the entire industry (flat glass sector +hollow glass sector). The last line of the table illustrates the drop in Iran's share, which plummeted from 1st position in 2005 to 31st in 2006.

Table 8 - Total Exports: leading countries of destination 2006 - 2005

	INDUSTRY EXPORTS				
LEADING COUNTRIES OF DESTINATION					
	2006 Exports	3		2005 Exports	
Pos.	Countries	% share	Pos.	% share	
I	Russia	9.20	2	11.76	
2	China+Hong Kong	7.61	3	7.00	
3	France	7.27	6	5.28	
4	United States	7.01	4	6.75	
5	Germany	5.25	8	4.67	
6	Spain	4.77	7	5.17	
7	India	3.38	9	3.49	
8	Turkey	3.34	5	5.67	
9	Poland	3.00	16	1.27	
10	Portugal	2.88	- 11	2.07	
	United Kingdom	2.38	10	2.88	
12	Rep. South Africa	2.36	28	0.83	
13	Austria	2.34	38	0.48	
14	Ukraine	2.18	32	0.67	
15	Brazil	2.08	17	1.14	
16	Belgium	1.91	25	0.87	
17	lapan	1.74	18	1.14	
18	Romania	1.73	29	0.73	
19	Bulgaria	1.33	24	0.89	
20	Aus tra lia	1.32	12	1.82	
31	lran	0.90	I	11.83	



12



#### **INDUSTRY SALES**

In spite of increasingly aggressive competition, the Italian industry of machines, accessories and special products for glass processing managed to show a profit again in 2006, by increasing sales in both the flat glass and in the hollow glass sectors. Italian exports held the course at high levels, maintaining the status quo, by delivering 72% of sales to foreign markets.

Table 9 - Sales by sector and % difference 2006/2005

ITALIAN INDUSTRY SALES							
MACHINES, ACCESSORIES AND SPECIAL PRODUCTS FOR GLASS							
Sectors	2004	2005	2006	% Diff.			
Sectors	Euros	Euros	Euros	2006/2005			
FLAT GLASS SECTOR							
Domestic sales	242,538,285	247,801,366	260,008,024	4.93			
Exports	588,442,186	608,743,452	648,038,644	6.46			
Total flat glass sales	830,980,471	856,544,818	908,046,668	6.01			
HOLLOW GLASS SECTOR							
Domestic sales	76,304,834	76,549,009	84,447,130	10.32			
Exports	240,232,910	242,178,796	245,307,383	1.29			
Total hollow glass sales	316,537,744	318,727,805	329,754,513	3.46			
Total Flat + Hollow	1,147,518,215	1,175,272,623	1,237,801,181	5.32			
% SHAI	RES BY DESTINA	ATION FOR 200	6 SALES				
Destination	Flat glass	Hollow glass	v glass TOTALS ALL SECTORS				
Domestic sales	28.63	25.61	27.83				
Exports	71.37	74.39	72.17				
TOTAL	100.00	100.00		100.00			

Source: Gimav processing of Istat data

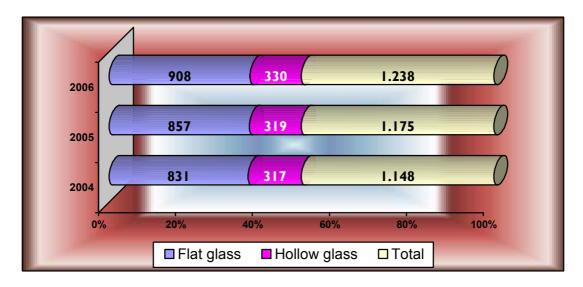




Table 10 - Summary

Summary  Machines, accessories and special products for the glass-processing industry  Years: 2004 – 2005 - 2006								
<b>V</b> ariables	Variables Unit of measure 2004 2005 2006							
Industry sales	Euro	1,147,518,215	1,175,272,623	1,237,801,181				
Exports	Euro	828,675,096	850,922,248	893,346,027				
Imports	Euro	52,980,544	47,447,811	51,499,078				
Trade surplus	Euro	775,694,552	803,474,437	841,846,949				
	Euro	318,843,119	324,350,375	344,455,154				
Domestic orders	% difference	+7.10	+1.73	+6.20				
	Euro	828,675,096	850,922,248	893,346,027				
Foreign orders	% difference	+8.07	+2.68	+4.99				
Workforce	No. employed	4,500	4,500	4,500				

Source: Gimav processing of Istat data

Signs of awakening from the domestic market and the ability of Italian companies to consistently broaden their range of activity while carefully monitoring the trends in an ever increasing number of international markets, gives reasons to hope that 2007 too, will close its books on a positive note.

Undeniably, Italy's machines, accessories and special products for flat and hollow glass manufacturing and processing industry will leave no stone unturned to maintain and strengthen its hard-won leadership position in the global marketplace, conquered through years of effort, product reliability, and after-sales support geared to meet the needs of its customers.



#### THE ITALIAN GLASS INDUSTRY

#### Flat glass

The year 2006 incurred a slight drop in flat glass production and exports, and a sizable increase in imports.

FLAT GLASS - In tons					
Items 2005 2006 % Diff.					
Production	1,183,310	1,141,874	- 3.5		
Exports	193,523	187,841	-2.9		
Imports	344,044	400,574	16.4		

#### Hollow glass

Contrary to the performance of flat glass, hollow glass production was up in all areas under consideration with percentage differences for 2006 that were all higher than those posed in 2005.

HOLLOW GLASS - In tons				
Items	2005	2006	% Diff.	
Production	3,716,509	3,721,288	0.1	
Exports	530,930	535,933	0.9	
Imports	444,826	458,411	3.1	

#### **Bottles**

Growth in this sector's production ran parallel to a drop in imports. It's easy to speculate that this was matched by a rise in the domestic share of national products.

BOTTLES - In tons			
Items	2005	2006	% Diff.
Production	3,145,211	3,167,500	0.7
Exports	293,705	291,498	- 0.8
Imports	241,005	237,853	- 1.3

#### **Vases**

Overall negative performance, measured in tons, for this sector.

VASES - In tons					
Items 2005 2006 % Diff.					
Production	254,083	242,009	- 4.8		
Exports	20,531	18,282	- 11.0		
Imports	67,464	65,513	- 2.9		



#### **Small Bottles & Vials**

Despite a drop in production, exports of Italian small bottles and vials led to a significant rise in foreign market share.

SMALL BOTTLES & VIALS- In tons					
Items 2005 2006 % Diff.					
Production	144,039	139,532	- 3.1		
Exports	84,574	98,103	16.0		
Imports	52,468	62,564	19.2		

#### **Packaging**

Packaging materials ended the year on a generally positive note; specifically, exports of Italian products enjoyed modest gains.

PACKAGING - In tons				
Item 2005 2006 % Diff.				
Production	3,543,333	3,549,041	0.2	
Exports	398,810	407,883	2.3	
Imports	360,937	365,930	1.4	

#### **Summary**

	Summary					
	GLASS INDUSTRY					
	F	oreign Trade 2006	· In tons			
Pos.	Pos. Product Exports Imports Balance					
	Flatglass	187,841	400,574	-212,733		
2	Hollow glass	535,933	458,411	77,522		
3	Bottles	291,498	237,853	53,645		
4	Vases	18,282	65,513	-47,231		
5	Via Is	98,103	62,564	35,539		
6	Packaging	407,883	365,930	41,953		
	<b>Total</b> 1,539,540 1,590,845 -51,305					

Source Assovetro

