

Overseas Market Information



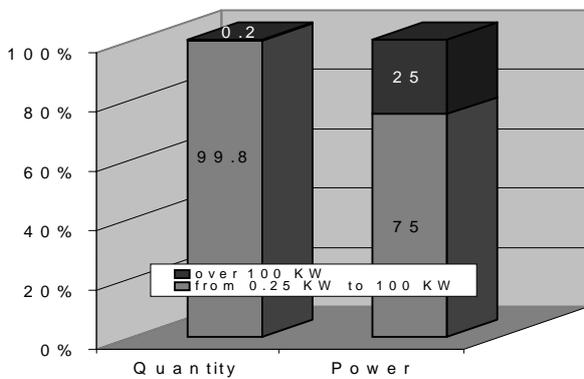
Electric Motors and Generators Market in Poland

The producers of electric motors and generators have seen the market send signal of revival. They boosted their output, improved economic indicators, and increase exports steadily. Additionally, western investors have delivered positive vibes to the entire industry with the purchase of some major domestic producers.

Making electricity, utilizing electricity

Without going into the details of statistical and speciality nomenclature (as used, for instance, by the Central Statistical Office GUS), the industry's main outputs consist of two types of machines : motors, which convert electric energy into mechanic motion, and generators, which convert mechanic motion or the energy of heat into electric current. In term of quantity, engines are more popular than generators. In terms of value, powerful engines and generators are the most important ones. In 1999, 15 largest generators made to orders from the energy sector, equalled 82% of the total power of five million engines produced in the same period.

Production structure of regular, three-phase motors



Source : GUS

Regardless of type, power, and their application, the energy sector orders the bulk part of generators and motors. Individual clients have indirect impact on the sector, through their purchases of household appliances, automotive vehicles and other goods that require power tools to produce.

Reviving market

In the 1980s, Poland was self-sufficient in production of electric motors and generators. However, it was import dependent in the category of large power units. The economic transition that started after 1989 misplaced the electromechanical sector as clients were happily switching to more advanced foreign equipment on one hand, while the Polish producers suffered overstaffing and generated huge costs.

The decline in production was halted in late 1990s. In 2001, the industry output signalled a growth trend. Even earlier, in 1997, the companies with staffs of over 49 people, recorded growth in output - however, the numbers included motors, generators, and transformers. In 1999, the total power of all items sold grew versus a year earlier, which was the first settling signal for the industry.

In 2001, the industry's sales of motors and generators scaled by 60% versus a year earlier. Next year, however, the market plummeted little over the 2000 results (10.3 GW in the total power of the units produced). In 2002, the industry's turnover was PLN 819 m, which was only 42% of that generated in 2001. It is difficult to say, however, if the drop had an effect on the entire industry, and if the sales of transformers had changed so much, and whether some methodological changes in statistical count did not input a bias - some companies might have cut employment below 49 people and thus be out of the statistics.

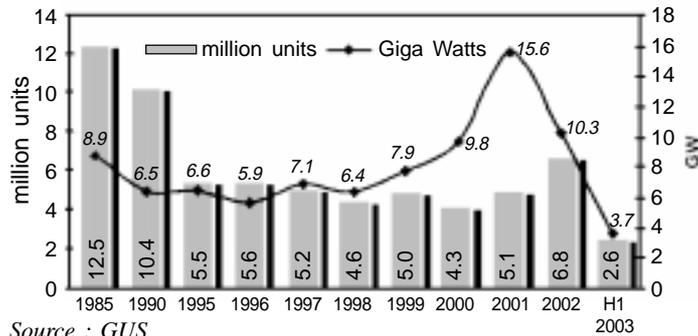
Basic economic indicators of producers of electric motors, generators, and transformers*

	1996	1997	1998	1999	2000	2001	2002	HI 2003
Production sold (PLN m)	1008	1207	1220	1182	1240	1414	819	689
Average employment ('000)	15.7	15.9	14.6	12.7	10.7	11.4	7.9	9.8
Work efficiency per employer (PLN '000)	64.2	75.9	83.6	93.1	115.9	124.0	103.7	70.3
Gross yield (%)	1	2.9	0.1	-0.6	-0.4	-0.1	1.6	3.7
Net yield (%)	0.8	0.9	-2	-2.5	-1.8	-1.2	0.6	1.8

*Companies with over 49 staffs

(Source : GUS)

The output of generators, in millions of units, and giga watts of power



Source : GUS

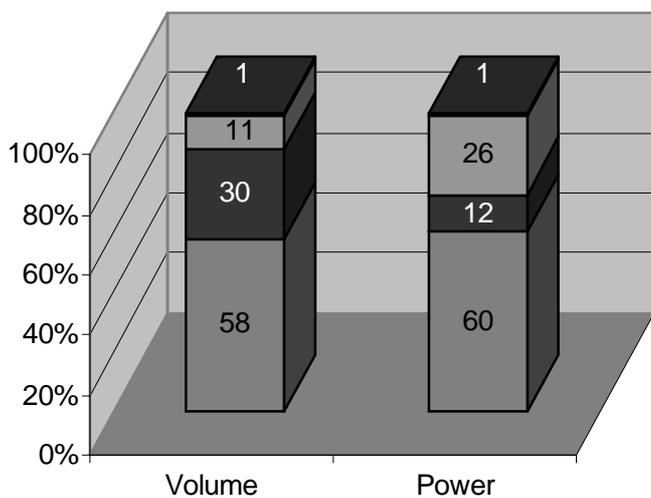
The basic economic indicators show that the situation of motor and generator manufacturers has been improving. While the dramatic decline of 2002 hit the market hard, the industry had managed to boost its turnover by 40% from 1996 to 2001. In the entire period from 1996 to 2002, the employment in the industry dropped by 50%, which in turn hiked the efficiency of one worker from PLN 64,000 to PLN 104,000. Thanks to the employment reduction and structural realignments, the industry managed to boost its gross yield to 1.6% in 2002.

Different motors

Electric motors comprise two groups of machines, as of the type of electric current they need to work - direct or alternating. The former group made up 58% of all motors produced, and 60% of the total power of all motors produced in 2001.

The alternating current category comprises two types : motors powered with one-phase, or three-phase current. The former group comprised 73% of all motors powered with alternating current, but only 31% of the total power of all alternating current motors produced in 2001.

Production of electric motors as of their types



Generators are not so commonly purchased as motors are. The most important groups of generators are those producing alternating current (only several made a year for the energy sector), and power generators recently produced in approximately 1,500 units per year. In 2000-2002, the production of motors and generators had the following characteristics : the supply of power generators dropped by 22%, that of alternating current generators by 29%; the supply of alternating current motors was flat, while the supply of direct current motors grew by 184%.

Italian players

The group of the most important manufacturers of motors comprises the following companies : Grupa Cantoni, Dabrowska Fabryka Maszyn Elektrycznych Damel S.A. of Dabrowa Górnicza, and Fabryka Silników Elektrycznych Tamel S.A. of Tarnów.

Grupa Cantoni is the largest one. The Italian family Cantoni established it in 2002 through the purchase of Elektrim Motor. Presently, the group comprises once independent companies Basel S.A., Indukta S.A., Celma S.A., and Emit S.A. Also to the group belongs the manufacturer of motors and brakes Ema-Elfa S.A.

The group outputs wide variety of motors with power ranging from 40 W to 3 MW. The group also produces motors to the specific orders, such as multi-gear motors, with additional radiator systems, self-braking, one-phase current universal motors, and high-voltage motors.

Tamel S.A. is presently a part of Brook Crompton, the world third largest manufacturer of electric motors. The group is a part of the Invensys holding, which is specialized in provision of electromechanical gear. Tamel's product portfolio includes one-phase, and three-phase induction motors, multi-gear motors, anti-explosion motors, for marine gear and power saws.

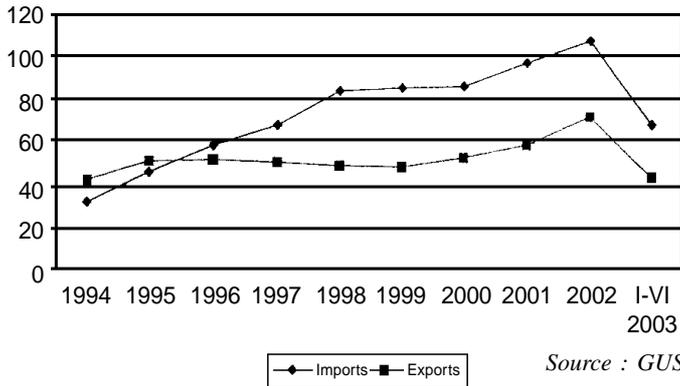
Damel S.A. has so far failed to find strategic investors and remains state-owned. Its product portfolio includes nearly 100 motors, each coming in several types. Those are mainly anti-explosion electric motors (with fireproof layer) with power from 11 kW to 650 kW. Additionally, the company produces electromagnetic separators, control automats, and electromagnetic filters for water infrastructures in hydro power plants, and other electric equipment.

Foreign trade

In 1994-2002, the import of electric motors increased 19 times in quantity, and 3.5 times in value measured in dollar. In the same time, the exports increased but not so fast - 7 times in quantity, and 1.7 times in value. As a result, from a net exporter, Poland became one of the largest net importers of electric motors in Europe. In 2003, Poland imported 14.1 m units for the total price of USD 107 m.



Foreign trade in motors and generators, in USD million



Only 8 years ago, the sector was strictly dependent on the domestic buyers. Presently, however, this is no longer reality. In 2002, the total number of 4.9 m generators and power generators exported reached the total USD 72 m. This was a very impressive result, especially when juxtaposed with 6.8 m generators produced in 2002. However, the data on production volumes comes from companies that employ over nine persons, while the foreign trade results are estimated based on customs documentation. In addition, some exports are in fact re-exports.

What is interesting, the average price per unit dropped in case of both exports and imports. In 1994-2002, the average price of imports shrank from USD 49 to USD 9. In the same time, average export prices were higher than import ones but they were diminishing year on year. In 2002 the average export price per unit was USD 15, compared with USD 60 in 1994. This means that Poland exported larger units than those it imported. The tendency could be taken for a signal of a growing demand for small motors in Poland and abroad which in fact triggered Polish manufacturers into boosting their share of that market. The small price of units imported resulted in changing statistics that now show that the quantity of the imports is twice that of the exports. In value, however, the imports make up 40% to 50% of the entire market.

Nearly 80% of Poland's foreign trade was commenced with other European Union countries - both in exports as well as in imports. The main import markets included Germany (USD 32 m), Italy (USD 18 m), Spain (USD 9 m), France (USD 8 m), the Netherlands (USD 7 m). Slovakia with USD 10 m and China with USD 9 m were also important sources of Poland's imports. In quantity, the largest import markets were Germany (3.9 m units), Italy (3.6 m), and China (3.2 m), which means that those countries were selling small power units to Poland.

Polish exports go mainly to Italy (USD 14 m), Germany (USD 12 m), and the Netherlands (USD 6 m). Other, more distant markets include those of Thailand (USD 3 m). In quantity, the largest markets are those of Italy (1.8 m units), Germany (1.5 m), Hungary (0.8 m), and France (0.3 m).

What next ?

The industry made further developments in 2003. Despite the 32% drop in the production output measured in mega watts for the first half of 2003 versus a year earlier, in quantity, the output grew by 2% in the same period. In the same time, the gross yield measured for the first half of 2003 grew to 3.7%, which was a record high measured for the entire decade.

Longtime perspectives for the industry are pegged to the expectations of the gross domestic product boost (investment in industry and the energy sector), and to the expectations of hike in the income of Polish households (purchases of household appliances, cars, and other power equipment). Poland's accession to the European Union offers good foundations for the anticipated growth of power motor production quotas and their sales in Poland and the European Union market.

Lukasz Komuda

(Source : Business News Poland dated July 2004 through Embassy of India, Warsaw)

We wish all success to the efforts of Shri T. A. S. Balagopal, Past Chairman of EEPC, whose Book on Export Management (2004 edition) has been released lately. For more details see below :

EXPORT MANAGEMENT

by

T. A. S. Balagopal

Former Chairman, Engineering Export Promotion Council and Former Export Director of TELCO (Tata Motors)

FOREWORD

by

Bharata Ratna Dr. A. P. J. Abdul Kalam

Dr. A. P. J. Abdul Kalam writes in his foreword - "Mr. Balagopal has taken India's present core-strength and the future possibilities of a determined nation, and has shown sector by sector, how an export target can be achieved by the year 2020 in line with the growth of Indian GDP."

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