

Confidential

Data will be used for statistical purposes only

No. in the industry: _____

**SURVEY OF RESEARCH AND DEVELOPMENT IN
MANUFACTURING – 2004
Establishment Questionnaire**

Definition of Research and Development in Manufacturing

Activity intended to create new scientific or technological knowledge, or to develop a new application for extant scientific or technological knowledge.

Research and development in manufacturing has several possible aims:

1. Application of extant knowledge toward solving problems related to creating a new product or process, including work required to assess potential uses.
2. Application of extant knowledge to problems related to unconventional improvement of an existing product or process. The term “improvement” **does not include**: routine activities related to application of extant knowledge, routine planning, various calculations and learning based on literature.
3. Planning and development of “prototypes” of products and processes is part of the R&D process.
4. Generating new knowledge or technological capabilities that will be used to develop new products and/or processes.
New scientific or technological knowledge: knowledge that is not part of the extant knowledge in the field of research available to the public in any country, by means of oral or written publication, by means of use or in any other way.

The end of the development phase and the beginning of the production phase are determined by the goal: If the main goal is to introduce additional improvements in an existing product or process, **then the activity is research and development**. If the product or process is completed and the purpose of the additional activity is related to planning and trial operation of the system for production of the product or process, **then the activity is not research and development**.

Research and development activity does not include: Market surveys; quality control; repair or renovation of a product, instrument or machine; provision of technical services for production units; consultation and provision of services to purchasers of know-how or products outside of the establishment; systematic and routine collection of data that are not intended for a specific research project; purchase of know-how and patents and adaptation of a given product to the demands of a specific consumer.

PART A: MANUFACTURE OF PRODUCTS BASED ON PATENTS AND KNOWLEDGE purchased or developed by the establishment during the years of its activity (circle the number of the appropriate response)

1. **Year of Report: From January 1, 2004 to December 31, 2004.**
If the response in the questionnaire refers to another period, please specify:
From - _____ to _____.
2. **Does the establishment currently manufacture at least some of its products on the basis of patents?**
Yes (continue)
No (skip to Question 4)
3. **Were the patents purchased or developed by the establishment?**
 1. The patents were purchased by the establishment.
 2. The patents were developed by the establishment.
 3. Some of the patents were purchased, and some were developed by the establishment.
4. **Does the establishment manufacture at least some of its products on the basis of acquired knowledge?**
 1. Yes (proceed to Part B of the questionnaire)
 2. No (proceed to Part B of the questionnaire)

PART B: GENERAL QUESTIONS

5. **In 2004, did your establishment engage in research and development as defined on the first page? (You may circle more than one response.)**
 1. Yes. The establishment engaged in research and development.
 2. Yes. The establishment commissioned research and development from an external factor: a research institute or another establishment (not including acquisition of extant knowledge).
If you circled number 1, please complete the entire questionnaire from Question 6.
*If you circled **only** number 2, skip to Question 19.*
 3. No. The establishment did not engage in research and development and did not commission research and development from an external factor.
If you circled number 3, skip to the last page of the questionnaire, fill in the requested information, and add comments if desired.
6. **Does your establishment have a separate unit for research and development?**
 1. Yes
 2. No
7. **Did your establishment keep a separate record of R&D expenditures in 2004?**
 1. Yes
 2. No

8. How were research and development expenditures recorded in your bookkeeping system?
1. As expenses
 2. As investments
 3. Partly as expenses and partly as investments.
9. Please indicate the number of research and development projects your establishment engaged in the 2004 report year _____
10. Please categorize these projects by their purpose. Circle the appropriate column, and add any comments you may have.

Project no.	In what way was the project innovative?			Was the final product of the project:			Comments
	New knowledge	New technological process	New material	New in the world	New in Israel	New in the company	
	11	12	13	21	22	23	
	11	12	13	21	22	23	
	11	12	13	21	22	23	
	11	12	13	21	22	23	
	11	12	13	21	22	23	
	11	12	13	21	22	23	
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	11	12	13	21	22	23	
	11	12	13	21	22	23	
	11	12	13	21	22	23	
	11	12	13	21	22	23	

COMPANY DATA

The amounts are listed in (please circle the appropriate response):

1. NIS
2. NIS adjusted to the Consumer Price Index (CPI)
3. NIS adjusted to the US dollar
4. US dollars

11. Company turnover (sales value) for 2004

Total income from sales (from conducting projects, sale of products and provision of services)..... _____

Thereof:

Sales to local market _____ export sales _____

12. Company turnover (sales value) from R&D activities for 2004

Total income from R&D sales (total of 12.1 + 12.2) _____

Thereof:

12.1 R&D sales to the local market _____

R&D sales to local parent company/subsidiary (of 12.1) _____

12.2 R&D sales for export _____

R&D sales to parent company/subsidiary abroad (of 12.2) _____

IMPACT OF RESEARCH AND DEVELOPMENT ON SALES

13. Please list the distribution of 2004 sales revenue among:
- | | | |
|---|---|-------------|
| 13.1 | Revenue from sale of innovative products developed between 2002 and 2004: | _____ % |
| 13.2 | Revenue from sale of products that were significantly improved between 2002 and 2004: | _____ % |
| 13.3 | Revenue from sale of products that were unchanged, or only slightly modified, between 2002 and 2004 | _____ % |
| 13.4 | Revenue from other sales (e.g. from projects, provision of services or sale of products that were not processed): | _____ % |
| Total revenue from sales in 2004 | | 100% |

PART C: EXPENDITURES FOR RESEARCH AND DEVELOPMENT IN 2004

Please list your expenditures for R&D before deductions (e.g., subsidies from the Chief Scientist of the Ministry of Industry and Trade and capitalization of expenses).

The amounts are listed in (please circle the appropriate response):

- | | |
|---|----------------------------------|
| 1. NIS | 3. NIS adjusted to the US dollar |
| 2. NIS adjusted to the Consumer Price Index (CPI) | 4. US dollars |

- If the establishment does not keep separate records of R&D expenditures according to the items in this questionnaire, **please estimate these expenditures.**
- Please **include** expenditures financed by government grants and/or by any other external source. **Do not include** expenses for acquisition of know-how and patents.
- In cases where the research phase of the project continues for several years – please list only expenditures during the report year in this questionnaire.
- **Please include expenditures for R&D that your establishment carried out for other companies and/or for any external factor.**

- 14. Number of persons employed in research and development** – part-time or full-time during any period of the report year, provided that they worked at the establishment in December, 2004. Kibbutz members should also be included. Please list the total number of employees in Column 1, and thereof the number of women employed in R&D in Column 2. If no women were employed at the establishment, please write “0”.

	Total employees	Thereof: No. of women employed in R&D (Column 2)
14.1 Ph.D. and above		
14.2 Engineers and academics with B.A. or M.A.		
14.3 Practical engineers, technicians (or persons with similar qualifications), drafts people, programmers		
14.4 Other workers engaged in research and development, such as secretaries, translators		
14.5 Total number of persons employed in research and development (141 to 143)		

- 15. Total number of hours of labor invested in R&D in December 2004** (if no record is available, please fill in item 15.1.) _____
- 15.1 **Total full-time positions in R&D in December 2004** (please sum up part-time positions into full-time positions, e.g., 6 half-time engineers = 3 full-time positions) _____
- 16. Wages, salaries, and other expenses related to employing workers specifically for research and development activities in 2004** _____
- 17. Expenses for raw material and auxiliary materials used for research and development in 2004** _____
- 18. Payment to external factors or sub-contractors for carrying out R&D activity in 2004** **Total amount (18.1-18.5)** _____
(not including payment for patents or acquisition of know-how).
- 18.1 Payment to higher education institutions in Israel _____
- 18.2 Payment to higher education institutions abroad _____
- 18.3 Payment to research institutes in Israel _____
- 18.4 Payment for sub-contractors, controlling institutes, engineering services, private consultants, etc. in Israel _____
- 18.5 Payment to factors or persons abroad (excluding higher education institutions abroad – 18.2) _____

19. Other expenditures related to research and development in 2004: _____

- 19.1 Does your response to item 16 (wages) include overhead expenses?
1. Yes
2. No

Please indicate overhead expenses _____ or percentage _____%.

- 19.2 Other expenses for research and development that are not included in overhead expenses (item 17.1)

Table to sum up "other expenses"	
_____	_____
_____	_____
_____	_____

20. Total expenditures for research and development in 2004 (Preferably, this expense should be copied from the profit and loss report, if it is listed as a separate item. Please make sure to indicate the gross sum before deductions, as mentioned in the Preface to the report.) (Question 20 = 16+17+18+19)

21. External funding (including grants) for research and development activities carried out in 2004: _____

Please include actual amounts received for activities carried out during the report year, as well as amounts (government commitments) owed to the establishment for activities carried out during the report year, but not yet received.

- 21.1 Grant from the Chief Scientist of the Ministry of Industry, Trade and Labour (for 2004). _____
- 21.2 Funding from international foundations (Israel-American, BIRD F, etc.). _____
- 21.3 Funding from another governmental source, specify. _____
- 21.4 Funding from other sources, specify. _____

22. Total investments in fixed capital (for R&D only) carried out in 2004:

Thereof, for:

- 22.1 Building, structures and engineering work for R&D only (do not include land value) _____.
- 22.2 Machines, installations and equipment _____.

23. In 2004, did you incur expenses for acquisition of know-how and patents?

1. Yes – please indicate the amount of the expenditure, and circle whether this is included/not included in 19.2 (other R&D expenses _____).
2. No – end of Questionnaire.

Changes and Comments:

Please list the reasons for the changes that occurred in your establishment during the report year (the company worked only part of the year, change in name or address of the establishment, change in type of ownership, mergers, splitting, etc.) and your comments regarding the structure of the questionnaire.

Name of reporter for the establishment: _____ position: _____

Telephone: _____

Name (second reporter): _____ position: _____ phone: _____

Name of district employee: _____

Enumeration through: 1. E 2. O 3. M 4. Fax

Final date in establishment _____ Final date at District _____

If you have any questions regarding the questionnaire, please call or write to one of the district offices of the Central Bureau of Statistics.

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