

PRODUCT AND PROCESS DEVELOPMENT STUDY - PHASE SIX

Ireland Manufacturing

These are the contact details that we have for your plant. Please amend if necessary.

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1. Background

Please indicate whether this plant is: (Please tick relevant box)

A single-plant company	
A parent or group HQ	
A subsidiary plant in a group	
Other	

If this plant is a subsidiary, in which country is your group's headquarters located?

Location of Group HQ:

In what year did your plant start production?

Please indicate your average employment during 2008/09:

Employment 2008/09:

Please indicate the total percentage growth of this plant over last three years:

	Percentage Growth
Employment Growth	%
Sales Growth	%

Please indicate *approximately* what proportion of the people who work in your plant have as their highest qualification:

	% of Workforce
A degree or equivalent qualification	%
A technician level qualification	%
A relevant apprenticeship level qualification:	%
Some relevant vocational qualification	%
No post-school vocational qualification	%

(Note: percentages should sum to 100%)

For the 2008/09 business year please estimate:

The value of your sales turnover	€000s:
The value of materials and fuels purchased	€000s:
Total gross expenditure on wages and salary payments	€000s:
Investment spending on plant, machinery and fixed assets	€000s:
Investment spending on buildings	€000s:

2. Markets and Strategy

Please indicate *approximately* what proportion of your sales are in each of the following markets:

	% of sales
Republic of Ireland	%
Northern Ireland	%
Great Britain	%
Other EU	%
Outside the EU	%

(Note: percentages should sum to 100%)

How important have the following been in your business strategy over the last three years? (please tick as appropriate)?

	Not Important			Very Important	
	1	2	3	4	5
Updating your product range					
Extending your product range					
Increasing or maintaining market share					
Entering new markets					
Reducing production costs					
Introducing 'greener' products					
Increasing profit margins					
Improving product quality					

3. Research and Development

Was any R&D undertaken in your plant in 2008/09?
Is there a formal R&D department in your plant?

Yes	No

Please *estimate* how many man-years were spent on R&D in your plant during 2008/09

Man-years:

Approximately what was total R&D expenditure by your plant in 2008/09 (€000s)?

€000s:

What percentage, if any, of this R&D expenditure was used to buy-in R&D services from other companies or organisations?

%:

Does your company own other plants apart from yours?

	Yes	No
Company owns other plants		

IF NO SKIP TO SECTION 4

Is R&D relevant to your plant done in other group companies in (tick as appropriate?)

	Yes	No
Republic of Ireland		
Northern Ireland		
Other UK		
Other EU countries		
North America		
Elsewhere		

4. Product Developments

Have you introduced ANY new or improved products at this plant in the last 3 years?

	Yes	No
Product Changes over last 3 years		

IF NO SKIP TO SECTION 5

How many products are there in your current product range?

Number of products in range:

How many new or improved products have you introduced over last 3 years?

Number of new/improved products:

Please *estimate* the proportion of your current sales (by value) that consist of:
(Note: percentages should add to 100%)

	% of Sales
New products introduced to the market <i>for the first time</i> over the last three years:	%
New products introduced by this plant over the last three years but <i>previously made elsewhere</i>	%
<i>Technically improved</i> products which were being made by this plant three years ago	%
<i>Aesthetically improved</i> products which were being made by this plant three years ago	%
Products which have remained <i>unchanged</i> over the last 3 years	%

(Note: percentages should add to 100%)

Please indicate which groups of staff in your plant would be involved in each of the following elements of the product development process:
(tick as many as apply)

	Scientists	Engineers	Skilled Production Staff	Design Staff	Marketing or Sales Staff
Identifying new products	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Prototype development	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Final product design	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Product testing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Production engineering	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Market research	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Developing marketing strategy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Which stages of the product innovation process have typically been undertaken in this plant and/or in another company or organisation. If you have involved another company or organisation please indicate if this was a collaborative or sub-contract arrangement
(tick as many as apply)

	In this plant	In another group company	Through a collaborative arrangement	Through a sub-contract arrangement
Identifying new products	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Prototype development	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Final product design	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Product testing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Production engineering	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Market research	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Developing marketing strategy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5. Process Developments

Have you introduced ANY new or improved production processes at this plant over the last three years?

	Yes	No
Process Changes over last three years?	<input type="checkbox"/>	<input type="checkbox"/>

IF NO SKIP TO SECTION 6

Please indicate whether the production process changes you introduced were (tick as appropriate):

	Yes	No
New processes introduced by your plant which <i>have not previously been used elsewhere</i>	<input type="checkbox"/>	<input type="checkbox"/>
New processes which <i>have not previously been used in Ireland</i>	<input type="checkbox"/>	<input type="checkbox"/>
New processes which <i>have not previously been used in your industry</i>	<input type="checkbox"/>	<input type="checkbox"/>
New processes which <i>have not previously been used in your plant</i>	<input type="checkbox"/>	<input type="checkbox"/>
Improvements to processes which your plant was already using in 2003	<input type="checkbox"/>	<input type="checkbox"/>

Please indicate if you now use any of the following production techniques. Also, please indicate the date when they were first introduced:

	Use Now	First Introduced:		
		Before 2003	During 2003-05	Since 2006
Numerically Controlled (NC) or CNC Machinery	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Robotic Equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Automated Materials Handling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Computer Aided Design (CAD)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Computer Aided Production Management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Computer Integrated Manufacturing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Quality Certification (e.g. ISO 9000)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Total Quality Management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Quality Circles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Just in time	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Investors in People	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6. Links to Other Firms and Organisations

Over the last three years did you have links with any other companies or organisations as part of your product or process development?

	Yes	No
Links with other companies or organisations		

IF NO SKIP TO SECTION 7

Which of the following types of company or organisation were these links with and where they were located (tick as many options as necessary)?

	Links With	Location				
		ROI	N.I.	Other UK	Other Europe	Other
Other Group Companies						
Clients/Customers						
Suppliers						
Competitors						
Joint Ventures						
Consultants						
Government Labs						
Universities						
Industry Operated Labs						
Private Research Institutes						

If you have had links with universities as part of your product or process development please indicate the nature of these links and how important these were for your firm (tick as many as apply)

	Used	Not Important to Very Important				
		1	2	3	4	5
Collaborative research						
Contract Research						
Licensing						
Use of Facilities & Equipment						
Training of Staff – Accredited Courses						
Training of staff – Non-accredited courses/lectures						
Personnel Exchange						

7. Government and EU Assistance

Please indicate whether you have received government support for any of the following over the last 3 years, and how important they were in shaping your activities.

	Received	Not Important to Very Important				
		1	2	3	4	5
Product development						
Process development						
Other R&D activity						
Purchase of licences						
New Plant/Machinery						
Exporting						

8. Constraints on Product/Process Development

Please indicate if any of the following factors have reduced or hindered product or process development in your plant over the last 3 years: (Please tick relevant boxes)

	Not Important to Very Important				
	1	2	3	4	5
Riskiness of product/process development					
Low rate of return					
Attitudinal barriers in this plant					
Lack of necessary finance					
Few market opportunities					
Lack of information about technologies					
Legislative or regulatory requirements					
Lack of partners					
Lack of technical expertise in this plant					
Lack of managerial expertise in this plant					

Finally, please indicate how significant the current downturn has been for the following aspects of your business (Please tick relevant box)

	Not Significant to Very Significant				
	1	2	3	4	5
Development of new products					
Improvement of existing products					
Process development					
Capital investment					
Expenditure on training					

Thank You - Your Assistance is very much appreciated

Please return in the envelope provided or post to Judith McKnight, School of Management, Queen's University Belfast, Belfast BT7 1NN
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