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Business Statistics Office

# Business Monitor

## Report on the Census of Production

### Industrial engines

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PA334

# Business Monitor

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## Report on the Census of Production 1976

### Industrial engines

Presented by the Secretary of State for Industry  
to Parliament in pursuance of the Statistics of Trade Act 1947  
(10 & 11 Geo.6 Cha.39 sec 7)

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- PA100 Introductory notes
- PA101 Coal mining
- PA102 Stone and slate quarrying and mining
- PA103 Chalk, clay, sand and gravel extraction
- PA104 Petroleum and natural gas
- PA109 Miscellaneous mining and quarrying
- PA211 Grain milling
- PA212 Bread and flour confectionery
- PA213 Biscuits
- PA214 Bacon curing, meat and fish products
- PA215 Milk and milk products
- PA216 Sugar
- PA217 Cocoa, chocolate and sugar confectionery
- PA218 Fruit and vegetable products
- PA219 Animal and poultry foods
- PA221 Vegetable and animal oils and fats
- PA229.1 Margarine
- PA229.2 Starch and miscellaneous foods
- PA231 Brewing and malting
- PA232 Soft drinks
- PA239.1 Spirit distilling and compounding
- PA239.2 British wines, cider and perry
- PA240 Tobacco
- PA261 Coke ovens and manufactured fuel
- PA262 Mineral oil refining
- PA263 Lubricating oils and greases
- PA271.1 Inorganic chemicals
- PA271.2 Organic chemicals
- PA271.3 Miscellaneous chemicals
- PA272 Pharmaceutical chemicals and preparations
- PA273 Toilet preparations
- PA274 Paint
- PA275 Soap and detergents
- PA276 Synthetic resins and plastics materials and synthetic rubber
- PA277 Dyestuffs and pigments
- PA278 Fertilizers
- PA279.1 Polishes
- PA279.2 Formulated adhesives, gelatine, etc.
- PA279.3 Explosives and fireworks
- PA279.4 Formulated pesticides, etc.
- PA279.5 Printing ink
- PA279.6 Surgical bandages, etc.
- PA279.7 Photographic chemical materials
- PA311 Iron and steel (general)
- PA312 Steel tubes
- PA313 Iron castings, etc.
- PA321 Aluminium and aluminium alloys
- PA322 Copper, brass and other copper alloys
- PA323 Miscellaneous base metals
- PA331 Agricultural machinery (except tractors)
- PA332 Metal-working machine tools
- PA333.1 Pumps
- PA333.2 Valves
- PA333.3 Compressors and fluid power equipment
- PA334 Industrial engines
- PA335 Textile machinery and accessories
- PA336 Construction and earth-moving equipment
- PA337 Mechanical handling equipment
- PA338 Office machinery
- PA339.1 Mining machinery
- PA339.2 Printing, bookbinding and paper goods machinery
- PA339.3 Refrigerating machinery, space-heating, ventilating and air-conditioning equipment
- PA339.5 Scales and weighing machinery and portable power tools
- PA339.7 Food and drink processing machinery and packaging and bottling machinery
- PA339.9 Miscellaneous (non-electrical) machinery
- PA341 Industrial (including process) plant and steelwork
- PA342 Ordnance and small arms
- PA349.1 Ball, roller, plain and other bearings
- PA349.2 Precision chains and other mechanical engineering
- PA351 Photographic and document copying equipment
- PA352 Watches and clocks
- PA353 Surgical instruments and appliances
- PA354 Scientific and industrial instruments and systems
- PA361 Electrical machinery
- PA362 Insulated wires and cables
- PA363 Telegraph and telephone apparatus and equipment
- PA364 Radio and electronic components
- PA365.1 Gramophone records and tape recordings
- PA365.2 Broadcast receiving and sound reproducing equipment
- PA366 Electronic computers
- PA367 Radio, radar and electronic capital goods
- PA368 Electrical appliances primarily for domestic use

- PA369.1 Electrical equipment for motor vehicles, cycles and aircraft
- PA369.2 Primary and secondary batteries
- PA369.4 Electric lamps, electric light fittings, wiring accessories, etc.
- PA370 Shipbuilding and marine engineering
- PA380 Wheeled tractor manufacturing
- PA381.1 Motor vehicle manufacturing
- PA381.2 Trailers, caravans and freight containers
- PA382 Motor cycle, tricycle and pedal cycle manufacturing
- PA383 Aerospace equipment manufacturing and repairing
- PA384 Locomotives, railway track equipment, railway carriages, wagons and trams
- PA390 Engineers' small tools and gauges
- PA391 Hand tools and implements
- PA392 Cutlery, spoons, forks and plated tableware, etc.
- PA393 Bolts, nuts, screws, rivets, etc.
- PA394 Wire and wire manufactures
- PA395 Cans and metal boxes
- PA396 Jewellery and precious metals
- PA399.1 Metal furniture
- PA399.5 Drop forgings, etc.
- PA399.6 Metal hollow ware
- PA399.8 Miscellaneous metal manufacture
- PA411 Production of man-made fibres
- PA412 Spinning and doubling on the cotton and flax systems
- PA413 Weaving of cotton, linen and man-made fibres
- PA414 Woolen and worsted
- PA415 Jute
- PA416 Rope, twine and net
- PA417.1 Hosiery and other knitted goods
- PA417.2 Warp knitting
- PA418 Lace
- PA419 Carpets
- PA421 Narrow fabrics
- PA422.1 Household textiles and handkerchiefs
- PA422.2 Canvas goods and sacks and other made-up textiles
- PA423 Textile finishing
- PA429.1 Asbestos
- PA429.2 Miscellaneous textile industries
- PA431 Leather (tanning and dressing) and fellmongery
- PA432 Leather goods
- PA433 Fur
- PA441 Weatherproof outerwear
- PA442 Men's and boys' tailored outerwear
- PA443 Women's and girls' tailored outerwear
- PA444 Overalls and men's shirts, underwear, etc.
- PA445 Dresses, lingerie, infants' wear, etc.
- PA446 Hats, caps and millinery
- PA449.1 Corsets and miscellaneous dress industries
- PA449.2 Gloves
- PA450 Footwear
- PA461.1 Refractory goods
- PA461.2 Building bricks and non-refractory goods
- PA462 Pottery
- PA463 Glass
- PA464 Cement
- PA469.1 Abrasives
- PA469.2 Miscellaneous building materials and mineral products
- PA471 Timber
- PA472 Furniture and upholstery
- PA473 Bedding, etc.
- PA474 Shop and office fitting
- PA475 Wooden containers and baskets
- PA479 Miscellaneous wood and cork manufactures
- PA481 Paper and board
- PA482.1 Cardboard boxes, cartons and fibre-board packing cases
- PA482.2 Packaging products of paper and associated materials
- PA483 Manufactured stationery
- PA484.1 Wallcoverings
- PA484.2 Miscellaneous manufactures of paper and board
- PA485 Printing, publishing of newspapers and periodicals
- PA489 General printing and publishing
- PA491 Rubber
- PA492 Linoleum, plastics floor-covering, leathercloth, etc.
- PA493 Brushes and brooms
- PA494.1 Toys, games and children's carriages
- PA494.3 Sports equipment
- PA495 Miscellaneous stationers' goods
- PA496 Plastics products
- PA499.1 Musical instruments
- PA499.2 Miscellaneous manufacturing industries
- PA500 Construction
- PA601 Gas
- PA602 Electricity
- PA603 Water supply
- PA1002 Summary tables

The information in this report relates to establishments classified to the Industrial engines industry, minimum list heading 334 in the Standard Industrial Classification (revised 1968). The activities of the industry include:-

Manufacturing industrial internal combustion engines (other than in marine engineering establishments), gas turbines and internal combustion engines for rail vehicles; other types of prime movers except turbines for electricity generation, marine engines and steam locomotives. Internal combustion engines for the propulsion of wheeled tractors, motor vehicles and aircraft are not included.

**In interpreting the data in the tables it is essential to bear in mind the notes and definitions which commence on page (iii).**

**LIST OF CONTENTS**

Table No	Title	Page
1	Output and costs, 1973-1976	2
2	Capital expenditure, 1973-1976	3
3	Stocks and work in progress, 1973-1976	3
4	Analysis of establishments by size, 1976	4-5
5	Regional distribution of employment, net capital expenditure, net output and gross value added at factor cost, 1976	6
6	Percentage analysis of twelve-month periods covered by returns received from United Kingdom establishments employing 20 or more persons, 1976	7
7	Percentage analysis of employees, by full and part-time employment and sex, 1976	7

TABLE 1

PA 334

Output and costs, 1973-1976  
All United Kingdom establishments classified to the Industry (a)

	Unit	1973	1974	1975	1976
Enterprises	Number	54	64	65	73
Establishments	"	61	72	71	80
Sales of goods produced	£ thousand	152,503	195,649	260,058	336,240
Receipts for work done and industrial services rendered	"	(b)	(b)	(b)	8,354
Capital goods produced for establishments' own use	"	325	(b)	(b)	949
Non-industrial services rendered	"	416	494	586	718
Goods merchanted or factored	"	19,597	27,681	32,326	40,978
<b>Total sales and work done (c)</b>	"	<b>172,840</b>	<b>223,824</b>	<b>292,970</b>	<b>387,239</b>
Increase during the year, work in progress and goods on hand for sale	"	5,971	13,981	24,174	13,037
<b>Gross output</b>	"	<b>178,811</b>	<b>237,805</b>	<b>317,144</b>	<b>400,276</b>
Purchases of materials for use in production, and packaging and fuel	"	80,260	114,656	140,432	175,532
Purchases of goods for merchanting or factoring	"	16,216	20,760	24,327	33,183
Increase during the year, stocks of materials, stores and fuel	"	4,723	11,421	4,153	3,808
Cost of industrial services received	"	5,719	9,517	9,887	13,062
<b>Net output</b>	"	<b>81,339</b>	<b>104,294</b>	<b>146,651</b>	<b>182,307</b>
Total employment (d)	Thousands	26.0	27.2	25.1	28.4
<b>Net output per head</b>	£	<b>3,127</b>	<b>3,829</b>	<b>5,852</b>	<b>6,415</b>
Payments for non-industrial services					
Rents, hire of plant and machinery (e)(f)	£ thousand	785	1,049	978	1,543
Commercial insurance premiums	"	733	833	1,176	1,682
Bank charges	"	91	133	207	259
Other non-industrial services (g)	"	3,563	5,993	6,826	7,638
Licensing of motor vehicles	"	35	40	46	68
Rates, excluding water rates	"	971	1,376	1,542	1,784
<b>Gross value added at factor cost</b>	"	<b>75,160</b>	<b>94,870</b>	<b>135,877</b>	<b>169,333</b>
<b>Gross value added at factor cost per head</b>	£	<b>2,889</b>	<b>3,483</b>	<b>5,422</b>	<b>5,958</b>

(a) Including estimates for establishments not making satisfactory returns, non-response and establishments exempt because of size. Satisfactory returns accounted for 92 per cent of employment within the industry.

(b) Included with sales of goods produced.

(c) Details of manufacturers' sales of principal products are published regularly in Business Monitor PQ 334.

(d) Average number employed, including full and part-time employees (see table 7) and working proprietors.

(e) 1973 figures include hire of vehicles.

(f) For 1973-1975 rents of industrial and commercial buildings were not recorded separately. For 1976 the amount payable was £706 thousand.

(g) 1974-1976 figures include the cost of hiring goods vehicles.

TABLE 2

PA 334

Capital Expenditure, 1973-1976  
All United Kingdom establishments classified to the Industry (a)(b)

	£ thousand			
	1973	1974	1975	1976
Land and buildings				
New building work	369	1,389	1,964	1,931
Land and existing buildings				
Acquisitions	214	184	6	14
Disposals	48	12	55	540
Vehicles				
Acquisitions				
Motor cars	209	294	)	
Other vehicles	118	108	) 249	780
Disposals				
Motor cars	49	69	)	
Other vehicles	12	10	) 42	221
Plant and machinery				
Acquisitions	3,751	7,473	8,767	15,267
Disposals	153	84	121	355
<b>Total net capital expenditure</b>	<b>4,398</b>	<b>9,272</b>	<b>10,769</b>	<b>16,875</b>

(a) Including estimates for establishments not making satisfactory returns, non-response and establishments exempt because of size. Satisfactory returns accounted for 92 per cent of employment within the industry.

(b) Capital expenditure in respect of manufacturing establishments where production had not commenced before the end of the year, is included.

TABLE 3

Stocks and work in progress, 1973-1976  
All United Kingdom establishments classified to the Industry (a)

	£ thousand				
	1973	1974	1975	1976	
				Increase	Value at end of year
Materials, stores and fuel	4,723	11,421	4,153	3,808	43,063
Work in progress	3,580	5,142	10,512	5,528	49,653
Goods on hand for sale	2,391	8,839	13,662	7,508	51,177
<b>Total</b>	<b>10,694</b>	<b>25,403</b>	<b>28,327</b>	<b>16,845</b>	<b>143,893</b>

(a) Including estimates for establishments not making satisfactory returns, non-response and establishments exempt because of size. Satisfactory returns accounted for 92 per cent of employment within the industry.

TABLE 4

Analysis of establishments by size, 1976  
All United Kingdom establishments classified to the Industry (a)

PA 334

Size group (b)	Estab- lish- ments	Enter- prises (c)	Employment			Wages and salaries(f)			
			Total (d)	Opera- tives	Others (e)	Operatives		Others(e)	
						Total	per head	Total	per head
Number	Number	Number	Number	Number	Number	£ thousand	£	£ thousand	£
1-10	35	35	200	676	288	1,818	2,690	1,060	3,682
11-19	10	10	137						
20-49	9	9	272						
50-99	6	6	386						
100-199	3	3	427	228	197	874	3,833	955	4,848
200-399	4	4	1,150	800	350	2,322	2,902	1,251	3,574
400-749	3	3	1,609	959	650	2,881	3,005	2,005	3,084
750-1,999	3	3	4,349	2,734	1,615	8,852	3,238	6,331	3,920
2,000 and over	7	3	19,891	12,160	7,731	35,689	2,935	24,912	3,222
<b>Total</b>	<b>80</b>	<b>73</b>	<b>28,421</b>	<b>17,557</b>	<b>10,831</b>	<b>52,437</b>	<b>2,987</b>	<b>36,514</b>	<b>3,371</b>

(a) Including estimates for establishments not making satisfactory returns, non-response and establishments with fewer than 20 employees.

(b) Average number employed, including full and part-time employees (see table 7) and working proprietors.

(c) The sum of the figures for the size groups may exceed the total for the industry because some enterprises control establishments in more than one size group.

(d) Including working proprietors.

(e) Administrative, technical and clerical employees.

PA 334

Total sales and work done (g)	Gross output	Net output	Gross value added at factor cost		Net capital expenditure (h)	Total stocks and work in progress at end of year	
			Total				
			Total	per head			
£ thousand	£ thousand	£ thousand	£	£ thousand	£ thousand		
13,014	13,119	4,016	4,036	(j)	(j)	276	3,046
6,957	7,634	3,683	8,625	6,806(j)	4,786(j)	78	2,906
11,107	11,342	5,619	4,886	4,979	4,330	806	4,925
25,674	27,429	13,588	8,445	12,959	8,054	1,414	10,627
82,984	84,854	37,690	8,666	34,931	8,032	3,063	23,953
247,504	255,898	117,712	5,918	109,658	5,513	11,238	98,436
<b>387,239</b>	<b>400,276</b>	<b>182,307</b>	<b>6,415</b>	<b>169,333</b>	<b>5,958</b>	<b>16,875</b>	<b>143,893</b>

(f) The cost of employers' contributions to national insurance, graduated pensions, other pensions and welfare schemes and the running costs of canteens, is estimated for the industry at £10,437 thousand.

(g) Sales of goods produced, capital goods manufactured, buildings constructed by establishments for their own use, work done, industrial and non-industrial services rendered and merchanted goods.

(h) New building work plus acquisitions less disposals of land and existing buildings, vehicles and plant and machinery.

(j) Gross value added data relate to establishments employing 1-199.

TABLE 5

PA 334

Regional distribution of employment, net capital expenditure, net output and gross value added at factor cost, 1976  
All United Kingdom establishments classified to the industry.

Area	Total employment (a)		Net capital expenditure (b)(c)		Net output, gross value added and employment in the region from returns received from establishments with more than 80 per cent of their employment in the region (d)		
	Thousands	per cent of United Kingdom	£ thousand	per cent of United Kingdom	£ thousand	£ thousand	Employment as a percentage of total regional employment in the industry
Standard regions of England							
North	*	*	*	*	*	*	*
Yorkshire and Humberside	0.2	0.8	60	0.4	*	*	*
East Midlands	*	*	*	*	*	*	*
East Anglia	*	*	*	*	*	*	*
South East	5.2	18.4	2,175	12.9	34,526	32,034	96.4
South West	*	*	*	*	*	*	*
West Midlands	4.6	16.1	2,341	13.9	*	*	*
North West	5.5	19.5	3,588	21.3	*	*	*
England	26.9	94.8	16,166	95.8	122,068	112,667	70.2
Wales	-	-	-	-	-	-	-
Scotland	*	*	*	*	*	*	*
Great Britain	*	*	*	*	*	*	*
Northern Ireland	*	*	*	*	*	*	*
Unallocated (e)	-	-	-	-	47,361	44,436	-
United Kingdom (b)	28.4	100.0	16,875	100.0	182,307	169,333	

(a) Average number employed, including full and part-time employees (see table 7) and working proprietors.

(b) Including estimates for establishments not making satisfactory returns, non-response and establishments with fewer than 20 employees.

(c) New building work plus acquisitions less disposals of land and existing buildings, vehicles and plant and machinery.

(d) Where a census return covered addresses in two or more regions an estimate was made of the net output and gross value added attributable to the region only where more than 80 per cent of the establishment's employees were located in the region. The estimate was made by assuming that net output and gross value added at each address covered by a return was proportional to employment at the address.

(e) Unallocated net output and gross value added covering establishments with addresses in two or more regions, plus estimates for unsatisfactory returns, non-response and establishments exempt because of size.

TABLE 6

PA 334

Percentage analysis of twelve-month periods covered by returns received from United Kingdom establishments employing 20 or more persons, 1976

Accounting year ended	Percentage of total returns received	Percentage of total number employed
	per cent	per cent
1976 April (a)	3.8	0.1
May	0.0	0.0
June	0.0	0.0
July	15.4	4.9
August	0.0	0.0
September	3.8	0.5
October	3.8	0.1
November	0.0	0.0
December	46.2	59.3
1977 January	0.0	0.0
February	0.0	0.0
March (b)	26.9	35.2

(a) From 6th April.

(b) Including returns made for twelve-month period ended 1st to 5th April 1977.

TABLE 7

Percentage analysis of employees, by full and part-time employment and sex, 1976 (a)

Sex	Full-time	Part-time	All employees
	per cent	per cent	per cent
Male	85	1	86
Female	12	2	14

Source: Department of Employment

(a) The percentages relate to the numbers employed (excluding working proprietors) in the United Kingdom at end June, 1976.

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