

PA500

1977

① S/42 (MARS)

② 42  
R834

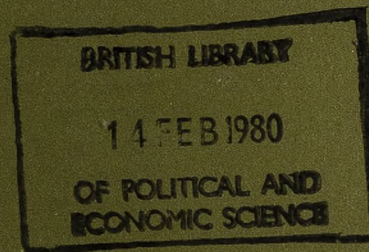
PA499.2 Miscellaneous manufacturing industries

Business Statistics Office

# Business Monitor

## Report on the Census of Production

### Construction industry



HMSO



A publication of the Government Statistical Service

#### Special Note for Purchasers

Commencing with the 1971 Census, the Census of Production reports are being numbered in a uniform series embracing all industrial inquiries in the Business Monitor series. These Business Monitors have a code P (for production) followed first by A (indicating that it is an annual series) or Q (quarterly) or M (monthly); and then by a number indicating the minimum list heading, or sub-division of a minimum list heading, of the Standard Industrial Classification (revised 1968).

The Census of Production (PA) reports are available on standing order (details on application to Her Majesty's Stationery Office, P.O. Box 569, London SE1 9NH. Telephone 01-928 6977), although they are not included in the global subscription arrangements for the Business Monitor series.

#### Government Statistical Service

A service of statistical information and advice is provided to the Government by specialist staffs employed in the statistics division of individual Departments. Statistics are made generally available through their publications and further information and advice on them can be obtained from the Departments concerned.

#### Enquiries:

Business Statistics Office

Newport, Gwent

NPT 1XG

Newport 56111 (STD code 0633) ext 2455

Telex 497121

Answer Back BSONPT G

# PA500

# Business Monitor

A publication of the Government Statistical Service

## Report on the Census of Production 1977

### Construction industry

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)

Department of Industry  
Business Statistics Office

London: Her Majesty's Stationery Office

## List of Industry Reports, etc.

PA1001	Introductory notes	PA369.1	Electrical equipment for motor vehicles, cycles and aircraft
PA101	Coal mining	PA369.2	Primary and secondary batteries
PA102	Stone and slate quarrying and mining	PA369.4	Electric lamps, electric light fittings, wiring accessories, etc.
PA103	Chalk, clay, sand and gravel extraction	PA370	Shipbuilding and marine engineering
PA104	Petroleum and natural gas	PA380	Wheeled tractor manufacturing
PA109	Miscellaneous mining and quarrying	PA381.1	Motor vehicle manufacturing
PA211	Grain milling	PA381.2	Trailers, caravans and freight containers
PA212	Bread and flour confectionery	PA382	Motor cycle, tricycle and pedal cycle manufacturing
PA213	Biscuits	PA383	Aerospace equipment manufacturing and repairing
PA214	Bacon curing, meat and fish products	PA384	Locomotives, railway track equipment, railway carriages, wagons and trams
PA215	Milk and milk products	PA390	Engineers' small tools and gauges
PA216	Sugar	PA391	Hand tools and implements
PA217	Cocoa, chocolate and sugar confectionery	PA392	Cutlery, spoons, forks and plated tableware, etc.
PA218	Fruit and vegetable products	PA393	Bolts, nuts, screws, rivets, etc.
PA219	Animal and poultry foods	PA394	Wire and wire manufactures
PA221	Vegetable and animal oils and fats	PA395	Cans and metal boxes
PA229.1	Margarine	PA396	Jewellery and precious metals
PA229.2	Starch and miscellaneous foods	PA399.1	Metal furniture
PA231	Brewing and malting	PA399.5	Drop forgings, etc.
PA232	Soft drinks	PA399.6	Metal hollow-ware
PA239.1	Spirit distilling and compounding	PA399.8	Miscellaneous metal manufacture
PA239.2	British wines, cider and perry	PA411	Production of man-made fibres
PA240	Tobacco	PA412	Spinning and doubling on the cotton and flax systems
PA261	Coke ovens and manufactured fuel	PA413	Weaving of cotton, linen and man-made fibres
PA262	Mineral oil refining	PA414	Woollen and worsted
PA263	Lubricating oils and greases	PA415	Jute
PA271.1	Inorganic chemicals	PA416	Rope, twine and net
PA271.2	Organic chemicals	PA417.1	Hosiery and other knitted goods
PA271.3	Miscellaneous chemicals	PA417.2	Warp knitting
PA272	Pharmaceutical chemicals and preparations	PA418	Lace
PA273	Toilet preparations	PA419	Carpets
PA274	Paint	PA421	Narrow fabrics
PA275	Soap and detergents	PA422.1	Household textiles and handkerchiefs
PA276	Synthetic resins and plastics materials and synthetic rubber	PA422.2	Canvas goods and sacks and other made-up textiles
PA277	Dyestuffs and pigments	PA423	Textile finishing
PA278	Fertilizers	PA429.1	Asbestos
PA279.1	Polishes	PA429.2	Miscellaneous textile industries
PA279.2	Formulated adhesives, gelatine, etc.	PA431	Leather (tanning and dressing) and fellmongery
PA279.3	Explosives and fireworks	PA432	Leather goods
PA279.4	Formulated pesticides, etc.	PA433	Fur
PA279.5	Printing ink	PA441	Weatherproof outerwear
PA279.6	Surgical bandages, etc.	PA442	Men's and boys' tailored outerwear
PA279.7	Photographic chemical materials	PA443	Women's and girls' tailored outerwear
PA311	Iron and steel (general)	PA444	Overalls and men's shirts, underwear, etc.
PA312	Steel tubes	PA445	Dresses, lingerie, infants' wear, etc.
PA313	Iron castings, etc.	PA446	Hats, caps and millinery
PA321	Aluminium and aluminium alloys	PA449.1	Corsets and miscellaneous dress industries
PA322	Copper, brass and other copper alloys	PA449.2	Gloves
PA323	Miscellaneous base metals	PA450	Footwear
PA331	Agricultural machinery (except tractors)	PA461.1	Refractory goods
PA332	Metal-working machine tools	PA461.2	Building bricks and non-refractory goods
PA333.1	Pumps	PA462	Pottery
PA333.2	Valves	PA463	Glass
PA333.3	Compressors and fluid power equipment	PA464	Cement
PA334	Industrial engines	PA469.1	Abrasives
PA335	Textile machinery and accessories	PA469.2	Miscellaneous building materials and mineral products
PA336	Construction and earth-moving equipment	PA471	Timber
PA337	Mechanical handling equipment	PA472	Furniture and upholstery
PA338	Office machinery	PA473	Bedding, etc.
PA339.1	Mining machinery	PA474	Shop and office fitting
PA339.2	Printing, bookbinding and paper goods machinery	PA475	Wooden containers and baskets
PA339.3	Refrigerating machinery, space-heating, ventilating and air-conditioning equipment	PA479	Miscellaneous wood and cork manufactures
PA339.5	Scales and weighing machinery and portable power tools	PA481	Paper and board
PA339.7	Food and drink processing machinery and packaging and bottling machinery	PA482.1	Cardboard boxes, cartons and fibre-board packing cases
PA339.9	Miscellaneous (non-electrical) machinery	PA482.2	Packaging products of paper and associated materials
PA341	Industrial (including process) plant and steelwork	PA483	Manufactured stationery
PA342	Ordnance and small arms	PA484.1	Wallcoverings
PA349.1	Ball, roller, plain and other bearings	PA484.2	Miscellaneous manufactures of paper and board
PA349.2	Precision chains and other mechanical engineering	PA485	Printing, publishing of newspapers and periodicals
PA351	Photographic and document copying equipment	PA489	General printing and publishing
PA352	Watches and clocks	PA491	Rubber
PA353	Surgical instruments and appliances	PA492	Linoleum, plastics floor-covering, leathercloth, etc.
PA354	Scientific and industrial instruments and systems	PA493	Brushes and brooms
PA361	Electrical machinery	PA494.1	Toys, games and children's carriages
PA362	Insulated wires and cables	PA494.3	Sports equipment
PA363	Telegraph and telephone apparatus and equipment	PA495	Miscellaneous stationers' goods
PA364	Radio and electronic components	PA496	Plastics products
PA365.1	Gramophone records and tape recordings	PA499.1	Musical instruments
PA365.2	Broadcast receiving and sound reproducing equipment	PA499.2	Miscellaneous manufacturing industries
PA366	Electronic computers	PA500	Construction industry
PA367	Radio, radar and electronic capital goods	PA601	Gas
PA368	Electrical appliances primarily for domestic use	PA602	Electricity
		PA603	Water supply
		PA1002	Summary tables

## PA500 CONSTRUCTION INDUSTRY

PA500 1

The information in this report relates to undertakings engaged in the construction industry, minimum list heading 500 in the Standard Industrial Classification (revised 1968). The activities of the industry include:—

Erecting and repairing buildings of all types. Constructing and repairing roads and bridges; erecting steel and reinforced concrete structures; other civil engineering work such as laying sewers, gas and water mains, and electricity cables, erecting overhead lines and line supports and aerial masts, extracting coal from opencast workings, etc. On-site industrialised building is also included. Establishments specialising in demolition work or in sections of construction work such as asphaltting, electrical wiring, flooring, glazing, installing heating and ventilating apparatus, painting, plastering, plumbing, roofing. The hiring of Contractor's plant and scaffolding.

The report covers the construction work done by private enterprises and by persons directly employed by Local Authorities, Public Authorities and Government Departments. It excludes construction work carried out by the employees of nationalised industries and transport and water undertakings, except for the building and civil engineering work of the British Steel Corporation and the housing departments of the National Coal Board. Contractual work on opencast coal-mining is included but the activities of the division of the National Coal Board responsible for selling the coal so obtained are excluded.

**In interpreting the data in the tables it is essential to bear in mind the notes and definitions which commence on page 20.**

Since publication of the 1976 Census Report certain discrepancies in the figures for the main and sub-contractor work have been identified. Revised figures are available from the Business Statistics Office as indicated inside the front cover of this report.

## LIST OF CONTENTS

Table No	Title	Page
1	Output and costs, 1974, 1975, 1976 and 1977	2
1 Supplement	Analysis of service costs, 1977, undertakings employing 100 or more persons	2
1A	Analysis of output and costs, 1977, private undertakings	3
1B	Analysis of output and costs, 1977, public undertakings	7
2	Capital expenditure and stocks, 1974, 1975, 1976 and 1977	8
2A	Analysis of capital expenditure and stocks, 1977, private undertakings	9
2B	Analysis of capital expenditure and stocks, 1977, public undertakings	13
3A	Analysis of undertakings by size, 1977, private undertakings	14
3B	Analysis of undertakings by size, 1977, public undertakings	15
4A	Percentage analysis of twelve-month periods covered by returns received, 1977, private undertakings	16
4B	Percentage analysis of twelve-month periods covered by returns received, 1977, public undertakings	16
5 (i)	Analysis by main NACE activity of undertaking, 1977, undertakings employing 20 or more persons	17
5 (ii)	Analysis by main NACE activity of undertaking, 1977, undertakings employing 100 or more persons	18
6	Operating ratios, 1977, private undertakings	19

**Table 1 Output and costs, 1974, 1975, 1976 and 1977**  
All United Kingdom undertakings classified to the industry (a)

	Unit	1974	1975	1976	1977
Number of undertakings	No	94,305	89,988	87,960	85,410
Building and civil engineering work carried out:					
As a main or direct contractor	£'000	10,103,026	11,471,316	12,295,435	13,060,469
As a sub-contractor	£'000	2,180,588	2,555,599	2,753,344	2,869,043
Receipts for plant hire	£'000	387,851	560,762	418,830	514,588
Other work done and sales of goods produced	£'000	152,651	197,349	209,752	203,977
Goods merchanted or factored	£'000	93,211	112,487	98,512	127,908
Total work done and goods sold	£'000	12,917,327	14,897,514	15,775,873	16,775,985
Change in year in goods on hand for sale	£'000	+14,815	+1,739	+3,060	+7,682
Gross output	£'000	12,932,141	14,899,253	15,778,933	16,783,667
Purchases of materials for use in construction	£'000	3,614,037	4,037,822	4,351,163	4,635,968
Cost of fuel and electricity	£'000	159,327	175,396	193,351	238,296
Purchases of goods for merchanding or factoring	£'000	78,175	90,567	75,948	99,872
Other purchases	£'000	217,491	237,266	226,250	272,303
Change in year of stocks of materials, stores and fuel	£'000	+51,006	+13,831	+40,781	+30,597
Cost of industrial services received	£'000	3,290,307	3,667,925	3,845,591	4,055,490(b)
Net output	£'000	5,623,811	6,704,109	7,127,410	7,512,337
Total employment (c)	No	1,508,466	1,464,817	1,396,921	1,334,394
Net output per head	£	3,728	4,577	5,102	5,630
Cost of non-industrial services received	£'000	646,532	754,685	823,155	934,118
Licensing of motor vehicles	£'000	17,721	22,125	18,865	24,638
Rates, excluding water rates	£'000	33,051	37,244	47,311	46,523
Gross value added at factor cost	£'000	4,926,506	5,890,056	6,238,078	6,507,058
Gross value added at factor cost per head	£	3,266	4,021	4,466	4,876

(a) Includes estimates for non-response and unsampled small undertakings (only 5% of firms employing fewer than 20 people were included in the census). For 1977, these estimates represented 41% of total employment and 38% of total output shown in the table. The 3 main size groups contribute to these percentages as follows:—

Size (employment)	Less than 20	20-99	100 and over	Total
Employment	22%	10%	9%	41%
Output	17%	10%	11%	38%

(b) Of industrial service costs incurred by private undertakings in 1977, £3,926,205,000 was for payments for work sub-contracted out, of which £648,485,000 was paid to labour only sub-contractors.

(c) Average number employed during the year, including working proprietors.

**Table 1 Supplement Analysis of service costs, 1977**  
United Kingdom undertakings employing 100 or more persons (a)

£'000

	Private undertakings	Public undertakings	Total
Amounts payable to other organisations:			
Payments for work sub-contracted out	2,646,780	(b)	2,646,780
Other industrial services	52,493	18,414	70,908
Total cost of industrial services	2,699,273	18,414	2,717,687
Rents paid for industrial buildings	14,660	2,501	17,161
Hire of vehicles and plant and machinery	307,926	50,962	358,888
Commercial insurance premiums	60,080	5,032	65,112
Bank charges	9,357	188	9,546
Other non-industrial services	152,188	30,757	182,945
Total cost of non-industrial services	544,212	89,440	633,652

(a) Includes estimates for non-response.

(b) Not collected for public undertakings.

**Table 1A Analysis of output and costs 1977**  
**Private undertakings in United Kingdom (a)**

	Unit	Sub-divisions of the industry – Great Britain (b)									
		General builders	Building and civil engineering contractors	Civil engineers	Plumbers	Carpenters and joiners	Painters	Roofers	Plasterers	Glaziers	Demolition contractors
Number of undertakings	No	34,800	1,904	1,714	7,121	5,299	12,410	2,044	2,776	510	423
Building and civil engineering work carried out:											
As a main contractor	£'000	5,867,972	2,678,283	1,180,946	111,408	100,829	229,923	67,649	10,279	24,428	23,947
As a sub-contractor	£'000	175,969	142,670	244,463	166,640	85,089	145,071	205,363	154,320	56,366	8,942
Receipts for plant hire	£'000	18,177	17,818	21,170	—	2,651	3,623	363	186	2,748	1,784
Other work done and sales of goods produced	£'000	31,810	19,256	21,660	2,062						
Goods merchanted or factored	£'000	8,640	4,249	4,439	4,172	279	5,797	4,291	59	5,458	194
Total work done and goods sold	£'000	6,102,568	2,862,276	1,472,678	284,283	188,848	387,411	282,216	165,400	89,000	35,480
Change in year in goods on hand for sale	£'000	+578	+1,399	+910	+42	+27	+205	+88	+4	-16	-76
Gross output	£'000	6,103,146	2,863,675	1,473,588	284,325	188,874	387,617	282,304	165,404	88,984	35,404
Purchases of materials for use in construction	£'000	1,667,521	610,470	346,184	131,740	56,581	68,450	128,072	47,489	40,240	3,919
Cost of fuel and electricity	£'000	50,241	35,539	38,333	3,397	2,228	5,457	2,787	1,564	1,009	1,790
Purchases of goods for merchenting or factoring	£'000	6,847	4,288	3,358	3,502	265	4,307	3,156	50	3,487	98
Other purchases	£'000	40,268	38,560	57,527	1,273	785	2,663	4,845	1,033	1,616	2,428
Change in year in stocks of materials, stores and fuel	£'000	+1,470	+1,392	+2,686	+1,370	-60	+681	+699	+82	+972	-245
Cost of industrial services received	£'000	2,174,358	1,079,961	278,616	10,860	44,616	42,121	24,771	31,474	2,605	4,220
Net output	£'000	2,165,381	1,096,249	752,256	134,923	84,339	265,301	119,372	83,875	41,000	22,704
Total employment (c)	No	425,628	161,930	87,765	32,191	21,670	59,882	22,104	19,820	7,326	4,563
Net output per head	£	5,087	6,770	8,571	4,191	3,892	4,430	5,400	4,232	5,596	4,976
Operatives:											
Average number employed	No	314,745	116,595	65,614	21,502	14,501	46,271	15,012	15,964	4,827	3,671
Wages and salaries	£'000	1,009,015	423,844	279,911	63,594	47,352	149,444	51,354	54,567	15,218	11,626
Other employees: (d)											
Average number employed	No	89,858	44,362	20,971	6,738	3,034	7,749	5,556	2,394	2,066	504
Wages and salaries	£'000	321,698	174,639	90,815	17,607	6,976	23,629	18,294	8,251	6,708	1,513
Cost of non-industrial services received	£'000	228,860	183,914	169,626	6,679	4,942	17,192	12,426	4,400	4,667	5,310
Licensing of motor vehicles	£'000	5,898	4,064	1,771	234	366	483	562	195	151	605
Rates, excluding water rates	£'000	12,506	5,279	3,151	911	135	1,027	871	335	533	82
Gross value added at factor cost	£'000	1,918,117	902,992	577,709	127,099	78,896	246,598	105,512	78,945	35,649	16,708
Gross value added at factor cost per head	£	4,507	5,576	6,582	3,948	3,641	4,118	4,773	3,983	4,866	3,662

Table 1A (continued)

	Unit	Sub-divisions of the industry — Great Britain (b)									
		Scaffolding specialists	Reinforced concrete specialists	Heating and ventilating engineers	Electrical contractors	Asphalt and surface dressing contractors	Plant hiring contractors with operators	Plant hiring contractors without operators	Flooring contractors	Constructional engineers*	Insulating specialists
Number of undertakings	No	240	292	3,067	5,945	451	1,788	385	650	432	276
Building and civil engineering work carried out:											
As a main-contractor	£'000	10,638	32,196	232,051	244,731	131,090	16,158	1,465	15,302	86,416	30,440
As a sub-contractor	£'000	75,199	51,874	475,016	381,788	81,021	8,562	856	57,394	85,356	84,706
Receipts for plant hire	£'000	25,039	106	1,263	414	1,536	306,213	110,086	42	37	19
Other work done and sales of goods produced	£'000	5,447	907	5,261	7,600	5,940	22,223	8,230	2,334	1,443	999
Goods merchanted or factored	£'000	21,753	6,513	17,279	6,154	1,539	10,069	9,327	1,055	422	1,988
Total work done and goods sold	£'000	138,077	91,596	730,871	640,687	221,126	363,226	129,963	76,127	173,674	118,152
Change in year in goods on hand for sale:											
Gross output	£'000	139,691	91,126	731,608	640,829	221,202	363,600	130,274	76,174	173,667	118,177
Purchases of materials for use in construction	£'000	8,633	23,887	342,065	285,064	101,751	12,097	2,334	36,171	70,607	40,229
Cost of fuel and electricity	£'000	2,167	1,886	5,224	5,294	5,628	18,055	4,301	1,580	1,413	1,460
Purchases of goods for merchenting or factoring	£'000	12,556	5,979	13,974	4,928	1,202	8,540	7,446	622	372	2,265
Other purchases	£'000	3,337	2,328	6,703	4,040	4,145	35,418	14,568	875	2,430	995
Change in year in stocks of materials, stores and fuel	£'000	+2,550	-369	+1,610	+1,649	+628	-	+820	+10	+1,846	+453
Cost of industrial services received	£'000	4,527	13,563	99,059	33,620	16,309	23,107	4,754	5,225	30,626	3,090
Net output	£'000	111,023	43,115	266,194	309,532	92,796	266,384	97,690	31,711	70,064	70,590
Total employment (c)	No	13,220	8,458	50,356	69,038	12,855	28,893	8,882	6,275	10,207	10,674
Net output per head	£	8,398	5,098	5,286	4,483	7,219	9,220	10,999	5,054	6,864	6,613
Operatives:											
Average number employed	No	9,247	5,776	32,189	51,778	9,922	22,083	5,996	4,018	6,871	8,469
Wages and salaries	£'000	38,455	21,404	110,364	183,140	35,855	88,774	22,132	13,825	31,502	36,319
Other employees: (d)											
Average number employed	No	3,856	2,460	16,059	14,273	2,587	5,820	2,728	1,876	3,006	1,899
Wages and salaries	£'000	14,101	8,785	56,081	49,781	9,493	19,872	9,186	6,066	12,363	6,954
Cost of non-industrial services received	£'000	14,589	8,612	26,305	20,257	13,925	41,795	14,351	3,629	10,245	5,731
Licensing of motor vehicles	£'000	540	211	461	772	507	1,696	776	89	131	51
Rates, excluding water rates	£'000	934	1,018	2,780	1,920	348	1,930	1,223	658	1,040	244
Gross value added at factor cost	£'000	94,960	33,274	236,648	286,582	78,017	220,963	81,341	27,336	58,649	64,563
Gross value added at factor cost per head	£	7,183	3,934	4,700	4,151	6,069	7,648	9,158	4,356	5,746	6,049

\*Compared with earlier years, figures for constructional engineers are reduced because of reclassification of certain of the larger undertakings in this sub-division to the constructional steelwork industry (minimum list heading 341.4 in the Standard Industrial Classification (revised 1968)).

PA500 4

Table 1A (continued)

	Unit	Sub-divisions of the industry — Great Britain (b)				Great Britain (e)		
		Suspended ceiling specialists	Floor and wall tiling specialists	Open cast coal mining contractors	Miscellaneous	Total	Main contractors	Sub-contractors
Number of undertakings	No	249	471	16	761	84,024	57,691	26,333
Building and civil engineering work carried out:								
As a main contractor	£'000	7,245	19,198	99,590	69,942	11,292,127	10,912,474	379,652
As a sub-contractor	£'000	38,326	30,562	2,214	64,256	2,822,022	505,520	2,316,502
Receipts for plant hire	£'000	29		1,248	315	509,512	59,158	450,354
Other work done and sales of goods produced	£'000		1,016		1,615	153,615	88,042	65,573
Goods merchanted or factored	£'000	312	5,281	3,463	3,307	124,303	38,961	85,341
Total work done and goods sold	£'000	45,912	56,057	106,514	139,436	14,901,578	11,604,156	3,297,423
Change in year in goods on hand for sale	£'000	-49	+1,258	-25	-2	+7,194	+2,442	+4,752
Gross output	£'000	45,863	57,315	106,489	139,435	14,908,772	11,606,598	3,302,174
Purchases of materials for use in construction	£'000	18,868	19,977	6,591	43,354	4,112,295	2,971,453	1,140,842
Cost of fuel and electricity	£'000	275	524	9,520	2,932	202,601	145,651	56,950
Purchases of goods for merchenting or factoring	£'000	161			2,721	96,616	32,622	63,994
Other purchases	£'000	157	5,378	17,106	2,225	244,212	158,807	85,405
Change in year in stocks of materials, stores and fuel	£'000	+176	-248	+49	+1,314	+19,535	+8,556	+10,979
Cost of industrial services received	£'000	7,287	5,967	11,326	9,837	3,961,898	3,644,731	317,167
Net output	£'000	19,292	25,221	61,993	79,680	6,310,685	4,661,890	1,648,795
Total employment (c)	No	3,225	3,728	4,996	12,920	1,086,606	787,212	299,394
Net output per head	£	5,982	6,765	12,409	6,167	5,808	5,922	5,507
Operatives:								
Average number employed	No	2,091	2,537	4,114	8,088	791,881	574,414	217,467
Wages and salaries	£'000	8,287	9,057	20,213	29,920	2,755,172	1,977,277	777,895
Other employees: (d)								
Average number employed	No	959	915	882	4,507	245,059	178,677	66,382
Wages and salaries	£'000	3,522	2,985	4,159	17,358	890,835	663,431	227,405
Cost of non-industrial services received	£'000	2,578	1,727	18,942	9,792	830,494	638,914	191,581
Licensing of motor vehicles	£'000	5	65	48	163	19,844	14,513	5,331
Rates excluding water rates	£'000	181	513	82	405	38,106	27,416	10,690
Gross value added at factor cost	£'000	16,529	22,916	42,921	69,320	5,422,241	3,981,048	1,441,193
Gross value added at factor cost per head	£	5,125	6,147	8,591	5,365	4,990	5,057	4,814

PA500 5

Table 1A(continued)

	Unit	Northern Ireland (e)			United Kingdom (e)		
		Main contractors	Sub-contractors	Total	Main contractors	Sub-contractors	Total
Number of undertakings	No	596	218	814	58,287	26,551	84,838
Building and civil engineering work carried out:							
As a main contractor	£'000	236,292	5,419	241,710	11,148,766	385,071	11,533,837
As a sub-contractor	£'000	4,668	42,353	47,020	510,188	2,358,855	2,869,043
Receipts for plant hire	£'000	1,854	2,271	4,125	61,012	452,625	513,636
Other work done and sales of goods produced	£'000	2,622	714	3,337	90,664	66,287	156,952
Goods merchanted or factored	£'000	727	2,191	2,918	39,689	87,532	127,221
Total work done and goods sold	£'000	246,163	52,947	299,110	11,850,319	3,350,370	15,200,688
Change in year in goods on hand for sale	£'000	+318	+168	+487	+2,761	+4,920	+7,681
Gross output	£'000	246,481	53,115	299,596	11,853,079	3,355,290	15,208,369
Purchases of materials for use in construction	£'000	91,300	18,919	110,219	3,062,753	1,159,761	4,222,513
Cost of fuel and electricity	£'000	4,967	973	5,940	150,619	57,923	208,542
Purchases of goods for merchenting or factoring	£'000	911	1,810	2,721	33,533	65,803	99,336
Other purchases	£'000	2,338	931	3,269	161,144	86,336	247,481
Change in year in stocks of materials, stores and fuel	£'000	+385	+195	+580	+8,941	+11,174	+20,114
Cost of industrial services received	£'000	69,873	4,181	74,054	3,714,604	321,348	4,035,952
Net output	£'000	77,477	26,497	103,973	4,739,367	1,675,292	6,414,659
Total employment (c)	No	18,867	4,489	23,356	806,079	303,883	1,109,962
Net output per head	£	4,106	5,903	4,452	20,198	1,914	5,779
Operatives:							
Average number employed	No	15,269	3,500	18,769	589,683	220,967	810,650
Wages and salaries	£'000	43,723	10,075	53,797	2,021,000	787,970	2,808,970
Other employees: (d)							
Average number employed	No	2,861	821	3,682	181,538	67,203	248,741
Wages and salaries	£'000	9,937	3,150	13,088	673,368	230,555	903,923
Cost of non-industrial services received	£'000	9,999	2,349	12,348	648,913	193,930	842,843
Licensing of motor vehicles	£'000	323	75	398	14,836	5,406	20,242
Rates, excluding water rates	£'000	317	73	390	27,733	10,764	38,496
Gross value added at factor cost	£'000	66,838	24,000	90,838	4,047,885	1,465,193	5,513,078
Gross value added at factor cost per head	£	3,543	5,346	3,889	5,022	4,822	4,967

(a)\* Includes estimates for non-response and unsampled small undertakings.

(b) The method of classifying returns to sub-divisions of the industry is explained in the notes, paragraph 6 page 20.

(c) Average number employed during the year, including working proprietors.

(d) Administrative, professional, technical and clerical employees.

(e) See final paragraph of introductory notes on page 1.

**Table 1B Analysis of output and costs, 1977**  
**Public undertakings in United Kingdom (a)**

PA500 7

	Unit	Great Britain	Northern Ireland	United Kingdom
Number of undertakings	No	554	18	572
Building and civil engineering work carried out	£'000	1,485,863	40,770	1,526,632
Receipts for plant hire	£'000 )			( 951
Other work done, and sales of goods produced	£'000 )	48,401	264	( 47,026
Goods merchanted or factored	£'000 )			( 687
Total work done and goods sold	£'000	1,534,264	41,033	1,575,297
Change in year in goods on hand for sale	£'000	+2	—	+2
Gross output	£'000	1,534,265	41,033	1,575,298
Purchases of materials for use in construction	£'000	402,704	10,751	413,455
Cost of fuel and electricity	£'000	28,642	1,112	29,754
Purchases of goods for merchenting or factoring	£'000	535	—	535
Other purchases	£'000	24,640	182	24,822
Change in year in stocks of materials, stores and fuel	£'000	10,083	401	10,483
Cost of industrial services received (b)	£'000	19,340	198	19,538
Net output	£'000	1,068,487	29,191	1,097,678
Total employment (c)	No	217,083	7,349	224,432
Net output per head	£	4,922	3,972	4,891
Operatives:				
Average number employed	No	177,184	6,657	183,841
Wages and salaries	£'000	580,455	16,708	597,163
Other employees (d)				
Average number employed	No	39,899	692	40,591
Wages and salaries	£'000	165,053	2,676	167,729
Cost of non-industrial services received	£'000	89,074	2,201	91,275
Licensing of motor vehicles	£'000	4,381	15	4,397
Rates, excluding water rates	£'000	7,859	167	8,026
Gross value added at factor cost	£'000	967,172	20,807	993,979
Gross value added at factor cost per head	£	4,455	3,648	4,429

(a) Includes estimates for non-response

(b) Not including any work sub-contracted out

(c) Average number employed during the year

(d) Administrative, professional, technical and clerical employees.



**Table 2 Capital expenditure and stocks 1974, 1975, 1976 and 1977**  
**All United Kingdom undertakings classified to the industry (a)**

	1974	1975	1976	1977
Capital expenditure: (b)				
Land and buildings:				
New building work	45,936	70,410	59,561	59,506
Land and existing buildings:				
Acquisitions	17,921	30,801	42,488	33,856
Disposals	13,087	22,183	16,597	15,715
Vehicles:				
Acquisitions	151,126	176,605	191,733	263,523
Disposals	38,286	47,352	57,357	73,708
Plant and machinery:				
Acquisitions	241,650	292,358	324,475	318,754
Disposals	54,769	70,342	81,953	77,081
Total net capital expenditure (c)	350,491	430,297	462,350	509,135
Buildings constructed and capital goods produced by undertakings' own staff, for their own use	33,867	42,434	35,627	39,602
Stocks: end of year				
Materials, stores and fuel	372,824	407,757	420,745	441,118
Goods on hand for sale	52,662	44,952	31,426	39,434

- (a) Includes estimates for non-response and unsampled small undertakings.
- (b) Capital expenditure in respect of units not in operation by the end of the year is included.
- (c) New building work plus acquisitions less disposals of land and existing buildings, vehicles and plant and machinery.

**Table 2A Capital expenditure and stocks, 1977**  
**Private undertakings in the United Kingdom (a)**

£'000

	Sub-divisions of the industry – Great Britain (b)									
	General builders	Building and civil engineering contractors	Civil engineers	Plumbers	Carpenters and joiners	Painters	Roofers	Plasterers	Glaziers	Demolition contractors
Capital expenditure (c)										
Land and buildings:										
New building work	19,409	4,423	6,715	275	648	214	189	109	384	2
Land and existing buildings:										
Acquisitions	10,334	5,396	5,019	390	310	762	223	427	696	287
Disposals	6,340	3,561	1,277	75	6	65	201	20	38	11
Vehicles:										
Acquisitions	89,261	30,150	24,524	5,687	3,967	10,893	3,810	4,509	1,403	1,507
Disposals	27,714	10,005	5,249	1,739	1,596	3,339	961	923	489	417
Plant and machinery:										
Acquisitions	38,798	33,008	58,885	420	664	1,766	813	452	584	1,021
Disposals	9,882	11,938	9,764	25	65	35	43	117	2	225
Total net capital expenditure (d)	113,866	47,473	78,854	4,935	3,922	10,197	3,830	4,437	2,537	2,165
Buildings constructed and capital goods produced by undertakings own staff, for their own use	18,683	3,564	6,826	—	—	—	51	17	17	—
Stocks:										
Materials, stores and fuel:										
Beginning of year	109,444	35,649	28,819	7,305	5,593	4,912	10,493	1,713	6,195	846
End of year	1,101,914	37,041	31,505	8,675	5,533	5,593	11,191	1,795	7,168	601
Goods on hand for sale:										
Beginning of year	1,551	2,013	3,623	859	38	779	494	50	1,029	120
End of year	2,128	3,412	4,533	901	64	984	582	54	1,013	44

Table 2A (continued)

£'000

	Sub-divisions of the industry – Great Britain (b)									
	Scaffolding specialists	Re-inforced concrete specialists	Heating and ventilating engineers	Electrical contractors	Asphalt and surface dressing contractors	Plant hiring contractors with operators	Plant hiring contractors without operators	Flooring contractors	Constructional engineers*	Insulating specialists
Capital expenditure (c)										
Land and buildings:										
New building work	325	738	388	1,070	121	1,047	559	24	5,292	66
Land and existing buildings:										
Acquisitions	141	436	1,383	1,477	( )	1,554	1,251	35	394	199
Disposals	102	17	189	456	( )	813	687	130	517	29
Vehicles:										
Acquisitions	5,671	1,248	10,587	9,400	3,919	16,398	7,025	1,735	2,304	2,029
Disposals	840	409	3,273	2,752	1,157	4,874	1,916	758	537	388
Plant and machinery:										
Acquisitions	9,607	1,677	2,794	2,835	3,020	81,622	41,017	187	1,452	361
Disposals	3,674	140	106	53	309	27,145	8,018	64	57	—
Total net capital expenditure (d)	11,128	3,533	11,583	11,520	5,711	67,788	39,231	1,029	8,331	2,238
Buildings constructed and capital goods produced by undertakings' own staff, for their own use	8	164	19	101	—	31	29	—	724	—
Stocks:										
Materials, stores and fuel:										
Beginning of year	19,906	4,720	21,205	12,016	3,198	10,238	5,092	3,792	7,583	2,549
End of year	22,456	4,350	22,815	13,665	3,826	10,238	5,912	3,802	9,429	3,002
Goods on hand for sale:										
Beginning of year	6,275	2,295	4,931	804	90	1,784	1,629	360	( )	171
End of year	7,890	1,825	5,668	946	166	2,158	1,939	407	( )	197

\*Compared with earlier years, figures for constructional engineers are reduced in most cases because of reclassification of certain of the larger undertakings in this sub-division to the constructional steelwork industry (minimum list heading 341.4 in the Standard Industrial Classification (revised 1968)).

PAS00 10

Table 2A (continued)

£'000

	Sub-divisions of the industry – Great Britain (b)				Great Britain (e)		
	Suspended ceiling specialists	Floor and wall tiling specialists	Open cast coal mining contractors	Miscellaneous	Total	Main contractors	Sub-contractors
Capital expenditure (c)							
Land and buildings:							
New building work	220	162	100	633	43,113	36,951	6,162
Land and existing buildings:							
Acquisitions	( )	( )	31	171	31,215	22,797	8,418
Disposals	( )	( )	507	—	15,547	12,162	3,385
Vehicles:							
Acquisitions	404	698	753	2,749	240,631	166,476	74,155
Disposals	236	175	787	736	71,272	50,392	20,880
Plant and machinery:							
Acquisitions	130	122	14,498	790	296,523	140,956	155,567
Disposals	11	16	2,711	142	74,542	33,320	41,222
Total net capital expenditure (d)	180	790	11,378	3,465	450,120	271,305	178,815
Buildings constructed and capital goods produced by undertakings' own staff, for their own use	—	162	75	26	30,496	26,516	3,980
Stocks:							
Materials, stores and fuel:							
Beginning of year	1,186	1,687	2,547	5,484	312,171	204,551	107,620
End of year	1,362	1,438	2,596	6,798	331,706	213,107	118,599
Goods on hand for sale:							
Beginning of year	59	( )	164	138	30,997	11,407	19,591
End of year	11	+1,258	( )	136	38,191	13,849	24,342

PAS00 11

Table 2A (continued)

£'000

	Northern Ireland (e)			United Kingdom (e)		
	Main contractor	Sub-contractor	Total	Main contractor	Sub-contractor	Total
Capital expenditure (c)						
Land and buildings:						
New building work	636	340	976	37,586	6,502	44,089
Land and existing buildings:						
Acquisitions	395	30	425	23,192	8,448	31,640
Disposals	73	3	76	12,235	3,388	15,624
Vehicles:						
Acquisitions	3,177	1,906	5,084	169,653	76,061	245,715
Disposals	731	663	1,394	51,123	21,543	72,666
Plant and machinery:						
Acquisitions	8,812	2,807	11,619	149,768	158,674	308,142
Disposals	1,818	105	1,923	35,137	41,328	76,465
Total net capital expenditure (d)	10,399	4,312	14,710	281,704	183,127	464,831
Buildings constructed and capital goods produced by undertakings' own staff, for their own use	264	141	405	26,779	4,121	30,900
Stocks:						
Materials, stores and fuel:						
Beginning of year	3,772	1,972	5,745	208,323	109,593	317,916
End of year	4,157	2,167	6,324	217,264	120,766	338,030
Goods on hand for sale:						
Beginning of year	297	447	743	11,704	20,037	31,741
End of year	615	615	1,230	14,464	24,957	39,421

(a) Includes estimates for non-response and unsampled small undertakings.

(b) The method of classifying returns to sub-divisions of the industry is explained in the report notes, paragraph 6.

(c) Capital expenditure in respect of units not in operation by the end of the year is included.

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

(e) See final paragraph of introductory notes on page 1.

**Table 2B Capital expenditure and stocks, 1977**  
**Public undertakings in the United Kingdom (a)**

£'000

	Great Britain	Northern Ireland	United Kingdom
Capital expenditure (b)			
Land and buildings:			
New building work	13,652	1,765	15,417
Land and existing buildings:			
Acquisitions	) +2,021	+103	( 2,216
Disposals	)		( 91
Vehicles:			
Acquisitions	16,722	1,086	17,808
Disposals	1,002	40	1,042
Plant and machinery:			
Acquisitions	) +9,816	+181	( 10,613
Disposals	)		( 616
Total net capital expenditure (c)	41,209	3,095	44,305
Buildings constructed and capital goods produced by undertakings' own staff for their own use	*	*	8,702
Stocks:			
Materials, stores and fuel:			
Beginning of year	90,402	2,204	92,605
End of year	100,484	2,604	103,089
Goods on hand for sale:			
Beginning of year	11	—	11
End of year	13	—	13

(a) Includes estimates for non-response.

(b) Capital expenditure in respect of units not in operation by the end of the year is included.

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

**Table 3A Analysis of undertakings by size, 1977**  
Private undertakings classified to the industry (a)

Size group	Under-takings	Employment			Wages and salaries				Total work done and goods sold	Gross output	Net output		Gross value added at factor cost		Net capital expenditure (d)	Total stocks at end of year		
		Total (b)	Operatives	Others (c)	Operatives		Others (c)				Total	Per head	Total	Per head			Total	Per head
					Total	Per head	Total	Per head										
Employment (b)	Number	Number	Number	Number	£'000	£	£'000	£	£'000	£'000	£'000	£	£'000	£	£'000	£'000		
0-19	76,196	314,395	214,331	57,040	655,840	3,060	159,174	2,791	2,999,503	3,001,491	1,349,789	4,293	1,213,751	3,861	86,912	77,795		
20-49	5,669	165,800	129,244	30,923	426,443	3,300	113,003	3,654	1,984,640	1,985,141	881,938	5,319	773,259	4,664	67,376	54,602		
50-99	1,631	113,301	89,788	22,020	306,501	3,414	85,173	3,868	1,521,528	1,522,367	643,087	5,676	560,370	4,946	52,901	36,532		
100-199	733	101,759	77,111	24,371	271,625	3,523	94,119	3,862	1,548,036	1,548,334	625,015	6,142	524,973	5,159	49,595	38,119		
200-499	385	117,515	87,458	29,965	328,398	3,755	116,517	3,888	2,011,886	2,012,428	827,081	7,038	682,558	5,808	64,749	45,689		
500-999	151	103,485	76,447	27,006	292,490	3,826	111,454	4,127	1,815,912	1,817,499	729,676	7,051	612,496	5,919	58,649	38,857		
1,000-2,499	55	82,826	59,788	23,018	234,722	3,926	87,209	3,789	1,532,617	1,533,519	608,354	7,345	505,887	6,108	35,680	44,683		
2,500-4,999	11	36,269	25,100	11,169	94,584	3,768	41,283	3,696	587,394	587,205	218,053	6,012	176,785	4,874	9,335	18,040		
5,000 and over	7	74,612	51,383	23,229	198,366	3,861	95,989	4,132	1,199,171	1,200,385	531,666	7,126	463,000	6,205	39,634	23,133		
Total	84,838	1,109,962	810,650	248,741	2,808,970	3,465	903,923	3,634	15,200,688	15,208,369	6,414,659	5,779	5,513,078	4,967	464,831	377,451		

- (a) Includes estimates for non-response and unsampled small undertakings.  
 (b) Average number employed during the year (including working proprietors) by the undertakings.  
 (c) Administrative, professional, technical and clerical employees.  
 (d) New building work plus acquisitions less disposals of land and existing buildings, vehicles and plant and machinery.

**Table 3B Analysis of undertakings by size, 1977**  
Public undertakings in the United Kingdom (a)

Size group	Under-takings	Employment			Wages and salaries				Total work done and goods sold	Gross output	Net output		Gross value added at factor cost		Net capital expenditure (d)	Total stocks at end of year		
		Total (b)	Operatives	Others (c)	Operatives		Others (c)				Total	Per head	Total	Per head			Total	Per head
					Total	Per head	Total	Per head										
Employment (b)	Number	Number	Number	Number	£'000	£	£'000	£	£'000	£'000	£'000	£	£'000	£	£'000	£'000		
0-19	17	203	159	44	475	2,986	148	3,370	1,199	1,199	862	4,246	801	3,944	199	195		
20-49	68	2,319	1,836	483	5,603	3,052	1,860	3,851	14,284	14,284	10,268	4,428	9,136	3,940	763	1,911		
50-99	102	7,485	5,920	1,565	18,015	3,043	6,146	3,927	44,031	44,031	32,399	4,329	30,484	4,073	1,437	5,007		
100-199	137	19,608	15,332	4,276	47,316	3,086	16,966	3,968	113,221	113,222	83,796	4,274	77,863	3,971	3,568	10,832		
200-499	134	43,446	35,062	8,384	110,047	3,139	33,909	4,045	273,979	273,979	189,660	4,365	170,823	3,932	8,806	21,385		
500-999	63	47,405	37,593	9,812	122,439	3,257	41,180	4,197	338,219	338,220	223,412	4,713	192,665	4,064	11,331	24,063		
1,000-2,499	45	63,549	52,051	11,498	166,855	3,206	46,799	4,070	480,147	480,147	313,151	4,928	276,561	4,352	13,841	27,117		
2,500 and over	6	40,417	35,888	4,529	126,412	3,522	20,720	4,575	310,216	310,216	244,129	6,040	235,646	5,830	4,361	12,592		
Total	572	224,432	183,841	40,591	597,163	3,248	167,729	4,132	1,575,297	1,575,298	1,097,678	4,891	993,979	4,429	44,305	103,102		

- (a) Includes estimates for non-response.  
 (b) Average number employed during the year.  
 (c) Administrative, professional, technical and clerical employees.  
 (d) New building work plus acquisitions less disposals of land and buildings, vehicles and plant and machinery.

**Table 4A** Percentage analysis of twelve-month periods covered by returns received from United Kingdom private undertakings

Accounting year ended		Percentage of total returns received	Percentage of total number employed
1977	April (a)	4.0	2.5
	May	2.7	2.0
	June	5.1	3.7
	July	2.9	1.5
	August	3.1	1.6
	September	6.4	7.6
	October	4.0	5.3
	November	3.1	1.8
	December	31.4	50.5
	1978	January	4.5
February		4.0	3.6
March (b)		28.8	16.7

**Table 4B** Percentage analysis of twelve-month periods covered by returns received from United Kingdom public undertakings

Accounting year ended		Percentage of total returns received	Percentage of total number employed
1977	April (a)	0.6	2.8
	May	—	—
	June	—	—
	July	—	—
	August	—	—
	September	—	—
	October	—	—
	November	—	—
	December	4.3	2.2
	1978	January	—
February		—	—
March (b)		95.1	95.0

(a) From 6 April 1977

(b) Including returns made for twelve-month period 1 to 5 April 1978.

Table 5(i) Analysis by main NACE activity of undertaking, 1977  
United Kingdom undertakings employing 20 or more persons (a)

Unit	Private undertakings – NACE classifications (b)						(c)	(d)	Public undertakings
	500	501	502	503	504				
Number of undertakings	No	411	4,179	1,150	1,514	1,198	23	166	555
Building and civil engineering work carried out:									
As a main contractor	£'000	1,728,474	4,882,239	2,132,872	364,584	240,845		( 147	1,525,434
As a sub-contractor	£'000	58,104	405,974	384,394	929,787	309,739	115,286	( 1,760	–
Receipts for plant hire	£'000	49,469	77,917	143,867	1,594	3,680	1,760	132,814	951
Other services rendered	£'000	5,861	9,075	12,272	1,083	512		( 6,045	17,232
Other work done and sales of goods produced	£'000	6,103	36,377	27,988	9,974	7,375	4,240	( 8,172	29,793
Goods merchanted or factored	£'000	3,427	37,371	10,121	24,249	10,080		( 15,555	687
Change in year in goods on hand for sale	£'000	+1,133	+1,991	+1,136	+731	+223	–50	+528	+2
Gross output	£'000	1,852,570	5,450,944	2,712,650	1,332,002	572,454	121,236	165,022	1,574,100
Purchases of goods for merchenting or factoring	£'000	4,071	25,910	7,661	19,138	7,602		( 12,606	535
Other purchases	£'000	432,128	1,563,020	790,320	611,889	163,323	38,684	( 27,681	467,695
Change in year in stocks of materials, stores and fuel	£'000	+473	+8,389	+4,745	+4,397	+2,277	+69	+1,414	+10,438
Cost of industrial services received	£'000	791,633	1,898,004	551,950	121,963	80,228	11,272	4,690	19,492
Net output	£'000	625,211	1,972,399	1,367,464	583,409	323,578	71,349	121,459	1,096,816
Other costs (e)	£'000	112,840	246,826	280,259	50,611	31,920	22,752	20,335	103,637
Gross value added at factor cost	£'000	512,371	1,725,574	1,087,205	532,798	291,659	48,598	101,124	993,179
Employment:									
Working proprietors (f)	No	318	3,993	849	1,203	1,135	–	50	–
Operatives	No	72,143	263,781	123,745	75,218	48,561	4,963	7,909	183,682
Other employees (g)	No	28,061	82,569	39,960	26,143	10,152	993	3,824	40,547
Gross value added at factor cost per head	£	5,097	4,925	6,607	5,195	4,873	8,159	8,582	4,429
Gross wages and salaries	£'000	368,240	1,199,009	676,871	375,071	207,395	29,322	41,970	764,269
Capital expenditure: (h)									
New building work	£'000	3,821	19,172	10,939	1,698	1,104		( 895	15,288
Land and existing buildings— acquisitions	£'000		( 8,294	6,060	3,291	1,150	–554	( 1,668	2,216
— disposals	£'000	–2,351	( 5,650	1,965	466	688		( 378	91
Vehicles	£'000	15,997	75,166	45,726	17,091	10,379	872	8,732	17,747
— disposals	£'000	4,685	20,943	11,227	5,193	3,420	986	2,128	1,041
Plant and machinery	£'000	22,831	52,331	114,284	5,267	2,681	18,710	50,741	10,604
— disposals	£'000	9,804	17,672	24,537	181	247	3,328	9,283	616

(a) Includes estimates for non-response.

(b) Details of NACE classification are given in the notes, paragraph 7 page 20. The headings are:

500 – General building and civil engineering, demolition.

501 – Construction of buildings

502 – Civil engineering

503 – Installation work

504 – Building completion work

(c) – Opencast coal-mining

(d) – Plant hire (without labour)

(e) Includes non-industrial services, motor vehicle licences and rates.

(f) Not collected for public authorities.

(g) Administrative, professional, technical and clerical employees.

(h) Capital expenditure in respect of units not in operation by the end of the year is included.



**Table 5(ii) Analysis by main NACE activity of undertaking, 1977**  
**United Kingdom undertakings employing 100 or more persons (a)**

	Unit	Private undertakings — NACE classification (b)						(c)	(d)	Public undertakings
		500	501	502	503	504				
Total employment (e)	No	87,509	215,995	126,901	54,373	19,824	5,487	6,379	214,425	
Employers' insurance and welfare contributions	£'000	38,510	91,028	63,873	25,765	8,096	3,205	2,870	128,601	
Stocks:										
Materials, stores, and fuel — beginning of year	£'000	16,819	79,374	43,844	18,834	3,847	2,921	4,083	86,468	
— end of year	£'000	17,403	85,101	47,164	21,048	4,854	2,937	4,795	95,976	
Goods on hand for sale — beginning of year	£'000	1,076	7,487	4,410	5,155	703	-50	1,523	11	
— end of year	£'000									9,031
Rents paid for industrial buildings	£'000	3,210	4,106	3,676	2,176	560	37	894	2,501	
Hire of vehicles and plant and machinery	£'000	55,563	77,331	144,305	4,007	4,323	18,028	4,368	50,962	
Commercial insurance premiums	£'000	11,278	19,724	21,571	3,736	1,614	939	1,219	5,032	
Bank charges	£'000	751	5,221	2,138	923	193	49	82	188	
Buildings constructed and capital goods produced by undertakings' own staff for their own use	£'000	2,203	17,120	3,412	107	46	*	*	8,246	
Licensing of motor vehicles	£'000	1,383	4,534	3,447	677	266	48	757	4,101	
Rates, excluding water rates	£'000	3,099	7,338	4,506	2,282	729	81	789	7,048	

(a) Includes estimates for non-response

(b) Details of NACE classification are given in the notes paragraph 7 page 20. The headings are:

500 — General building and civil engineering, demolition

501 — Construction of buildings

502 — Civil engineering

503 — Installation work

504 — Building completion work

(c) — Opencast coal-mining

(d) — Plant hire (without labour)

(e) Average number employed during the year, including working proprietors.

**Table 6 Operating ratios, 1977**  
**Private undertakings in Great Britain (a)**

	Gross value added per head	Gross value added as proportion of gross output	Gross output per head	Net output per head	Wages and salaries as proportion of gross value added	Ratio of operative to APTC (b)	Average wages and salaries of APTC (b)	Average wages and salaries of operatives	Net capital expenditure per head	Net capital expenditure as proportion of gross value added
	£		£	£			£	£	£	
General builders	4,507	0.31	14,339	5,087	0.69	3.50	3,580	3,206	268	0.059
Building and civil engineering contractors	5,576	0.32	17,685	6,770	0.66	2.63	3,937	3,635	293	0.053
Civil engineers	6,582	0.39	16,790	8,571	0.64	3.13	4,331	4,226	898	0.136
Plumbers	3,948	0.45	8,832	4,191	0.64	3.19	2,613	2,958	153	0.039
Carpenters and joiners	3,641	0.42	8,716	3,892	0.69	4.78	2,299	3,265	181	0.050
Painters	4,118	0.64	6,473	4,430	0.70	5.97	3,049	3,230	170	0.041
Roofers	4,773	0.37	12,772	5,400	0.66	2.70	3,293	3,421	173	0.036
Plasterers	3,983	0.48	8,345	4,232	0.80	6.67	3,447	3,418	224	0.056
Glaziers	4,866	0.40	12,146	5,596	0.62	2.34	3,247	3,153	346	0.071
Demolition contractors	3,662	0.47	7,759	4,976	0.79	7.28	3,001	3,167	474	0.130
Scaffolding specialists	7,183	0.68	10,567	8,398	0.55	2.40	3,657	4,159	842	0.117
Reinforced concrete specialists	3,934	0.37	10,774	5,098	0.91	2.35	3,571	3,706	418	0.106
Heating and ventilating engineers	4,700	0.32	14,529	5,286	0.70	2.00	3,492	3,429	230	0.049
Electrical contractors	4,151	0.45	9,282	4,483	0.81	3.63	3,488	3,537	167	0.040
Asphalt and surface dressing contractors	6,069	0.35	17,207	7,219	0.58	3.84	3,699	3,614	444	0.073
Plant hiring contractors with operators	7,648	0.61	12,584	9,220	0.49	3.79	3,414	4,020	2,346	0.307
Plant hiring contractors without operators	9,158	0.62	14,667	10,999	0.39	2.20	3,367	3,691	4,417	0.482
Flooring contractors	4,356	0.36	12,139	5,054	0.73	2.14	3,234	3,441	164	0.038
Constructional engineers	5,746	0.34	17,015	6,864	0.75	2.29	4,113	4,585	816	0.142
Insulating specialists	6,049	0.55	11,071	6,613	0.67	4.46	3,662	4,288	210	0.035
Suspended ceiling specialists	5,125	0.36	14,221	5,982	0.71	2.18	3,673	3,963	56	0.011
Floor and wall tiling specialists	6,147	0.40	15,374	6,765	0.53	2.77	3,263	3,570	212	0.034
Opencast coal mining contractors	8,591	0.40	21,315	12,409	0.57	4.66	4,715	4,913	2,278	0.265
Miscellaneous	5,365	0.50	10,792	6,167	0.68	1.79	3,851	3,691	268	0.050
Industry ratios	4,990	0.36	13,720	5,808	0.67	3.23	3,635	3,479	414	0.083

(a) Figures include estimates for non-response, unsatisfactory returns and unsampled small undertakings

(b) APTC — Administrative, professional, technical and clerical employees.

## Introduction

1. These notes give the main information needed for interpreting the figures in this Business Monitor. More detailed information about the census in general is given in a separate booklet "Introductory Notes", Part PA1001 of the Report on the Census of Production for 1976. In many respects, these general notes apply only to manufacturing industries. The following notes refer particularly to the construction industry.
2. The construction industry has been included in a full Annual Census of Production since 1974. The census forms part of the integrated system of industrial statistics introduced by the Government Statistical Service. The industry was included in the 1968 quinquennial census, and for the years 1969 to 1973 there was a limited annual inquiry covering capital expenditure and stocks from a small sample of larger undertakings.
3. The subjects to be covered for the census were decided after consultation with the Census of Production Advisory Committee appointed under the Statistics of Trade Act, 1947, and with the Standing Consultative Committee on Construction Statistics of the National Consultative Council for the Building and Civil Engineering Industries.

## Coverage

4. A return for Great Britain was required from all private undertakings employing 20 or more persons, but the full range of questions was only required from those employing 100 or more. Because of the relatively large proportion of output in this industry contributed by smaller businesses, a 5 per cent sample of undertakings with fewer than 20 employees was included in the Census. All Public Authorities were required to make a return in respect of their direct labour construction work.
5. The Department of Commerce, Belfast, conducts an Annual Census of Production for Northern Ireland. The data collected are passed to the Business Statistics Office for incorporation in the United Kingdom tables.

## Industrial Classification

6. The census was conducted on the Business Statistics Office's construction register. This register was created from the Department of the Environment's builders address file of establishments in Great Britain engaged in construction (as defined in the Standard Industrial Classification minimum list heading 500), to which the addresses of Public Authorities' direct labour departments have been added. The register includes details of industry sub-division classification (used in tables 1A and 2A) obtained by the Department of the Environment in their Private Contractors Construction Census taken annually in October. As part of the Contractors census respondents are asked to indicate from a list of the various specialist classes of construction business the description most appropriate to their business. The Business Statistics Office, further sub-divides private contractors between 'main contractors' and 'sub-contractors' according to their major activity, measured in terms of the value of work done. 'Plant hiring contractors' are all classed as 'sub-contractors'.
7. Following our membership of the European Economic Communities an additional industrial classification of private contributors to the census is necessary. Figures on this basis will enable comparison to be made between figures of member states. This classification, "Nomenclature of Economic Activities in the European Communities" (NACE) has been used in tables 5(i) and 5(ii). Each census form carried a list of activities from which respondents were asked to select the one most appropriate to the main activity of their business.

Details of NACE classification for construction are as follows:

- 500 General building and civil engineering work (without any particular specialisation) and demolition work.
- 501 Construction of buildings. This includes general building contracting and restoration and repair work on outside walls as well as roofing, waterproofing and damp-proofing, erection and dismantling of scaffolding, structural carpentry, and other such specialised activities relating directly to the construction of buildings.
- 502 Civil engineering, including construction of roads, bridges, railways, tunnels; shaft drilling, earth-moving, construction work relating to irrigation, drainage, water supply, sewerage etc.
- 503 Installation work including installation of fixtures and fittings, including gas fittings, plumbing, sanitary equipment, heating, ventilating, insulation, electrical wiring and fittings; installation of aerials, lightning conductors, telephones, etc.
- 504 Building completion work, including plastering, on-site joinery, painting, glazing, paperhanging, wall and floor tiling and covering, and other such specialised activities relating directly to the completion of buildings.

The following activities, within the construction heading under the Standard Industrial Classification, are not included in construction under NACE classification.

Opencast coal-mining.

Plant hire (without labour). When plant is hired with labour, the work is classified according to the most appropriate activity for which the plant is used.

## Estimation of figures

8. Estimates have been made in the Business Statistics Office for non-response and unsampled small firms in order to obtain totals for the industry as a whole. For Great Britain, ratio estimates were obtained from satisfactory returns using as the auxiliary variables either employment or output figures obtained in the Department of the Environment's annual census for 1977. Separate estimates were calculated for each industry sub-division by employment size strata. For Northern Ireland, the Department of Commerce made individual estimates for non-response, using the latest information available from quarterly output returns and previous census returns; for unsampled small firms estimation was made by the Business Statistics Office on the basis of employment figures supplied by the Department of Commerce.
9. Additionally, respondents were asked to make reasonable estimates wherever exact figures were not readily available.

## Description of tables

10. Of the tables, all except tables 4A and 4B include estimates for non-response and non-sampled businesses. Tables 4A and 4B are based on returns received only. Apart from table 6 which relates to the private contractors in Great Britain, all tables relate to the United Kingdom; tables 1A and 2A show separate figures for Great Britain analysed by industry sub-divisions and by main and sub-contractors and for Northern Ireland analysed by main and sub-contractors. Tables 1A, 2A, 3A and 4A are for private contractors only, tables 1B, 2B, 3B and 4B relate to the public sector.

## Average number employed

11. Undertakings were required to state the number of persons on the payroll on the average during the year of return, whether full-time or part-time employees. Separate figures were required for:
  - (a) administrative, professional, technical and clerical employees and
  - (b) all other employees (operatives and apprentices).
 Averages could be calculated from figures relating to the last week of each calendar month. Undertakings were also required to state the number of working proprietors where appropriate and these are included in total employment figures, but not in (a) or (b) above.
12. The figures include persons engaged in merchanting or factoring and canteen workers where particulars in respect of these activities could not be excluded from the return.

## Working proprietors

13. These include all persons regarded as 'self-employed' for national insurance purposes and members of their families who worked in the business without receiving a definite wage or salary; such persons who worked less than half the normal number of working hours are excluded. Directors working in the business but not in receipt of a definite wage, salary or commission are included under this heading; directors paid by fee only are not included.

## Employees

14. Administrative, professional, technical and clerical employees include employees (including learners and trainees) engaged in the business who do not do manual work, e.g. managing and other directors in receipt of a definite wage, salary or commission, managers, architects, surveyors, engineers, other professionals, training officers, superintendents, research, experimental, technical and design staff, draughtsmen and tracers, travellers, sales and office (including works office) staff, and general foremen and other supervisors who do not do manual work. Public Authorities were asked to include only such a proportion of total office and management staff as was fairly attributable to the building and civil engineering work carried out by direct employees.
15. Operatives include all other employees, both on-site and off-site. They include manual wage earners, apprentices, working foremen, operatives engaged in transport work, stores and warehouses, canteen workers and operatives engaged on the manufacture of goods for sale.

## Capital expenditure

16. Capital expenditure during the year in respect of units not then in operation is included in the figures. Undertakings were asked not to deduct from the value of capital expenditure, amounts received or expected to be received in grants or allowances from the Government or any statutory body (or local authority).
  - a. New building work
 

This represents the cost incurred during the year of new building and other constructional work to be used in connection with the business covered by the return. The value is that charged to capital account during the year of return; it includes expenditure on new buildings and on the extension or reconstruction of old buildings, the value of works of a capital nature carried out by the undertaking's own staff and the cost of any newly constructed buildings purchased. Figures shown include any legal charges, stamp duties, agents' commissions, etc.
  - b. Land and existing buildings
 

The items shown are the capital costs of freeholds purchased and the capital cost or premium payable for leaseholds acquired (excluding the value of any assets acquired in taking over an existing business), and the amounts receivable for any freeholds or leaseholds disposed of. The value is that charged to capital account during the year of return.
  - c. Plant, machinery and vehicles
 

The items shown are the value of plant and machinery and of vehicles acquired, both new and second-hand, and the amount received for items disposed of during the year. The value of plant and machinery acquired includes plant, etc., which firms produced for their own use in connection with the business covered by the return. The value of plant, etc., acquired is the expenditure charged to capital account during the year of return less any discounts received, but including the cost of transport and installation. Deductible value added tax is excluded, but non-deductible value added tax and Customs and Excise car tax on motor cars acquired is included. No deduction is made for depreciation, amortization or obsolescence. The proceeds of items disposed of during the year exclude amounts written off for items scrapped.

## Gross output

17. For the calculation of gross output the value of work done, sales of goods and receipts for plant hire is increased by the rise (or reduced by the fall) during the year in the value of stocks of goods on hand for sale.

## Net output

18. Net output, a customary census measure, is calculated by deducting from gross output the cost of purchases, (reduced by the rise or increased by the fall, during the year in the value of stocks of fuel and raw materials), the cost of work sub-contracted out and of other industrial services.

## Net output per head

19. The figures of net output per head are derived by dividing the net output by the average number of persons employed (full-time and part-time) on all activities covered by the returns, including operatives, administrative, professional, technical and clerical employees and working proprietors.

## Gross value added at factor cost

20. Gross value added at factor cost is calculated by deducting from net output the cost of non-industrial services received (rent of buildings and capital equipment, commercial insurance premiums, bank charges and amounts paid for professional services, postal services, transport, advertising etc.) and certain indirect taxes (vehicle licences and rates). This estimate of gross value added approaches more closely than census net output to the definition of net output or value added used in national accounts statistics.
21. Gross value added at factor cost per head.
 

The figures of gross value added at factor cost per head are derived by dividing the gross value added at factor cost by the average number of persons employed (full-time and part-time) on all activities covered by the returns, including operatives, administrative, professional, technical and clerical employees and working proprietors.

22. Purchases include the cost of materials and goods used or incorporated in building and civil engineering work or in production; of fuel and electricity for all purposes; of packaging materials, including the full cost of returnable cases and containers when first purchased; of workshop materials, office materials and materials for repairs to an undertaking's own buildings, plant and vehicles carried out by their own work people included in the return; of consumable tools, and of parts for machinery purchased during the year as replacements. Water charges are also included. Purchases of goods for merchanting or factoring were collected separately. Materials supplied by customers for processing are excluded, as are all purchases charged to capital account.
23. The values shown exclude value added tax but include any duty paid (less rebate, etc.). Values exclude trade discounts allowed. The cost of transport is included only if included in the cost of materials as invoiced; amounts paid to transport organisations, including an establishment's own separate transport organisation, for delivery of materials and fuel are therefore excluded. Materials purchased overseas are included at their full delivered cost. If, however, the cost of transport from the docks was not included in the invoiced price, then the cif cost plus any duty payable is used.
24. Materials and fuel transferred from another department of the establishment not covered by the same return are included at the estimated selling value recorded by the other department.

## Stocks

25. Values are given of stocks of materials and fuels, and of goods on hand for sale, at the beginning and end of the year of return, including any stocks of goods held for merchanting or factoring. Values exclude value added tax.

## Wages and salaries

26. These are the amounts paid during the year to operatives and administrative, professional, technical and clerical employees. Payments to working proprietors, whether called salaries or not, are excluded. The values shown include all overtime payments, bonuses and commissions, whether paid regularly or not, and no deduction is made for income tax, insurance, contributory pensions, etc. The value of any payments in kind, travelling expenses, lodging allowances etc., and employers' contributions to national insurance and pension schemes are excluded.

## Employers' insurance and welfare contributions

27. Values shown include the employers' contribution to national insurance and graduated pensions, as well as commercial insurance premiums to provide pensions, superannuation, or other retirement benefits, sickness benefits, personal accident benefits, disability or death benefits for employees or former employees or their dependents. Contributions to running costs of canteens, social centres, childrens' and holiday homes, etc., for employees, former employees and their dependents are also included.

## Work done and goods sold

28. Values shown are exclusive of value added tax.
29. For work done the value shown is the net contract price of the work if the contract was executed wholly within the year of return; otherwise an appropriate proportion of the net contract price is used, representing the value of work done during the year. It includes the value of all goods used or incorporated in the work done.
30. Sales are in respect of goods made, goods bought and sold without processing, and waste products. Goods incorporated in the building and civil engineering work are excluded.
31. The value shown for sales is the net selling value charged to customers, excluding any trade discounts, agents' commissions etc. The net amount charged for packing materials is included.

## Operating ratios

32. For each industry sub-division the operating ratios shown were obtained by dividing the estimate of the sub-division total for the quantities shown in the numerator by the corresponding estimates of the quantity shown in the denominator. These estimates cover all undertakings classified to each sub-division, including those exempted and non-respondents. In comparing the ratios between different sub-divisions, consideration must be given to the nature of the business carried on by undertakings in the sub-divisions concerned. Within a sub-division, it is possible to compare ratios for an individual undertaking with the ratios shown for the relevant sub-division. However, it is important to bear in mind that various factors may affect this result — for example, differences in definitions treatment of depreciation (which is not identified in the census data) and varying practice with regard to stock valuation, may affect comparability in some respects.

## SYMBOLS USED

33. The following symbols are used throughout the report:

.. not available

— nil or less than half the final digit shown

\* figures cannot be shown owing to the risk of disclosing information about individual enterprises.

R revised

## ROUNDING OF FIGURES

34. Figures in the tables have, where necessary, been rounded to the nearest digit. Where figures have been so rounded, the sum of the constituent items may not always agree exactly with the total shown.

© Crown copyright 1980

**Her Majesty's Stationery Office**

*Government Bookshops*

49 High Holborn, London WC1V 6HB

13a Castle Street, Edinburgh EH2 3AR

41 The Hayes, Cardiff CF1 1JW

Brazennose Street, Manchester M60 8AS

Southey House, Wine Street, Bristol BS1 2BQ

258 Broad Street, Birmingham B1 2HE

80 Chichester Street, Belfast BT1 4JY

*Government publications are also available  
through booksellers*

*Extracts from this publication may be reproduced  
provided the source is acknowledged. Proposals for  
complete reproduction should be addressed to the  
Librarian, Business Statistics Office, Newport,  
Gwent NPT 1XG*