

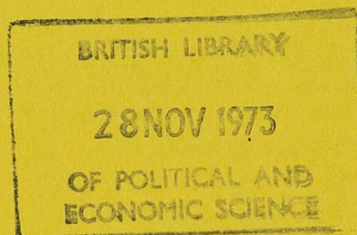


Business Monitor

DEPARTMENT OF TRADE AND INDUSTRY
BUSINESS STATISTICS OFFICE

Report on the Census of Production 1970

C5 Petroleum and natural gas
Salt and miscellaneous non-metalliferous
mining and quarrying



Special Note for Purchasers

Commencing with the 1970 Census, the Census of Production reports will in future be published annually as part of the Business Monitor series. They will continue to be available on standing order from HMSO, but 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 divisions 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
Cardiff Road
Newport, Mon
NPT 1XG
Newport 56111 (STD code 0633) ext 2455

Publication of the Government Statistical Service

Business Monitor

DEPARTMENT OF TRADE AND INDUSTRY
BUSINESS STATISTICS OFFICE

Report on the Census of Production 1970

C5 Petroleum and natural gas Salt and miscellaneous non-metalliferous mining and quarrying

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

LONDON: HER MAJESTY'S STATIONERY OFFICE 1973

List of Industry Reports, etc.

- C1 Introductory Notes
- C2 Coal mining
- C3 Stone and slate quarrying and mining
- C4 Chalk, clay, sand and gravel extraction
- C5 Petroleum and natural gas
Salt and miscellaneous non-metalliferous mining and quarrying
- C6 Metalliferous mining and quarrying
- C7 Grain milling
- C8 Bread and flour confectionery
- C9 Biscuits
- C10 Bacon curing, meat and fish products
- C11 Milk and milk products
- C12 Sugar
- C13 Cocoa, chocolate and sugar confectionery
- C14 Fruit and vegetable products
- C15 Animal and poultry foods
- C16 Vegetable and animal oils and fats
- C17 Margarine
- C18 Starch and miscellaneous foods
- C19 Brewing and malting
- C20 Soft drinks
- C21 Spirit distilling and compounding
- C22 British wines, cider and perry
- C23 Tobacco
- C24 Coke ovens and manufactured fuel
- C25 Mineral oil refining
- C26 Lubricating oils and greases
- C27 General chemicals (inorganic)
- C28 General chemicals (organic)
- C29 General chemicals (other than inorganic and organic)
- C30 Pharmaceutical chemicals and preparations
- C31 Toilet preparations
- C32 Paint
- C33 Soap and detergents
- C34 Synthetic resins and plastics materials and synthetic rubber
- C35 Dyestuffs and pigments
- C36 Fertilizers
- C37 Polishes
- C38 Formulated adhesives, gelatine, etc.
- C39 Explosives, fireworks and matches
- C40 Formulated pesticides and disinfectants
- C41 Printing ink
- C42 Surgical bandages, etc.
- C43 Photographic chemical materials
- C44 Iron and steel (general)
- C45 Steel tubes
- C46 Iron castings, etc.
- C47 Aluminium and aluminium alloys
- C48 Copper, brass and other copper alloys
- C49 Miscellaneous base metals
- C50 Agricultural machinery (except tractors)
- C51 Metal-working machine tools
- C52 Pumps, valves and compressors
- C53 Industrial engines
- C54 Textile machinery and accessories
- C55 Construction and earth moving equipment
- C56 Mechanical handling equipment
- C57 Office machinery
- C58 Mining machinery
- C59 Printing, bookbinding and paper goods making machinery
- C60 Refrigerating machinery (except domestic type refrigerators)
- C61 Space heating, ventilating and air-conditioning equipment
- C62 Food and drink processing machinery
- C63 Miscellaneous (non-electrical) machinery
- C64 Industrial (including process) plant and steelwork
- C65 Ordnance and small arms
- C66 General mechanical engineering
- C67 Photographic and document copying equipment
- C68 Watches and clocks
- C69 Surgical instruments and appliances
- C70 Scientific and industrial instruments and systems
- C71 Electrical machinery
- C72 Insulated wires and cables
- C73 Telegraph and telephone apparatus and equipment
- C74 Radio and electronic components
- C75 Broadcast receiving and sound reproducing equipment
- C76 Electronic computers
- C77 Radio, radar and electronic capital goods
- C78 Electric appliances primarily for domestic use
- C79 Miscellaneous electrical goods
- C80 Shipbuilding and marine engineering
- C81 Wheeled tractor manufacturing
- C82 Motor vehicle manufacturing
- C83 Motor cycle, tricycle and pedal cycle manufacturing
- C84 Aerospace equipment manufacturing and repairing
- C85 Locomotives and railway track equipment
- C86 Railway carriages, wagons and trams
- C87 Engineers' small tools and gauges
- C88 Hand tools and implements
- C89 Cutlery, spoons, forks and plated tableware, etc.
- C90 Bolts, nuts, screws, rivets, etc.
- C91 Wire and wire manufactures
- C92 Cans and metal boxes
- C93 Jewellery and precious metals
- C94 Metal furniture
- C95 Drop forgings, etc.
- C96 Metal hollow-ware
- C97 Miscellaneous metal goods
- C98 Production of man-made fibres
- C99 Spinning and doubling on the cotton and flax systems
- C100 Weaving of cotton, linen and man-made fibres
- C101 Woolen and worsted
- C102 Jute
- C103 Rope, twine and net
- C104 Hosiery and other knitted goods
- C105 Lace
- C106 Carpets
- C107 Narrow fabrics
- C108 Made-up household textiles and handkerchiefs
- C109 Canvas goods and sacks, etc.
- C110 Textile finishing
- C111 Asbestos
- C112 Miscellaneous textiles
- C113 Leather (tanning and dressing) and fellmongery
- C114 Leather goods
- C115 Fur
- C116 Waterproof outerwear
- C117 Men's, and boys' tailored outerwear
- C118 Women's and girls' tailored outerwear
- C119 Overalls and men's shirts, underwear, etc.
- C120 Dresses, lingerie, infants wear, etc.
- C121 Hats, caps and millinery
- C122 Corsets and miscellaneous dress industries
- C123 Gloves
- C124 Footwear
- C125 Bricks, fireclay and refractory goods
- C126 Pottery
- C127 Glass
- C128 Cement
- C129 Abrasives
- C130 Miscellaneous building materials and mineral products
- C131 Timber
- C132 Furniture and upholstery
- C133 Bedding and soft furnishing
- C134 Shop and office fittings
- C135 Wooden containers and baskets
- C136 Miscellaneous wood and cork manufacturers
- C137 Paper and board
- C138 Cardboard boxes, cartons and fibre-board packing cases
- C139 Packaging products of paper and associated materials (other than board)
- C140 Manufactured stationery
- C141 Wallcovering
- C142 Miscellaneous manufactures of paper and board
- C143 Printing, publishing of newspapers and periodicals
- C144 General printing, publishing, etc.
- C145 Rubber
- C146 Linoleum, plastics floor covering, leathercloth, etc.
- C147 Brushes and brooms
- C148 Toys, games and children's carriages
- C149 Sports equipment
- C150 Miscellaneous stationers' goods
- C151 Plastics products
- C152 Musical instruments
- C153 Miscellaneous manufacturing industries
- C154 Gas
- C155 Electricity
- C156 Water supply
- C157 Summary tables

C5 Petroleum and natural gas
Salt and miscellaneous non-metalliferous mining and quarrying

This report on the (i) Petroleum and Natural Gas and (ii) Salt and Miscellaneous Non-metalliferous Mining and Quarrying Industries relates to establishments engaged wholly or mainly in extracting and refining salt (at mine or pit) and salt processing and packing; mining or quarrying alum, barytes, graphite, gypsum and fluorspar etc; exploration (including boring) for and extracting petroleum on land and off-shore (including drilling contractors with offices in the UK); mining oil shale (including oil shale retorting). Petroleum includes natural gas and natural gas condensates. Producers' off-shore pipe lines are included but land pipe line terminals owned by associated companies or the Gas Council are excluded.

The industries correspond to minimum list headings 104, 109(3) and 109(4) respectively in the Standard Industrial Classification (revised 1968) which was used for the first time as a basis of classification in the 1968 census, when they were reported as part 6. The definition of the industries is the same for the 1963, 1968 and 1970 censuses.

The report is presented in three parts:- A. Petroleum and Natural Gas, Salt and Miscellaneous Non-metalliferous Mining and Quarrying, 1963, 1968 and 1970. B. Petroleum and Natural Gas, 1970. C. Salt and Miscellaneous Non-metalliferous Mining and Quarrying, 1970.

Pits and quarries operated by establishments in the Miscellaneous Building Materials and Mineral Products Industry are not included in this report unless they had their own separate set of accounts.

Mining and quarrying industries were excluded from the censuses for 1963, 1968 and 1970 taken in Northern Ireland and this report relates, therefore, only to Great Britain in respect of land operations. For off-shore operations this report relates to the United Kingdom part of the continental shelf.

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 TABLES

C5.2

Table No.	Title	Page
Section I - Estimates for all Great Britain establishments in the industries		
1	Net output, 1963, 1968 and 1970 - Establishments classified to the industries	
1a	Combined analysis, 1963, 1968 and 1970	C5.3
1b	Separate analysis, 1970	C5.4
2	Capital expenditure and stocks, 1963, 1968 and 1970 - Establishments classified to the industries	
2a	Combined analysis, 1963, 1968 and 1970	C5.5
2b	Separate analysis, 1970	C5.6
3	Analysis of establishments by size, 1970 - Establishments classified to the industries	
3a	Combined analysis	C5.7
3b	Petroleum and natural gas	C5.8
3c	Salt and miscellaneous non-metalliferous mining and quarrying	C5.9
4	Percentage analysis of employees by age and sex, 1970 - Establishments classified to the industries	C5.10
5	Regional distribution of employment, net capital expenditure and net output, 1970 - Establishments classified to the industries	
5a	Combined analysis	C5.11
5b	Petroleum and natural gas	C5.12
5c	Salt and miscellaneous non-metalliferous mining and quarrying	C5.13
Section II - Analysis of returns received		
6	Analysis of net output of returns received from establishments employing 25 or more persons, 1963, 1968 and 1970	
6a	Combined analysis, 1963, 1968 and 1970	C5.14
6b	Separate analysis, 1968 and 1970	C5.15
7	Percentage analysis of twelve-month periods covered by returns from establishments employing 25 or more persons, 1970	C5.16

TABLE 1a

C5.3

Net output 1963, 1968 and 1970

All Great Britain establishments classified to the Petroleum and natural gas, Salt and miscellaneous non-metalliferous mining and quarrying industries (a) (b)

	Unit	1963	1968	1970
Enterprises	Number	39	57	70
Establishments (c)	"	64	73	79
Sales of goods produced and work done (d)	£'000	22,611	35,153	78,551
Services rendered to other organisations (e)	"			
Goods merchanted or factored	"	746	1,482	423
Canteen takings	"			
Total sales and work done	"	23,357	36,635	80,292
Value of outward transport carried out by establishments' own staff on goods sold	"	636	310	387
Change during the year, goods on hand for sale	"	+ 74	- 346	- 13
Gross output (f)	"	26,654	42,226	85,304
Cost of purchases	"	7,088	8,534	21,358
Change during the year, stocks of materials, stores and fuel	"	+ 274	- 197	+ 569
Payments to other organisations				
for work done on materials given out	"	5	24	43
for transport				
inwards on materials and fuel purchased				
by road	"	14	48	22
by rail or other means	"			
outwards on goods sold				
by road	"	2,587	3,980	3,703
by rail or other means (g)	"			
Royalties, etc.	"	3,944
Total sales	"	9,419	14,432	33,309
Net output	"	17,235	27,794	51,996
Total employment (including working proprietors) (h)	Thousands	6.2	4.0	4.2
Net output per head	£	2,793	6,931	12,333

(a) See fifth paragraph of the introduction to this report.

(b) Including estimates for establishments not making satisfactory returns and for establishments employing less than 25 persons.

(c) See definition of establishments in notes on page (iv).

(d) Sales of products are valued at ex-mine or ex-works prices, the cost of transport being shown separately, but, for 1968 and 1970, sales in the Petroleum and Natural Gas sector of this report are valued on a well-head or delivered basis.

(e) Amounts charged for hiring out plant, machinery or other goods, or for providing transport, or for any technical or other services rendered.

(f) Includes cost of outward transport on goods sold in the Salt and miscellaneous non-metalliferous mining and quarrying industries; see notes on page (v).

(g) For 1963 and 1968, payments for postal services are excluded.

(h) Average number of persons employed during the year.

TABLE 1b

C5.4

Net output, 1970

All Great Britain establishments classified to the Petroleum and natural gas, Salt and miscellaneous non-metalliferous mining and quarrying industries (a) (b)

	Unit	Petroleum and natural gas	Salt and miscellaneous non-metalliferous mining and quarrying
Enterprises	Number	9	61
Establishments (c)	"	12	67
Sales of goods produced and work done (d)	£'000	55,937	23,915
Services rendered to other organisations (e)	"		
Goods merchanted or factored	"		
Canteen takings	"	17	422
Total sales and work done	"	55,954	24,338
Value of outward transport carried out by establishments' own staff on goods sold	"	..	387
Change during the year, goods on hand for sale	"	- 7	- 6
Gross output	"	55,947	29,357 (f)
Cost of purchases	"	12,721	8,637
Change during the year, stocks of materials, stores and fuel	"	+ 384	+ 185
Payments to other organisations			
for work done on materials given out	"	5	59
for transport	"		
inwards on materials and fuel purchased	"		
by road	"		
by rail or other means	"		
outwards on goods sold	"		
by road	"	84	3,620
by rail or other means	"	3,789	1,018
Royalties, etc.	"	3,944	..
Total costs	"	20,159	13,149
Net output	"	35,788	16,208
Total employment (including working proprietors) (g)	Thousands	1.1	3.1
Net output per head	£	33,107	5,170

(a) See fifth paragraph of the introduction to this report.

(b) Including estimates for establishments not making satisfactory returns and for establishments employing less than 25 persons.

(c) See definition of establishments in notes on page (iv).

(d) Sales of products are valued at ex-mine or ex-works prices, the cost of transport being shown separately, but, for 1968 and 1970, sales in the Petroleum and Natural Gas sector of this report are valued on a well-head or delivered basis.

(e) Amounts charged for hiring out plant, machinery or other goods, or for providing transport, or for any technical or other services rendered.

(f) Includes cost of outward transport on goods sold; see notes on page (v).

(g) Average number of persons employed during the year.

TABLE 2a

C5.5

Capital expenditure and stocks, 1963, 1968 and 1970

All Great Britain establishments classified to the Petroleum and natural gas, Salt and miscellaneous non-metalliferous mining and quarrying industries (a) (b)

	1963	1968	1970 (c)
Capital expenditure	£'000	£'000	£'000
New building work	552	159	3,229
Land and existing buildings			
Acquisitions	37	- 1 (d)	+ 217 (d)
Disposals	110		
Plant and machinery			
Acquisitions	1,575	13,166	38,753
Disposals	43	27	777
Vehicles			
Acquisitions	127	87	647
Disposals	49	24	41
Total net capital expenditure (d)	2,088	13,361	42,028
Stocks at end of year			
Materials, stores and fuel	1,607	2,268	4,576
Goods on hand for sale	581	383	373
Total stocks	2,188	2,651	4,949

(a) See fifth paragraph of the introduction to this report.

(b) Including estimates for establishments not making satisfactory returns and for establishments employing less than 25 persons.

(c) Capital expenditure in respect of establishments where production had not commenced before the end of the year, is included for 1970.

(d) Acquisitions less disposals.

TABLE 2b

C5.6

Capital expenditure and stocks, 1970

All Great Britain establishments classified to the Petroleum and natural gas, Salt and miscellaneous non-metalliferous mining and quarrying industries (a) (b)

	Petroleum and natural gas	Salt and miscellaneous non-metalliferous mining and quarrying
Capital expenditure (c)	£'000	£'000
New building work		
Land and existing buildings	+ 2,702 (d)	+ 743 (d)
Acquisitions		
Disposals		
Plant and machinery		
Acquisitions	36,273	2,479
Disposals	679	98
Vehicles		
Acquisitions	+ 20 (d)	+ 587 (d)
Disposals		
Total net capital expenditure (d)	38,316	3,712
Stocks at end of year		
Materials, stores and fuel	3,060	1,516
Goods on hand for sale	-	373
Total stocks	3,060	1,888

(a) See fifth paragraph of the introduction to this report.

(b) Including estimates for establishments not making satisfactory returns and for establishments employing less than 25 persons.

(c) Capital expenditure in respect of establishments where production had not commenced before the end of the year, is included for 1970.

(d) Acquisitions less disposals.

TABLE 3a

Analysis of establishment by size, 1970

All Great Britain establishments classified to the Petroleum and natural gas, Salt and miscellaneous non-metalliferous mining and quarrying industries (a) (b)

Size group (c)	Enterprises (d)	Estab- lishments (e)	Total employment (c)	Employees		Wages and salaries		Wages and salaries per head		Total sales and work done (g)	Gross output	Net output	Net output per head	Capital expenditure (net) (h)	Total stocks at end of year
				Operatives	Others (f)	Operatives	Others (f)	Operatives	Others (f)						
	Number	Number	Number	Number	Number	£'000	£'000	£	£	£'000	£'000	£'000	£	£'000	£'000
1-10	39	39	236	896	215	1,286	531	1,435	2,471	15,763	16,406	14,124	12,599	2,751	1,065
11-24	14	14	236												
25-49	9	9	330												
50-99	4	5	319												
100-199	6	8	1,086	662	424	932	1,084	1,407	2,556	31,151	31,326	19,725	18,163	12,046	1,131
200 and over	4	4	2,009	1,319	690	1,834	1,730	1,391	2,508	33,378	37,573	18,148	9,033	27,231	2,753
Total	70	79	4,216	2,877	1,329	4,052	3,345	1,408	2,517	80,292	85,304	51,996	12,333	42,028	4,949

(a) See fifth paragraph of the introduction to this report.

(b) Including estimates for establishments not making satisfactory returns and for establishments employing less than 25 persons.

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

(d) The sum of the figures for the size groups exceeds the total for the industry to the extent that enterprises made returns for establishments in more than one size group.

(e) See definition of establishments in notes on page (iv).

(f) Administrative, technical and clerical employees.

(g) Including sales of goods merchanted or factored and canteen takings. Also includes services rendered to other organisations (amounts charged for hiring out plant, machinery or other goods, for providing transport, or for technical or other services rendered).

(h) Acquisitions less disposals.

TABLE 3b

Analysis of establishment by size, 1970

All Great Britain establishments classified to the Petroleum and natural gas industry (a)

Size group (b)	Enterprises (c)	Estab-lishments (d)	Total employment (b)	Employees		Wages and salaries		Wages and salaries per head		Total sales and work done (f)	Gross output	Net output	Net output per head	Capital expenditure (net) (g)	Total stocks at end of year
				Operatives	Others (e)	Operatives	Others (e)	Operatives	Others (e)						
	Number	Number	Number	Number	Number	£'000	£'000	£	£	£'000	£'000	£'000	£	£'000	£'000
1-99	7	8	283	194	89	379	337	1,954	3,791	11,613	11,612	11,196	39,561	2,647	737
100 and over	3	4	798	286	512	389	1,699	1,360	3,317	44,341	44,336	24,592	30,818	35,669	2,323
Total	9	12	1,081	480	601	768	2,036	1,600	3,388	55,954	55,947	35,788	33,107	38,316	3,060

(a) See fifth paragraph of the introduction to this report.

(b) Average number employed during the year by the establishment.

(c) The sum of the figures for the size groups exceeds the total for the industry to the extent that enterprises made returns for establishments in more than one size group.

(d) See definition of establishments in notes on page (iv).

(e) Administrative, technical and clerical employees.

(f) Including sales of goods merchanted or factored and canteen takings. Also includes services rendered to other organisations (amounts charged for hiring out plant, machinery or other goods, for providing transport, or for technical or other services rendered).

(g) Acquisitions less disposals.

05.8

TABLE 3c

Analysis of establishment by size, 1970

All Great Britain establishments classified to the Salt and miscellaneous non-metalliferous mining and quarrying industry (a) (b)

Size group (c)	Enterprises (d)	Estab-lishments (e)	Total employment (c)	Employees		Wages and salaries		Wages and salaries per head		Total sales and work done (g)	Gross output	Net output	Net output per head	Capital expenditure (net) (h)	Total stocks at end of year
				Operatives	Others (f)	Operatives	Others (f)	Operatives	Others (f)						
	Number	Number	Number	Number	Number	£'000	£'000	£	£	£'000	£'000	£'000	£	£'000	£'000
1-10	38	38	227	702	126	907	194	1,292	1,538	4,150	4,794	2,928	3,494	104	328
11-24	12	12	200												
25-99	7	9	411												
100 and over	5	8	2,297	1,695	602	2,377	1,116	1,402	1,853	20,188	24,563	13,280	5,781	3,608	1,560
Total	61	67	3,135	2,397	728	3,284	1,309	1,370	1,799	24,338	29,357	16,208	5,170	3,712	1,888

(a) See fifth paragraph of the introduction to this report.

(b) Including estimates for establishments not making satisfactory returns and for establishments employing less than 25 persons.

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

(d) The sum of the figures for the size groups exceeds the total for the industry to the extent that enterprises made returns for establishments in more than one size group.

(e) See definition of establishments in notes on page (iv).

(f) Administrative, technical and clerical employees.

(g) Including sales of goods merchanted or factored and canteen takings. Also includes services rendered to other organisations (amounts charged for hiring out plant, machinery or other goods, for providing transport, or for technical or other services rendered).

(h) Acquisitions less disposals.

05.9

TABLE 4

C5.10

Percentage analysis of employees, by age and sex, 1970

All Great Britain establishments classified to the Petroleum and natural gas, Salt and miscellaneous non-metalliferous mining and quarrying industries (a)

	Ages	Males	Females	All employees
Petroleum and Natural Gas (b)	Under 18	1	-	1
	18 and over	86	13	99
	All ages	87	13	100.0
Salt and Miscellaneous Non-Metalliferous Mining and Quarrying (c)	Under 18	2	1	3
	18 and over	88	9	97
	All ages	90	10	100.0

Source: Department of Employment

(a) See fifth paragraph of the introduction to this report.

(b) The percentages relate to the numbers employed (excluding working proprietors) at mid-June, 1970.

(c) The percentages relate to the numbers employed (excluding working proprietors) in the 'Other mining and quarrying' industries, minimum list heading 109 at mid-June 1970. In the 1970 census the employment of the 'Salt and miscellaneous non-metalliferous mining and quarrying' industry represented 66 per cent of the employment of minimum list heading 109 as a whole.

TABLE 5a

C5.11

Regional distribution of employment, net capital expenditure and net output, 1970.

All Great Britain establishments classified to the Petroleum and natural gas, Salt and miscellaneous non-metalliferous mining and quarrying industries.

This table is not appropriate to a combined analysis of the industries.

TABLE 5b

C5.12

Regional distribution of employment, net capital expenditure and net output, 1970.

All Great Britain establishments classified to the Petroleum and natural gas industry.

This table is not applicable to this industry.

TABLE 5c

C5.13

Regional distribution of employment, net capital expenditure and net output, 1970

All Great Britain establishments classified to the Salt and miscellaneous non-metalliferous mining and quarrying industry (a)

Area	Average number employed (b)		Net capital expenditure (c)		Net output and employment in the region of establishments with more than 80 per cent of their employment in the region (d)		
	Thousands	per cent of Great Britain	£'000	per cent of Great Britain	Estimated net output £'000	Average number employed as a percentage of total average number employed in the industry in the region	Net output as percentage of total of the industry in the Great Britain
Standard Regions of England							
North	0.4	14.0	383	10.3	722	58.4	4.5
Yorkshire and Humberside	*	*	*	*	*	*	*
East Midlands	*	*	*	*	*	*	*
East Anglia	*	*	*	*	*	*	*
South East	*	*	*	*	*	*	*
South West	*	*	*	*	*	*	*
West Midlands	0.3	8.5	7	0.2	187	18.4	1.2
North West	1.3	42.0	2,199	59.2	7,103	81.9	43.8
England	*	*	*	*	*	*	*
Wales	*	*	*	*	*	*	*
Scotland	*	*	*	*	*	*	*
Unallocated(e)	-	-	-	-	5,452	-	33.7
Great Britain	3.1	100.0	3,712	100.0	16,208		100.0

(a) See fifth paragraph of the introduction to this report.

(b) Including working proprietors.

(c) New building work plus acquisitions less disposals of land and existing buildings, plant and machinery and vehicles: including capital expenditure at establishments not yet in production.

(d) Where a census return covered addresses in two or more regions an estimate was made of the net output 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 at each address covered by a return was proportionate to employment at the address. The establishment's residual net output was included in unallocated net output.

(e) Includes estimates of net output for establishments not making satisfactory returns and establishments employing less than 25 employees, and unallocated net output of establishments covering addresses in two or more regions.

TABLE 6a

C5.14

Analysis of net output of returns received from Great Britain establishments employing 25 or more persons, 1963, 1968 and 1970 (a) (b)

	Unit	1963	1968	1970
Enterprises	Number	18	18	18
Establishments (c)	"	42	27	25
Sales of goods produced and work done (d)	£'000	} 22,004	} 33,179	} 75,353
Services rendered to other organisations (e)	"			
Goods merchanted or factored	"			
Canteen takings	"			
Total sales and work done	"	22,729	34,506	77,050
Value of outward transport carried out by establishments' own staff on goods sold	"	618	278	353
Change during the year, goods on hand for sale	"	+ 72	- 310	- 61
Gross output (f)	"	25,943	39,595	81,594
Cost of purchases	"	6,901	7,961	20,280
Change during the year, stocks of materials, stores and fuel	"	+ 267	- 132	+ 556
Payments to other organisations				
for work done on materials given out	"	5	21	28
for transport				
inwards on materials and fuel purchased				
by road	"	} 14	} 43	} 20
by rail or other means	"			
outwards on goods sold				
by road	"	} 2,523	} 5,122	} 3,344
by rail or other means (g)	"			
Royalties, etc.	"	3,944
Total costs	"	9,175	13,280	31,841
Net output	"	16,768	26,315	49,753
Total employment (including working proprietors) (h)	Thousands	6.0	3.7	3.5
Net output per head	£	2,789	7,184	14,043

- (a) See fifth paragraph of the introduction to this report.
- (b) Some establishments employing fewer than 25 persons were included in returns for larger establishments. These amounted to 7 in 1963, 1 in 1968 and 1 in 1970.
- (c) See definition of establishments in notes on page (iv).
- (d) Sales of products are valued at ex-mine or ex-works prices, the cost of transport being shown separately, but, for 1968 and 1970, sales in the Petroleum and Natural Gas sector of this report are valued on a well-head or delivered basis.
- (e) Amounts charged for hiring out plant, machinery or other goods, for providing transport or for any technical or other services rendered.
- (f) Includes cost of outward transport on goods sold in the Salt and miscellaneous non-metalliferous mining and quarrying industries; see notes on page (v).
- (g) For 1963 and 1968, payments for postal services are excluded.
- (h) Average number of persons employed during the year.

TABLE 6b

C5.15

Analysis of net output of returns received from Great Britain establishments employing 25 or more persons, 1970 (a)

	Unit	Petroleum and natural gas	Salt and miscellaneous non-metalliferous mining and quarrying
Enterprises	Number	9	9
Establishments (b)	"	12	13
Sales of goods produced and work done (c)	£'000	} 55,937	} 20,716
Services rendered to other organisations (d)	"		
Goods merchanted or factored	"		
Canteen takings	"		
Total sales and work done	"	55,954	21,096
Value of outward transport carried out by establishments' own staff on goods sold	"	..	353
Change during the year, goods on hand for sale	"	- 7	- 54
Gross output	"	55,947	25,647 (e)
Cost of purchases	"	12,721	7,559
Change during the year, stocks of materials, stores and fuel	"	+ 384	+ 171
Payments to other organisations			
for work done on materials given out			
for transport			
inwards on materials and fuel purchased	"	} 5	} 43
by road	"		
by rail or other means	"		
outwards on goods sold			
by road	"	84	3,260
by rail or other means	"	3,789	991
Royalties, etc.	"	3,944	..
Total costs	"	20,159	11,682
Net output	"	35,788	13,965
Total employment (including working proprietors) (f)	Thousands	1.1	2.5
Net output per head	£	33,107	5,679

- (a) See fifth paragraph of the introduction to this report.
- (b) See definition of establishments in notes on page (iv).
- (c) Sales of products are valued at ex-mine or ex-works prices, the cost of transport being shown separately, but for 1970, sales in the Petroleum and Natural Gas sector of this report are valued on a well-head or delivered basis.
- (d) Amounts charged for hiring out plant, machinery or other goods, for providing transport or for any technical or other services rendered.
- (e) Includes cost of outward transport on goods sold; see notes on page (v).
- (f) Average number of persons employed during the year.

TABLE 7

C5.16

Percentage analysis of twelve-month periods covered by returns received from Great Britain establishments employing 25 or more persons, 1970 (a)

Accounting year ended	Petroleum and natural gas		Salt and miscellaneous non-metalliferous mining and quarrying	
	Percentage of total returns received	Percentage of total numbers employed	Percentage of total returns received	Percentage of total numbers employed
	per cent	per cent	per cent	per cent
1970 April (b)	0.0	0.0	7.7	2.0
May	0.0	0.0	0.0	0.0
June	0.0	0.0	0.0	0.0
July	0.0	0.0	0.0	0.0
August	0.0	0.0	0.0	0.0
September	0.0	0.0	30.8	23.7
October	0.0	0.0	0.0	0.0
November	6.3	5.0	0.0	0.0
December	93.7	95.0	15.4	42.6
1971 January	0.0	0.0	0.0	0.0
February	0.0	0.0	0.0	0.0
March (c)	0.0	0.0	46.1	31.7
	100.0	100.0	100.0	100.0

(a) See fifth paragraph of the introduction to this report.

(b) From 6th April.

(c) Including returns made for twelve-month period ending 1st to 5th April 1971.

NOTES

These notes give the main information needed for interpreting the figures in the industry reports, (more detailed information about the census is given in a separate booklet - "Introductory Notes", Part C1 of the Report on the Census of Production for 1970).

GENERAL INFORMATION

Changes compared with 1968

The questions asked in the 1970 census were similar to those in the 1968 census with certain exceptions. In particular the 1970 census returns did not ask for details of:-

- (i) purchases or sales by commodities
- (ii) payments of rates
- (iii) payments for repairs and maintenance
- (iv) costs of operating road goods vehicles

The amounts payable to other organisations for transport of goods however, did include the cost of the Post Office parcel services.

Other changes concern the treatment of firms employing less than 25 persons and the rules used for classifying establishments to industry. Any such changes are explained in the following paragraphs, or in the introductions to the industry reports, or by footnotes to the tables.

Industrial classification

Establishments were classified to industries on the basis of major activity in conformity with the third edition of the Standard Industrial Classification (Revised 1968). Normally an establishment was classified to an industry if its sales of the principal products of that industry accounted for a greater proportion of its total sales than in its sales of the principal products of any other industry. Classification of an establishment in this census was based on the establishment's return to the Census of Production, 1968.

Establishments added to the register subsequent to the 1968 census were classified on the basis of the description of the business given by the respondent.

Coverage

Detailed census returns were generally sought only from establishments employing on average 25 or more persons, but in industries where firms employing less than 25 persons account for a relatively high proportion of total employment and output the exemption limit was lowered to 11. Census returns were also sent to establishments whose employment was not known to the Business Statistics Office at the time of despatch; if their employment was below the exemption limit for their industry establishments were asked to supply figures only of total employment and total sales.

TERMS USED IN THE CENSUS REPORT

Average number employed

Establishments were required to state the number of persons on the payroll (i.e. whose national insurance cards were held by them) on the average during the year of return, whether full time or part time

employees. Separate figures were required for (a) administrative, technical and clerical employees and (b) all other employees (operatives). Averages could be calculated from figures relating to the last week of each calendar month. Establishments were also required to state the number of working proprietors where appropriate and these are included in total employment figures. Outworkers (i.e. persons employed by establishments who worked in their own homes etc. on materials supplied by the establishments) are excluded.

The figures include persons engaged on merchanting or factoring and canteen workers where particulars in respect of these activities could not be excluded from the return.

Working Proprietors

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 fixed wage or salary; but 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

Administrative, technical and clerical employees include managing and other directors in receipt of a definite wage, salary or commission, managers, superintendents and works foremen; research, experimental development, technical and design employees (other than operatives); draughtsmen and tracers; editorial staff, staff reporters, canvassers, competition and advertising staff; travellers; and office (including works office) employees.

Operatives includes all other classes of employees, that is, broadly speaking, all manual wage earners. They include those employed in and about the factory or works; operatives employed in power houses, transport work (including roundsmen) stores, warehouses, shops and canteens; inspectors, viewers and similar workers; maintenance workers, and cleaners. Operators engaged in outside work of erecting, fitting etc. are also included, but outworkers are excluded.

Capital expenditure

(a) New building work

This represents the cost incurred during the year of new building and other constructional work (including office buildings, canteens and the like used in connection with the business covered by the return, but not dwelling houses for employees). The value is that charged to capital account during the year of return; it includes expenditure on new buildings or on the extension or reconstruction of old buildings, the value of works of a capital nature carried out by the establishment's own staff and the cost of any newly constructed buildings purchased. Figures shown include any legal charges, stamp duties, agents commissions, etc.

(iii)

(b) Land and existing buildings

The items shown are the capital cost of freeholds purchased and the capital cost of premium payable for leaseholds acquired (excluding the value of any assets acquired in taking over an existing business), and 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 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. 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.

Capital expenditure during the year in respect of manufacturing establishments where production had not started before the end of the year is excluded from the figures for both 1963 and 1968 but is included in the figures for 1970.

Enterprise

The term enterprise is used in this report to mean one or more establishment under common ownership or control. An enterprise normally consists of a single establishment, more than one establishment owned by the same firm, or a number of establishments owned by a parent company and its subsidiary companies. Information about the relationship between constituent companies of enterprises was obtained mainly from published sources such as the Stock Exchange Year Book supplemented by information from company reports and information supplied by establishments. The information available is not complete but covers the largest and most important groups of industrial establishments and is believed sufficient to provide a worth-while basis for analysis.

Establishment

The definition of the establishment differed between the Censuses for 1963, 1968 and 1970. The definitions used were as follows:-

1963: the establishment was normally the premises under the same ownership or management at a particular address.

1968: the establishment was defined, in accordance with Standard Industrial Classification (Revised 1968), as being the smallest unit which could provide the information normally required for an economic census, for example, employment, expenses, turnover and capital formation. Sometimes activities which are conducted as a single business are carried on at a number of addresses. In 1968 where the activities of such a business were closely integrated and the addresses, termed local units, were in close proximity the establishment was defined to cover the combined activities and a single return was accepted. When the activities were closely integrated

but the addresses were not in close proximity a combined return was accepted but the individual addresses were treated - in the count of establishments in an industry, for instance - as separate establishments.

1970: the practice of treating as multi-unit establishments those businesses with closely integrated activities at a number of addresses in close proximity was extended to all those businesses where the local units were at more than one geographical location and detailed census information was not available for each unit. Separate figures were obtained, however, of employment and capital expenditure at each unit. The effect of this change is to reduce somewhat the number of larger establishments as compared with 1968.

Gross output

The gross output of an industry is the aggregate value of goods made and other work done during the year by the establishments classified to the industry. It is derived by adding to the value of sales and work done the value of stocks of goods on hand for sale at the end of the year and the cost of outward transport and subtracting the value of goods on hand for sale at the beginning of the year.

Net output

The net output of an industry represents the value added to materials by the process of production. It includes the gross margin on any merchanted or factored goods sold. Net output has been obtained by deducting from the gross output the costs of purchases adjusted for stock changes, payments for work given out to other firms, and payments to other organisations for transport.

Net output per person employed

The figures of net output per person employed 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, technical and clerical employees and working proprietors, but excluding outworkers.

Purchases

Purchases include the cost of materials and components bought for use in production; of fuel and electricity for all purposes; of packaging materials including the cost of returnable cases and containers when first purchased; of workshop materials, office materials and materials for repairs to establishment's own buildings, plants and vehicles when carried out by their own work people included in the returns; of consumable tools; and of parts for machinery purchased during the year as replacements. Water charges are also included. In general, purchases of goods for merchenting or factoring and canteen supplies are included. Materials supplied by customers for processing are excluded, as are all purchases charged to capital account.

The values shown include any duty paid (less rebate, etc.) but 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 establish-

ment's own separate transport organisations for delivery of materials and fuel are therefore, excluded. Materials purchased overseas are included at their c.i.f. cost plus any duty payable if the cost of transport from the docks was not included in the invoiced price, but at their full delivery cost if invoiced "carriage paid home". 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.

Sales

Sales are in respect of minerals raised or goods produced by the business covered by the return, and waste products. Any machinery or other capital items produced for use in the business covered by the return are included, the value being that adopted in the establishment's asset accounts. Goods sold without being subjected to any manufacturing process (i.e. merchanted or factored) and canteen takings are included.

The value shown for sales is the net selling value, defined, in the case of mine or quarry products, as the amount charged to customers whether at ex-mine or ex-quarry prices or, in the case of other goods, at ex-works prices, excluding any trade discounts, agents' commissions, allowances for returnable cases, purchase tax etc; the net amount charged for packaging materials is included. Goods charged on a delivered basis to customers overseas are included at the f.o.b. value.

Goods produced in one establishment and transferred to another establishment of the same firm not covered by the return were treated as sales by the producing establishment and valued as far as possible as if they had been sold to an independent purchaser. Goods transferred to wholesale or retail selling organisations for which separate accounts were kept were valued on the same basis.

To the extent that sales of minerals raised and finished products of one establishment constitute the materials purchased by another, total figures of the value of sales (and of materials and fuel purchased) include an element of duplication. In some industries e.g. motor vehicle manufacturing, and woollen and worsted, this duplication is substantial; and aggregates of the figures for a number of industries contain significantly greater amounts of duplication.

For work done on commission, sub-contract work, etc., the value shown is the total amount charged for the work, including the value of any materials bought and used in such work.

Services rendered

This represents the amounts charged for hiring out plant, machinery and other goods, providing transport, or for any technical or other services rendered to other organisations. It includes amounts credited for similar services rendered to other establishments of the same enterprise not covered by the return.

Standard Industrial Classification

Industry classification is based on the Standard Industrial Classification (Revised 1968). It is published by H M Stationery Office together with a separate index in the form of an alphabetical list of industries.

Stocks

Values are given of stocks of goods on hand for sale, and of materials and fuel, at the end of the year of return, including any stocks of goods held for merchenting or factoring. Values of the change during the year are also shown.

Transport payments

These represent the total amount paid or credited during the year for both outwards transport of goods sold including waste products and inwards transport of materials and fuel purchased. They include payment to other establishments, and to any separate transport organisation of the same establishment not covered by the return and the cost of outward transport services performed by the business covered by the return. The cost of transport services used in connection with mining and quarrying operations as such and for the transport of employees is excluded. The items included are payments for hired cartage and for inwards and outwards carriage by all forms of inland transport i.e. railways, road haulage, canals, coastwise shipping, air, etc. The estimated cost of freight over private railway lines, etc. to a public railway line or to a point of shipment or sale is also included. Payments made for sea and air freight on goods sold to customers overseas and on materials and fuel purchased from overseas suppliers are excluded.

Wages and salaries

These are amounts paid during the year to operatives and to administrative, 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, insurances, contributory pensions, etc. The value of any payments in kind, travelling expenses, lodging allowances, etc. and employers contributions to national insurances and pension schemes is excluded.

Work given out

The figures shown represent the total amount paid for work done by other establishments (whether part of the same enterprise or not) on materials supplied to them. They do not include payments to individual outworkers or payments for business and other services.

SYMBOLS USED

The following symbols are used throughout the report:

- .. not available
- nil or negligible (less than half the last significant figure)
- * figures cannot be shown owing to risk of disclosing information about individual enterprises.

ROUNDING OF FIGURES

Figures in the tables have, where necessary, been rounded to the nearest final digit; there may, therefore, be apparent slight discrepancies between the sums of the constituent items and the totals shown.

© *Crown copyright* 1973

HER MAJESTY'S STATIONERY OFFICE
Government Bookshops

To be purchased from

49 High Holborn, London WC1V 6HB

13a Castle Street, Edinburgh EH2 3AR

109 St Mary Street, Cardiff CF1 1JW

Brazenose Street, Manchester M60 8AS

50 Fairfax Street, Bristol BS1 3DE

258 Broad Street, Birmingham B1 2HE

80 Chichester Street, Belfast BT1 4JY

*Government publications are also available
through booksellers*