## PA331 OS (42(HA 251) 2 42 R834

# 1979

**HMSO** 

BRITISH LIBRARY

- 9 SEP 1981 OF POLITICAL AND ECONOMIC SCIENCE **Business Statistics Office** 

# **Business Monitor**

## **Report on the Census of Production**

Agricultural machinery (except tractors)



A publication of the Government Statistical Service

# PA331



#### **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. Business Monitors have a code P (for production) followed first by A (indicating that it is an annual series) or O (occasional) or Q (quarterly) or M (monthly) or R (repetitive - i.e. at regular intervals of less than one year but not monthly or quarterly): 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

# 1979

## **Agricultural machinery** (except tractors)

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** 

## Report on the **Census of Production**

#### List of Industry Reports, etc.

PA1001	Introductory notes
PA101	Coal mining
PA102	Stone and slate quarrying and mining
PA103	Chalk, clay, sand and gravel extraction
PA104	Petroleum and natural gas
PA109	Miscellaneous mining and quarrying
PA211	Grain milling
PA212	Bread and flour confectionery
PA213	Biscuits
PA214	Bacon curing, meat and fish products
PA215	Milk and milk products
PA216	Sugar
PA217	Cocoa, chocolate and sugar confectionery
PA218	Fruit and vegetable products
PA219	Animal and poultry foods
PA221	Vegetable and animal oils and fats
PA229.1	Margarine
PA229.2	
PA231	Brewing and malting
PA232	Soft drinks
PA239.1	Spirit distilling and compounding
PA239.2	British wines, cider and perry
PA240	Tobacco
PA261	Coke ovens and manufactured fuel
PA262	Mineral oil refining
PA263	Lubricating oils and greases
PA271.1	Inorganic chemicals
PA271.2	5
PA271.3	
PA272	Pharmaceutical chemicals and preparations
PA273	Toilet preparations
PA274	Paint
PA275	Soap and detergents
PA276	Synthetic resins and plastics materials and
PAZIO	
	synthetic rubber
PA277	Dyestuffs and pigments
PA278	Fertilizers
PA279.1	Polishes
PA279.2	
PA279.3	
PA279.4	
PA279.5	Printing ink
PA279.6	Surgical bandages, etc.
PA279.7	Photographic chemical materials
PA311	Iron and steel (general)
PA312	Steel tubes
PA312 PA313	
PA313	Iron castings, etc.
PA313 PA321	Iron castings, etc. Aluminium and aluminium alloys
PA313 PA321 PA322	Iron castings, etc. Aluminium and aluminium alloys Copper, brass and other copper alloys
PA313 PA321 PA322 PA <b>323</b>	Iron castings, etc. Aluminium and aluminium alloys Copper, brass and other copper alloys Miscellaneous base metals
PA313 PA321 PA322 PA <b>323</b> PA331	Iron castings, etc. Aluminium and aluminium alloys Copper, brass and other copper alloys
PA313 PA321 PA322 PA <b>323</b>	Iron castings, etc. Aluminium and aluminium alloys Copper, brass and other copper alloys Miscellaneous base metals
PA313 PA321 PA322 PA <b>323</b> PA331 PA332	Iron castings, etc. Aluminium and aluminium alloys Copper, brass and other copper alloys Miscellaneous base metals Agricultural machinery (except tractors) Metal-working machine tools
PA313 PA321 PA322 PA <b>323</b> PA331 PA332 PA333.1	Iron castings, etc. Aluminium and aluminium alloys Copper, brass and other copper alloys Miscellaneous base metals Agricultural machinery (except tractors) Metal-working machine tools Pumps
PA313 PA321 PA322 PA323 PA331 PA332 PA333.1 PA333.2	Iron castings, etc. Aluminium and aluminium alloys Copper, brass and other copper alloys Miscellaneous base metals Agricultural machinery (except tractors) Metal-working machine tools Pumps Valves
PA313 PA321 PA322 PA323 PA331 PA332 PA333.1 PA333.2 PA333.3	Iron castings, etc. Aluminium and aluminium alloys Copper, brass and other copper alloys Miscellaneous base metals Agricultural machinery (except tractors) Metal-working machine tools Pumps Valves Compressors and fluid power equipment
PA313 PA321 PA322 PA323 PA331 PA332 PA333.1 PA333.2 PA333.3 PA334	Iron castings, etc. Aluminium and aluminium alloys Copper, brass and other copper alloys Miscellaneous base metals Agricultural machinery (except tractors) Metal-working machine tools Pumps Valves Compressors and fluid power equipment Industrial engines
PA313 PA321 PA322 PA323 PA331 PA332 PA333.1 PA333.2 PA333.3	Iron castings, etc. Aluminium and aluminium alloys Copper, brass and other copper alloys Miscellaneous base metals Agricultural machinery (except tractors) Metal-working machine tools Pumps Valves Compressors and fluid power equipment
PA313 PA321 PA322 PA323 PA331 PA332 PA333.1 PA333.2 PA333.3 PA334	Iron castings, etc. Aluminium and aluminium alloys Copper, brass and other copper alloys Miscellaneous base metals Agricultural machinery (except tractors) Metal-working machine tools Pumps Valves Compressors and fluid power equipment Industrial engines Textile machinery and accessories
PA313 PA321 PA322 PA323 PA331 PA332 PA333.1 PA333.2 PA333.3 PA334 PA335 PA336	Iron castings, etc. Aluminium and aluminium alloys Copper, brass and other copper alloys Miscellaneous base metals Agricultural machinery (except tractors) Metal-working machine tools Pumps Valves Compressors and fluid power equipment Industrial engines Textile machinery and accessories Construction and earth-moving equipment
PA313 PA321 PA322 PA323 PA331 PA332 PA3331 PA3332 PA333 PA334 PA335 PA336 PA337	Iron castings, etc. Aluminium and aluminium alloys Copper, brass and other copper alloys Miscellaneous base metals Agricultural machinery (except tractors) Metal-working machine tools Pumps Valves Compressors and fluid power equipment Industrial engines Textile machinery and accessories Construction and earth-moving equipment Mechanical handling equipment
PA313 PA321 PA322 PA323 PA331 PA332 PA3331 PA3332 PA3333 PA334 PA335 PA336 PA337 PA338	Iron castings, etc. Aluminium and aluminium alloys Copper, brass and other copper alloys Miscellaneous base metals Agricultural machinery (except tractors) Metal-working machine tools Pumps Valves Compressors and fluid power equipment Industrial engines Textile machinery and accessories Construction and earth-moving equipment Mechanical handling equipment Office machinery
PA313 PA321 PA322 PA323 PA331 PA332 PA333.1 PA333.2 PA333.3 PA334 PA335 PA336 PA336 PA337 PA338 PA339.1	Iron castings, etc. Aluminium and aluminium alloys Copper, brass and other copper alloys Miscellaneous base metals Agricultural machinery (except tractors) Metal-working machine tools Pumps Valves Compressors and fluid power equipment Industrial engines Textile machinery and accessories Construction and earth-moving equipment Mechanical handling equipment Office machinery Mining machinery
PA313 PA321 PA322 PA323 PA331 PA332 PA333.1 PA332 PA333.2 PA3334 PA335 PA336 PA336 PA337 PA338 PA339.1 PA339.2	Iron castings, etc. Aluminium and aluminium alloys Copper, brass and other copper alloys Miscellaneous base metals Agricultural machinery (except tractors) Metal-working machine tools Pumps Valves Compressors and fluid power equipment Industrial engines Textile machinery and accessories Construction and earth-moving equipment Mechanical handling equipment Office machinery Mining machinery Printing, bookbinding and paper goods machinery
PA313 PA321 PA322 PA323 PA331 PA332 PA333.1 PA333.2 PA333.3 PA334 PA335 PA336 PA336 PA337 PA338 PA339.1	Iron castings, etc. Aluminium and aluminium alloys Copper, brass and other copper alloys Miscellaneous base metals Agricultural machinery (except tractors) Metal-working machine tools Pumps Valves Compressors and fluid power equipment Industrial engines Textile machinery and accessories Construction and earth-moving equipment Mechanical handling equipment Office machinery Printing, bookbinding and paper goods machinery Refrigerating machinery, space-heating,
PA313 PA321 PA322 PA323 PA331 PA332 PA333.1 PA332 PA333.2 PA3334 PA335 PA336 PA336 PA337 PA338 PA339.1 PA339.2	Iron castings, etc. Aluminium and aluminium alloys Copper, brass and other copper alloys Miscellaneous base metals Agricultural machinery (except tractors) Metal-working machine tools Pumps Valves Compressors and fluid power equipment Industrial engines Textile machinery and accessories Construction and earth-moving equipment Mechanical handling equipment Office machinery Printing, bookbinding and paper goods machinery Refrigerating machinery, space-heating,
PA313 PA321 PA322 PA323 PA331 PA332 PA3331 PA3332 PA333 PA334 PA335 PA336 PA336 PA337 PA338 PA339.1 PA339.2 PA339.3	Iron castings, etc. Aluminium and aluminium alloys Copper, brass and other copper alloys Miscellaneous base metals Agricultural machinery (except tractors) Metal-working machine tools Pumps Valves Compressors and fluid power equipment Industrial engines Textile machinery and accessories Construction and earth-moving equipment Mechanical handling equipment Office machinery Printing, bookbinding and paper goods machinery Refrigerating machinery, space-heating, ventilating and air-conditioning equipment
PA313 PA321 PA322 PA323 PA331 PA332 PA333.1 PA332 PA333.2 PA3334 PA335 PA336 PA336 PA337 PA338 PA339.1 PA339.2	Iron castings, etc. Aluminium and aluminium alloys Copper, brass and other copper alloys Miscellaneous base metals Agricultural machinery (except tractors) Metal-working machine tools Pumps Valves Compressors and fluid power equipment Industrial engines Textile machinery and accessories Construction and earth-moving equipment Mechanical handling equipment Office machinery Mining machinery Printing, bookbinding and paper goods machinery Refrigerating machinery, space-heating, ventilating and air-conditioning equipment Scales and weighing machinery and portable
PA313 PA321 PA322 PA323 PA331 PA332 PA3331 PA332 PA3333 PA334 PA335 PA336 PA336 PA337 PA338 PA339.1 PA339.2 PA339.3	Iron castings, etc. Aluminium and aluminium alloys Copper, brass and other copper alloys Miscellaneous base metals Agricultural machinery (except tractors) Metal-working machine tools Pumps Valves Compressors and fluid power equipment Industrial engines Textile machinery and accessories Construction and earth-moving equipment Mechanical handling equipment Office machinery Mining machinery Printing, bookbinding and paper goods machinery Refrigerating machinery, space-heating, ventilating and air-conditioning equipment Scales and weighing machinery and portable power tools
PA313 PA321 PA322 PA323 PA331 PA332 PA3331 PA3332 PA333 PA334 PA335 PA336 PA336 PA337 PA338 PA339.1 PA339.2 PA339.3	Iron castings, etc. Aluminium and aluminium alloys Copper, brass and other copper alloys Miscellaneous base metals Agricultural machinery (except tractors) Metal-working machine tools Pumps Valves Compressors and fluid power equipment Industrial engines Textile machinery and accessories Construction and earth-moving equipment Mechanical handling equipment Office machinery Mining machinery Printing, bookbinding and paper goods machinery Refrigerating machinery, space-heating, ventilating and air-conditioning equipment Scales and weighing machinery and portable power tools Food and drink processing machinery and
PA313 PA321 PA322 PA323 PA331 PA332 PA3331 PA3332 PA333 PA334 PA335 PA336 PA337 PA339 PA339.1 PA339.2 PA339.3 PA339.5 PA339.7	Iron castings, etc. Aluminium and aluminium alloys Copper, brass and other copper alloys Miscellaneous base metals Agricultural machinery (except tractors) Metal-working machine tools Pumps Valves Compressors and fluid power equipment Industrial engines Textile machinery and accessories Construction and earth-moving equipment Mechanical handling equipment Office machinery Printing, bookbinding and paper goods machinery Printing, bookbinding and paper goods machinery Refrigerating machinery, space-heating, ventilating and air-conditioning equipment Scales and weighing machinery and portable power tools Food and drink processing machinery and packaging and bottling machinery
PA313 PA321 PA322 PA323 PA331 PA332 PA3331 PA332 PA3333 PA334 PA335 PA336 PA336 PA337 PA338 PA339.1 PA339.2 PA339.3	Iron castings, etc. Aluminium and aluminium alloys Copper, brass and other copper alloys Miscellaneous base metals Agricultural machinery (except tractors) Metal-working machine tools Pumps Valves Compressors and fluid power equipment Industrial engines Textile machinery and accessories Construction and earth-moving equipment Mechanical handling equipment Office machinery Mining machinery Printing, bookbinding and paper goods machinery Refrigerating machinery, space-heating, ventilating and air-conditioning equipment Scales and weighing machinery and portable power tools Food and drink processing machinery and
PA313 PA321 PA322 PA323 PA331 PA332 PA333 PA334 PA335 PA336 PA336 PA337 PA339,1 PA339,2 PA339,3 PA339,7 PA339,9	Iron castings, etc. Aluminium and aluminium alloys Copper, brass and other copper alloys Miscellaneous base metals Agricultural machinery (except tractors) Metal-working machine tools Pumps Valves Compressors and fluid power equipment Industrial engines Textile machinery and accessories Construction and earth-moving equipment Mechanical handling equipment Office machinery Mining machinery Printing, bookbinding and paper goods machinery Refrigerating machinery, space-heating, ventilating and air-conditioning equipment Scales and weighing machinery and portable power tools Food and drink processing machinery and packaging and bottling machinery Miscellaneous (non-electrical) machinery
PA313 PA321 PA322 PA323 PA331 PA332 PA333 PA334 PA335 PA336 PA336 PA337 PA338 PA339.1 PA339.2 PA339.3 PA339.5 PA339.7 PA339.9 PA339.9 PA331	Iron castings, etc. Aluminium and aluminium alloys Copper, brass and other copper alloys Miscellaneous base metals Agricultural machinery (except tractors) Metal-working machine tools Pumps Valves Compressors and fluid power equipment Industrial engines Textile machinery and accessories Construction and earth-moving equipment Mechanical handling equipment Office machinery Mining machinery Printing, bookbinding and paper goods machinery Refrigerating machinery, space-heating, ventilating and air-conditioning equipment Scales and weighing machinery and portable power tools Food and drink processing machinery Miscellaneous (non-electrical) machinery Industrial (including process) plant and steelwork
PA313 PA321 PA322 PA323 PA331 PA332 PA3331 PA3332 PA3332 PA333 PA334 PA335 PA336 PA337 PA339.1 PA339.2 PA339.3 PA339.5 PA339.7 PA339.9 PA339.9	Iron castings, etc. Aluminium and aluminium alloys Copper, brass and other copper alloys Miscellaneous base metals Agricultural machinery (except tractors) Metal-working machine tools Pumps Valves Compressors and fluid power equipment Industrial engines Textile machinery and accessories Construction and earth-moving equipment Mechanical handling equipment Office machinery Printing, bookbinding and paper goods machinery Refrigerating machinery, space-heating, ventilating and air-conditioning equipment Scales and weighing machinery and portable power tools Food and drink processing machinery Miscellaneous (non-electrical) machinery Industrial (including process) plant and steelwork Ordnance and small arms
PA313 PA321 PA322 PA323 PA331 PA332 PA3331 PA3332 PA333 PA334 PA335 PA336 PA337 PA338 PA339,1 PA339,3 PA339,3 PA339,5 PA339,7 PA339,7 PA339,9 PA339,7 PA339,9 PA341 PA342 PA349,1	Iron castings, etc. Aluminium and aluminium alloys Copper, brass and other copper alloys Miscellaneous base metals Agricultural machinery (except tractors) Metal-working machine tools Pumps Valves Compressors and fluid power equipment Industrial engines Textile machinery and accessories Construction and earth-moving equipment Mechanical handling equipment Office machinery Printing, bookbinding and paper goods machinery Refrigerating machinery, space-heating, ventilating and air-conditioning equipment Scales and weighing machinery and portable power tools Food and drink processing machinery Industrial (including process) plant and steelwork Ordnance and small arms Ball, roller, plain and other bearings
PA313 PA321 PA322 PA323 PA331 PA332 PA333 PA334 PA333 PA334 PA335 PA336 PA336 PA339 PA339,1 PA339,2 PA339,3 PA339,5 PA339,7 PA339,7 PA339,9 PA341 PA342 PA349,1 PA349,2	Iron castings, etc. Aluminium and aluminium alloys Copper, brass and other copper alloys Miscellaneous base metals Agricultural machinery (except tractors) Metal-working machine tools Pumps Valves Compressors and fluid power equipment Industrial engines Textile machinery and accessories Construction and earth-moving equipment Mechanical handling equipment Office machinery Printing, bookbinding and paper goods machinery Refrigerating machinery, space-heating, ventilating and air-conditioning equipment Scales and weighing machinery and portable power tools Food and drink processing machinery Miscellaneous (non-electrical) machinery Industrial (including process) plant and steelwork Ordnance and small arms Ball, roller, plain and other bearings Precision chains and other mechanical engineering
PA313 PA321 PA322 PA323 PA331 PA332 PA3331 PA3332 PA333 PA334 PA335 PA336 PA337 PA338 PA339,1 PA339,3 PA339,3 PA339,5 PA339,7 PA339,7 PA339,9 PA339,7 PA339,9 PA341 PA342 PA349,1	Iron castings, etc. Aluminium and aluminium alloys Copper, brass and other copper alloys Miscellaneous base metals Agricultural machinery (except tractors) Metal-working machine tools Pumps Valves Compressors and fluid power equipment Industrial engines Textile machinery and accessories Construction and earth-moving equipment Mechanical handling equipment Office machinery Printing, bookbinding and paper goods machinery Refrigerating machinery, space-heating, ventilating and air-conditioning equipment Scales and weighing machinery and portable power tools Food and drink processing machinery Industrial (including process) plant and steelwork Ordnance and small arms Ball, roller, plain and other bearings
PA313 PA321 PA322 PA323 PA331 PA332 PA333 PA333 PA334 PA335 PA336 PA336 PA337 PA338 PA339.1 PA339.2 PA339.3 PA339.5 PA339.7 PA339.7 PA339.7 PA339.9 PA342 PA342 PA342 PA3451	Iron castings, etc. Aluminium and aluminium alloys Copper, brass and other copper alloys Miscellaneous base metals Agricultural machinery (except tractors) Metal-working machine tools Pumps Valves Compressors and fluid power equipment Industrial engines Textile machinery and accessories Construction and earth-moving equipment Mechanical handling equipment Office machinery Mining machinery Printing, bookbinding and paper goods machinery Refrigerating machinery, space-heating, ventilating and air-conditioning equipment Scales and weighing machinery and portable power tools Food and drink processing machinery Miscellaneous (non-electrical) machinery Industrial (including process) plant and steelwork Ordnance and small arms Ball, roller, plain and other mechanical engineering Photographic and document copying equipment
PA313 PA321 PA322 PA323 PA331 PA332 PA331 PA332 PA333 PA334 PA335 PA336 PA337 PA338 PA339.1 PA339.3 PA339.5 PA339.5 PA339.7 PA339.9 PA341 PA342 PA349.1 PA349.2 PA351 PA352	Iron castings, etc. Aluminium and aluminium alloys Copper, brass and other copper alloys Miscellaneous base metals Agricultural machinery (except tractors) Metal-working machine tools Pumps Valves Compressors and fluid power equipment Industrial engines Textile machinery and accessories Construction and earth-moving equipment Mechanical handling equipment Office machinery Printing, bookbinding and paper goods machinery Refrigerating machinery, space-heating, ventilating and air-conditioning equipment Scales and weighing machinery and portable power tools Food and drink processing machinery Miscellaneous (non-electrical) machinery Industrial (including process) plant and steelwork Ordnance and small arms Ball, roller, plain and other bearings Precision chains and other mechanical engineering Photographic and document copying equipment Watches and clocks
PA313 PA321 PA322 PA323 PA331 PA332 PA331 PA332 PA333 PA334 PA335 PA336 PA337 PA338 PA339,1 PA339,3 PA339,3 PA339,5 PA339,7 PA339,7 PA339,7 PA339,9 PA339,7 PA339,9 PA341 PA342 PA351 PA352 PA353	Iron castings, etc. Aluminium and aluminium alloys Copper, brass and other copper alloys Miscellaneous base metals Agricultural machinery (except tractors) Metal-working machine tools Pumps Valves Compressors and fluid power equipment Industrial engines Textile machinery and accessories Construction and earth-moving equipment Mechanical handling equipment Office machinery Printing, bookbinding and paper goods machinery Refrigerating machinery, space-heating, ventilating and air-conditioning equipment Scales and weighing machinery and portable power tools Food and drink processing machinery Industrial (including process) plant and steelwork Ordnance and small arms Ball, roller, plain and other bearings Precision chains and other mechanical engineering Photographic and document copying equipment Watches and clocks Surgical instruments and appliances
PA313 PA321 PA322 PA323 PA331 PA332 PA333 PA334 PA333 PA334 PA335 PA336 PA337 PA339 PA339,1 PA339,2 PA339,3 PA339,5 PA339,7 PA352 PA352 PA353	Iron castings, etc. Aluminium and aluminium alloys Copper, brass and other copper alloys Miscellaneous base metals Agricultural machinery (except tractors) Metal-working machine tools Pumps Valves Compressors and fluid power equipment Industrial engines Textile machinery and accessories Construction and earth-moving equipment Mechanical handling equipment Office machinery Printing, bookbinding and paper goods machinery Refrigerating machinery, space-heating, ventilating and air-conditioning equipment Scales and weighing machinery and portable power tools Food and drink processing machinery Miscellaneous (non-electrical) machinery Industrial (including process) plant and steelwork Ordnance and small arms Ball, roller, plain and other bearings Precision chains and other mechanical engineering Photographic and document copying equipment Watches and clocks Surgical instruments and appliances Scientific and industrial instruments and systems
PA313 PA321 PA322 PA323 PA331 PA332 PA331 PA332 PA333 PA334 PA335 PA336 PA336 PA339 PA339,1 PA339,2 PA339,3 PA339,5 PA339,7 PA353 PA353 PA353 PA353	Iron castings, etc. Aluminium and aluminium alloys Copper, brass and other copper alloys Miscellaneous base metals Agricultural machinery (except tractors) Metal-working machine tools Pumps Valves Compressors and fluid power equipment Industrial engines Textile machinery and accessories Construction and earth-moving equipment Mechanical handling equipment Office machinery Mining machinery Printing, bookbinding and paper goods machinery Refrigerating machinery, space-heating, ventilating and air-conditioning equipment Scales and weighing machinery and portable power tools Food and drink processing machinery Miscellaneous (non-electrical) machinery Industrial (including process) plant and steelwork Ordnance and small arms Ball, roller, plain and other bearings Precision chains and other mechanical engineering Photographic and document copying equipment Watches and clocks Surgical instruments and appliances Scientific and industrial instruments and systems Electrical machinery
PA313 PA321 PA322 PA323 PA331 PA332 PA331 PA332 PA333 PA334 PA335 PA336 PA337 PA338 PA339.1 PA339.2 PA339.3 PA339.5 PA339.7 PA339.9 PA341 PA342 PA341 PA342 PA352 PA353 PA354 PA354 PA361 PA362	Iron castings, etc. Aluminium and aluminium alloys Copper, brass and other copper alloys Miscellaneous base metals Agricultural machinery (except tractors) Metal-working machine tools Pumps Valves Compressors and fluid power equipment Industrial engines Textile machinery and accessories Construction and earth-moving equipment Mechanical handling equipment Office machinery Printing, bookbinding and paper goods machinery Refrigerating machinery, space-heating, ventilating and air-conditioning equipment Scales and weighing machinery and portable power tools Food and drink processing machinery Miscellaneous (non-electrical) machinery Industrial (including process) plant and steelwork Ordnance and small arms Ball, roller, plain and other bearings Precision chains and other mechanical engineering Photographic and document copying equipment Watches and clocks Surgical instruments and appliances Scientific and industrial instruments and systems Electrical machinery Insulated wires and cables
PA313 PA321 PA322 PA323 PA331 PA332 PA331 PA332 PA333 PA334 PA335 PA336 PA336 PA339 PA339,1 PA339,2 PA339,3 PA339,5 PA339,7 PA353 PA353 PA353 PA353	Iron castings, etc. Aluminium and aluminium alloys Copper, brass and other copper alloys Miscellaneous base metals Agricultural machinery (except tractors) Metal-working machine tools Pumps Valves Compressors and fluid power equipment Industrial engines Textile machinery and accessories Construction and earth-moving equipment Mechanical handling equipment Office machinery Printing, bookbinding and paper goods machinery Refrigerating machinery, space-heating, ventilating and air-conditioning equipment Scales and weighing machinery and portable power tools Food and drink processing machinery Miscellaneous (non-electrical) machinery Industrial (including process) plant and steelwork Ordnance and small arms Ball, roller, plain and other bearings Precision chains and other mechanical engineering Photographic and document copying equipment Watches and clocks Surgical instruments and appliances Scientific and industrial instruments and systems Electrical machinery Insulated wires and cables
PA313 PA321 PA322 PA323 PA331 PA332 PA331 PA332 PA333 PA334 PA335 PA336 PA337 PA338 PA339.1 PA339.2 PA339.3 PA339.5 PA339.7 PA339.9 PA341 PA342 PA341 PA342 PA352 PA353 PA354 PA354 PA361 PA362	Iron castings, etc. Aluminium and aluminium alloys Copper, brass and other copper alloys Miscellaneous base metals Agricultural machinery (except tractors) Metal-working machine tools Pumps Valves Compressors and fluid power equipment Industrial engines Textile machinery and accessories Construction and earth-moving equipment Mechanical handling equipment Office machinery Printing, bookbinding and paper goods machinery Refrigerating machinery, space-heating, ventilating and air-conditioning equipment Scales and weighing machinery and portable power tools Food and drink processing machinery Industrial (including process) plant and steelwork Ordnance and small arms Ball, roller, plain and other bearings Precision chains and other mechanical engineering Photographic and document copying equipment Watches and clocks Surgical instruments and appliances Scientific and industrial instruments and systems Electrical machinery Insulated wires and cables Telegraph and telephone apparatus and
PA313 PA321 PA322 PA323 PA331 PA332 PA333 PA334 PA333 PA334 PA335 PA336 PA339 PA339,1 PA339,2 PA339,3 PA339,3 PA339,5 PA339,7	Iron castings, etc. Aluminium and aluminium alloys Copper, brass and other copper alloys Miscellaneous base metals Agricultural machinery (except tractors) Metal-working machine tools Pumps Valves Compressors and fluid power equipment Industrial engines Textile machinery and accessories Construction and earth-moving equipment Mechanical handling equipment Office machinery Printing, bookbinding and paper goods machinery Refrigerating machinery, space-heating, ventilating and air-conditioning equipment Scales and weighing machinery and portable power tools Food and drink processing machinery Miscellaneous (non-electrical) machinery Industrial (including process) plant and steelwork Ordnance and small arms Ball, roller, plain and other bearings Precision chains and other mechanical engineering Photographic and document copying equipment Watches and clocks Surgical instruments and appliances Scientific and industrial instruments and systems Electrical machinery Insulated wires and cables Telegraph and telephone apparatus and equipment
PA313 PA321 PA322 PA323 PA331 PA332 PA331 PA332 PA333 PA334 PA335 PA336 PA339 PA339,1 PA339,2 PA339,3 PA339,5 PA339,7 PA339,7 PA339,7 PA339,7 PA339,7 PA339,7 PA342 PA342 PA342 PA351 PA352 PA353 PA354 PA361 PA363 PA364	Iron castings, etc. Aluminium and aluminium alloys Copper, brass and other copper alloys Miscellaneous base metals Agricultural machinery (except tractors) Metal-working machine tools Pumps Valves Compressors and fluid power equipment Industrial engines Textile machinery and accessories Construction and earth-moving equipment Mechanical handling equipment Office machinery Mining machinery Printing, bookbinding and paper goods machinery Refrigerating machinery, space-heating, ventilating and air-conditioning equipment Scales and weighing machinery and portable power tools Food and dortink processing machinery Miscellaneous (non-electrical) machinery Miscellaneous (non-electrical) machinery Industrial (including process) plant and steelwork Ordnance and small arms Ball, roller, plain and other bearings Precision chains and other mechanical engineering Photographic and document copying equipment Watches and clocks Surgical instruments and appliances Scientific and industrial instruments and systems Electrical machinery Insulated wires and cables Telegraph and telephone apparatus and equipment Radio and electronic components
PA313 PA321 PA322 PA323 PA331 PA332 PA331 PA332 PA333 PA334 PA335 PA336 PA336 PA337 PA338 PA339.1 PA339.2 PA339.3 PA339.5 PA339.7 PA339.7 PA339.9 PA341 PA342 PA341 PA342 PA352 PA353 PA354 PA354 PA361 PA365.1	Iron castings, etc. Aluminium and aluminium alloys Copper, brass and other copper alloys Miscellaneous base metals Agricultural machinery (except tractors) Metal-working machine tools Pumps Valves Compressors and fluid power equipment Industrial engines Textile machinery and accessories Construction and earth-moving equipment Mechanical handling equipment Office machinery Printing, bookbinding and paper goods machinery Refrigerating machinery, space-heating, ventilating and air-conditioning equipment Scales and weighing machinery and portable power tools Food and drink processing machinery Miscellaneous (non-electrical) machinery Industrial (including process) plant and steelwork Ordnance and small arms Ball, roller, plain and other bearings Precision chains and other mechanical engineering Photographic and document copying equipment Watches and clocks Surgical instruments and appliances Scientific and industrial instruments and systems Electrical machinery Insulated wires and cables Telegraph and telephone apparatus and equipment Radio and electronic components Gramophone records and tape recordings
PA313 PA321 PA322 PA323 PA331 PA332 PA331 PA332 PA333 PA334 PA335 PA336 PA339 PA339,1 PA339,2 PA339,3 PA339,5 PA339,7 PA339,7 PA339,7 PA339,7 PA339,7 PA339,7 PA342 PA342 PA342 PA351 PA352 PA353 PA354 PA361 PA363 PA364	Iron castings, etc. Aluminium and aluminium alloys Copper, brass and other copper alloys Miscellaneous base metals Agricultural machinery (except tractors) Metal-working machine tools Pumps Valves Compressors and fluid power equipment Industrial engines Textile machinery and accessories Construction and earth-moving equipment Mechanical handling equipment Office machinery Printing, bookbinding and paper goods machinery Refrigerating machinery, space-heating, ventilating and air-conditioning equipment Scales and weighing machinery and portable power tools Food and drink processing machinery Industrial (including process) plant and steelwork Ordnance and small arms Ball, roller, plain and other bearings Precision chains and other mechanical engineering Photographic and document copying equipment Watches and clocks Surgical instruments and appliances Scientific and industrial instruments and systems Electrical machinery Insulated wires and cables Telegraph and telephone apparatus and equipment Radio and electronic components Gramophone records and tape recordings Broadcast receiving and sound reproducing
PA313 PA321 PA322 PA323 PA331 PA332 PA331 PA332 PA333 PA334 PA335 PA336 PA339 PA339,1 PA339,2 PA339,3 PA339,5 PA339,7 PA360,7 PA363 PA365,7 PA	Iron castings, etc. Aluminium and aluminium alloys Copper, brass and other copper alloys Miscellaneous base metals Agricultural machinery (except tractors) Metal-working machine tools Pumps Valves Compressors and fluid power equipment Industrial engines Textile machinery and accessories Construction and earth-moving equipment Mechanical handling equipment Office machinery Printing, bookbinding and paper goods machinery Refrigerating machinery, space-heating, ventilating and air-conditioning equipment Scales and weighing machinery and portable power tools Food and drink processing machinery Miscellaneous (non-electrical) machinery Industrial (including process) plant and steelwork Ordnance and small arms Ball, roller, plain and other bearings Precision chains and other mechanical engineering Photographic and document copying equipment Watches and clocks Surgical instruments and appliances Scientific and industrial instruments and systems Electrical machinery Insulated wires and cables Telegraph and telephone apparatus and equipment Radio and electronic components Gramophone records and tape recordings
PA313 PA321 PA322 PA323 PA331 PA332 PA331 PA332 PA333 PA334 PA335 PA336 PA336 PA337 PA338 PA339.1 PA339.2 PA339.3 PA339.5 PA339.7 PA339.7 PA339.9 PA341 PA342 PA341 PA342 PA352 PA353 PA354 PA354 PA361 PA365.1	Iron castings, etc. Aluminium and aluminium alloys Copper, brass and other copper alloys Miscellaneous base metals Agricultural machinery (except tractors) Metal-working machine tools Pumps Valves Compressors and fluid power equipment Industrial engines Textile machinery and accessories Construction and earth-moving equipment Mechanical handling equipment Office machinery Printing, bookbinding and paper goods machinery Refrigerating machinery, space-heating, ventilating and air-conditioning equipment Scales and weighing machinery and portable power tools Food and drink processing machinery Industrial (including process) plant and steelwork Ordnance and small arms Ball, roller, plain and other bearings Precision chains and other mechanical engineering Photographic and document copying equipment Watches and clocks Surgical instruments and appliances Scientific and industrial instruments and systems Electrical machinery Insulated wires and cables Telegraph and telephone apparatus and equipment Radio and electronic components Gramophone records and tape recordings Broadcast receiving and sound reproducing
PA313 PA321 PA322 PA323 PA331 PA332 PA333 PA334 PA333 PA334 PA335 PA336 PA339,1 PA339,2 PA339,3 PA339,5 PA339,7 PA336,7 PA365,1 PA366,	Iron castings, etc. Aluminium and aluminium alloys Copper, brass and other copper alloys Miscellaneous base metals Agricultural machinery (except tractors) Metal-working machine tools Pumps Valves Compressors and fluid power equipment Industrial engines Textile machinery and accessories Construction and earth-moving equipment Mechanical handling equipment Office machinery Mining machinery Printing, bookbinding and paper goods machinery Refrigerating machinery, space-heating, ventilating and air-conditioning equipment Scales and weighing machinery and portable power tools Food and drink processing machinery Miscellaneous (non-electrical) machinery Industrial (including process) plant and steelwork Ordnance and small arms Ball, roller, plain and other bearings Precision chains and other mechanical engineering Photographic and document copying equipment Watches and clocks Surgical instruments and appliances Scientific and industrial instruments and systems Electrical machinery Insulated wires and cables Telegraph and telephone apparatus and equipment Radio and electronic components Gramophone records and tape recordings Broadcast receiving and sound reproducing equipment Electronic computers
PA313 PA321 PA322 PA323 PA331 PA332 PA331 PA332 PA333 PA334 PA335 PA336 PA339 PA339,1 PA339,2 PA339,3 PA339,5 PA339,7 PA360,7 PA363 PA365,7 PA	Iron castings, etc. Aluminium and aluminium alloys Copper, brass and other copper alloys Miscellaneous base metals Agricultural machinery (except tractors) Metal-working machine tools Pumps Valves Compressors and fluid power equipment Industrial engines Textile machinery and accessories Construction and earth-moving equipment Mechanical handling equipment Office machinery Printing, bookbinding and paper goods machinery Refrigerating machinery, space-heating, ventilating and air-conditioning equipment Scales and weighing machinery and portable power tools Food and drink processing machinery Miscellaneous (non-electrical) machinery Industrial (including process) plant and steelwork Ordnance and small arms Ball, roller, plain and other bearings Precision chains and other mechanical engineering Photographic and document copying equipment Watches and clocks Surgical instruments and appliances Scientific and industrial instruments and systems Electrical machinery Insulated wires and cables Telegraph and telephone apparatus and equipment Radio and electronic components Gramophone records and tape recordings Broadcast receiving and sound reproducing equipment

PA369.1	Electrical equipment for motor vehicles, cycles
PA369.2	and aircraft Primary and secondary batteries
	Electric lamps, electric light fittings, wiring
1 4000.4	accessories, etc.
PA370	Shipbuilding and marine engineering
PA380	Wheeled tractor manufacturing
PA381.1	Motor vehicle manufacturing Trailers, caravans and freight containers
PA381.2 PA382	Motor cycle, tricycle and pedal cycle manufacturing
PA383	Aerospace equipment manufacturing and repairing
PA384	Locomotives, railway track equipment, railway carriages,
	wagons and trams
PA390	Engineers' small tools and gauges
PA391 PA392	Hand tools and implements Cutlery, spoons, forks and plated tableware, etc.
PA392 PA393	Bolts, nuts, screws, rivets, etc.
PA394	Wire and wire manufactures
PA395	Cans and metal boxes
PA396	Jewellery and precious metals
	Drop forgings, etc. Metal hollow ware
	Miscellaneous metal manufacture
PA411	Production of man-made fibres
PA412	Spinning and doubling on the cotton and flax systems
PA413	Weaving of cotton, linen and man-made fibres
PA414 PA415	Woollen and worsted Jute
PA416	Rope, twine and net
PA417.1	
PA417.2	
PA418	Lace
PA419 PA421	Carpets Narrow fabrics
PA422.1	
	Canvas goods and sacks and other made-up textiles
PA423	Textile finishing
PA429.1	Asbestos
PA429.2 PA431	Miscellaneous textile industries Leather (tanning and dressing) and fellmongery
PA432	Leather goods
PA433	Fur
PA441	Weatherproof outerwear
PA442	Men's and boys' tailored outerwear Women's and girls' tailored outerwear
PA443 PA444	Overalls and men's shirts, underwear, etc.
PA445	Dresses, lingerie, infants' wear, etc.
PA446	Hats, caps and millinery
	Corsets and miscellaneous dress industries
PA449.2	
PA450 PA461 1	Footwear Refractory goods
PA461.2	Building bricks and non-refractory goods
PA462	Pottery
PA463	Glass
PA464	Cement
PA469.1 PA469.2	Abrasives Miscellaneous building materials and mineral products
PA471	Timber
PA472	Furniture and upholstery
PA473	Bedding, etc.
PA474 PA475	Shop and office fitting Wooden containers and baskets
PA479	Miscellaneous wood and cork manufactures
PA481	Paper and board
PA482.1	Cardboard boxes, cartons and fibre-board packing cases
PA482.2	
PA483 PA484.1	Manufactured stationery Wallcoverings
PA484.2	Miscellaneous manufactures of paper and board
PA485	Printing, publishing of newspapers and periodicals
PA489	General printing and publishing
PA491	Rubber
PA492 PA493	Linoleum, plastics floor-covering, leathercloth, etc. Brushes and brooms
PA493	Toys, games and children's carriages
PA494.3	Sports equipment
PA495	Miscellaneous stationers' goods
PA496	Plastics products
PA499.1 PA499.2	Musical instruments Miscellaneous manufacturing industries
PA499.2 PA500	Construction
PA601	Gas
PA602	Electricity
PA603	Water supply
PA1002	Summary tables

#### PA331 AGRICULTURAL MACHINERY (EXCEPT TRACTORS)

The information in this report relates to establishments classified to the Agricultural machinery (except tractors) industry, minimum list heading 331 in the Standard Industrial Classification (revised 1968). The activities of the industry include:-

Manufacturing agricultural machinery and implements (including self-propelled agricultural machinery) such as ploughs, harrows, combine harvesters, elevators, etc. The manufacture of milking machines is included but industrial dairy machinery and appliances, tractors and hand tools such as spades are excluded. Specialist repairers of agricultural machinery are also excluded.

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

#### LIST OF CONTENTS

No	Title
1	Output and costs, 1975–1979
2	Capital expenditure, 1975–1979
3	Stocks and work in progress, 1975–1979
4	Analysis of establishments by size, 1979
5	Regional distribution of employment, net capital expenditure at factor cost, 1979
6	Percentage analysis of twelve-month periods covered by retur Kingdom establishments, 1979
7	Percentage analysis of employees, by full and part-time employees
8	Operating ratios, 1978–1979

	ł	Pag
	itin Traditi ev hallot og	2
	and the second second	3
		3
		4-
e, net output and gross value a	dded	
		6
rns received from United		
	and and a state of the	7
oyment and sex, 1977		7
	a manager and and a	8

.

.1

#### TABLE 1

Output and costs, 1975–1979 All United Kingdom establishments classified to the industry (a)

	Unit	1975	1976	1977	1978	1979
Enterprises	Number	576	608	612	620	607
Establishments	"	598	633	641	660	645
Sales of goods produced	£ thousand	200,058(b)	237,642	286,321	328,102	363,918
Receipts for work done and industrial services rendered		(b)	1,870	1,820	2,532	1,855
Capital goods produced for establish- ments' own use	"	111	364	468	610	428
Non-industrial services rendered	"	544	669	638	490	710
Goods merchanted or factored	"	35,378	48,629	54,384	73,245	74,689
Total sales and work done (c)	"	236,092	289,174	343,631	404,978	441,599
Increase during the year, work in progress and goods on hand for sale		16,504	6,002	10,938	10,923	7,480
Gross output	"	252,596	295,176	354,570	415,901	449,079
Purchases of materials for use in pro- duction, and packaging and fuel		112,292	127,755	160,413	170,054	195,764
Purchases of goods for merchanting or factoring	"	28,747	37,314	42,987	45,959	56,358
Increase during the year, stocks of materials, stores and fuel	"	-184	3,679	8,533	-19	4,870
Cost of industrial services received	"	4,479	5,472	7,450	7,706	6,932
Net output	"	106,893	128,314	152,253	192,164	194,895
Total employment (d)	Thousands	23.0	22.9	22.8	22.7	21.2
Net output per head	£	4,646	5,607	6,680	8,469	9,183
Payments for non-industrial services						
Hire of vehicles, plant and machinery	£ thousand	1,489(e)	710	1,172	1,525	1,697
Rents of industrial and commercial buildings	"	(e)	886	1,300	1,897	2,088
Commercial insurance premiums	"	1,056	1,141	1,437	1,646	1,833
Bank charges		164	242	242	318	309
Other non-industrial services (f)		8,568	12,838	14,017	19,076	21,496
Licensing of motor vehicles		128	134	167	207	281 .
Rates, excluding water rates	"	2,220	2,241	2,655	2,942	3,391
Gross value added at factor cost	"	93,269	110,121	131,262	164,553	163,800
Gross value added at factor cost per head	£	4,054	4,812	5,759	7,252	7,718

Including estimates for establishments not making satisfactory returns, non-response and establishments not selected for the Census. Satisfactory returns accounted for 69 per cent of employment within the industry. (a)

Receipts for work done and industrial services rendered included in sales of goods produced. (b)

Details of manufacturers' quarterly sales of principal products are published regularly in Business Monitor PQ331. (c)

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

Rents of industrial and commercial buildings (not recorded separately) included in hire of vehicles, plant and machinery. (e)

For 1975-1978 transport of goods by road (within the United Kingdom) was not recorded separately. For 1979 the amount payable (f) was £5,760 thousand.

TABLE 2

PA331

### Capital expenditure, 1975–1979 All United Kingdom establishments classified to the industry (a)(b)

the state of the state of the state	1975	1976
Land and buildings		
New building work	2,117	1,289
Land and existing buildings		
Acquisitions	392	392
Disposals	71	428
Vehicles		
Acquisitions	.929	1,728
Disposals	329 ·	576
Plant and machinery		
Acquisitions	3,979	5,355
Disposals	771	371
Total net capital expenditure	6,246	7,390

Including estimates for establishments not making satisfactory returns, non-response and establishments not selected for the Census. (a)

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

#### TABLE 3

Stocks and work in progress, 1975–1979 All United Kingdom establishments classified to the industry (a)

	1975	1976	1977	1978		1979
	very service of the	e and the second	Increase	officients	W age W	Value at end of year
Materials, stores and fuel	-184	3,679	8,533	-19	4,870	47,718
Vork in progress	6,795	4,373	2,979	7,074	3,219	37 ,250
Goods on hand for sale	9,709	1,629	7,960	3,849	4,260	51,621
Total	16,320	9,682	19,471	10,903	12,350	136,589

(a) Including estimates for establishments not making satisfactory returns, non-response and establishments not selected for the Census.

3

P	A	3	3	1

	and the second	£ thousand
1977	1978	1979
3,137	4,249	3,074
526	511	1,342
77	3,056	1,031
2,322	2,722	4,071
576	810	1,300
7,246	7,898	8,273
286	1,125	356
12,294	10,388	14,072

#### TABLE 4

Analysis of establishments by size, 1979 All United Kingdom establishments classified to the industry (a)

Size Estab-Enter-Employment Wages and salaries (f) group lishprises (b) ments (c) Total Opera-Others Operatives Others (e) (d) tives (e) Total Total per per head head Number Number Number Number Number £ thousand £ £ thousand £ 1-10 429 420 1,890) 11-19 106 103 1,493) 4,116 1,870 14,814 3,599 8,834 4,724 20-49 51 51 1,552) 50-99 21 20 1,550) 100-199 16 15 2.301 1,567 734 6,441 4,110 3,552 4,839 200-299 9 8 2,324 1,625 699 6,770 4,166 3,750 5,365 300-399 4 4 1,466 824 642 3,557 4,317 3,236 5,040 400 - 7495 5 2,686 1,850 836 7,058 3,815 3,567 4,267 750 and over 4 4 5,961 4,086 1,875 18,150 4,442 9,274 4,946

Total	645	607	21,223	14,068	6,656	56,790	4.037	32.214	4,840	

(a) Including estimates for establishments not making satisfactory returns, non-response and establishments not selected for the Census.

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

(c) The count of enterprises shown in each row represents the number of enterprises, irrespective of size, owning the establishments shown in the previous column, i.e. the number of enterprises owning the establishments within the size group indicated by the row heading. It should be noted that because an enterprise may own establishments in more than one size group, the sum of the individual enterprise counts may exceed the total for the industry.

4

(d) Including working proprietors.

(e) Administrative, technical and clerical employees.

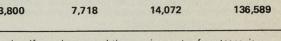
Total sales and work done (g)	Gross output	Net output		Gross value added at factor cost		Net capital expenditure (h)	Total stocks and work in progress at end of year
		Total	per head	Total	per head		
£ thousand	£ thousand	£ thousand	£	£ thousand	£	£ thousand	£ thousand
149,943	152,443	65,120	10,042	(j)	(j )	7,002	34,613
45,439	46,263	21,407	9,303	70,150(j)	7,984(j)	1,507	14,979
42,674	43,918	21,611	9,299	18,222	7,841	2,366	12,830
38,762	40,489	16,339	11,145	13,678	9,330	1,604	13,009
44,737	45,375	19,202	7,149	16,312	6,073	1,119	15,032
120,043	120,590	51,216	8,592	45,438	7,623	474	46,125

99 449,079	194,895	9,183	163,8
			ensions and
New building work plu	s acquisitions less di	sposals of land and	l existing b
	The cost of employers' estimated for the indus Sales of goods produce industrial and non-indu	The cost of employers' contributions to natestimated for the industry at £ 16,263 thouses a service of goods produced, capital goods mar industrial and non-industrial services render	99 449,079 194,895 9,183   The cost of employers' contributions to national insurance, p estimated for the industry at £ 16,263 thousand.   Sales of goods produced, capital goods manufactured and bui industrial and non-industrial services rendered and merchanter.   New building work plus acquisitions less disposals of land and

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

PA331

PA331



nd welfare schemes and the running costs of canteens, is

instructed by establishments for their own use, work done,

buildings, vehicles and plant and machinery.

5

United Kingdom

PA331

#### TABLE 6

Percentage analysis of twelve-month periods covered by returns received from United Kingdom establishments, 1979

Accounting year ended		Percentage of total returns received	Percentage of total number employed		
		per cent	per cent	and the state of the state	
1979	April (a)	1.5	0.2		
	Мау	_	-		
	June	4.6	3.6	and design of the second	
	July	9.2	9.9		
	August		-		
	September	7.7	2.2		
	October	4.6	18.0		
	November	3.1	0.8		
	December	52.3	52.1		
1980	January	9.2	2.4		
	February	-	-		
	March (b)	7.7	11.0		

#### (a) From 6th April.

(b) Including returns made for twelve-month period ended 1st to 5th April 1980.

#### TABLE 7

Percentage analysis of employees, by full and part-time employment and sex, 1977(a)

Sex	Full-time	Part-time
	per cent	per cent
Male	86	1
Female	10	3

The percentages relate to the numbers employed (excluding working proprietors) in the United Kingdom at mid-June, 1977, the latest date for which information is available. (a)

Area	Total employment (b)		Net capital expenditure (c)		Net output (d)	Gross value added at factor cost (d)	Gross value added at factor cost returned by establishments with 80 per cent or more of their employment in the region as a proportion of total gross value added at factor cost in the region
	Thousands	per cent of United Kingdom	£ thousand	per cent of United Kingdom	£ thousand	£ thousand	percentage
Standard regions of England							and the second
North	0.2	0.8	135	1.0	1,608	1,318	-
Yorkshire and Humberside	2.2	10.3	1,834	13.0	17,407	15,027	71.3
East Midlands	1.1	5.3	708	5.0	10,480	8,648	40.4
East Anglia	5.4	25.6	1,679	11.9	44,511	37,627	80.1
South East	3.4	15.9	3,068	21.8	38,392	32,358	69.3
South West	2.5	11.6	1,856	13.2	23,607	19,116	59.3
West Midlands	2.6	12.2	1,869	13.3	22,704	18,867	35.2
North West	0.3	1.6	300	2.1	3,168	2,568	17.7
England	17.7	83.2	11,448	81.4	161,878	135,529	/
Wales	0.8	3.9	708	5.0	9,852	8,013	64.2
Scotland	2.5	11.6	1,101	7.8	20,690	18,286	66.2
Great Britain	20.9	98.7	13,257	94.2	192,420	161,828	
Northern Ireland	0.3	1.3	815	5.8	2,475	1,972	46.9

Regional distribution of employment, net capital expenditure, net output and gross value added at factor cost, 1979

Including estimates for establishments not making satisfactory returns, non-response and establishments not selected for the Census. (a)

100.0

194,895

163,800

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

14,072

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

100.0

21.2

Where a census return covered addresses in two or more regions, an estimate of the net output attributable to each address was made by assuming that net output was proportionate to employment. An estimate for each region was obtained by aggregating estimates of net output for addresses located in that region. Gross value added at factor cost is treated similarly. (d)

6

All employees	
per cent	
87	
13	

Source: Department of Employment

#### TABLE 8

Operating ratios, 1978-1979 All United Kingdom establishments classified to the industry (a)

in the second	Unit	1978	1979
Gross output per head	£	18,330	21,160
Net output per head	£	8,469	9,183
Gross value added per head	£	7,252	7,718
Gross value added as a percentage of gross output	%	40	36
Ratio of gross output to stocks (b)		3.3	3.3
Wages and salaries as a percentage of gross value added	%	50	54
Ratio of operatives to administrative, technical and clerical amployees		2.2	2.1
Nages and salaries per administrative, technical and clerical amployee	£	4,140	4,840
Nages and salaries per operative	£	3,486	4,037
Net capital expenditure per head	£	458	663
Net capital expenditure as a percentage of gross value added	%	6	9

Including estimates for establishments not making satisfactory returns, non-response and establishments not selected for the Census. (a)

8

Stocks include materials, stores and fuel, work in progress and goods on hand for sale at the end of the business year. (b)

#### NOTES

PA331

These notes give the main information needed for interpreting the figures in the industry Business Monitors: more detailed information about the census is given in a separate Business Monitor - PA 1001 (Introductory Notes) of the Report on the Census of Production, 1979.

#### GENERAL INFORMATION

#### Changes made for 1979

The Census for 1979 is in line with similar inquiries being conducted in other member countries of the European Community.

The census differed from the 1978 census in three respects. A question on the leasing of capital assets was removed from the form and a question on road transport costs was added. The sample of units in the 10 to 19 employment size band included for the 1978 census was not repeated.

Suppression of information relating to individual undertakings Section 9(5) (b) of the Statistics of Trade Act 1947 states - "The following provisions shall have effect with respect to any report, summary or other communication to the public of information obtained under the foregoing provisions of this Act-

in compiling any such report, summary or communication the competent authority shall so arrange it as to prevent any particulars published therein from being identified as being particulars relating to any individual person or undertaking except with the previous consent in writing of that person or the person carrying on that undertaking, as the case may be; but this provision shall not prevent the disclosure of the total quantity or value of any articles produced. sold or delivered; so, however, that before disclosing any such total the competent authority shall have regard to any representations made to them by any person who alleges that the disclosure thereof would enable particulars relating to him or to an undertaking carried on by him to be deduced from the total disclosed."

If a figure involved disclosure the contributor concerned was sometimes asked to give permission for its publication. In the majority of cases permission was given. When it was refused and where contributors were not approached the figure has been suppressed, either by combining it with other figures, or as in the regional tables, by omitting the figure altogether.

#### Symbols used

The following symbols are used throughout the PA series of Business Monitors:

#### 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

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

#### Industrial classification

The United Kingdom Standard Industrial Classification (SIC) was first issued in 1948 and was subsequently revised in 1958, 1968 and 1980. It exists to promote uniformity and comparability in the official statistics of the United Kingdom.

Prior to the 1980 revision the general principles followed were those of the International Standard Industrial Classification of all Economic Activities of the United Nations Statistical Office but the United Kingdom SIC has reflected the organisation and structure of industry and trade as it existed in the United Kingdom. For the 1980 revision an attempt was made to align the United Kingdom classification as closely as practicable with NACE, the classification in use by the Statistical Office of the European Community. The SIC is a classification by activity and is not a commodity classification. An index, based on the 1968 SIC for all commodity headings for which sales data are provided in the Quarterly Business Monitors is published in Business Monitor PO 1000.

Statistical units

The statistical unit for the purpose of the Census is the establishment which is defined in the SIC as the smallest unit which can provide the information normally required for an economic census, for example, employment, expenses, turnover, capital formation. Usually the principal activities carried on in an establishment fall within a single heading of the classification (eg steel making or sugar refining). Typically the establishment embraces all the activities carried on at a single address eg a mine or a factory, including those which are ancillary to the principal activities. Frequently distinct activities characteristic of different industries are carried on at one address, but normally these are not classified separately and the whole establishment is classified according to the main activity. If, however, the required range of data can be provided for each activity, each is taken to constitute a separate establishment. Sometimes activities which are conducted as a single business are carried on at a number of addresses. Where this is so, businesses are asked to provide the full range of information in respect of each address, whether or not the activities are different. Their activities may, however, be integrated to such an extent that they constitute a single establishment. In the latter case the establishment is defined to cover the combined activities at these addresses (termed local units). Separate figures are obtained of employment and net capital expenditure at each unit in order to compile regional tables.

Efforts are made by the Business Statistics Office (BSO) to ensure, by negotiating with respondents, that the return from an establishment does not cover local units in more than one of the countries of the United Kingdom.

Establishments are asked to exclude from their returns particulars relating to any department not engaged in production eg merchanting, transport, warehousing, for which they keep a separate set of accounts. Transfers of goods produced to such departments are treated as sales and respondents are asked to value them as far as possible as if sold to an independent purchaser. Where separate accounts are not kept they are asked to include details of all these activities in their return.

Particulars relating to head offices mainly engaged in the administration of the production units within the scope of the census were included. Where more than one return was made the information in respect of the head office was apportioned among them.

For certain purposes in the annual censuses of production (especially the enterprise analyses of Business Monitor PA 1002) related establishments are combined. An enterprise group is defined as a business consisting of either a single establishment or two or more establishments under common ownership or control. Bringing together establishments into enterprise groups is also necessary for the purpose of ensuring that there will be no disclosure of the activities of any one enterprise group. Information about the relationship of establishments, the changing structure of groups of companies and about common ownership links is obtained from many sources, including the Stock Exchange Year Book, company reports, press reports and information supplied by individual establishments

#### THE REGISTER

The register permits a questionnaire to be sent direct to the reporting establishment on which the latter can include information relating to all the manufacturing (or local) units which it comprises. The inquiries provide a major source of information for keeping the register continuously up-to-date and act as a check on its detail and structure. For the establishments on the register making returns to the quarterly inquiries, the industrial classification is derived from an analysis of their sales of commodities and is reviewed annually. Employment data are entered on the register from returns to the annual census of production. In cases where an establishment does not make a return to these inquiries the employment data are based on information provided by the Department of Employment from the annual censuses of employment. New additions to the register are obtained from various sources including the Department of Employment and HM Customs and Excise. The 1973 Finance Act allows the latter to pass lists of businesses registered for VAT to the BSO. Where necessary details are sought directly from new businesses. Units which cease to trade are removed from the live register.

#### Coverage

In recent censuses returns have been required from all establishments employing 20 or more. For the 1979 Census in 68 selected manufacturing industries coverage of establishments in the 20 to 49

employment size band has been reduced to a 1 in 2 sample. This change has relieved some 5,800 firms of the need to complete a census return.

#### Regions

The regions defined in Table 5 take account of the boundary changes arising out of the Local Government Act 1972 and the Local Government Act (Scotland) 1973. These changes came into effect in April 1974 in England and Wales and May 1975 in Scotland.

#### TERMS USED IN THE CENSUS REPORT

#### Average number employed

Establishments were required to state the average number of persons on the payroll during the year of return. Separate figures were required for:

- (a) administrative, technical and clerical employees
- (b) all other employees (operatives)

Averages could be calculated from the 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. Full-time and part-time employees are included but outworkers (ie persons employed by establishments who worked in their own homes etc on materials supplied by the establishment) 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 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 directors in receipt of a definite wage, salary or commission, managers and works foremen; research and design employees (other than operatives); draughtsmen, editorial staff, advertising staff, travellers and all office employees.

Operatives include all other classes of employees, that is, broadly speaking, all manual wage earners. They include operatives employed in power stations, transport (including roundsmen), warehouses, stores, shops and canteens, inspectors, maintenance workers and cleaners. Operatives engaged in outside work of erecting, fitting etc are also included, but outworkers are excluded.

#### Capital expenditure

Capital expenditure during the year in respect of manufacturing units where production had not started before the end of the year is included. Establishments 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. Establishments with 100 or more employees were asked to include a total net capital expenditure figure for each calendar year:

#### (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 establishment's own staff and the cost of any newly constructed buildings purchased. Figures shown include legal charges, stamp duties, agents' commissions, etc.

#### (b) Land and existing buildings

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

#### Cost of industrial services

This includes amounts payable to other firms for work done on materials supplied by the establishment, payments for repairs and maintenance (including those in respect of rented buildings) and amounts paid to other firms for contracts which have been sublet. Payments to outworkers are excluded.

#### Cost of non-industrial services

This includes rents of industrial and commercial buildings, hire of plant, machinery and vehicles (excluding vehicles hired with drivers), commercial insurance premiums, bank charges and amounts paid for professional services, post office services. transport (within the United Kingdom), advertising etc. Amounts payable on royalties for the right to use patents, trademarks, copyrights etc, manufacturing and quarrying rights and technical "know-how" are also included.

#### Gross output

In the calculation of gross output the value of total sales and work done is increased by the rise (or reduced by the fall) during the year in the value of work in progress and goods on hand for sale.

#### Net output

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 of stocks of materials etc) and the cost of industrial services received, and where applicable, duties etc.

#### Net output per head

The figures of net output per head are derived by dividing the net output by the average number of persons employed (full and parttime) on all activities covered by the returns, including operatives, administrative, technical and clerical employees and working proprietors but excluding outworkers.

#### Gross value added at factor cost

Gross value added at factor cost is calculated by deducting from net output the cost of non-industrial services eg rent of buildings, hire of plant, machinery and vehicles (excluding vehicles hired with drivers), commercial insurance premiums, bank charges and amounts paid for professional services, post office services, transport (within the United Kingdom) and advertising, rates (excluding water rates) and the cost of licensing motor vehicles. This estimate of gross value added approaches more closely than census net output to the definition of net output or value added in national accounts statistics.

#### 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 by the average number of persons employed (full 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 raw materials, components, semimanufactured goods and workshop materials; of replacement parts and consumable tools not charged to capital account; of packaging materials of all types; of stationery and printed matter; of fuel, electricity and water; of materials to be used by the establishment or given out to other establishments for the production of machinery or other capital items for the establishment's own use; of materials for use by the establishment when working on goods supplied by customers; and of food, etc for any canteen covered by the establishment's return. Transfers of goods to the establishment from another department of the same firm not covered by the establishment's return are included at a cost corresponding to the estimated selling value recorded by the other department. Amounts payable to transport firms or credited to the firm's own transport department for delivery of materials are excluded, as are all . purchases of machinery and plant charged to capital account. Purchases of goods for merchanting or factoring have been collected separately since 1973. The values shown exclude VAT. They include, in addition to the actual purchase price, the value of packaging material charged to the establishment. The value of returned goods or packaging material returned to suppliers and any trade discounts are excluded. Materials purchased duty-paid are included at their duty-paid value, less any drawback, rebate, etc. The cost of transport is included only if it is included with the purchase price in the firm's accounts. Imported goods are included at their full delivered cost. If in the firm's accounts the transport from docks or airport is not included in the cost of goods purchased, the cost is entered at cif plus duty (if applicable). Leasing, renting and hire purchase charges are excluded.

#### Sales of goods produced

Sales for the purposes of the annual censuses means deliveries on sale of goods made by establishments in the United Kingdom covered by the inquiry. Sales of goods made for these establishments by outworkers or by other establishments from materials given out to them and sales of waste products are included. New building work and machinery or other capital items produced by establishments for hiring out or leasing are regarded as sales, the value included in the return being that adopted in the establishments' capital asset accounts. Forward sales and canteen takings are excluded. All sales in the period of the inquiry are included irrespective of when the goods were manufactured. Goods produced in one establishment and transferred either to ancillary departments not engaged in production for which there are separate accounts, or to another establishment of the same firm not covered by the return, are 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 are kept are valued on the same basis.

The value shown for sales is the "net selling value" defined as the amount (excluding VAT) charged to customers whether on an exworks or delivered basis, after any trade discounts and agents' commissions have been deducted. The cost of packing materials less allowance for returnable cases is included. In industries where products attract Excise Duty the value stated is usually inclusive of duty if sold duty-paid and exclusive of duty if sold in bond or exported.

#### Receipts for work done and industrial services rendered Figures for work done represent the amount charged for work

carried out on materials supplied by a customer and include repair work. Within certain industries this heading covers a wide variety of activities, for example, within the food sector - butter packed on commission; within the textile industries - making up of garments, fur dressing and textile finishing; within printing and publishing preparatory work on type-setting, block making and binding. Work done is also significant in the electrical machinery and heavy engincering industries, covering erection, installation and repair and jobbing work. Other activities within this heading include exploration work, research and development, glass cutting and dressing and planing of timber.

Industrial services rendered include repairs and maintenance, installation work, and technical research and studies for other organisations.

#### Capital goods produced for establishment's own use

This includes all work of a capital nature carried out during the year by the establishments' own staff for their own use.

> Produced in Wales by Her Majesty's Stationery Office Reprographic Unit, Cardiff Dd. 0718807 C8 Cdf 155 6/81

> > (v)

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 redundancy payments less any amounts reimbursed from Government sources is included. The value of any payments in kind, travelling expenses etc is excluded.

The remuneration paid to outworkers (ie persons employed by the establishment who do their work in their own homes) is generally on a piece-work basis. Only amounts paid to outworkers whose names appear on the establishment's payroll are included. Amounts paid to outworkers by sub-contractors are excluded.

#### Non-industrial services rendered

This includes rents received for commercial and industrial buildings, amounts charged for hiring out plant, machinery and vehicles and other goods and amounts charged to other organisations for the provision of transport. It also includes amounts received for the right to use patents, trademarks, copyrights etc, manufacturing and quarrying rights and technical "know-how" and revenue from such staff facilities as canteens.

#### Goods merchanted or factored

Merchanted goods are those (excluding canteen sales) sold without having been subjected to any manufacturing process by the seller.

#### Stocks and work in progress

Values are given of stocks of goods on hand for sale and of materials, stores and fuel, at the end of the year of return and of the change during the year, including any stocks of goods held for merchanting or factoring. Work in progress is defined as materials which have been partially processed by the establishment but which are not usually sold or transferred to another establishment without further processing. The values include the cost of materials consumed and labour used. Progress payments made to subcontractors are excluded and progress payments received from other organisations are not deducted.

#### Wages and salaries

#### Remuneration paid to outworkers

#### Employers' insurance and welfare contributions

This item includes employers' contributions to national insurance under the Social Security Pensions Act, 1975 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 dependants. Contributions to the running costs of canteens, social centres, children's and holiday homes, etc for employees, former employees and their dependants are also included.

#### Operating ratios

The operating ratios shown were obtained by dividing the estimate of the industry total for the quantity shown in the numerator by the corresponding estimate for the quantity shown in the denominator. These estimates cover all establishments classified to each industry, including not selected establishments and non-respondents. Within an industry, it is possible to compare ratios for an individual firm with the ratios shown for the relevant industry. However, it is important to bear in mind that various factors may affect the results 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.

© Crown copyright 1981

#### Her Majesty's Stationery Office

Government Bookshops

49 High Holborn, London WC1V6HB 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

'Brief extracts from this publication may be reproduced provided the source is fully acknowledged. Proposals for reproduction of larger extracts should be addressed to the Librarian, Business Statistics Office, Newport, Gwent NPT 1XG.'