PA482.1

05/42 (HA251)

142 R834

1977



**Business Statistics Office** 

# **Business Monitor**

Report on the Census of Production

Cardboard boxes, cartons and fibre-board packing cases



## **Special Note for Purchasers**

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

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

#### **Government Statistical Service**

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

## **Enquiries:**

Business Statistics Office Newport, Gwent NPT 1XG Newport 56111 (STD code 0633) ext 2455 Telex 497121 Answer Back BSONPT G

# PA482.1 Business Monitor

A publication of the Government Statistical Service

Report on the Census of Production 1977

Cardboard boxes, cartons and fibre-board packing cases

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

Department of Industry
Business Statistics Office

London: Her Majesty's Stationery Office

## PA482.1 CARDBOARD BOXES, CARTONS AND FIBRE-BOARD PACKING CASES

The information in this report relates to establishments classified to the Cardboard boxes, cartons and fibre-board packing cases industry, minimum list heading 482.1 in the Standard Industrial Classification (revised 1968). The activities of the industry include:—

Manufacturing all types (whether printed or not) of rigid or folding cardboard and paper boxes, canisters and other containers (including composite containers of board and metal) except paper bags, fibre card and silver cans.

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

Animal and surveys and state quarrying and mining PA388.2 Primary and secondary batteries and aircraft and ai	DA 100	1. Introductory notes	PA369.1	Electrical equipment for motor vehicles, cycles
PA302 Stone and sizer quarrying and mining PA303 associated, city and start give extraction to the part of the par		100분 - 프로마스 바로 시트로 보고 있다면서 보고 있다. 100분 100분 100분 100분 100분 100분 100분 100		and aircraft
PA100 Printing and any gray destraction process of the common of the com				
PA219 Grain milling PA219 Grain milling PA219 Grain milling PA219 Grain milling PA219 Bread and floor confectionery PA219 Bread and floor confectionery PA219 Around the part of the part		Chalk, clay, sand and gravel extraction	PA369.4	
PA212 Brased and flour confectionery PA212 Brased and flour confectionery PA213 Brown and the products PA215 Miss and flour confectionery PA216 State and flour confectionery PA217 Cocco, chocates and stage confectionery PA218 Sugar PA218 Cocco, chocates and stage confectionery PA219 Cocco, chocates and stage confectionery PA219 Cocco, chocates and stage confectionery PA219 Arimal and poultry foods PA210 Cocco, chocates and stage confectionery PA210 Arimal and poultry foods PA210 Arimal and poultry foods PA211 Cocco, chocates and stage confectionery PA211 Cocco, chocates and stage confectionery PA212 Arimal and poultry foods PA213 Brave flow flow flow flow flow flow flow flow	PA104		DA270	
PA321 Blacut and floor confectionery PA321 Blacuts PA321 Blacuts PA321 Blacuts PA322 Blacuts PA323 Blacuts PA324 Blacuts PA324 Blacuts PA325 All Constructions PA326 PA3				
PA231 Biscuits PA218 Biscuits PA218 Biscuits PA218 Milk and milk products PA219 All and products PA219 All and products PA219 All and products PA219 All and milk products PA219 All and products PA219 All and milk products				
PA219 Bason curing, meat and fish products PA219 Mine and milk products PA219 Sugar PA219 Sugar PA219 Furth and vegetable products PA219 Animal and poutry foods PA219 Animal and poutry foods PA219 Animal and poutry foods PA219 Sugar PA229 Starch and miscellaneous foods PA239 Starch and miscellaneous foods			PA381.2	Trailers, caravans and freight containers
PA216 Supe checolists and supr confectionery PA218 Fruit and vegetable products PA219 Fruit and vegetable products PA219 Fruit and vegetable products PA219 All Superiors of the passion and trains PA219 All Superiors of the passion				Motor cycle, tricycle and pedal cycle manufacturing
PA219 Corosa, chocalse and super confectionery PA219 Corosa, chocalse and super confectionery PA2110 Animal and poultry foods PA2111 Animal and poultry foods PA2121 Agrapha and minist oils and fats PA2221 Agrapha and minist oils and fats PA2231 Branch with the super part of the sup			PA383	Aerospace equipment manufacturing and repairing
PA219 For and wegstable products PA219 For and wegstable products PA219 For and wegstable products PA210 Vegetable and animal oils and fats PA221 Vegetable and animal oils and fats PA222 Starch and miscellaneous foods PA223 Starch and miscellaneous foods PA232 Starch and miscellaneous foods PA233 Bridging and manufactures PA233 Starch and miscellaneous foods PA233 Starch and miscellaneous foods PA234 Bridging and compounding PA235 Starch and miscellaneous foods PA236 Starch and miscellaneous foods PA237 Starch and miscellaneous foods PA238 Starch and miscellaneous foods PA239 Starch and miscellan			PA384	
PA219 Fruit and vegetable products PA219 Ainmil and poutry forward animal oils and fats PA219 Ainmil and poutry forward animal oils and fats PA220 Street and miscellaneous foods PA231 Brewing and malting PA232 Street and miscellaneous foods PA233 Brewing and malting PA234 Street and miscellaneous foods PA233 Brewing and malting PA234 Street and miscellaneous foods PA235 Brewing and malting PA236 Street and miscellaneous foods PA236 Street and fats PA237 Street and fats PA238 Brewing and malting PA239 Brewing and malting PA239 Brewing and malting PA239 Brewing and malting PA230 Brewing and fats PA230 Brewing and manufactured PA230 Brewing and further and fats furniture PA230 Brewing and forward and fats furniture PA230 Brewing and forward and fats furniture PA230 Brewing and forward and fats systems PA231 Inorganic chemicals PA231 Inorganic chemicals PA231 Miscellaneous chemicals and preparations PA231 Miscellaneous chemicals PA231 Miscellaneous chemicals PA231 All for preparations PA231 All for preparations PA232 Symbetr resist and plastics materials and PA233 Brewing and college and forwards PA234 Brewing and forwards PA235 Printing interests and plastics materials and PA236 Brewing and forwards PA237 Popility and fats forwards PA238 Brewing and forwards PA239 Explosives and freworks PA239 Explosives and freworks PA239 Explosives and freworks PA231 Street from the printing and fats systems PA232 Expensive and defense from the printing and fats systems PA233 Indirect from the printing and fats systems PA234 Indirect from the printing and fats systems PA235 Printing ink PA236 Freiting and from from the printing and fats systems PA237 Printing ink PA238 Freiting and fats on fats and free freiting and fats on fats systems PA239 Miscellaneous to materials PA239 Printing and fats				wagons and trams
PA2321 Vegetable and animal oils and fats PA2322 Starch and miscellaneous foods PA2323 Starch and miscellaneous foods PA2324 Starch and miscellaneous foods PA2325 Starch and miscellaneous foods PA2326 Starch and miscellaneous foods PA2327 Starch and miscellaneous foods PA2328 Starch and miscellaneous foods PA2329 Starch white, cider and perry perry white, cider and perry perry white, cider				Engineers' small tools and gauges
PA2292 Starth and miscellaneous foods PA2391 Brewing and malting PA2392 Britsh and miscellaneous foods PA2391 Brewing and malting PA2392 Britsh wines, cider and perry PA2393 Britsh wines, cider and perry PA2394 Brewing and compounding PA2395 Britsh wines, cider and perry PA2396 Drop forgings, etc. PA2396 Drop forgings, etc. PA2397 Britsh wines, cider and perry PA2399 Britsh wines, cider and perry PA2390 Britsh wine	PA219			Hand tools and implements
PA232 Starch and miscellaneous foods PA231 Eventying and maltiting PA232 Soft drinks PA2331 Soft drinks PA2331 Soft drinks PA2331 Soft drinks PA2332 Soft drinks PA2332 Soft drinks PA2333 Soft drinks PA2333 Soft drinks PA2334 Soft drinks PA2335 Soft drinks PA2336 Soft drinks PA2336 Soft drinks PA2337 Soft drinks PA2336 Soft drinks PA2336 Soft drinks PA2337 Soft drinks PA2337 Soft drinks PA2338 Soft drinks PA2339 Soft drinks PA2330 Soft drinks PA23				
PA239 Strict distilling and compounding PA396 Swellery and precious metals PA396 PA398 Swellery and precious metals PA398 PA398 Swellery and precious metals PA398				
PA2392 Soft drinks PA2391 British wines, cider and perry PA2392 British wines, cider and perry PA2393 Drope from the part of t				
PA239. I Spirit distilling and compounding PA399. Type forgings, etc. PA239. PA239. Type forgings, etc. PA239. Type forgings, etc. PA239. Dynographic spirit which which will be produced by the part of the part				
PA2392   British wines, cider and perry   PA3993   Urgo forgings, etc.   PA261   Coke over and manufactured fuel   PA261   Coke over any and manufactured fuel   PA261   Coke over any and manufactured fuel   PA261   Coke over any and manufacture   PA262   Coke over any and any and a company and a			PA399.1	
PA259 6 New Jones and manufactured fuel PA359 8 Miscellaneous metal manufacture Manufacture PA359 8 Miscellaneous metal PA319 8 Miscellaneous metal PA329 Miscellaneous metal PA329 Miscellaneous metal PA329 Miscella				
PA261 Coke overs and manufactured fuel PA262 Mineral oil refining PA262 Lubricating oils and greases PA271 Internal oil refining PA271 Internal oils and greases PA271 Internal oils and greates PA271 Internal oils and preparations PA272 Internal oils and preparations PA273 Toilet preparations PA273 Toilet preparations PA273 Toilet preparations PA274 PA274 PA274 PA274 PA274 PA274 PA274 PA274 PA274 PA275				
PA2712 Jorganic chemicals PA4112 Organic chemicals PA4112 Organic chemicals PA4114 Woollen and worsted PA2713. Organic chemicals PA4144 Woollen and worsted PA2713 Messellaneous chemicals PA415 United PA415 Organic chemicals PA416 Woollen and worsted PA417 Hospital PA417 Organic chemicals PA417 Draw PA417 Dr				
PA2711 Inorganic chemicals PA2712 Organic chemicals PA2713 Miscellaneous chemicals PA2714 Mooille and worsted PA272 Parmaceutical chemicals and preparations PA273 Tollet preparations PA273 Tollet preparations PA273 Tollet preparations PA274 Parmaceutical chemicals and preparations PA275 Support of the propagation of the passion of the				
PA2712. Organic chemicals PA2712 Pharmaceutical chemicals and preparations PA2713 Plant (Indication of the Pa2714) Pharmaceutical chemicals and preparations PA272 Pharmaceutical chemicals and preparations PA273 Pa274 Plant (Pa272) Pharmaceutical chemicals and preparations PA274 Plant (Pa272) Pharmaceutical chemicals and preparations PA275 Soap and detergents PA276 Soap and detergents PA277 Pa276 Presenter cessins and plastics materials and PA277 Pa277 Presenter cessins and plastics materials and PA278 Pa277 Presenter cessins and plastics materials and PA279				
PA2713 Miscellaneous chemicals PA272 Tollet preparations PA273 Tollet preparations PA274 Pa274 Paint PA275 Soap and detergents PA276 Synthetic resis and plastics materials and synthetic rubber PA2776 Synthetic resis and plastics materials and synthetic rubber PA2777 Synthetic resis and plastics materials and synthetic rubber PA2778 Synthetic resis and plastics materials and synthetic rubber PA2779 Secondary Synthetic resis and plastics materials and synthetic rubber PA2779 Secondary Synthetic resis and plastics materials PA2780 Secondary Synthetic resis and plastics materials PA279 Secondary Synthetic rubber PA279 Secon				
PA277 Plarmaceutical chemicals and preparations PA278   Paint				
PA217 Tollet preparations PA217   Paint		Dharmacoutical chemicals and preparations		
PA217 Span and detergents PA218 Sosp and detergents PA218 Sosp and detergents PA219 Synthetic resins and plastics materials and synthetic rubber synthetic rubb				
PA275 Soap and detergents PA276 Synthetic resins and plastics materials and synthetic rubber you be provided by the provided synthetic rubber you be provided by the provided				
PA279 Synthetic resins and plastics materials and synthetic rubber synthet			PA418	
PA277 Dyesturfs and pigments PA278 PA279.1 Polishes PA279.1 Polishes PA279.2 Formulated achesives, gelatine, etc. PA279.3 Explosives and fireworks PA279.3 Explosives and fireworks PA279.4 Formulated pacticides, etc. PA279.5 Printing ink PA279.6 Printing ink PA279.6 Printing ink PA279.7 Protographic chemical materials PA279.7 Protographic chemical materials PA279.7 Protographic chemical materials PA279.8 PA279.7 Protographic chemical materials PA279.7 Protographic and accessory pactical protographic chemical materials PA279.8 PA279.7 Protographic and pactical protographic chemical materials PA289.7 Pa299.8 PA2999.8 PA2999.8 PA2999.8 PA2999.8 PA2999.8 PA2999.8 PA2999.8 PA		Synthetic resins and plastics materials and		
PA279 Fertilizer's PA279 Formulated adhesives, gelatine, etc. PA279.2 Formulated adhesives, gelatine, etc. PA279.3 Explosives and fireworks PA279.4 Formulated pesticides, etc. PA279.5 Formulated pesticides, etc. PA279.6 Surgical bandages, etc. PA279.6 Surgical bandages, etc. PA279.6 Surgical bandages, etc. PA279.6 Surgical bandages, etc. PA279.7 Photographic chemical materials PA279.7 Photographic chemical materials PA279.7 Photographic chemical materials PA279.8 PA279.8 PA279.8 PA279.9 Photographic chemical materials PA279.9 PA279.9 Photographic chemical materials PA279.9 PA2799.9				
PA279.1 Polishes PA279.3 Explosives and fireworks PA279.3 Explosives and fireworks PA279.5 Primulated pesticides, etc. PA279.5 Primulated pesticides, etc. PA279.6 Primulating ink PA279.7 Photographic chemical materials PA279.7 Photographic chemical materials PA279.7 Photographic chemical materials PA311 Iron and steel (general) PA312 Steel tubes PA321 Steel tubes PA323 Steel tubes PA323 Auminium and aluminium alloys PA323 Auminium and aluminium alloys PA323 Auminium and aluminium alloys PA323 Miscellaneous base metals PA324 Auminium and aluminium and loys PA325 Auminium and aluminium alloys PA326 Auminium and aluminium alloys PA327 Auminium and aluminium alloys PA328 Miscellaneous base metals PA329 Auminium and aluminium alloys PA330 Auminium and aluminium alloys PA331 Industrial engine and accessories PA333 Auminium and aluminium alloys PA334 Auminium and aluminium alloys PA335 Auminium and aluminium alloys PA336 Auminium and aluminium alloys PA337 Auminium and aluminium alloys PA338 Auminium and aluminium alloys PA339 Auminium and aluminium alloys PA339 Auminium and aluminium alloys PA340 Auminium and aluminium alloys PA341 Auminium and aluminium alloys PA342 Auminium and aluminium alloys PA343 Auminium and aluminium alloys PA344 Auminium and aluminium alloys PA345 Auminium and aluminium alloys PA346 Auminium and aluminium alloys PA347 Auminium and aluminium alloys PA348 Auminium and aluminium alloys PA349 Auminium and aluminium alloys PA340 Auminium and aluminium alloys PA341 Auminium and aluminium alloys PA341 Auminium alloys PA342 Auminium and aluminium alloys PA343 Auminium aluminium alloys PA344 Auminium aluminium alloys PA345 Auminium aluminium alloys PA346 Auminium aluminium alloys PA				
PA279.2 Formulated adhesives, gelatine, etc. PA279.4 Formulated pesticides, etc. PA279.5 Formulated pesticides, etc. PA279.6 Surgical bandages, etc. PA279.6 Surgical bandages, etc. PA279.7 Printing ink PA279.6 Surgical bandages, etc. PA279.7 Printing ink PA279.7 Printing ink PA279.8 Surgical bandages, etc. PA279.8 Printing ink PA279.9 Protographic chemical materials PA311 Iron and steel (general) PA312 Iron and steel (general) PA313 Iron and steel (general) PA314 Iron castings, etc. PA323 Iron castings, etc. PA324 Copper, brass and other copper alloys PA325 Copper, brass and other copper alloys PA326 Agricultural machinery (except tractors) PA327 Agricultural machinery (except tractors) PA338 Agricultural machinery (except tractors) PA339 Agricultural machinery equipment PA331 Iron and steel (general) PA332 Iron castings, etc. PA333, I Pumps PA333, I Pumps PA333, I Pumps PA334 Iron and steel (general) PA335 Iron castings, etc. PA336 Iron castings, etc. PA337 Iron castings, etc. PA338 Iron castings, etc. PA349 Iron ca				
PA279.3 Explosives and fireworks PA279.5 Primiting ink PA279.6 Primiting ink PA279.7 Printing ink PA279.7 Protographic chemical materials PA311 Leather (tanning and dressing) and fellmongery PA29.8 Surgical bandages, etc. PA279.7 Photographic chemical materials PA311 Steel tubes PA311 Loro castings, etc. PA312 Steel tubes PA313 Aluminium and aluminium alloys PA313 Aluminium and aluminium alloys PA314 Aluminium and aluminium alloys PA315 Aluminium and aluminium alloys PA316 Aluminium and aluminium alloys PA317 Aluminium and aluminium alloys PA318 Aluminium and aluminium alloys PA319 Aluminium and aluminium alloys PA319 Aluminium and aluminium alloys PA321 Aluminium and aluminium alloys PA322 Aluminium and aluminium alloys PA323 Aluminium and aluminium alloys PA324 Aluminium and aluminium alloys PA325 Aluminium and aluminium alloys PA326 Aluminium and aluminium alloys PA327 Aluminium and aluminium alloys PA328 Aluminium and aluminium alloys PA329 Aluminium and aluminium alloys PA320 Aluminium and aluminium alloys PA321 Aluminium and aluminium alloys PA322 Aluminium and aluminium alloys PA322 Aluminium and aluminium alloys PA323 Aluminium and aluminium alloys PA324 Aluminium and aluminium alloys PA325 Aluminium and aluminium alloys PA326 Aluminium and aluminium alloys PA327 Aluminium and aluminium alloys PA328 Aluminium and aluminium alloys PA329 Aluminium and aluminium alloys PA329 Aluminium and aluminium alloys PA320 Aluminium and aluminium alloys PA321 Aluminium and aluminium alloys PA322 Aluminium and aluminium alloys PA321 Aluminium and aluminium alloys PA322 Aluminium and aluminium alloys PA322 Corpser, brass and fluid power equipment PA333 Aluminium and aluminium and aluminium and aluminium and aluminium and aluminiu				
PA279.6 Formulated pesticides, etc. PA279.6 Surgical bandages, etc. PA279.7 Printing ink PA279.6 Surgical bandages, etc. PA279.7 Printing ink PA279.7 Printing ink PA279.8 Surgical bandages, etc. PA279.7 Protographic chemical materials PA311 Iron and steel (general) PA312 Iron and steel (general) PA313 Iron and steel (general) PA313 Iron and steel (general) PA314 Iron castings, etc. PA315 Iron castings, etc. PA316 Iron castings, etc. PA317 Iron castings, etc. PA318 Iron castings, etc. PA319 Iron castings, etc. PA329 Copper, brass and other copper alloys PA320 Copper, brass and other copper alloys PA331 Agricultural machinery (except tractors) PA331 Agricultural machinery (except tractors) PA332 Agricultural machinery (except tractors) PA333 Iron Pa333 Iron Pa333 Iron Pa333 Iron Pa333 Iron Pa334 Iron Pa344 Iron Pa345 Iron Pa34				
PA279.5 Printing ink PA279.7 Photographic chemical materials PA311 Con and steel (eperal) PA311 Steel tubes PA312 Steel tubes PA313 I Con castings, etc. PA321 Aluminium and aluminium alloys PA322 Agricultural machinery (except tractors) PA323 Miscellaneous base metals PA331 Pumps PA333.2 Valves PA333.2 Valves PA333.2 Valves PA333.3 I Pumps PA333.3 I Compressors and fluid power equipment PA334 I Industrial engines PA335 Construction and earth-moving equipment PA339 Office machinery PA339.2 Printing, bookbinding and paper goods machinery PA339.2 Printing, bookbinding and paper goods machinery PA339.3 Printing and air-conditioning equipment PA339.4 I Nining machinery PA339.5 Pa339.7 Printing from a packaging and bottling machinery PA339.8 Pa339.8 Printing and air-conditioning equipment PA339.9 Printing, bookbinding and paper goods machinery PA339.1 Industrial inclined process) plant and steelwork PA339 PA339.1 Precision chains and other mechanical engineering PA349 PA349.1 Ball, roller, plain and other bearing PA349 PA349.1 Electrical machinery PA349 PA349.1 PA359 PA350 Surgical instruments and appliances PA349 PA359 PA350 Surgical instruments and appliances PA350 PA350 Surgical instruments and systems PA351 Photographic and document copying equipment PA352 PA353 Surgical instruments and systems PA354 Radio and electronic components PA355 PA356 Selentific and industrial instruments and systems PA356 PA356 PA356 PA356 Selentific and industrial instruments and systems PA350 Surgical ristruments and appliances PA350 PA350 Surgical instruments and systems PA354 Radio and electronic components PA355 Surgical ristruments and appliances PA356 Selentific and industrial instruments and systems PA356 Selentific and industrial instruments and systems PA356 Selentific and industrial instruments and systems PA356 Selentific and industrial				
PA279.6 Surgical bandages, etc. PA279.7 Photographic chemical materials PA311 Iron and steel (general) PA312 Iron and steel (general) PA313 Iron castings, etc. PA313 Iron castings, etc. PA313 Iron castings, etc. PA314 Iron and aluminium alloys PA315 Iron castings, etc. PA317 Iron and aluminium alloys PA318 Iron castings, etc. PA319 Iron castings, etc. PA319 Iron castings, etc. PA319 Iron castings, etc. PA310 Iron castings, etc. PA310 Iron castings, etc. PA311 Iron castings, etc. PA311 Iron castings, etc. PA312 Iron castings, etc. PA313 Iron castings, etc. PA314 Iron castings, etc. PA315 Iron castings, etc. PA316 Iron castings, etc. PA317 Iron castings, etc. PA318 Iron castings, etc. PA319 Iron castings, etc. PA319 Iron castings, etc. PA310 Iron castings, etc. PA310 Iron castings, etc. PA311 Iron castings, etc. PA311 Iron and castings, etc. PA311 Iron and castings, etc. PA311 Iron and castings, etc. PA311 Iron castings, etc. PA311 Iron castings, etc. PA311 Iron castings, etc. PA311 Iron castings, etc. PA312 Iron castings, etc. PA313 Iron castings, etc. PA314 Iron castings, etc. PA315 Iron castings, etc. PA316 Iron castings, etc. PA317 Iron castings, etc. PA318 Iron castings, etc. PA319 Iron castings, etc. PA319 Iron castings, etc. PA310 Iron castings, etc. PA310 Iron castings, etc. PA311 Iron castings, etc. PA311 Iron castings, etc. PA312 Iron castings, etc. PA312 Iron castings, etc. PA314 Iron castings, etc. PA315 Iron castings, etc. PA316 Iron castings, etc. PA317 Iron castings, etc. PA318 Iron castings, etc. PA319 Iron castings, etc. PA319 Iron castings, etc. PA310 Iron castings, etc. PA311 Iron castings, etc. PA311 Iron castings, etc. PA312 Iron castings, etc. PA312 Iron castings, etc. PA312 Iron castings, etc. PA313 Iron castings, etc. PA314 Iron castings, etc. PA315 Iron castings, etc. PA316 Iron castings, etc. PA317 Iron castings, etc. PA318 Iron castings, etc. PA319 Iron castings, etc. PA319 Iron castings, etc. PA310 Iron castings, etc. PA310 Iron castings, etc. PA310 Iron castings, etc. PA311 Iron casti				
PA219.7 Photographic chemical materials PA311 Pa312 Steel tubes PA312 Tron and steel (general) PA313 Steel tubes PA314 In Tron castings, etc. PA321 Aluminium and aluminium alloys PA322 Aluminium and aluminium alloys PA323 Miscellaneous base metals PA323 Miscellaneous base metals PA324 Metal-working machiner (scept tractors) PA325 Metal-working machiner (scept tractors) PA332 Metal-working machiner (scept tractors) PA333.2 Valves PA333.2 Valves PA333.3 Ompressors and fluid power equipment PA334 Industrial engines PA335 Construction and earth-moving equipment PA336 Construction and earth-moving equipment PA339. Printing, bookbinding and paper goods machinery PA339. Printing and air-conditioning equipment PA339. Prod and drink processing machinery and packaging and bottling machinery PA349.1 Industrial (including process) plant and steelwork PA349.1 Ball, roller, plain and other bearing PA349.1 Precision chains and other mechanical engineering PA349.1 Procision chains and other mechanical engineering PA349.2 Precision chains and other bearing PA349.3 Precision chains and other bearing PA349.4 Printing, publishing of newspapers and periodicals PA350 Telegraph and telephone apparatus and equipment PA361 Radio, radar and electron			PA433	
PA312 Steel tubes PA313 Iron castings, etc. PA321 Aluminium and aluminium alloys PA322 Copper, brass and other copper alloys PA323 Algoricultural machinery (except tractors) PA323 Agricultural machinery (except tractors) PA324 Agricultural machinery (except tractors) PA325 PA325 Iron (asting a part of the color of t				
PA313 Iron castings, etc. PA321 Aluminium and aluminium alloys PA322 Copper, brass and other copper alloys PA323 Miscellaneous base metals PA324 Miscellaneous base metals PA325 Miscellaneous base metals PA326 Aluminium and chinery (except tractors) PA327 Aluminium and aluminium alloys PA328 Miscellaneous base metals PA329 Miscellaneous base metals PA331 Miscellaneous base metals PA332 Metal-working machiner (except tractors) PA333 Metal-working machiner tools PA333.2 Valves PA333.2 Valves PA333.3 Compressors and fluid power equipment PA333 Industrial engines PA334 Industrial engines PA335 Construction and earth-moving equipment PA336 Construction and earth-moving equipment PA338 Office machinery PA339.2 Printing, bookbinding and paper goods machinery PA339.2 Printing, bookbinding and paper goods machinery PA339.3 Refrigerating machinery, space-heating, ventilating and air-conditioning equipment PA339.5 Scales and weighing machinery and portable power tools PA339.9 Miscellaneous (non-electrical) machinery PA339.9 Miscellaneous (non-electrical) machinery PA339.9 Miscellaneous (non-electrical) machinery PA3401 Industrial including process) plant and steelwork PA342 Ordnance and small arms PA3402 Protesty PA341 Industrial including process) plant and steelwork PA342 Surgical instruments and appliances PA343 Surgical instruments and appliances PA344 Surgical instruments and appliances PA355 Scientific and industrial instruments and systems PA349.4 Relaction and decument copying equipment PA354 Scientific and industrial instruments and equipment PA355 Protection and electronic components PA366 Flebrroin components PA367 Ford and electronic components PA368 Flebracing and sound reproducing PA368 Flebracing and sound reproducing PA368 Flebracing and sound reproducing PA369 Flebracing and sound reproducing PA360 Flebracing and s				
PA321 Aluminium and aluminium alloys PA322 (Copper, brass and other copper alloys PA323 Miscellaneous base metals PA331 PA332 Miscellaneous base metals PA332 Metal-working machinery (except tractors) PA332 PA333. Metal-working machiner tools PA333. Valvies PA333. Valvies PA333. Compressors and fluid power equipment PA333. Industrial engines PA333. Textile machinery and accessories PA336 Textile machinery and accessories PA337 Mechanical handling equipment PA338 Mechanical handling equipment PA339. Miscellaneous base metals PA349. PA640 PA661. Refractory goods PA349. PA670 PA661. Refractory goods PA670 PA6				
PA322 Copper, brass and other copper alloys PA322 Miscellaneous base metals PA331 Miscellaneous base metals PA332 Metal-working machiner (except tractors) PA332 Metal-working machiner tools PA332 PA332 Valves PA333.2 Valves PA333.2 Valves PA333.3 Compressors and fluid power equipment PA334 Industrial engines PA334 Industrial engines PA336 Construction and earth-moving equipment PA337 Extile machinery and accessories PA338 Office machinery PA339 Pfinting, bookbinding and paper goods machinery PA339.2 Printing, bookbinding and paper goods machinery PA339.5 Scales and weighing machinery and portable power tools PA339.6 Food and drink processing machinery and power tools PA339.9 Miscellaneous (non-electrical) machinery PA341 Industrial (including process) plant and steelwork PA342 Ordnance and small arms PA349.1 Palia and other bearings PA349.2 Precision chains and other mechanical engineering PA349.3 Surgical instruments and appliances PA352 Watches and clocks PA362 Insulated wires and cables PA363 Radio and electronic components PA365.2 Broadcast receiving and sound reproducing equipment PA366.2 Broadcast receiving and sound reproducing equipment PA366.2 Broadcast receiving and sound reproducing equipment PA366 Electrical machinery PA360 Pottory PA360 Pottory PA360 Pottory PA360 PA360 Pottory PA360 PA				
PA323 Miscellaneous base metals PA331 Agricultural machinery (except tractors) PA331 Agricultural machinery (except tractors) PA332. Plumps PA333.1 Pumps PA333.1 Pumps PA333.2 Valves PA333.3 Compressors and fluid power equipment PA333.5 Textile machinery and accessories PA336 Textile machinery and accessories PA337 Mechanical handling equipment PA339 PA339.1 Mining machinery PA339.2 Printing, bookbinding and paper goods machinery PA339.2 Printing, bookbinding and paper goods machinery PA339.3 Refrigerating machinery, space-heating, ventilating and air-conditioning equipment PA339.3 Refrigerating machinery and packaging and bortling machinery and packaging and bortling machinery PA339.1 Miscellaneous building materials and mineral products PA340.2 Plottery PA350.2 Printing, bookbinding and paper goods machinery PA360.3 Refrigerating machinery and packaging and bortling machinery and packaging and bortling machinery and packaging and bortling machinery PA341 Industrial (including processi) plant and steelwork PA342.1 Industrial (including process) plant and steelwork PA349.1 Ball, roller, plain and other bearings PA349.2 Precision chains and other mechanical engineering PA351 Surgical instruments and appliances PA362 Surgical instruments and appliances PA363 Surgical instruments and appliances PA363 Surgical instruments and appliances PA364 Scientific and industrial instruments and systems PA365 PA365 Servado and teleprone apparatus and equipment PA366 Electrical machinery PA366 Electrical machinery PA366 Electrical machinery PA367 Watches and clocks PA368 Fractory goods PA368 Fractory goods PA369 PA360 Fotory PA360 Fraction and and non-refractory goods PA360 PA360 Fotory PA360 Fraction and and non-refractory goods PA360 Fraction and non-refractory goods PA360 Fraction and non-refractory goods PA3				
PA331 Agricultural machinery (except tractors) PA332 PA332 PA333. Pumps PA333. Pumps PA333. Pa333. Pumps PA333. Pomps PA333. Pomps PA334 Passes Passe				
PA332   Metal-working machine tools   PA450   PA451.   Refrectory goods   PA333.   Pa333.   Pumps   PA461.   Refrectory goods   PA462.   Refre				
PA333.1 Pumps PA333.2 Valves PA333.2 Compressors and fluid power equipment PA334 PA353 PA335 PA336 PA338 PA339.2 Printing, bookbinding and paper goods machinery PA339.3 Pa339.3 Pa339.3 Pa339.5 PA339.3 PA339.5 PA339.3 PA339.5 PA339.4 PA339.5 PA339.5 PA339.5 PA339.7				
PA333.2 Valves PA333.3 Compressors and fluid power equipment PA334 Industrial engines PA335 Textile machinery and accessories PA336 PA337 Mechanical handling equipment PA339.1 Mining machinery PA339.2 Printing, bookbinding and paper goods machinery PA339.3 Refrigerating machinery, space-heating, ventilating and air-conditioning equipment PA339.7 Scales and weighing machinery and portable power tools PA339.9 PA339.9 Processing and bottling machinery and portable power tools PA349.2 Presision chains and other mechanical engineering PA349.2 Precision chains and other mechanical engineering PA349.3 Surgical instruments and appliances PA350 Scientific and industrial instruments and systems PA361 PA361 PA362 PA363 Products of paper and board PA364 PA365 PA365 PA365 PA365 PA366 PA36			PA461.1	Refractory goods
PA334 Industrial engines PA336 Textile machinery and accessories PA337 Mechanical handling equipment PA337 Mechanical handling equipment PA339. Mechanical handling equipment PA339. Printing, bookbinding and paper goods machinery PA339.3 Refrigerating machinery, space-heating, ventilating and air-conditioning equipment PA339.3 Refrigerating machinery and portable power tools PA339. Food and drink processing machinery and packaging and bottling machinery PA341. Pa342 Processing machinery PA341. PA342 Processing machinery PA349.2 Precision chains and other mechanical engineering PA349.3 Protographic and document copying equipment Watches and clocks PA353 Surgical instruments and appliances PA354 Pa365 PA364 Pa366 Telegraph and telephone apparatus and equipment PA366 Fa366	PA333,	2 Valves		Building bricks and non-refractory goods
PA335 Textile machinery and accessories PA336 Construction and earth-moving equipment PA337 Mechanical handling equipment PA338 Mechanical handling equipment PA339. PA339. Mining machinery PA339. Printing, bookbinding and paper goods machinery PA339.3 Refrigerating machinery, space-heating, ventilating and air-conditioning equipment PA339.5 Scales and weighing machinery and portable power tools PA339.7 Food and drink processing machinery and packaging and bottling machinery PA331 Industrial (including process) plant and steelwork PA341 Pa341 Pa341 Ball, roller, plain and other bearings PA349.1 Ball, roller, plain and other bearings PA351 Surgical instruments and appliances PA352 Surgical instruments and appliances PA365 Telegraph and telephone apparatus and equipment PA366 Flectronic components PA366 Flectronic computers PA366 Flectronic computers PA367 Radio, radar and electronic capital goods PA360 Vere supply PA36		3 Compressors and fluid power equipment		
PA336 Construction and earth-moving equipment PA337 Mechanical handling equipment PA338 Office machinery PA339.1 Mining machinery PA339.1 Mining machinery PA339.2 Printing, bookbinding and paper goods machinery PA339.3 Refrigerating machinery, space-heating, ventilating and air-conditioning equipment PA339.5 Scales and weighing machinery and portable power tools PA339.7 Food and drink processing machinery and packaging and bottling machinery PA341 Industrial (including process) plant and steelwork PA342 Precision chains and other mechanical engineering PA349.2 Precision chains and other mechanical engineering PA352 Watches and clocks PA353 Scientific and industrial instruments and systems PA361 Electrical machinery PA361 Timber PA472 Furniture and upholstery PA473 Bedding, etc. Shop and office fitting Wooden containers and baskets PA481 Paper and board PA482.1 Cardboard boxes, cartons and fibre-board packing cases PA482.1 Wallcoverings PA482.1 Wallcoverings PA484.2 Wallcoverings PA484.3 Wallcoverings PA485 Photographic and document copying equipment PA352 Watches and clocks PA353 Telegraph and telephone apparatus and equipment PA366 Flectrical machinery PA366 Flectronic components PA366 Flectronic components PA366 Flectronic componers PA366 Flectronic computers PA367 Fladio, radar and electronic capital goods PA469 Fleating machinery PA475 Shop and office fitting Wooden containers and baskets PA479 Miscellaneous wood and cork manufactures PA482.1 Cardboard boxes, cartons and fibre-board packing cases PA482.1 Valloverings PA482.2 Packaging products of paper and board PA482.2 Packaging products of paper and board PA482.3 Packaging products of paper and board PA482.4 Valloverings PA484 Pa484 Path Path Path Path Path Path Path Path	PA334	Industrial engines	PA463	Glass
PA337 Mechanical handling equipment PA338 Office machinery PA339. Office machinery PA339. Mining machinery PA339. Mining machinery PA339. Printing, bookbinding and paper goods machinery PA339. Printing, bookbinding and paper goods machinery PA339. Refrigerating machinery, space-heating, ventilating and air-conditioning equipment PA39.5 Scales and weighing machinery and portable power tools PA39.7 Food and drink processing machinery and packaging and bottling machinery PA339.9 Miscellaneous (non-electrical) machinery PA341 Industrial (including process) plant and steelwork PA342 Precision chains and other mechanical engineering PA351 Photographic and document copying equipment PA352 Vales Surgical instruments and appliances PA354 Scientific and industrial instruments and systems PA361 Electrical machinery PA362 Pa363 Telegraph and telephone apparatus and equipment PA364 Radio and electronic components PA365 Broadcast receiving and sound reproducing equipment PA366 Electronic computers PA360 Summary tables PA361 Radio, radar and electronic capital goods PA365 Radio, radar and electronic capital goods PA366 Selectronic computers PA366 Selectronic computers PA367 Pass PA360 Summary tables PA368 Summary tables PA369 Summary tables				
PA339. Office machinery PA339.1 Mining machinery PA339.2 Printing, bookbinding and paper goods machinery PA339.3 Refrigerating machinery, space-heating, ventilating and air-conditioning equipment PA39.5 Scales and weighing machinery and portable power tools PA39.7 Food and drink processing machinery PA39.9 Miscellaneous (non-electrical) machinery PA341 Industrial (including process) plant and steelwork PA342 Ordnance and small arms PA342.1 Precision chains and other bearings PA349.2 Precision chains and other mechanical engineering PA351 Photographic and document copying equipment PA352 Watches and clocks PA353 Surgical instruments and appliances PA354 Scientific and industrial instruments and systems PA362 Insulated wires and cables PA363 Radio and electronic components PA364 Radio and electronic components PA365.1 Gramophone records and tape recordings PA366 Electronic computers PA366 Electronic computers PA367 Industrial instruments PA368 Radio, radar and electronic capital goods PA369 Ventilating, bookbinding and paper goods machinery PA475 Eurniture and upholstery PA475 Shop and office fitting PA476 Wooden containers and baskets Miscellaneous wood and cork manufactures PA481 Daylor Wooden containers and baskets Miscellaneous wood and cork manufactures PA482.1 Cardboard boxes, cartons and fibre-board packing cases PA482.2 Packaging products of paper and associated materials Manufactured stationery PA482.1 Wallcoverings PA484.2 Miscellaneous manufactures of paper and board Printing, publishing of newspapers and periodicals General printing and publishing Rubber PA491 Timber PA492 Linoleum, plastics floor-covering, leathercloth, etc. PA493 Sports equipment PA494.3 Sports equipment PA496 Miscellaneous stationers' goods PA496 Miscellaneous stationers' goods PA499.1 Musical instruments PA499.2 Miscellaneous manufacturing industries Construction Construction PA490.1 Miscellaneous stationery PA490.1 Miscellaneous stationers' goods PA490.1 Miscellaneous stationers' goods PA490.1 Miscellaneous stationers' goods PA49				
PA339.1 Mining machinery PA339.2 Printing, bookbinding and paper goods machinery PA339.3 Refrigerating machinery, space-heating, ventilating and air-conditioning equipment PA39.5 Scales and weighing machinery and portable power tools PA39.7 Food and drink processing machinery and packaging and bottling machinery PA339.1 Industrial (including process) plant and steelwork PA341 Industrial (including process) plant and steelwork PA342 Ordnance and small arms PA349.1 Ball, roller, plain and other bearings PA351 Photographic and document copying equipment PA352 Surgical instruments and appliances PA353 Surgical instruments and appliances PA365 Insulated wires and cables PA366.2 Broadcast receiving and sound reproducing equipment PA366.2 Broadcast receiving and sound reproducing PA367 Radio, radar and electronic capital goods PA360 Radio, radar and electronic capital goods				
PA339.2 Printing, bookbinding and paper goods machinery PA339.3 Refrigerating machinery, space-heating, ventilating and air-conditioning equipment PA395.5 Scales and weighing machinery and portable power tools PA39.7 Food and drink processing machinery and packaging and bottling machinery PA39.9 Miscellaneous (non-electrical) machinery PA39.1 Industrial (including process) plant and steelwork PA349.2 Precision chains and other mechanical engineering PA351 Photographic and document copying equipment PA352 Surgical instruments and appliances PA353 Surgical instruments and appliances PA354 Scientific and industrial instruments and systems PA362 Insulated wires and cables PA363 Telegraph and telephone apparatus and equipment PA364 Radio and electronic components PA365.1 Broadcast receiving and sound reproducing equipment PA367 Radio, radar and electronic capital goods PA369 Radio, radar and electronic capital goods PA360 Summary tables PA478 Wooden containers and baskets Miscellaneous wood and cork manufactures PA479 Wiscellaneous wood and cork manufactures PA479 Wacellaneous wood and cork manufactures PA481 Paper and board PA482.1 Cardboard boxes, cartons and fibre-board packing cases PA482.1 Cardboard boxes, cartons and fibre-board packing cases PA482.1 Packaging products of paper and associated materials PA482.1 Wallcoverings PA484.2 Wiscellaneous manufactures of paper and board PA484.1 Wallcoverings PA484.2 Miscellaneous manufactures of paper and board PA484.1 Wallcoverings PA485 Printing, publishing of newspapers and periodicals PA489 Pa489 Finting, publishing of newspapers and periodicals PA489 Pa491 Toys, games and children's carriages PA491 Toys, games and children's carriages PA492.1 Toys, games and children's carriages PA493 Miscellaneous stationers' goods PA499.1 Musical instruments PA499.2 Miscellaneous manufacturing industries Construction PA601 Gas PA602 Electricity PA602 Summary tables				
PA39.3 Refrigerating machinery, space-heating, ventilating and air-conditioning equipment PA39.5 Scales and weighing machinery and portable power tools  PA39.7 Food and drink processing machinery and packaging and bottling machinery and packaging and bottling machinery PA39.9 Miscellaneous (non-electrical) machinery PA311 Industrial (including process) plant and steelwork PA341 Industrial (including process) plant and steelwork PA349.1 Ball, roller, plain and other bearings PA349.2 Precision chains and other mechanical engineering PA352 Watches and clocks PA353 Surgical instruments and appliances PA365 Electrical machinery PA366 Broadcast receiving and sound reproducing equipment PA365.2 Broadcast receiving and sound reproducing equipment PA366 Electroic computers PA367 Radio, radar and electronic capital goods  PA367 PA368 PA368 Radio, radar and electronic capital goods  PA369 PA360 PA361 Electroic computers PA360 Radio, radar and electronic capital goods  PA360 PA361 PA362 PA363 Radio, radar and electronic capital goods  PA363 PA364 Radio, radar and electronic capital goods  PA365 PA366 PA367 PA367 PA367 PA367 PA367 PA367 PA368 PA369 PA36				
ventilating and air-conditioning equipment PA39.5 Scales and weighing machinery and portable power tools PA39.7 Food and drink processing machinery and packaging and bottling machinery PA39.9 Miscellaneous (non-electrical) machinery PA39.1 Industrial (including process) plant and steelwork PA342 Ordnance and small arms PA349.1 Ball, roller, plain and other bearings PA349.2 Precision chains and other mechanical engineering PA351 Photographic and document copying equipment PA352 Watches and clocks PA353 Surgical instruments and appliances PA354 Scientific and industrial instruments and systems PA361 Electrical machinery PA362 Insulated wires and cables PA363 Telegraph and telephone apparatus and equipment PA364 Radio and electronic components PA365.1 Gramophone records and tape recordings PA366 Electroic computers PA367 Radio, radar and electronic capital goods PA368 Radio, radar and electronic capital goods  PA369 Scientific computers PA360 Water supply PA360 Water supply PA361 Electricity PA361 Radio, radar and electronic capital goods  PA363 Radio, radar and electronic capital goods  PA366 Scientific computers PA367 Radio, radar and electronic capital goods  PA368 Scientific computers PA369 Radio, radar and electronic capital goods  PA360 Scientific computers PA360 Sci				
PA39.5 Scales and weighing machinery and portable power tools PA39.7 Food and drink processing machinery and packaging and bottling machinery and packaging and bottling machinery PA39.9 Miscellaneous (non-electrical) machinery PA341 Paper and board PA482.1 Cardboard boxes, cartons and fibre-board packing cases PA482.2 Packaging products of paper and associated materials PA39.9 Miscellaneous (non-electrical) machinery PA341 Paper and board PA482.1 Cardboard boxes, cartons and fibre-board packing cases PA482.2 Packaging products of paper and associated materials PA482.1 Wallcoverings PA483.1 Wallcoverings PA484.2 Miscellaneous manufactures of paper and board PA349.1 Ball, roller, plain and other bearings PA485.2 Precision chains and other mechanical engineering PA351 Photographic and document copying equipment PA352 Watches and clocks PA353 Surgical instruments and appliances PA354 Scientific and industrial instruments and systems PA365 Electrical machinery PA362 Insulated wires and cables PA363 Telegraph and telephone apparatus and equipment PA364 Radio and electronic components PA365.1 Gramophone records and tape recordings PA365.2 Broadcast receiving and sound reproducing equipment PA366 Electroic computers PA367 Radio, radar and electronic capital goods PA368 Radio, radar and electronic capital goods PA369 Summary tables				Wooden containers and baskets
PA339.7 Food and drink processing machinery and packaging and bottling machinery PA389.9 Miscellaneous (non-electrical) machinery PA341 Industrial (including process) plant and steelwork PA342 Ordnance and small arms PA349.1 Ball, roller, plain and other bearings PA349.2 Precision chains and other mechanical engineering PA351 Photographic and document copying equipment PA352 Surgical instruments and appliances PA364 Electrical machinery PA365 Insulated wires and cables PA365.1 Gramophone records and tape recordings PA365.1 Gramophone records and tape recordings PA366 Electronic computers PA367 Radio, radar and electronic capital goods  PA367 Radio, radar and electronic capital goods  PA389.2 Cardboard boxes, cartons and fibre-board packing cases PA482.2 Packaging products of paper and associated materials PA482.2 Packaging products of paper and associated materials PA482.4 Manufactured stationery PA484.1 Wallcoverings PA484.1 Wallcoverings PA484.2 Miscellaneous manufactures of paper and board Printing, publishing of newspapers and periodicals PA485.4 Printing, publishing of newspapers and periodicals PA491.4 Rubber PA491 Toys, games and children's carriages PA494.3 Sports equipment PA495. Miscellaneous stationers' goods PA494.3 Sports equipment PA499.1 Musical instruments PA499.1 Musical instruments PA499.1 Musical instruments PA499.2 Miscellaneous manufacturing industries PA600 Construction PA601 Gas PA603 Water supply Summary tables	PA339.	5 Scales and weighing machinery and portable	PA479	Miscellaneous wood and cork manufactures
packaging and bottling machinery PA39.9 Miscellaneous (non-electrical) machinery PA341 Industrial (including process) plant and steelwork PA342 Ordnance and small arms PA349.1 Ball, roller, plain and other bearings PA349.2 Precision chains and other mechanical engineering PA351 Photographic and document copying equipment PA352 Watches and clocks PA353 Surgical instruments and appliances PA364 Electrical machinery PA362 Insulated wires and cables PA363 Telegraph and telephone apparatus and equipment PA364 Radio and electronic components PA365.1 Gramophone records and tape recordings PA366 Electronic computers PA367 Radio, radar and electronic capital goods PA367 Radio, radar and electronic capital goods PA368 Industrial instruments and systems PA369 PA490 PA490 All Radio and electronic capital goods PA360 PA480 Packaging products of paper and associated materials Manufactured stationery PA481 Wallcoverings Manufactured stationery PA484.1 Wallcoverings Manufactured stationery PA484.1 Wallcoverings PA484.2 Printing, publishing of newspapers and periodicals PA485 Printing, publishing of newspapers and periodicals PA486 Pa489 Printing, publishing of newspapers and periodicals PA489 Printing, publishing of newspapers and periodicals PA489 Printing, publishing of newspapers and periodicals PA489 Pastics floor-covering, leathercloth, etc. PA491 PA489 Pa4				
PA339.9 Miscellaneous (non-electrical) machinery PA341 Industrial (including process) plant and steelwork PA342 Ordnance and small arms PA349.1 Ball, roller, plain and other bearings PA349.2 Precision chains and other mechanical engineering PA351 Photographic and document copying equipment PA352 Watches and clocks PA353 Surgical instruments and appliances PA354 Celectrical machinery PA361 Electrical machinery PA362 Insulated wires and cables PA363 Telegraph and telephone apparatus and equipment PA364 Radio and electronic components PA365.1 Gramophone records and tape recordings PA366 Electronic computers PA367 Radio, radar and electronic capital goods PA367 Radio, radar and electronic capital goods PA367 Surgical instruments and systems PA488 Manufactured stationery PA483 Mallcoverings PA484.1 Wallcoverings PA484.2 Miscellaneous manufactures of paper and board PA485.1 PA486.1 Photographic and coher mechanical engineering PA486.1 PA489 Electronic stationery PA489 Pha489 Pha489 Plastics products PA499.1 Plastics products PA499.2 Miscellaneous stationers' goods PA499.1 Plastics products PA499.2 Miscellaneous manufacturing industries PA499.1 Toys, games and children's carriages PA494.3 Sports equipment PA496 Plastics products PA499 Plastics products PA499.1 Musical instruments PA499.2 Miscellaneous manufacturing industries PA499.1 Toys, games and children's carriages PA499.1 Toys, games and childr	PA339.			
PA341 Industrial (including process) plant and steelwork PA342 Ordnance and small arms PA349.1 Ball, roller, plain and other bearings PA349.2 Precision chains and other mechanical engineering PA351 Photographic and document copying equipment PA352 Watches and clocks PA353 Surgical instruments and appliances PA354 Scientific and industrial instruments and systems PA361 Electrical machinery PA362 Insulated wires and cables PA363 Telegraph and telephone apparatus and equipment PA364 Radio and electronic components PA365.1 Gramophone records and tape recordings PA366.1 Gramophone records and tape recordings PA366 Electricity PA366 Electronic computers PA367 Radio, radar and electronic capital goods PA367 Radio, radar and electronic capital goods PA368 Watches and other mechanical engineering PA488.2 Miscellaneous manufactures of paper and board PA484.2 Miscellaneous manufactures of paper and board PA485.7 Printing, publishing of newspapers and periodicals PA485 Printing, publishing of newspapers and periodicals PA485 Printing, publishing of newspapers and periodicals PA485 General printing and publishing PA491 Rubber PA491 Toys, games and children's carriages PA494.3 Sports equipment PA494.3 Sports equipment PA496 Plastics products PA496 Plastics products PA499.1 Musical instruments PA499.2 Miscellaneous stationers' goods PA500 Construction PA601 Gas PA601 Gas PA602 Electricity PA603 Water supply PA603 Summary tables	DAGGG			
PA342 Ordnance and small arms PA349.1 Ball, roller, plain and other bearings PA349.2 Precision chains and other mechanical engineering PA351 Photographic and document copying equipment PA352 Watches and clocks PA353 Surgical instruments and appliances PA354 Electrical machinery PA362 Insulated wires and cables PA363 Telegraph and telephone apparatus and equipment PA364 Radio and electronic components PA365.1 Gramophone records and tape recordings PA366 Electroic computers PA366 Electroic computers PA367 Radio, radar and electronic capital goods PA367 Radio, radar and electronic capital goods PA368 Printing, publishing of newspapers and periodicals PA489 General printing and publishing PA489 General printing and publishing PA489 Habber PA489 Chaysa Pha491 Linoleum, plastics floor-covering, leathercloth, etc. PA493 Brushes and brooms PA493 Brushes and children's carriages PA494.1 Toys, games and children's carriages PA494.3 Sports equipment PA495 Miscellaneous stationers' goods PA496 Plastics products PA499.1 Musical instruments PA499.1 Musical instruments PA499.2 Miscellaneous manufacturing industries PA499.1 Gas PA601 Gas PA602 Electricity PA603 Water supply PA603 Summary tables				
PA349.1 Ball, roller, plain and other bearings PA349.2 Precision chains and other mechanical engineering PA351 Photographic and document copying equipment PA352 Watches and clocks PA353 Surgical instruments and appliances PA354 Scientific and industrial instruments and systems PA361 Electrical machinery PA362 Insulated wires and cables PA363 Telegraph and telephone apparatus and equipment PA364 Radio and electronic components PA365.1 Gramophone records and tape recordings PA366 Electronic computers PA367 Radio, radar and electronic capital goods PA367 Radio, radar and electronic capital goods PA368 Printing, publishing of newspapers and periodicals PA489 General printing and publishing PA489 Radios newspapers and periodicals PA489 General printing, publishing of newspapers and periodicals PA489 General printing and publishing PA491 Rubber PA491 Rubber PA492 Linoleum, plastics floor-covering, leathercloth, etc. PA493 Brushes and brooms PA494.1 Toys, games and children's carriages PA494.3 Sports equipment PA495 Miscellaneous stationers' goods PA496 Plastics products PA499.1 Musical instruments PA499.2 Miscellaneous manufacturing industries PA499.2 Goostruction PA601 Gas PA602 Electricity PA603 Water supply PA603 Summary tables				
PA349.2 Precision chains and other mechanical engineering PA351 Photographic and document copying equipment PA352 Watches and clocks PA353 Surgical instruments and appliances PA364 Scientific and industrial instruments and systems PA361 Electrical machinery PA362 Insulated wires and cables PA363 Telegraph and telephone apparatus and equipment PA364 Radio and electronic components PA365.1 Gramophone records and tape recordings PA365.2 Broadcast receiving and sound reproducing equipment PA366 Electronic computers PA367 Radio, radar and electronic capital goods PA367 Surgical instrument PA368 Potential goods PA369				Printing publishing of newspapers and periodicals
PA351 Photographic and document copying equipment PA352 Watches and clocks PA353 Surgical instruments and appliances PA354 Scientific and industrial instruments and systems PA361 Electrical machinery PA362 Insulated wires and cables PA363 Telegraph and telephone apparatus and equipment PA364 Radio and electronic components PA365.1 Gramophone records and tape recordings PA365.2 Brushes and brooms PA494.1 Toys, games and children's carriages PA494.3 Sports equipment PA496 Plastics products PA496 Plastics products PA497 Musical instruments PA499.1 Musical instruments PA499.2 Miscellaneous manufacturing industries PA496.1 Gramophone records and tape recordings PA500 Construction PA501 Gas equipment PA502 Electricity PA603 Water supply PA503 Summary tables				
PA352 Watches and clocks PA353 Surgical instruments and appliances PA354 Scientific and industrial instruments and systems PA361 Electrical machinery PA362 Insulated wires and cables PA363 Telegraph and telephone apparatus and equipment PA364 Radio and electronic components PA365.1 Gramophone records and tape recordings PA365.2 Broadcast receiving and sound reproducing equipment PA366 Electronic computers PA367 Radio, radar and electronic capital goods PA368 Linoleum, plastics floor-covering, leathercloth, etc. PA492 Brushes and brooms PA494.1 Toys, games and children's carriages PA494.1 Sports equipment PA495 Miscellaneous stationers' goods PIastics products PA496 Plastics products PA499.1 Musical instruments PA499.2 Miscellaneous manufacturing industries PA500 Construction PA500 Gas PA601 Gas PA602 Electricity PA603 Water supply PA603 Summary tables				
PA354 Scientific and industrial instruments and systems PA361 Electrical machinery PA362 Insulated wires and cables PA363 Telegraph and telephone apparatus and equipment PA364 Radio and electronic components PA365.1 Gramophone records and tape recordings PA365.2 Broadcast receiving and sound reproducing equipment PA366 Electronic computers PA367 Radio, radar and electronic capital goods PA368 Sports equipment Miscellaneous stationers' goods PA499 Plastics products PA499.1 Musical instruments PA499.2 Miscellaneous manufacturing industries PA500 Construction PA601 Gas PA601 Gas PA602 Electricity PA603 Water supply PA603 Sports equipment PA496 Plastics products PA499.1 Musical instruments PA499.2 Miscellaneous manufacturing industries PA601 Gas PA601 Gas PA602 Sports equipment PA496 Plastics products PA499.2 Miscellaneous manufacturing industries PA601 Gas PA601 Gas PA602 Sports equipment PA496 Plastics products PA499.3 Miscellaneous manufacturing industries PA601 Gas PA602 Sports equipment PA496 Plastics products PA499.3 Miscellaneous manufacturing industries PA601 Gas PA602 Sports equipment PA496 Plastics products PA499.3 Miscellaneous manufacturing industries PA601 Gas PA602 Sports equipment PA496 Plastics products PA499.3 Miscellaneous manufacturing industries PA601 Gas PA602 Sports equipment PA496 Plastics products PA499.3 Miscellaneous manufacturing industries PA601 Gas PA602 Sports equipment PA496 Plastics products PA499.3 Miscellaneous manufacturing industries PA601 Gas PA602 Sports equipment PA496 Plastics products PA499.3 Miscellaneous manufacturing industries PA601 Gas PA602 Sports equipment PA496 Plastics products PA499.3 Miscellaneous manufacturing industries PA601 Gas PA602 Sports equipment	PA352	Watches and clocks		
PA361 Electrical machinery PA362 Insulated wires and cables PA363 Telegraph and telephone apparatus and equipment PA364 Radio and electronic components PA365.1 Gramophone records and tape recordings PA365.2 Broadcast receiving and sound reproducing equipment PA366 Electronic computers PA367 Radio, radar and electronic capital goods PA367 Sports equipment PA495 Misscellaneous stationers' goods PA496 Plastics products PA499.1 Musical instruments PA499.2 Miscellaneous manufacturing industries PA496.1 Gas PA560 Electricity PA601 Gas PA602 Electricity PA602 Summary tables				
PA362 Insulated wires and cables PA363 Telegraph and telephone apparatus and equipment PA364 Radio and electronic components PA365.1 Gramophone records and tape recordings PA365.2 Broadcast receiving and sound reproducing equipment PA366 Electronic computers PA367 Radio, radar and electronic capital goods PA368 PA499 Miscellaneous stationers' goods PA499 Plastics products PA499.1 Musical instruments PA499.2 Miscellaneous manufacturing industries Construction PA500 Gas equipment PA601 Gas PA602 Electricity PA603 Water supply PA603 Summary tables				
PA363 Telegraph and telephone apparatus and equipment PA364 Radio and electronic components PA365.1 Gramophone records and tape recordings PA365.2 Broadcast receiving and sound reproducing equipment PA366 Electronic computers PA367 Radio, radar and electronic capital goods PA367 PA368 PA368 PA368 PA368 PA368 PA369 PA				
equipment PA499.1 Musical instruments PA499.2 Miscellaneous manufacturing industries PA365.1 Gramophone records and tape recordings PA500 Construction PA365.2 Broadcast receiving and sound reproducing equipment PA601 Gas PA666 Electronic computers PA603 Water supply PA367 Radio, radar and electronic capital goods PA1002 Summary tables				
PA364 Radio and electronic components PA365.1 Gramophone records and tape recordings PA365.2 Broadcast receiving and sound reproducing equipment PA366 Electronic computers PA367 Radio, radar and electronic capital goods PA499.2 Miscellaneous manufacturing industries PA500 Construction PA601 Gas PA602 Electricity PA603 Water supply PA1002 Summary tables	FA303			
PA365.1 Gramophone records and tape recordings PA365.2 Broadcast receiving and sound reproducing equipment PA366 Electronic computers PA367 Radio, radar and electronic capital goods PA500 Construction PA601 Gas PA602 Electricity PA603 Water supply PA1002 Summary tables	PA364			
PA365.2 Broadcast receiving and sound reproducing equipment PA601 Gas PA602 Electricity PA366 Electronic computers PA603 Water supply PA367 Radio, radar and electronic capital goods PA1002 Summary tables				
equipment PA602 Electricity PA366 Electronic computers PA603 Water supply PA367 Radio, radar and electronic capital goods PA1002 Summary tables		그러나 그리는 이 경영 있는 것이 없는 것이 이번에 가는 이 집에 그리고 있다면 없는데 없다면 없다면 없다.		
PA366 Electronic computers PA603 Water supply PA367 Radio, radar and electronic capital goods PA1002 Summary tables				
				Water supply
PA308 Electrical appliances primarily for domestic use			PA1002	Summary tables
	PA368	Electrical appliances primarily for domestic use		

## LIST OF CONTENTS

Table	Title 988						Page
No							
10.888	Output and costs	, 1973–1977					2
2	Capital expenditu	ure, 1973—1977					3
3	Stocks and work	in progress, 1973	-1977				3
4	Analysis of estab	lishments by size,	1977				4-5
5	Regional distribu at factor cost, 19		ent, net capital ex	penditure, net outp	out and gross va	alue added	6
6		sis of twelve-mont hments employing		by returns receive ons, 1977	d from United		7
7	Percentage analys	sis of employees, l	by full and part-ti	me employment ar	nd sex, 1977		mun so revA
8	Operating ratios,	1977					8

(ii)

TABLE 2

PA482.1

Output and costs, 1973–1977
All United Kingdom establishments classified to the industry (a)

Constitution of the second second	Unit	1973	1974	1975	1976	1977
Enterprises	Number	475	515	518	533	523
Establishments	and sales po	595	635	640	656	646
Sales of goods produced	£ thousand	479,403	668,630	698,309	880,426	1,031,643
Receipts for work done and industrial services rendered	euco ou limbe (iii	(b)	(b)	(b)	2,108	3,433
Capital goods produced for establish- nents' own use	,,	695	188	410	370	295
Non-industrial services rendered	"	2,006	2,388	3,221	2,870	3,582
Goods merchanted or factored	"	12,427	20,749	20,166	19,691	25,404
Total sales and work done (c)	,,	494,531	691,955	722,106	905,466	1,064,356
ncrease during the year, work in rogress and goods on hand for sale	"	6,265	14,333	-2,699	9,712	8,554
Gross output	"	500,796	706,289	719,407	915,178	1,072,910
Purchases of materials for use in pro- luction, and packaging and fuel	,,	270,396	401,686	382,858	501,508	590,522
urchases of goods for merchanting or actoring	,	10,860	17,943	17,081	17,176	21,938
ncrease during the year, stocks of naterials, stores and fuel	,,	10,931	31,668	-17,129	12,059	4,155
ost of industrial services received	"	10,007	15,671	13,444	18,197	23,027
Net output	"	220,464	302,656	288,894	390,355	441,578
otal employment (d)	Thousands	69.1	70.0	64.6	63.6	64.9
Net output per head	£	3,192	4,322	4,473	6,141	6,809
ayments for non-industrial services						
Hire of vehicles, plant and machinery	£ thousand	3,750	6,135	5,096	2,315	4,064
Rents of industrial and commercial buildings	,,	(e)	(e)	(e)	3,837	5,201
Commercial insurance premiums	"	2,146	2,625	3,496	4,303	4,888
Bank charges	"	208	284	305	353	297
Other non-industrial services	"	15,739	22,158	20,105	27,913	34,586
icensing of motor vehicles		290	314	360	459	521
ates, excluding water rates	"	4,092	5,446	7,131	8,008	9,004
Gross value added at factor cost	"	194,239	265,695	252,401	343,167	383,016
Gross value added at factor cost per head	£	2,812	3,794	3,908	5,399	5,906

<sup>(</sup>a) Including estimates for establishments not making satisfactory returns, non-response and establishments with fewer than 20 persons. Satisfactory returns accounted for 83 per cent of employment within the industry.

Capital expenditure, 1973—1977 All United Kingdom establishments classified to the industry (a)(b)

					£ thousand
	1973	1974	1975	1976	1977
Land and buildings			Tecator cost	567	esnom progress at (c
New building work	2,901	3,291	2,588	1,648	2,845
Land and existing buildings  Acquisitions	tead letoTper		Total der		
Acquisitions	550	521	580	1,127	1,595
Disposals	559	1,765	105	345	440
Vehicles					
Acquisitions	1,771	2,678	2,299	3,147	4,953
Disposals	709	788	599	1,007	1,349
Plant and machinery					
Acquisitions	13,798	17,896	16,936	23,717	29,613
Disposals	712	650	652	1,124	1,713
Total net capital expenditu	re 17,040	21,183	21,048	27,162	35,504

<sup>(</sup>a) Including estimates for establishments not making satisfactory returns, non-response and establishments with fewer than 20 persons.

TABLE 3

Stocks and work in progress, 1973—1977
All United Kingdom establishments classified to the industry (a)

						£ thousand		
	1973	1974	1975	1976	1977			
	180,979 816,03465	14,646,001,3	Increase	588,883	ECENT. 1843	Value at end of year		
Materials, stores and fuel	10,931	31,668	-17,129	12,059	4,155	75,639		
Work in progress	4,363	6,244	-3,959	8,312	2,227	30,069		
Goods on hand for sale	1,902	8,089	1,259	1,400	6,327	30,087		
Total	17,196	46,002	-19,828	21,771	12,709	135,795		

<sup>(</sup>a) Including estimates for establishments not making satisfactory returns, non-response and establishments with fewer than 20 persons.

<sup>(</sup>b) Included in sales of goods produced.

Details of manufacturers' quarterly sales of principal products are published regularly in Business Monitor PQ 482.1

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

<sup>(</sup>e) For 1973—1975 rents of industrial and commercial buildings were not recorded separately, but included in hire of vehicles, plant and machinery.

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

Analysis of establishments by size, 1977 All United Kingdom establishments classified to the industry (a)

Size group (b)	Estab- lish- ments	Enter- prises (c)	Employmen	nt.		Wages and sa	laries (f)			
			Total	Opera-	Others	Operatives	\$	Others (e)		
			(d)	tives	(e)	Total	per head	Total	per head	
Security and	Number	Number	Number	Number	Number	£ thousand	£	£ thousand	£	
1-10	170	168	1,015)							
11–19	98	95	1,412)							
20-49	125	118	3,980)	9,565	2,599	23,985	2,508	9,649	3,713	
50-99	85	78	6,134)							
100-199	70	61	9,435	7,244	2,178	19,955	2,755	7,866	3,612	
200–299	38	33	8,869	6,843	2,022	21,636	3,162	7,860	3,887	
300-399	19	11	6,699	5,092	1,607	17,634	3,463	6,078	3,782	
400-499	17	10	7,569	5,721	1,848	18,281	3,196	6,907	3,737	
500-999	17	11	9,933	7,667	2,266	29,025	3,786	9,334	4,119	
,000 and over	7	6	9,807	7,782	2,025	26,463	3,401	8,245	4,072	

Total	646	523	64,853	49,914	14,545	156,979	3,145	55,939	3,846

<sup>(</sup>a) Including estimates for establishments not making satisfactory returns, non-response and establishments with fewer than 20 persons.

Total sales and work done (g)	Gross outpu	t Net outp	Net output			Gross value added at factor cost	100	Net capital expenditure (h)	Total stocks and work in progress at end of year
th cotol	gross value ad hactor cost in region	Total	2.1	per head		Total	per head		
£ thousand	£ thousand	£ thousan	nd	£	pay cent United Kingdon	£ thousand	£ year sec	£ thousand	£ thousand
178,833	180,146	72,465		5,778		(j)	(j)	6,993	20,315
146,095	147,087	58,938		6,247		112,372(j)	5,113(j)	7,499	20,699
157,411	159,075	60,715		6,846		52,759	5,949	4,853	20,638
127,446	127,980	53,188		7,940		46,074	6,878	5,675	13,339
116,948	118,068	50,988		6,736		43,268	5,717	2,805	17,263
189,238	190,083	79,556		8,009		69,579	7,005	5,343	22,057
148,385	150,471	65,729		6,702		58,964	6,012	2,336	21,483

in sateman							
1,064,356	1,072,910	441,578	6,809	383,016	5,906	35,504	135,795

The cost of employers' contributions to national insurance, pensions and welfare schemes and the running costs of canteens, is estimated for the industry at £ 33,797 thousand. The remuneration of outworkers on returns received was £145 thousand.

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

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

<sup>(</sup>d) Including working proprietors.

<sup>(</sup>e) Administrative, technical and clerical employees.

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

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

<sup>(</sup>j) Gross value added data relate to establishments employing 1-199.

-

PA482.1

Gross value Gross value added at

Regional distribution of employment, net capital expenditure, net output and gross value added at factor cost, 1977 All United Kingdom establishments classified to the industry (a)

Area	Total employment	(b)	Net capital expenditure (c)			Net Gross value output (d) added at factor cost (d)			by establish 80 per cent of their emp in the region proportion	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		
Descript 3	Thousands	per cent of United Kingdom	£ thousand	per central United Kingdon		£ thousar	£ thous	and	percentage	remakuda)	
Standard regions of England											
North	3.0	4.6	1,635	4.6		21,562	18,81	7	81.8		
Yorkshire and Humberside	4.4	6.8	2,473	7.0		27,354	24,33	1	80.8		
East Midlands	6.5	10.0	4,452	12.5		42,320	36,33	0 (	71.9		
East Anglia	2.0	3.1	1,194	3.4		16,810	14,329	9 8	90.5		
South East	16.3	25.1	8,364	23.6		119,614	102,88	3	80.8		
South West	7.3	11.2	3,038	8.6		49,609	44,19	7 8	86.3		
West Midlands	4.5	7.0	2,747	7.7		25,172	21,83	2	66.4		
North West	11.5	17.7	5,759	16.2		75,204	64,40	1	85.8	_	
England	55.5	85.5	29,661	83.5		377,646	327,129	9			
Wales	1.8	2.8	2,156	6.1		11,664	9,889	9	93.0		
Scotland	6.1	9.4	3,015	8.5		43,080	38,170	)	78.6		
Great Britain	63.4	97.7	34,832	98.1		432,390	375,188	3			
Northern Ireland	1.5	2.3	671	1.9		9,189	7,829	)	74.7		
United Kingdom	64.9	100.0	35,504	100.0		441,578	383,010	3			

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

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

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

(d) Where a census return covered addresses in two or more regions, an estimate 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.

TABLE 6

PA482.1

Percentage analysis of twelve-month periods covered by returns received from United Kingdom establishments employing 20 or more persons, 1977

Accour	nting year ended	Percentage of total returns received	Percentage of total number employed
SAA	HAD BURNING TO THE STATE OF THE	per cent	per cent
1977	April (a)	2.5	1.3
	May	2.5	0.7
	June and a	2.9	1.2
	July	3.3	2.2
	August	4.4	2.7
	September	5.1	8.9
	October	1.5	0.3
	November	0.7	0.1
	December	47.8	54.0
978	January	5.1	5.6
	February	2.2	0.6
	March (b)	22.1	22.5

(a) From 6th April.

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

#### TABLE 7

Percentage analysis of employees, by full and part-time employment and sex, 1977(a), Packaging products of paper, board and associated materials industries, minimum list heading 482.

Sex	Full-time	Part-time	All employees
Theres contact be	per cent	per cent	per cent
Male	62	1	63
Female	28	9	37

Source: Department of Employment

(a) The percentages relate to the numbers employed (excluding working proprietors) in the United Kingdom in minimum list heading 482 at mid-June, 1976, because 1977 information is not yet available. In the 1977 Census of Production the employment of the Cardboard boxes, cartons and fibre-board packing cases industry represented 74 per cent of the employment of minimum list heading 482 as a whole.

PA482.1

Operating ratios, 1977 All United Kingdom establishments classified to the industry (a)

		Unit	1977
		£	16,544
Gross output per head		toso sed	10,044
Net output per head		£	6,809
Gross value added per head		£	5,906
			The second second
Gross value added as a percentage of gross output		%	36
			7.9
Ratio of gross output to stocks			7.9 Maria
Nages and salaries as a percentage of gross value added		%	56
Ratio of operatives to administrative, technical and clerical employees			3.4
Vages and salaries per operative		£	3,145
Wages and salaries per administrative, technical and clerical employee		£	3,846
		£	547

<sup>(</sup>a) Including estimates for establishments not making satisfactory returns, non-response and establishments employing fewer than 20 persons.

Notes

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, 1977.

#### GENERAL INFORMATION

## Changes made for 1977

The Census for 1977 is in line with similar inquiries being conducted in other member countries of the European Economic Communities. There was a small number of changes in the scope of the industry reports compared with 1976.

For the first time in the industry monitors a table has been neluded on operating ratios, calculated from census measures of putput, investment, manpower and labour costs.

Specific changes are explained in the introductions to the industry reports or by footnotes to the tables.

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 and 1968. It exists to promote uniformity and comparability in the official statistics of the United Kingdom. The general principles followed are those of the International Standard Industrial Classification of all Economic Activities of the United Nations Statistical Office but the United Kingdom SIC reflects the organisation and structure of industry and trade as it exists in the United Kingdom. The SIC is a classification by activity and is not a commodity classification. However, an index of all commodity headings for which sales data are provided in the Quarterly Business Monitors, is published in Business Monitor PQ 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 separate 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 or addresses in more than one of the countries of the United Kingdom.

Further information about, the statistical unit appeared in an article "The statistical unit in business inquiries" in Statistical News No 13 May 1971.

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. For these purposes an enterprise group may be 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 Companies Registration Office and the Department of Employment, The 1973 Finance Act allows HM Customs and Excise to pass to the BSO lists of businesses registered for VAT. Information from all these sources is used to improve the register, and where necessary, details are sought directly from new businesses. Units which cease to trade are removed from the live register.

Increasing use of the information obtained from the Department of Employment, HM Customs and Excise and BSO inquiries has led to improvements on the register, which in turn enabled the BSO to produce better estimates, particularly of numbers of smaller establishments and enterprises.

#### Coverage

A return was required in the 1977 Census from each establishment with 20 or more employees. Each establishment is classified to an industry, as defined in the SIC, whose principal products form the major part of the establishment's sales.

#### 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 number of persons on the payroll on average during the year of return, whether full-time or part-time employees. 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. 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, duries 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 part-time) 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

sistomers; 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 epartment for delivery of materials are excluded, as are all irchases of machinery and plant charged to capital account. urchases of goods for merchanting or factoring have been pllected 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 eturned goods or packaging material returned to suppliers and any rade discounts are excluded. Materials purchased duty-paid are ocluded at their duty-paid value, less any drawback, rebate, etc. the cost of transport is included only if it is included with the urchase price in the firm's accounts. Imported goods are included their full delivered cost. If in the firm's accounts the transport romdocks or airport is not included in the cost of goods purchased. the cost is entered at cif plus duty (if applicable). Leasing, enting and hire purchase charges are excluded.

#### Sales of goods produced

Sales for the purposes of the annual censuses means deliveries on ale of goods made by establishments in the United Kingdom vered by the inquiry. Sales of goods made for these establishments outworkers or by other establishments from materials given out them and sales of waste products are included. New building work and machinery or other capital items produced by establishnents for hiring out or leasing are regarded as sales, the value ncluded in the return being that adopted in the establishments' apital 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 stablishment and transferred either to ancillary departments not ngaged in production for which there are separate accounts, or to other establishment of the same firm not covered by the return. re treated as sales by the producing establishment and valued as ar as possible as if they had been sold to an independent purchaser. oods transferred to wholesale or retail selling organisations, for hich separate accounts are kept are valued on the same hasis

The value shown for sales in the "net selling value" defined as the amount (excluding VAT) charged to customers whether on an ex-works 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 engineering 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

## Capital goods produced for establishments' own use

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

#### 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.

## boods 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, together with a margin of overhead costs and profits. Progress payments made to sub-contractors are excluded and progress payments received from other organisations are not deducted.

#### 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, commissions and holiday pay, 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.

#### Remuneration paid to outworkers

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.

#### Employers' insurance and welfare contributions

This item includes employers' contributions to national insurance (and/or earnings related basic contributions under the Social Security Pensions Act, 1975) and 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 the industry, including exempted 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 practise with regard to stock valuation, may affect comparability in some respects.

## © Crown copyright 1979

## Her Majesty's Stationery Office

Government Bookshops

49 High Holborn, London WC1W6HB
13a Castle Street, Edinburgh EH2 3ÅR
41 The Hayes, Cardiff CF1 1JW
Brazennose Street, Manchester M60 8AS
Southey House, Wine Street, Bristol BS1 2BQ
258 Broad Street, Birmingham B1 2HE
80 Chichester Street, Belfast BT1 4JY

Government publications are also available through booksellers

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