

86 Railway carriages, wagons and trams

This Report on the Railway Carriages, Wagons and Trams Industry relates to establishments engaged wholly or mainly in manufacturing and repairing railway coaches (including those embodying motive units), wagons, trucks, brake vans, axle boxes, etc, tramcars and colliery and other trams and tubs, etc.

This industry corresponds to minimum list heading 385 in the Standard Industrial Classification (Revised 1968) which has been used for the first time as a basis of classification in the 1968 Census. The definition of this industry however is unchanged from the last detailed Census of Production for 1963 in which it was reported (Part 66).

With the exception of Table 4, which shows separate details, this report combines the information for railway workshops and other manufacturers. Returns in full detail were obtained for all railway workshops and from other manufacturers employing twenty-five or more persons.

The output of railway workshops is valued at cost, ie a sum calculated to cover the cost of labour and materials together with such a proportion of the general establishment charges properly applicable to the output concerned but without any allowance for profit. The output of other manufacturers is, however, valued at selling prices and therefore includes profit.

There were no establishments in this industry in Northern Ireland in 1963 or 1968.

METHOD OF CLASSIFICATION

The classification of returns to this industry followed the standard procedure as outlined in the notes which appear on page (i) but in classifying returns to the sub-divisions of the industry establishments of British Rail were allocated to the group headed 'Railway Workshops' and all other establishments to the other group.

In interpreting the data in the tables it is essential to bear in mind the notes and definitions which appear on pages (i) to (iv).

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- (c) In counting the number of establishments in combined returns for 1963, certain outstations were classed as establishments which were not so regarded for 1968: the numbers therefore are not strictly comparable for the two years.
- (d) Including services rendered to other organisations (amounts charged for hiring out plant, machinery or other goods, for providing transport, or for technical or other services rendered).
- (e) Administrative, technical and clerical employees.
- (f) Excluding expenditure for establishments not yet in production.
- (g) Acquisitions less disposals.

TABLE 1 Industry summary, 1963 and 1968
United Kingdom (a) (b)

	Unit	All establishments		
		1963	1968	
Number of enterprises	No.	45	30	
Number of establishments (c)	"	138	77	
Gross output	£'000	72,679	81,634	
Net output	"	37,323	39,084	
Net output per head	£	922	1,197	
Sales and work done	{ goods produced and work done (d)	£'000	73,367	80,279
	{ merchanted goods and canteen takings	"	892	1,859
Purchases	{ materials for use in production and packaging and fuel	"	27,364	41,664
	{ goods for merchenting and canteen purchases	"	756	1,530
Payments to other organisations	{ for work done on materials given out for transport	"	799	583
	{ by road	"	331	192
	{ by rail and other means excluding postal services	"		136
Stocks and work in progress				
Total stocks and work in progress	{ change during year	"	- 7,685	+ 1,051
	{ at end of year	"	16,490	26,257
Goods on hand for sale	{ change during year	"	- 25	- 7
	{ at end of year	"	352	114
Work in progress	{ change during year	"	- 1,553	- 498
	{ at end of year	"	3,930	6,739
Materials, stores and fuel	{ change during year	"	- 6,106	+ 1,556
	{ at end of year	"	12,208	19,403
Number employed on average during the year	{ total, including working proprietors	Th.	40.5	32.7
	{ operatives	"	35.0	27.9
	{ other employees (e)	"	5.4	4.7
Wages and salaries	{ of operatives	£'000	25,725	28,080
	{ of other employees (e)	"	4,683	5,827
Capital expenditure (f)				
Total	"	783	1,763	
New building work	"	788	648	
Land and existing buildings (g)	"	- 507	- 259	
Plant and machinery (g)	"	444	1,310	
Vehicles (g)	"	58	65	

(a) For 1968, estimates for establishments not making satisfactory returns and for small establishments, from which only employment data were collected, accounted for just over 1 per cent. of the total figures in which they were incorporated: of this, unsatisfactory returns accounted for just under 1 per cent. A similar situation existed for 1963.

(b) The following information relates to small establishments (employing fewer than 25 persons) in this industry. It includes an estimate for small establishments not making satisfactory returns in 1963.

	1963	1968
Number of establishments	29	29
Average number employed:		
Working proprietors	7	7
Other persons employed	343	284

Footnotes continued on page 86/2

TABLE 2 Analysis by size of establishment within the industry, 1968

(i) Output and employment

All establishments: United Kingdom

Number employed on average during the year by the establishment (a)	Estab-lish-ments	Enter-prises (b)	Total number employed on average during the year (a)	Gross output	Net output	Net output per head
	Number	Number	Number	£'000	£'000	£
1-5	10	5	25	..	..	..
6-10	7	6	54	..	..	..
11-24	12	9	211	..	..	..
25-49	10	4	392	854	555	1,415
50-99	5	4	310	888	468	1,510
100-199	8	6	1,024	3,203	1,897	1,853
200-299	6	5	1,402	5,724	2,500	1,783
300-749	5	5	2,203	5,600	2,439	1,107
1,000 and over	12	6	26,846	63,817	30,502	1,136
Unsatisfactory returns	2	2	192	..	..	..
Total	77	30	32,659	81,634(c)	39,084(c)	1,197(c)

(ii) Employees, wages and salaries

All establishments: United Kingdom

Number employed on average during the year by the establishment (a)	Employees		Wages and salaries		Wages and salaries per head	
	Oper-atives	Others (d)	Oper-atives	Others (d)	Oper-atives	Others (d)
	Number	Number	£'000	£'000	£	£
1-5	..	..	..	..	..	..
6-10	..	..	..	..	..	..
11-24	..	..	..	..	..	..
25-49	303	87	256	84	844	968
50-99	245	63	210	75	858	1,198
100-199	823	194	824	202	1,001	1,041
200-299	1,112	283	1,024	289	921	1,021
300-749	1,831	372	1,720	454	939	1,221
1,000 and over	23,178	3,658	23,617	4,622	1,019	1,264
Unsatisfactory returns	..	..	..	..	..	..
Total	27,878(c)	4,747(c)	28,080(c)	5,827(c)	1,007(c)	1,228(c)

(a) Including working proprietors.

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

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

(d) Administrative, technical and clerical employees.

TABLE 3 Percentage analysis of employees, by age and sex, 1969 (a)

All establishments: United Kingdom

Ages	Males	Females	All employees
	Per cent.	Per cent.	Per cent.
Under 18	3	-	3
18 and over	92	5	97
All ages	95	5	100

Source: Department of Employment

(a) The percentages relate to the numbers employed (excluding working proprietors) at June 1969, the earliest date for which the information is available on the basis of the Standard Industrial Classification, (Revised 1968).

Footnotes to Table 4

- (a) Some establishments employing fewer than 25 persons were included in returns for larger establishments. These amounted to 3 establishments in 1968 and 18 in 1963.
- (b) The method of classifying returns to sub-divisions of the industry is explained in the notes.
- (c) In counting the number of establishments in combined returns for 1963, certain outstations were classed as establishments which were not so regarded for 1968: The numbers therefore are not strictly comparable for the two years.
- (d) Including services rendered to other organisations (amounts charged for hiring out plant, machinery or other goods, for providing transport, or for technical or other services rendered).
- (e) Characteristic products relate only to sub-divisions of the industry.
- (f) This is the ratio of total sales of principal products by the industry to total sales of goods produced and workdone.
- (g) Owing to the risk of disclosure it is not possible to show figures for progress payments received from customers in the United Kingdom or overseas.
- (h) Administrative, technical and clerical employees.
- (i) Excluding expenditure for establishments not yet in production.
- (j) Acquisitions less disposals.

TABLE 4 Analysis of larger establishments, 1963 and 1968

Establishments employing 25 or more persons: Analysis of returns received, United Kingdom (a)

	Unit	Sub-divisions of the industry (b)				Total			
		Railway workshops 01		Other manufacturers 02		1963	1968		
		1963	1968	1963	1968				
Number of enterprises	No.	1	1	31	17	32	18		
Number of establishments (c)	"	20	14	105	35	125	49		
Gross output	£'000	47,230	60,427	24,492	20,112	71,723	80,539		
Net output	"	24,862	29,621	11,970	8,939	36,832	38,560		
Net output per head	£	868	1,133	1,058	1,471	922	1,197		
Sales and work done	£'000	goods produced and work done (d)		47,817	58,154	24,584	21,049	72,401	79,203
		merchanted goods and canteen takings		629	1,662	251	172	880	1,834
Sales of characteristic products	"	44,992	53,644	19,086	16,092	(e)	(e)		
Index of specialisation (f)	Per cent.	94	92	78	76	89	88		
Purchases	£'000	materials for use in production and packaging, and fuel		15,380	30,185	11,624	10,920	27,004	41,105
		goods for merchandising and canteen purchases		502	1,368	243	142	746	1,510
Payments to other organisations	"	for work done on materials given out for transport		704	492	85	83	789	575
		by road		57	22	269	167	49	189
		by rail and other means excluding postal services			85		49		134
Stocks and work in progress									
Goods on hand for sale	"	change during year		- 39	- 24	+ 14	+ 17	- 25	- 7
		at end of year		160	31	187	82	347	113
Work in progress (g)	"	change during year		-1,178	+ 635	- 356	-1,126	-1,534	- 491
		at end of year		1,220	4,242	2,658	2,407	3,878	6,649
Materials, stores and fuel	"	change during year		-5,726	+ 1,347	- 300	+ 187	-6,026	+ 1,535
		at end of year		9,697	17,618	2,350	1,525	12,047	19,143
Number employed on average during the year	No.	total including working proprietors		28,645	26,144	11,316	6,077	39,961	32,221
		operatives		25,478	22,647	9,115	4,882	34,593	27,529
		other employees (h)		3,167	3,497	2,195	1,187	5,362	4,684
Wages and salaries	£'000	of operatives		18,708	22,790	6,694	4,920	25,402	27,709
		of other employees (h)		2,825	4,414	1,796	1,336	4,621	5,750
Wages and salaries per head	£	operatives		734	1,006	734	1,008	734	1,007
		other employees (h)		892	1,262	818	1,126	862	1,228
Capital expenditure (i)									
New building work	£'000	735	506	42	133	778	639		
Land and existing buildings	"	acquisitions		-	-	67	67	255 (j)	
		disposals		-	25 (j)	567	567		
Plant and machinery	"	acquisitions		338	656	251	850	589	1,506
		disposals		67	102	84	112	151	214
Vehicles	"	acquisitions		15	6	70	82	85	88
		disposals		-	3	27	21	27	24

For notes to this table - see page 86/5

TABLE 5 Sales of principal products of the industry by larger establishments, including sales by establishments classified to other industries, 1963 and 1968

Establishments employing 25 or more persons: Analysis of returns received, United Kingdom

	1963		1968			
	Quantity	Value	Quantity	Value	Enterprises	Entries
Railway carriages (excluding diesel railcars)	Number	£'000	Number	£'000	Number	Number
Complete						
Power driven (ie with traction motors driven by a current originating outside the unit)	294 Tons 8,327	3,363	245 Tons 6,283	3,692	*	*
Other types	661		6,868				344	6,750	*	*
Parts (excluding axles, tyres and wheels, and internal combustion engines and electric motors)	..	4,223	..	3,389	9	14
Diesel railcars complete and parts thereof (excluding axles, tyres and wheels, internal combustion engines and electric motors)	..	2,228	..	1,848	7	13
Railway wagons and trucks						
Complete						
Exceeding 3ft. in gauge	7,003	9,605	3,398 ..	10,864 1,577	7	9
Not exceeding 3ft. in gauge (including colliery tubs, trams and trucks)	13,975	1,112	..	243		
Parts (excluding axles, tyres and wheels, and internal combustion engines and electric motors)	..	4,661	..	7,104	20	39
Combination road/rail freight vehicles	-	-	561	382	*	*
Other products	..	813	..	758	6	11
Waste products						
Scrap metals	Th. tons		Th. tons			
Iron and steel	229 ..	2,415 870	69.0 ..	751 135	17	44
Brass	0.7	175			6	18
Copper	..	..	0.3	70	*	13
Other scrap metals	..	521	..	128	5	18
Other waste products	..	..	..	42	*	17

Continued on next page

TABLE 5 (continued)

	1963		1968			
	Quantity	Value	Quantity	Value	Enter-prises	Entries
Work done		£'000		£'000	Number	Number
Repair work done, including repairing contracts						
Railway carriages and wagons, railcars, colliery and other trams and tubs, etc	..	31,288	..	36,392	13	42
Other repair work	..	736	..	764	*	18
Other work done (eg machining and turning)	..	1,632	..	811	7	14
Total		70,336		75,878	..	..
Sales in other industries (see Table 6)		6,257		6,141		
Principal products of this industry sold by establishments in the industry		64,078		69,736	18	46 (a)

(a) This figure represents the total number of returns made for larger establishments in this industry which is less than the total number of establishments shown in Table 4 on account of combined returns covering more than one establishment.

TABLE 6 Sales of principal products of the industry by larger establishments classified to other industries, 1963 and 1968

Establishments employing 25 or more persons:
Analysis of returns received, United Kingdom

	1963		1968	
	Value	Value	Entries	Principal industries in which produced (a)
Diesel railcars complete and parts thereof including other railway carriage parts (except axles, tyres, wheels, internal combustion engines and electric motors)	£'000	£'000	Number	
	2,681	1,813	14	45,52,64,82
Railway wagons and trucks complete and parts (except axles, tyres, wheels, internal combustion engines and electric motors), hand operated rail trolleys and cars (including parts)	3,576	2,858	21	45,56,66,95
Repairs to railway carriages and wagons, railcars, colliery and other trams and tubs, etc	-	1,470	*	44,85
Total	6,257	6,141	..	

(a) The references given are to the list of industries at the front of this report.

TABLE 7 Sales of other than principal products by larger establishments in the industry, 1963 and 1968

Establishments employing 25 or more persons:
Analysis of returns received, United Kingdom

	1963		1968	
	Value	Value	Value	Value
	£'000	£'000		
Locomotive parts	2,412	1,536		
Freight containers specially designed and equipped for transport by rail, road, air and ship, totally enclosed and other products	3,330	5,311		
Work done and repair work other than to railway carriages, wagons and trains	777	558		
Services rendered to other organisations (a)	1,802	2,061		
Total value of goods sold without having been subjected to any manufacturing process (merchanted or factored)	862	1,776		
Canteen takings	18	58		
Total	9,202	11,300		

(a) Amounts charged for hiring out plant, machinery or other goods, for providing transport, or for technical or other services rendered to other organisations.

TABLE 8 Production of certain principal products of the industry by larger establishment, 1963 and 1968

This table is not applicable to this industry.

TABLE 9 Purchases by larger establishments of selected principal products of the industry, 1968

This table is not applicable to this industry.

TABLE 10 Purchases by larger establishments in the industry, 1963 and 1968

Establishments employing 25 or more persons:
Analysis of returns received, United Kingdom

	1963		1968	
	Quantity	Cost	Quantity	Cost
Materials for use in production	Th.tons	£'000	Th.tons	£'000
Iron castings and pig iron including refined pig iron and other irons for re-melting	12.6	668(a)	7.0	491
Steel				
Ingots, blooms, billets, slabs (including sheet/plate mill slabs and sheet bars)	3.3	159	..	68
Bars and rods (including wire rods), angles, shapes and sections, girders, beams, joists and pillars rolled (not fabricated), including tube rounds and squares	40.9	1,899	37.3	2,059
			..	477
Plates, 3mm. thick and over	40.8	1,896	26.5	1,357
	..	235	..	225
Sheets under 3mm. thick (including electrical sheets)	5.8	323	3.8	246
			..	219
Hoop and strip (including tape of all thicknesses)	0.8	46	..	95
Forgings (except drop forgings)	1.3	156	2.4	364
Castings	8.3	955	11.5	1,384
	..	108	..	1,617
Axles, tyres and wheels	22.3	1,896	25.2	3,069
Drop forgings	..	(b)	4.4	553
Iron and steel not elsewhere specified except finished parts, wire and scrap				
Wrought tubes and fittings for wrought tubes (including welded, seamless, conduits, etc)	1.0	60	1.8	234
	..	53	..	132
Other	4.7	218	..	122
	..	10		
Light metals and non-ferrous metal in all forms except finished parts, wire and scrap				
Aluminium and aluminium alloys	1.5	601	0.9	395
			..	211
Brass and other copper alloys (including nickel silver and cupro-nickel, but excluding all other nickel alloys and cadmium copper)			1.0	249
Copper (including cadmium copper)			0.7	297
Lead and alloys of lead (excluding solder)			0.1	9
Nickel and nickel alloys (excluding nickel silver and cupro-nickel)	..	(c)	..	4
			Th.cwt.	
Tin			1.1	71
			Th.tons	
White metal alloys (ie alloys of tin, lead, zinc, antimony, etc not elsewhere specified)			0.4	73
			..	30
Springs, laminated and other types	..	489	..	961
Bolts, rivets, nuts and washers, screws, nails, tacks, etc	..	935	..	1,058
Vehicle and machinery components and accessories for incorporation in firms' finished products				
Brake gear	..	475	..	2,197
Automatic couplings	..	251	..	224
Ball and roller bearings and parts thereof	..	305	..	423
Traction and other electric motors and parts thereof	..	493	..	1,625
Electrical equipment, including batteries and accumulators, not elsewhere specified	..	804	..	1,240

TABLE 10 (continued)

	1963		1968	
	Quantity	Cost	Quantity	Cost
Materials for use in production (continued)		£'000		£'000
Vehicle and machinery components and accessories for incorporation in firms' finished products (continued)				
Diesel engines, and parts thereof	..	4,893	..	10,092
All other components, not elsewhere specified	..	166	..	177
Glass (including plate and sheet)	Th.gal.		Th.gal.	
	437	417	378	453
	..	36		
Woven piece goods (other than narrow fabrics) wholly or mainly of				
Cotton	Th.sq.yds.		Th.sq.yds.	
	311	56	169	90
Wool	212	208	328	348
Synthetic fibres (nylon, etc)	4.6	1	29.9	30
	..	9	..	17
Other man-made fibres (rayon, etc)	54.9	13	72.4	18
Woven and tufted floor coverings, leathercloth and decorative thermoplastic sheet	..	128	..	253
Timber				
Softwood, sawn or planed, but not further prepared or manufactured	Th.stds.		Th.stds.	
	6.6	555	6.9	643
Hardwood, sawn or planed, but not further prepared or manufactured	Th.cu.ft.		Th.cu.ft.	
	219	157	252	307
	..	55	..	..
Plywood, including blockboard, laminboard and battenboard	Th.sq.ft.		Th.sq.ft.	
	2,629	192	6,523	815
	..	103	..	..
Chipboard	-	-	31	1
Plastic goods moulded and fabricated (including components and fittings)	..	105	..	89
Lubricating oils and greases (including cutting oils and emulsions)	Th.gal.		Th.gal.	
	1,028	144	489	122
	Th.cwt.		Th.cwt.	
	16.2	42	6.0	27
			..	4
Replacement parts for firms' own machinery, plant and vehicles, and accessories and consumable tools bought as replacement				
Tyres and other spare parts for firms' own road goods vehicles	..	700	..	22
Other	..	..	..	649
All other materials for use in production	..	4,178	..	3,292
Packaging materials	..	23	..	7
Fuel and electricity (d)	Th.tons		Th.tons	
Coal	90.1	472	16.4	116
			..	79
Coke (including screenings) and manufactured fuel	17.3	137	4.9	47
Derv fuel and motor spirit for use in road vehicles	Th.gal.		Th.gal.	
	196	37	1,508	100
	..	6	..	18
Other liquid fuels (including creosote/pitch mixtures, etc and liquefied petroleum gases)	3,840	175	7,617	329
	..	58	..	97

Continued on next page

TABLE 10 (continued)

	1963		1968	
	Quantity	Cost	Quantity	Cost
Fuel and electricity (d) (continued)	Th.therms	£'000	Th.therms	£'000
Gas	2,997	189	3,051	217
Electricity	Th.kWh	649	Th.kWh	651
	..	66	..	133
All other fuels	..	(e)	..	78
Total cost of materials and fuel		27,004		41,105
Goods purchased for merchanting		724		1,460
Canteen purchases		22		49
Total cost of purchases		27,750		42,615

(a) Castings only.

(b) Included in 'Iron and steel not elsewhere specified except finished parts, wire and scrap' in 1963.

(c) Included in 'All other materials for processing' in 1963.

(d) Owing to the risk of disclosure of information relating to individual firms the quantity of electricity generated in 1963, in establishments employing 25 or more persons cannot be given. None was recorded in 1968.

(e) Not recorded separately in 1963.

TABLE 11 Transport costs and employment of larger establishments, 1963 and 1968

Establishments employing 25 or more persons:
Analysis of returns received, United Kingdom

	Unit	1963	1968
Average number mainly employed on transport	No.	105	75
Transport costs			
Wages and salaries	£'000	83	76
Derv fuel and motor spirit	"	43	118
Tyres and other spare parts for road goods vehicles	"	..	22
Payments to other organisations for transport	by road	}	189
		326	134
Costs of operating road goods vehicles			
Insurance	"	7	5
Vehicle licences	"	6	9
Depreciation	"	37	52
Payments to other organisations for repairs and maintenance	"	11	19
Total	"	513(a)	624

(a) Excluding tyres and other spare parts for road goods vehicles, not collected separately for 1963.

TABLE 12 Payments for certain services, etc by larger establishments, 1963 and 1968 (a)

Establishments employing 25 or more persons:
Analysis of returns received, United Kingdom

	Amounts payable	
	1963	1968
Repairs and maintenance to	£'000	£'000
Buildings	253	183
Road goods vehicles	11	19
Plant, machinery and other capital equipment	117	168
Insurance, licensing and depreciation of road goods vehicles (b)	50	66
Rates, excluding water rates	293	419
Hire of plant and machinery	156	101
Postage, telephone, telegrams, cables and telex (c)	84	101
Total	964	1,056

(a) No deduction is made for these payments to arrive at the figures of net output given in this report.

(b) For details see Table 11.

(c) Excluding Telex for 1963.

TABLE 13 Percentage analysis of twelve-month periods covered by returns from larger establishments, 1968

Establishments employing 25 or more persons:
Analysis of returns received, United Kingdom

Year ended	Percentage of total returns received	Percentage of total number employed
1968	Per cent.	Per cent.
April (a)	0.0	0.0
May	0.0	0.0
June	6.5	2.5
July	0.0	0.0
August	0.0	0.0
September	6.5	1.9
October	0.0	0.0
November	0.0	0.0
December	50.0	88.5
1969		
January	0.0	0.0
February	0.0	0.0
March	37.0	7.1
April (b)	0.0	0.0
	100	100

(a) From 6 April.

(b) To 5 April.



