UIC - RIC Passenger Car Numbering Scheme

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In the previous article covering the UIC - RIV freight car numbering scheme, I presented the basic schema of the UIC numbering system and detailed how the numbers for freight cars are constructed. The schema for numbering passenger cars follows many of the same guidelines, differing only where necessary to accommodate the unique information needed to effectively manage the fleet.

The UIC passenger car number also contains twelve digits, including the computer check digit, which is computed in the same manner as for freight cars.

Digits 1-2

The first two digits indicate the interchange characteristics of the vehicle. The schema has remained relatively unchanged over the years:

Number	Use	Characteristics
50	National Service Only	
51	International Service (RIC)	Fixed gauge
52	International Service (RIC)	Changeable gauge
60	Maintenance Service	Fixed Gauge
61	Eurocity Service	Fixed gauge
62	Eurocity Service	Changeable gauge
65	Automobile transport car for passenger trains	
71	Sleeping-car in TEN pool	Fixed gauge
72	Sleeping-car in TEN pool	Changeable gauge
73	Eurocity Service	Pressure-proof (airtight)

Digits 3-4

The second pair indicates the railway administration or other organization that registered the vehicle (see the list in the previous article).

Digits 5-6

These two digits indicate the type of passenger car as based on a number of recognized types:

Num.	Type	Use	Characteristics
00	DU	Postal car	Private
06	WL	Sleeping-car	Private
07	WL	Sleeping-car	Private
08	WR	Dining-car	Private

Num.	Type	Use	Characteristics
09	WG	Pullman/saloon/party/special car	Private
10-19	A	1st class coach	x0 = 10 compartments or 20-21 rows x1 = 11 compartments or 22-23 rows x2 = 12 compartments or 24-25 rows x3 = 3 axles x4 = 2 axles x6 = Double deck (commuter) x7 = 7 compartments or 14-15 rows x8 = 8 compartments or 16-17 rows x9 = 9 compartments or 18-19 rows
20-29	B	2nd class coach	
30-39	AB	1st/2nd class coach	
40-49	Ac, AcBc	1st or 1st/2nd class couchette car	x0 = 10 compartments x1 = 11 compartments x2 = 12 compartments 43 = 8 compartments 53 = 10½ compartments 63 = 9 compartments 73 = 10 compartments 44 = 9 compartments 54 = 11½ compartments 64 = 10 compartments 74 = 11 compartments x7 = 7 compartments x8 = 8 compartments x9 = 9 compartments
50-59	Bc	2nd class couchette car	
60-69	WLA	Sleeping-car	
70-79	WLAB	Sleeping-car TEN	
80	BM	Ambulance/Instruction coach	
81	AD, ABD	1st or 1st/2nd class coach	With luggage compartment
82	BD	2nd class coach	With luggage compartment
83	BD	2nd class coach	2 or 3 axles with luggage compartment
84	AR	1st class coach with buffet	
85	BR	2nd class coach with buffet	
87	WRD BRD	Dining-car, or 2nd class with buffet	With luggage compartment
88	WR	Dining-car	
89	WG, WGS	Party/Saloon car	
90	DU	Mail van	
91	DU	Luggage/mail van	
92	D	Luggage van	Without side corridor
93	D	Luggage van	2 or 3 axles

Num.	Type	Use	Characteristics
94	DU	Luggage/mail van	2 or 3 axles
95	D	Luggage van	With side corridor and customs compartment
96-98	DD	Automobile transport wagon	96 = 2 axles 97 = 3 axles 98 = 4 axles
99	V	Exposition/Measurement/Special cars	

Digits 7-8

This pair indicates the maximum permissible speed and the train power (climate-control) systems the car supports. This data was taken from Taschenbuch Deutsche Reisezugwagen published in1978:

120 km/h	140 km/h	160 km/h	200 km/h	Climate Control
03	33, 34, 35	73, 75	94, 95	a
06	36	76	96, 97	a, b, c
00	30	70	90, 91	a, b, c, d
	39			a, d
05				b
07	37	77	98	b, c
08	38	78		d
20-26	60-68	84		S
11, 12, 13, 14, 15	43, 45, 53, 54	85	93	S, a
10	40, 41, 42, 50, 51, 52	80	92	S, a, b, c, d
16	46, 56	86		S, a, c
	59			S, a, d
17	47, 57	87		S, b, c
18, 19	48, 58	88		S, d
27-29	69	89	99	Self

S = Steam heat   a = 1000V~, 16-2/3Hz   c = 1500V=
Self = Autonomous System   b = 1500V~, 50Hz   d = 3000V=

According to Carrozze FS 1983, only three systems exist: steam, 3000VDC, and RIC. The author of that

text describes the RIC system as capable of being powered at any of the three train-line voltages 1000VAC, 1500VAC, or 1500VDC. He seems to regard the RIC electrical system and the 3000VDC system as mutually exclusive and does not address the situation where a vehicle might be able to use any of the available methods.

Digits 9-11

These three digits are the car serial number counted from 000 or 001 up to 999.

Modeler's Notes

Lettering Style

The standard font for UIC marking appears to be <u>DIN Schriften 1451 Engschrift Alternate</u>. This proportional, sans-serif font is distinguished by its near-2:1 height to width ratio and its open number '4'. Unfortunately, this font is not typically included with US-delivered word processing or graphics software, however it is available for purchase in a package of DIN fonts from Adobe Corporation (see Bibliography). If you're considering making your own decals and other railway-related signage, the $95.99 price tag might be justified.

ABCDEFGHIJKLMNOPQRSTUV
WXYZabcdefghijklmnopqrstu
vwxyz&0123456789ÆÁÂÄÀÅ

The acronym DIN refers to the Deutsche Industrie-Norm (German Industrial Standard). These typefaces were developed prior to World War II and are seen on most road signs and license plates in what was formerly West Germany. One of the primary criteria for the DIN Schriften design was a facility for reproduction. It also may lend itself to Optical Character Recognition technology.

Not all railway administrations employ this font exactly. For example, Italian cars often display a font that, while similar, has slightly wider elements and a more squared-off appearance. The difference would be almost indistinguishable in all but the largest modeling scales.

Lettering Layout and Placement

On freight cars, the most common layout of the UIC number is on three lines:

    01 RIV
    83 FS
    575 0 421-8
    -Taass

On flat cars and in other situations where vertical space is unavailable, the number may be placed on two lines or on a single line:

    01   83 575 0 421-8
    RIV   FS -Taass

    01 RIV 83 FS 575 0 421-8 -Taass

Note that the lettering on a freight car almost always includes the applicable UIC classification as well as

the standard acronym denoting the railway administration to which the car belongs. The code 'Taass' describes this car as a six-axle wagon with opening roof, having a capacity of at least 60 tons, and capable of speeds up to 120 km/h.

However it is laid out, the lettering on freight cars is applied to the left of center on the car side, very often at the left edge of the car side.

One interesting variation is that the DB (and perhaps others) often use a smaller version of the lettering for the first and second line and for the computer check digit:

    21 RIV
    80 DB
    155 9 084-5
    -Gbrs-v[254]

On passenger cars, the most common layout of the UIC number is on a single line centered on the car side:

    51 83 <u>10-70 510</u>-9

The standard railway acronym is usually not included, as there is almost always a much larger railway logotype elsewhere on the car side. Note that the numerals denoting the car type, max speed, climate control system, and serial number (digits 5 through 11) are usually underlined.

Occasionally one will find a car (typically a DB commuter coach) with the UIC number arranged on three lines and applied high on the left half of the car between two windows.

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