

RT Rondelle

Thin

Rondelle

Thin Italic

Rondelle

Extralight

Rondelle

Extralight Italic

Rondelle

Light

Rondelle

Light Italic

Rondelle

Book

Rondelle

Book Italic

Rondelle

Regular

Rondelle

Regular Italic

Rondelle

Medium

Rondelle

Medium Italic

Rondelle

Bold

Rondelle

Bold Italic

Rondelle

Black

Rondelle

Black Italic

Rondelle

About

RT Rondelle is the result of an exploration into public transport signage typefaces. While building on this foundation it incorporates the distinctive characteristics of a highly specialized genre to become a versatile grotesque family with a balanced geometrical touch. RT Rondelle embarks on a new life of its own, leaving behind the restrictions of its heritage to form a consistent and independent type family. Suited for a wide range of applications

www.rt-rondelle.com

Supported languages

Afrikaans, Albanian, Basque, Bosnian, Breton, Catalan, Croatian, Czech, Danish, Dutch, English, Esperanto, Estonian, Faroese, Fijian, Finnish, Flemish, French, Frisian, German, Greenlandic, Hawaiian, Hungarian, Icelandic, Indonesian, Irish, Italian, Latin, Latvian, Lithuanian, Malay, Maltese, Maori, Moldavian, Norwegian, Polish, Portuguese, Provençal, Romanian, Romany, Sámi (Inari), Sámi (Luli), Sámi (Northern), Sámi (Southern), Samoan, Scottish Gaelic, Slovak, Slovenian, Sorbian, Spanish, Swahili, Swedish, Tagalog, Turkish, Welsh

File formats

Desktop: OTF
Web: WOFF2, WOFF
App: OTF

Available licenses

Desktop license
Web license
App license

Further licensing options are available on request.
Please get in touch.

Contact

info@razziatype.com
www.razziatype.com
www.rt-rondelle.com

RAZZIATYPE

OPENTYPE FEATURES

Case sensitive

(Hey)

(HEY)

[Hey]

[HEY]

{Hey}

{HEY}

i¿Who?!

i¿WHO?!

One/Two

ONE/TWO

«Hey»

«HEY»

Hey-Hey

HEY-HEY

Language feature
Romanian
Moldavian

și societății

și societății

ȘI SOCIETĂȚII

ȘI SOCIETĂȚII

Tabular numbers
and currencies

10158\$

10158\$

37946£

37946£

Slashed zero

1000

1000

Sups

56⁽⁴⁺³⁾56⁽⁴⁺³⁾

Subs

H₂OH₂O

Automatic fractions

3/125

3/125

SS01

⑤

⑤

SS02

↗

↗

340pt

M T A

120pt

Single *Ticket*

80pt

Transit Authority

18pt

The development of *Railroads* was one of the most important phenomena of the *Industrial Revolution*. With their formation, construction and operation, they brought profound social, economic and political change to a country only 50 years old. Over the next 50 years, *America* would come to see magnificent bridges and other structures on which trains would run, awesome depots, ruthless rail magnates and the majesty of rail locomotives crossing the country. The railroad was first developed in *Great Britain*. A man named *George Stephenson* successfully applied the steam technology of the day and created the world's first successful locomotive. The first engines used in the United States were purchased from the *Stephenson Works* in England. Even rails were largely imported from England until the *Civil War*. Americans who had visited England to see new *Steam Locomotives* were impressed that railroads dropped the cost of shipping by carriage by 60-70%. *Baltimore*, the third largest city in the nation in 1827, had not invested in a canal. Yet, *Baltimore* was 200 miles closer to the frontier than *New York* and soon recognized that the development of a railway could make the city more competitive with *New York* and the *Erie Canal* in transporting people

12pt

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280pt

Metro

170pt

Milanesese

90pt

M3 Linea Gialla

18pt

In 1515, *Cardinal Matthäus Lang* wrote a description of the Reisszug, a funicular railway at the *Hohensalzburg Fortress* in Austria. The line originally used wooden rails and a hemp haulage rope and was operated by human or animal power, through a treadwheel. The line still exists and is operational, although in updated form and is possibly the oldest operational railway. *Wagonways* (or tramways), with wooden rails and horse-drawn traffic, are known to have been used in the 1550s to facilitate transportation of ore tubs to and from mines. They soon became popular in Europe and an example of their operation was illustrated by *Georgius Agricola* in his 1556 work *De re metallica*. This line used “Hund” carts with unflanged wheels running on wooden planks and a vertical pin on the truck fitting into the gap between the planks to keep it going the right way. The miners called the wagons Hunde (“dogs”) from the noise they made on the tracks. There are many references to wagonways in central Europe in the 16th century. A wagonway was introduced to England by German miners at *Caldbeck, Cumbria*, possibly in the 1560s. A wagonway was built at *Prescot, near Liverpool*, sometime around 1600, possibly as early as 1594. Owned by Philip Layton,

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270pt

Subbte

160pt

Dirección

90pt

Metrovías B. Aires

18pt

The *Middleton Railway* in Leeds, which was built in 1758, later became the world's oldest operational railway (other than funiculars), albeit now in an upgraded form. In 1764, the first railway in America was built in *Lewiston, New York*. The introduction of steam engines for powering blast air to blast furnaces led to a large increase in British iron production after the mid 1750s. In the late 1760s, the *Coalbrookdale Company* began to fix plates of cast iron to the upper surface of wooden rails, which increased their durability and load-bearing ability. At first only balloon loops could be used for turning wagons, but later, movable points were introduced that allowed passing loops to be created. A system was introduced in which unflanged wheels ran on *L-shaped* metal plates these became known as plateways. *John Curr*, a Sheffield colliery manager, invented this flanged rail in 1787, though the exact date of this is disputed. The plate rail was taken up by *Benjamin Outram* for wagonways serving his canals, manufacturing them at his Butterley ironworks. In 1803, *William Jessop* opened the Surrey Iron Railway, a double track plateway, sometimes erroneously cited as world's first public railway, in south London. In 1789, *William Jessop* had in-

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320pt

Linie

120pt

Gleisdreieck

80pt

Bahnhofsaufsicht

18pt

Cast iron was not a satisfactory material for rails because it was brittle and broke under heavy loads. The wrought iron invented by *John Birkinshaw* in 1820 replaced cast iron. *Wrought iron* (usually simply referred to as “*iron*”) was a ductile material that could undergo considerable deformation before breaking, making it more suitable for iron rails. But wrought iron was expensive to produce until *Henry Cort* patented the puddling process in 1784. In 1783, *Cort* also patented the rolling process, which was 15 times faster at consolidating and shaping iron than hammering. These processes greatly lowered the cost of producing iron and iron rails. The next important development in iron production was hot blast developed by *James Beaumont Neilson* (patented 1828), which considerably reduced the amount of coke (fuel) or charcoal needed to produce pig iron. Wrought iron was a soft material that contained slag or dross. The softness and dross tended to make iron rails distort and delaminate and they typically lasted less than 10 years in use, and sometimes as little as one year under high traffic. All these developments in the production of iron eventually led to replacement of composite wood/iron rails with

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280pt

Tågget

130pt

Tunnelbana

70pt

Tekniska Högskolan

18pt

James Watt, a Scottish inventor and mechanical engineer, greatly improved the steam engine of *Thomas Newcomen*, hitherto used to pump water out of mines. Watt developed a reciprocating engine in 1769, capable of powering a wheel. Although the Watt engine powered cotton mills and a variety of machinery, it was a *large stationary engine*. It could not be otherwise: the state of boiler technology necessitated the use of low pressure steam acting upon a vacuum in the cylinder; this required a separate condenser and an air pump. Nevertheless, as the construction of boilers improved, Watt investigated the use of *high-pressure steam* acting directly upon a piston. This raised the possibility of a smaller engine, that might be used to power a vehicle and he patented a design for a steam locomotive in 1784. His employee *William Murdoch* produced a working model of a self-propelled steam carriage in that year. The first full-scale working railway steam locomotive was built in the *United Kingdom* in 1804 by *Richard Trevithick*, a British engineer born in Cornwall. This used high-pressure steam to drive the engine by one power stroke. The transmission system emplo-

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340pt

1847

140pt

Eisenbahn

60pt

Strecke Baden — Zürich

18pt

The first commercially successful steam locomotive was *Matthew Murray's* rack locomotive *Salamanca* built for the *Middleton Railway* in Leeds in 1812. This twin-cylinder locomotive was not heavy enough to break the edge-rails track and solved the problem of adhesion by a cog-wheel using teeth cast on the side of one of the rails. Thus it was also the first rack railway. This was followed in 1813 by the locomotive *Puffing Billy* built by *Christopher Blackett* and *William Hedley* for the *Wylam Colliery Railway*, the first successful locomotive running by adhesion only. This was accomplished by the distribution of weight between a number of wheels. *Puffing Billy* is now on display in the *Science Museum* in London, making it the oldest locomotive in existence. In 1814 *George Stephenson*, inspired by the early locomotives of *Trevithick*, *Murray* and *Hedley*, persuaded the manager of the *Killingworth Colliery* where he worked to allow him to build a steam-powered machine. *Stephenson* played a pivotal role in the development and widespread adoption of the steam locomotive. His designs considerably improved on the work of the earlier pioneers. He built the locomotive *Blü-*

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320pt

Paris

110pt

Gare du Nord

60pt

Chemins de fer français

18pt

The first known electric locomotive was built in 1837 by chemist *Robert Davidson of Aberdeen* in Scotland, and it was powered by galvanic cells (batteries). Thus it was also the earliest battery electric locomotive. Davidson later built a larger locomotive named Galvani, exhibited at the *Royal Scottish Society of Arts Exhibition* in 1841. The seven-ton vehicle had two direct-drive reluctance motors, with fixed electromagnets acting on iron bars attached to a wooden cylinder on each axle, and simple commutators. It hauled a load of six tons at four miles per hour (6 kilometers per hour) for a distance of one and a half miles (2.4 kilometres). It was tested on the *Edinburgh and Glasgow Railway* in September of the following year, but the limited power from batteries prevented its general use. It was destroyed by railway workers, who saw it as a threat to their job security. *Werner von Siemens* demonstrated an electric railway in 1879 in Berlin. The world's first electric tram line, *Gross-Lichterfelde Tramway*, opened in Lichterfelde near Berlin, Germany, in 1881. It was built by *Siemens*. The tram ran on 180 Volt DC, which was supplied by running rails. In 1891 the track was

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300pt

SBBB

130pt

Zürich HB

80pt

Durchmesserlinie

18pt

In 1896, Oerlikon installed the first commercial example of the system on the *Lugano Tramway*. Each 30-tonne locomotive had two 110 kW (150 hp) motors run by three-phase 750 V 40 Hz fed from double overhead lines. Three-phase motors run at constant speed and provide regenerative braking, and are well suited to steeply graded routes, and the first main-line three-phase locomotives were supplied by *Brown* (by then in partnership with *Walter Boveri*) in 1899 on the 40 km *Burgdorf—Thun Line*, Switzerland. Italian railways were the first in the world to introduce electric traction for the entire length of a main line rather than just a short stretch. The 106 km *Valtellina Line* was opened on 4 September 1902, designed by *Kandó* and a team from the *Ganz Works*. The electrical system was three-phase at 3 kV 15 Hz. In 1918, *Kandó* invented and developed the rotary phase converter, enabling electric locomotives to use three-phase motors whilst supplied via a single overhead wire, carrying the simple industrial frequency (50 Hz) single phase AC of the high voltage national networks. An important contribution to the wider adoption

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