

THE HISTORY OF STAINLESS STEEL

Mankind has utilised iron for thousands of years. Yet it is only within the past 150 years that metallurgists have learnt how to make steels, control their properties and mass-produce them with a consistent level of quality.

During the 19th century, a number of scientists discovered the excellent corrosion resistance of chromium alloyed steels. But it was not until the early decades of the 1900s that the first stainless steel was patented and manufactured. These events mark the start of the stainless steel industry. An industry that has, over the past 100 years, made a significant contribution to the development of our world.

The history of stainless steel is also available in Spanish: www.jnaceros.com.pe/100/

Sources: [The History of Stainless Steel](#) (Harold M. Cobb), [British Stainless Steel Association](#), [Wikipedia](#), [The Avesta Works](#), [Japan Stainless Steel Association](#)

100
YEARS
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THE HISTORY OF STAINLESS STEEL

4000 BC

First evidence of the use of iron.



3000 BC

Chinese Qin dynasty uses chromium to strengthen weapons and protect them from corrosion.

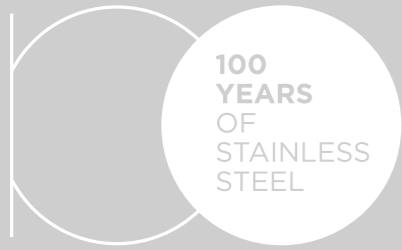
300 BC

Wootz steelmaking technique develops in India and Sri Lanka. The technique spreads across the Arabian peninsula.



1100 to 1300

Wootz steel comes to the attention of Europeans in the form of Damascus swords [More information here](#)



THE HISTORY OF STAINLESS STEEL



1400

Cutlery made of steel begins to appear in Britain

[More information here](#)

1740

Benjamin Huntsman develops the crucible-casting method, enabling mass-production of steel for the first time.

[More information here](#)



1751

Axel Fredrik Cronsted discovers nickel.

[More information here](#)



1778

Karl Wilhelm Scheele discovers molybdenum.

[More information here](#)

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1797

Nicolas-Louis Vauquelin discovers chromium

[More information here](#)

1821

Pierre Berthier publishes the results of his studies into chromium alloys and ferro-chromium.

1871

John T. Woods and John Clark recognise the commercial value of corrosion-resistant chromium alloys and obtain a British patent for a “Weather Resistant” alloy.

[More information here](#)



1904 to 1911

Leon Alexandre Guillet publishes research into iron, chromium and nickel alloys that today would be classed as stainless steel.

[More information here](#)

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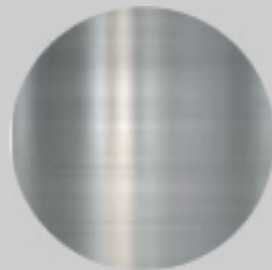
THE HISTORY OF STAINLESS STEEL



1907

First commercial electric arc furnace (EAF) established in the United States. Today, almost all stainless steel is produced using the EAF method.

[More information here](#)



1909

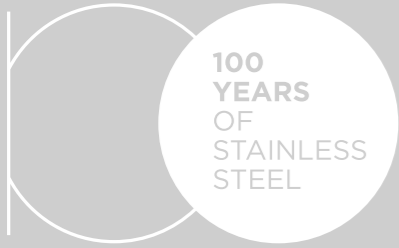
Albert Marcel Portevin took over Guillet's research and, together with W. Giesen, publishes information on stainless steels that are roughly equivalent to modern austenitic, martensitic, and ferritic stainless steels.

[More information here](#)

1910 to 1911

Philipp Monnartz and William Borchers obtain a German patent for stainless steel.

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THE HISTORY OF STAINLESS STEEL

1911 to 1914

Frederick M. Becket and Christian Dantsizen discover a number of ferritic chromium stainless steels.

[More information here](#)

1912

While working for Krupp, Eduard Maurer and Benno Strauss are granted patents on two chromium-nickel stainless steels.

[More information here](#)



1913

Harry Brearley discovers martensitic chromium stainless steel while seeking a corrosion-resistant alloy for gun barrels.

[More information here](#)



1919

Elwood Haynes obtains a patent on martensitic stainless steel.

[More information here](#)

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1919 to 1923

Sheffield cutlery start regular production of stainless steel cutlery, surgical scalpels and tools. Early stainless tableware such as dishes and bowls also started to appear at this time.

[More information here](#)



1925

Stainless steel is used for a chemical tank for the storage of nitric acid.

[More information here](#)



1926

A stainless steel having 18% chromium and 8% nickel is introduced into surgical implant applications.

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1927

Heil Truck of Milwaukee (USA) produces a welded stainless steel tank of chromium stainless steel.

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1928

The brewery industry installs the first stainless steel fermenting vessel.

[More information here](#)



1929

William J. Kroll of Luxembourg is the first to discover precipitation-hardening stainless steel.

[More information here](#)



1930

Duplex stainless steel is produced for the first time at the Avesta Ironworks (Sweden). The microstructure of the alloy consists of both ferrite and austenite.

[More information here](#)



1930

Chrysler Building, with its decorative stainless steel capping, becomes the tallest building in the world.

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1930

Avesta Jernverk receives a record order during the early 1930s for stainless steel heavy plate.

[More information here](#)



1931

The world's first stainless steel aircraft, the Pioneer, is built by Edward G. Budd Manufacturing Company in Philadelphia.

[More information here](#)



1932

The Supermarine S6B gives the Royal Air Force its third consecutive win in the Schneider Trophy race for seaplanes, thus ensuring the trophy remains forever in the UK.

[More information here](#)



1934

SS Queen Mary is launched, with stainless steel featuring strongly in her kitchens, swimming pools, interior decor and turbine engines.

[More information here](#)

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THE HISTORY OF STAINLESS STEEL



1935

In approximately 1935, sinks made of 18-8 stainless steel begin to be installed in new homes, instead of porcelain-enamelled cast iron sinks.

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1936

Six Deluxe Sedan stainless steel cars roll off the Ford production line in Detroit.

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1941

A pier in Progreso, Mexico using stainless steel reinforcement is erected. Ever since it has been maintenance free.

[More information here](#)



1942

Type 430 stainless steel, a ferritic chromium alloy, is used to make wire 0.1mm in diameter for voice-recording machines.

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1952

Stainless steel turbine blades are a leading feature of the world's first gas turbine driven railway locomotive.

[More information here](#)



1953

Oxygen breathing apparatus in stainless steel helps Hillary and Tensing to conquer Mount Everest.

[More information here](#)



1954

The first stainless steel underwater TV camera is made.



1956

The first stainless steel razor blades are introduced by Wilkinson Sword in England.

[More information here](#)

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1956

The first major nuclear power plant opens in England.

[More information here](#)



1958

Stainless steel is adopted in Japan for railway carriages.

[More information here](#)



1966

The world's first tidal power station, near St. Malo, France is completed with stainless steel turbine blades.

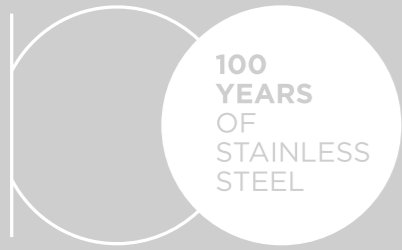
[More information here](#)



1967 to 1973

NASA uses stainless steel in all 13 Saturn V rockets used as part of the Apollo space programme. In 1969, Apollo 11 brought the first stainless steel to the moon.

[More information here](#)



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1980

Italian buses begin using type 304 stainless steel in construction. [More information here](#)



1982 to 1986

The Thames Barrier in London becomes the longest movable flood barrier in the world. The ten stainless steel gates protect an area of 125 square kilometers from storm surge tides. [More information here](#)



1984

The Ford Motor Company mass-produces partial stainless steel exhaust systems. [More information here](#)

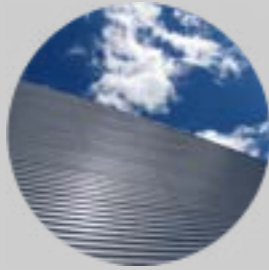


1985

Ferritic stainless steel begins to be used in water piping systems in Japan. [More information here](#)

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1989

Ferritic stainless steel is first used as a large scale roofing material.

[More information here](#)



1993

La Pyramide Inversée in front of the Louvre Museum in Paris is completed.

[More information here](#)



1995

The building of the European Court of Human Rights is completed. The façade is made of stainless steel.

[More information here](#)



1998

Stainless steel is used extensively in the Petronas Towers. At 452m, the buildings remain the tallest in the world until 2004.

[More information here](#)

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2006

China becomes the biggest stainless steel producer in the world.

[More information here](#)



2006

First flight of the Lockheed-Martin Joint Strike Fighter.

[More information here](#)



2006

The Atomium in Brussels, Belgium was renovated with stainless steel cladding.

[More information here](#)



2010

The Burj Khalifa in Dubai is opened on 4 January 2010. At 829.84m in height, it is currently the tallest structure in the world.

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1100 to 1300

Wootz steel comes to the attention of Europeans in the form of Damascus swords.

The swords are extremely strong, shatter-resistant and could be sharpened to a fine blade. Many people have attempted to replicate the steelmaking technique since, though no one has yet succeeded.

Photo courtesy of: www.wikipedia.org

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1400

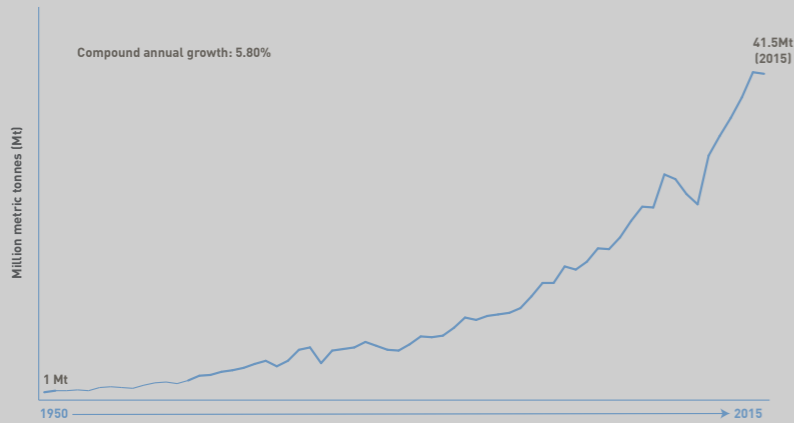
Cutlery made of steel begins to appear in Britain

Today most cutlery in the Western world is made using stainless steel owing to its hygienic properties and ease of cleaning (www.worldstainless.org/Files/issf/Animations/Hygiene/flash.html). Also chopsticks can be made of stainless steel (www.worldstainless.org/Files/issf/Animations/Chopsticks/Chopsticks.swf)

Photo courtesy of: Artefe Company

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1740

Benjamin Huntsman develops the crucible-casting method, enabling mass-production of steel for the first time.

The production of stainless steel has grown rapidly since the end of WWII. Statistical information can be found at www.worldstainless.org/Statistics/

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1751

Axel Fredrik Cronsted discovers nickel.

For further information visit: www.nickelinstitute.org

Photo courtesy of: www.wikipedia.com

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1778

Karl Wilhelm Scheele discovers molybdenum.

For further information visit: www.imoa.info

Photo courtesy of: International Molybdenum Association (IMO)

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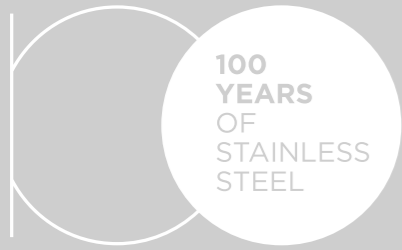


1797

Nicolas-Louis Vauquelin discovers chromium

For further information visit: www.icdachromium.com

Photo courtesy of: International Chromium Development Association

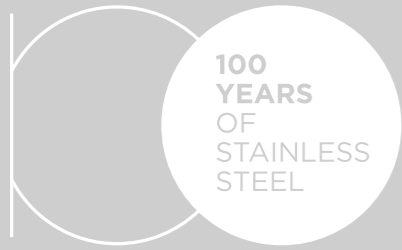


THE HISTORY OF STAINLESS STEEL

1871

John T. Woods and John Clark recognise the commercial value of corrosion-resistant chromium alloys and obtain a British patent for a “Weather Resistant” alloy.

For further information visit http://www.worldstainless.org/what_is_stainless_steel/introduction_to_stainless_steel



THE HISTORY OF STAINLESS STEEL

1904 to 1911

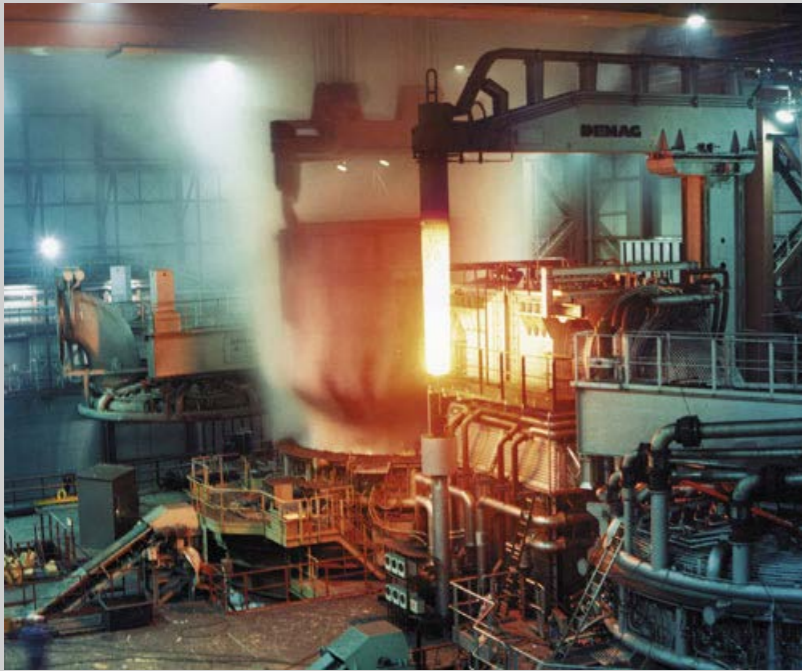
Leon Alexandre Guillet publishes research into iron, chromium and nickel alloys that today would be classed as stainless steel.

Guillet did not however describe the passive layer, one of the most important characteristics of stainless steel.

http://www.worldstainless.org/what_is_stainless_steel/introduction_to_stainless_steel

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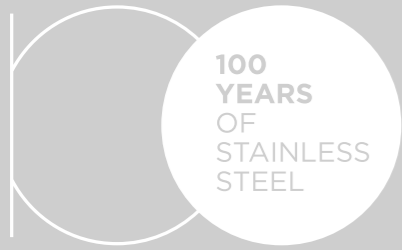


1907

First commercial electric arc furnace (EAF) established in the United States. Today, almost all stainless steel is produced using the EAF method.

For more information on how stainless steel is produced, please consult the different sources that are mentioned on: http://www.worldstainless.org/about_stainless/process_and_production

Picture courtesy of: ArcelorMittal

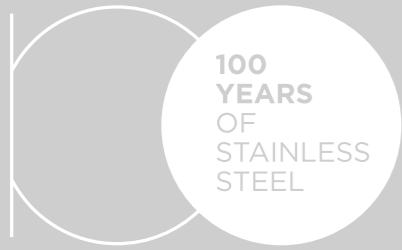


THE HISTORY OF STAINLESS STEEL

1909

Albert Marcel Portevin took over Guillet's research and, together with W. Giesen, publishes information on stainless steels that are roughly equivalent to modern austenitic, martensitic, and ferritic stainless steels.

As with Guillet, they did not describe the passive layer. For an entertaining explanation of what stainless steels are - iron-chromium alloys, whose range of applications can be extended by adding further elements like nickel or molybdenum - see http://www.worldstainless.org/files/issf/mov_video_files/Alloyed%20for%20lasting%20value/Alloyed%20for%20lasting%20value%20English.mov

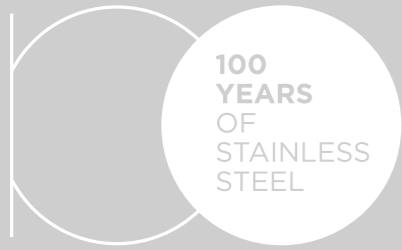


THE HISTORY OF STAINLESS STEEL

1910 to 1911

Philipp Monnartz and William Borchers obtain a German patent for stainless steel.

Monnartz publishes: A Study of Iron-Chromium Alloys with Special Consideration of their Resistance to Acids. He is the first to explain that stainless steel requires at least 12% chromium and a controlled amount of carbon. It will be many years before the passive chromium oxide layer theory is published. For an entertaining explanation of what stainless steels are - iron-chromium alloys, whose range of applications can be extended by adding further elements like nickel or molybdenum - see http://www.worldstainless.org/files/issf/mov_video_files/Alloyed%20for%20lasting%20value/Alloyed%20for%20lasting%20value%20English.mov

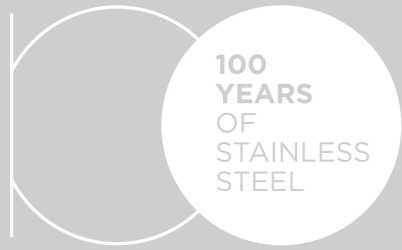


THE HISTORY OF STAINLESS STEEL

1911 to 1914

Frederick M. Becket and Christian Dantsizen discover a number of ferritic chromium stainless steels.

For more information on the different categories of stainless steel, visit http://www.worldstainless.org/what_is_stainless_steel/categories_grades_productforms



THE HISTORY OF STAINLESS STEEL

1912

While working for Krupp, Eduard Maurer and Benno Strauss are granted patents on two chromium-nickel stainless steels.

The first alloy is a martensitic grade, while the second is an austenitic grade. For more information on the different categories of stainless steel, visit http://www.worldstainless.org/what_is_stainless_steel/categories_grades_productforms

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1913

Harry Brearley discovers martensitic chromium stainless steel while seeking a corrosion-resistant alloy for gun barrels.

He casts the first commercial martensitic chromium stainless steel. In 1915 Brearley obtains Canadian, French and US patents. For more information on the different categories of stainless steel, visit http://www.worldstainless.org/what_is_stainless_steel/categories_grades_productforms

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1919

Elwood Haynes obtains a patent on martensitic stainless steel.

His first application in 1911 was denied because the US Patent Office had already registered Brearley's patent and others on chromium steels. For more information on the different categories of stainless steel, visit http://www.worldstainless.org/what_is_stainless_steel/categories_grades_productforms

Photo courtesy of: Elwood Haynes Museum Archives

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1919 to 1923

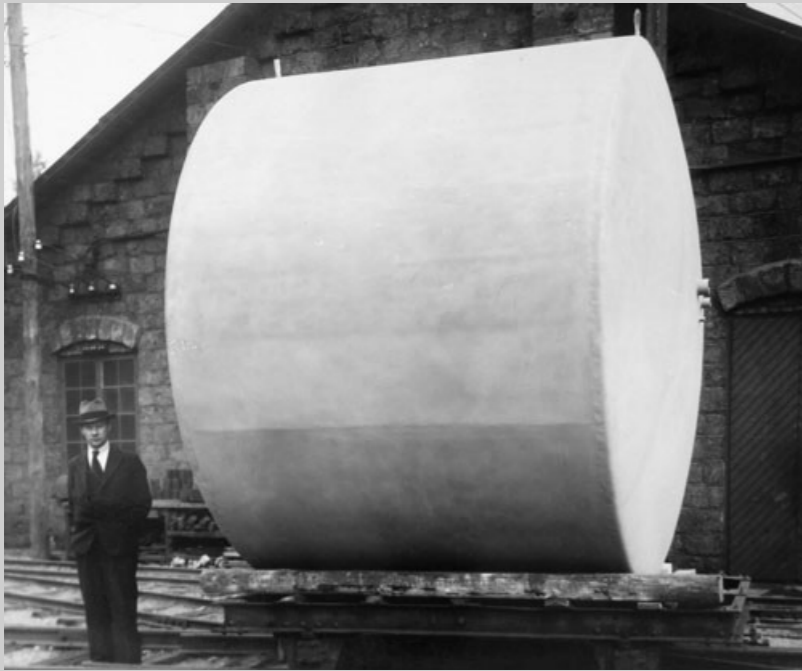
Sheffield cutlery makers start regular production of stainless steel cutlery, surgical scalpels and tools. Early stainless tableware such as dishes and bowls also started to appear at this time.

For more information visit, http://www.worldstainless.org/home_and_office_uses/kitchen_and_bathroom

Photo courtesy of: BSSA (British Stainless Steel Association)

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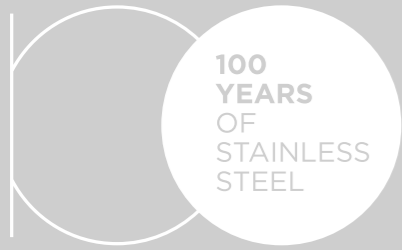


1925

Stainless steel is used for a chemical tank for the storage of nitric acid.

Generally speaking it is the ability to withstand attack by highly corrosive chemicals that creates such a high level of demand for these alloys within the chemical and petrochemical industrial sectors. More detailed information can be found at: http://www.worldstainless.org/industrial_applications/chemical_and_petrochemical

Photo courtesy of: Outokumpu



THE HISTORY OF STAINLESS STEEL

1926

A stainless steel having 18% chromium and 8% nickel is introduced into surgical implant applications.

The material is noted to be much more resistant to bodily fluids and stronger than the vanadium steel introduced by Sherman for his fracture-fixation plates. The ease with which stainless steel surgical instruments and appliances can be kept clean and sterile provides an obvious illustration of the way the material helps to safeguard our health. However, there are so many less obvious ways in which the contribution of stainless steel to our well-being is of growing importance.

http://www.worldstainless.org/applications_protection_environment_and_human_health/human_health

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1927

Heil Truck of Milwaukee (USA) produces a welded stainless steel tank of chromium stainless steel.

The modern dairy industry requires the use of cleanable, corrosion-resistant stainless steel equipment to meet the needs of milk product consumers everywhere:

http://www.worldstainless.org/Files/issf/non-image-files/PDF/ISSF_Stainless_Steel_in_the_Dairy_Industry.pdf

Photo courtesy of: Turid Bjørnsen, www.fotolia.com

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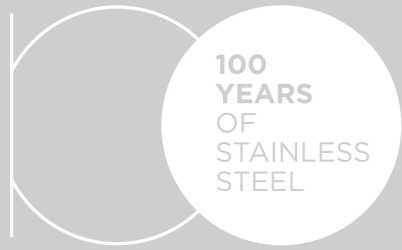
1928

The brewery industry installs the first stainless steel fermenting vessel.

The discovery of stainless steel early in the 20th century was a milestone event for the food and drink processing industries. This wonderfully hygienic and durable alloy has become a favourite in domestic kitchens and for the very same reasons, it is the material of choice in industries as diverse as the processing of milk and dairy products, beer and wine making, confectionery, cooked meats and many, many more.

www.worldstainless.org/industrial_applications/food_and_beverage_industry

Photo courtesy of: Ewwwgenich1, www.fotolia.com



THE HISTORY OF STAINLESS STEEL

1929

William J. Kroll of Luxembourg is the first to discover precipitation-hardening stainless steel.

He used titanium. Kroll developed the Kroll process for refining titanium and zirconium. For more information on the different categories of stainless steel, visit: www.worldstainless.org/what_is_stainless_steel/categories_grades_productforms

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1930

Duplex stainless steel is produced for the first time at the Avesta Ironworks (Sweden). The microstructure of the alloy consists of both ferrite and austenite.

Duplex stainless steels account today for about 1% of the total stainless steel production. For more information about these steels and their fabrication, visit: www.worldstainless.org/what_is_stainless_steel/categories_grades_productforms and www.worldstainless.org/process_and_production/fabrication

Photo courtesy of: Calle Eklund, www.wikipedia.com

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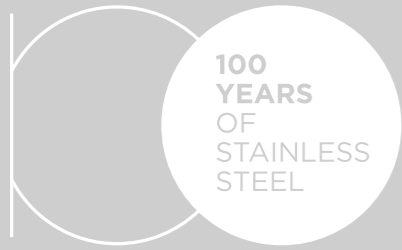
1930

Chrysler Building, with its decorative stainless steel capping, becomes the tallest building in the world.

The title of tallest building passes to the Empire State Building just eleven months later. Today the use of stainless steel cladding for building exteriors is no longer an exception. More information and examples can be found at:

www.worldstainless.org/architecture_building_and_construction_applications/building_exteriors

Photo courtesy of: Catherine Houska, Nickel Institute



THE HISTORY OF STAINLESS STEEL

1930

Avesta Jernverk receives a record order during the early 1930s for stainless steel heavy plate.

The order for 1,500 tonnes of stainless steel plate was for use at the Aswan Dam in Egypt to protect the original dam while its height was raised.

www.worldstainless.org/applications_protection_environment_and_human_health/water

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1931

The world's first stainless steel aircraft, the Pioneer, is built by Edward G. Budd Manufacturing Company in Philadelphia.

For more information visit: www.worldstainless.org/transport_applications/aerospace

Photo courtesy of: Andrew Bossi, www.wikipedia.com

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1932

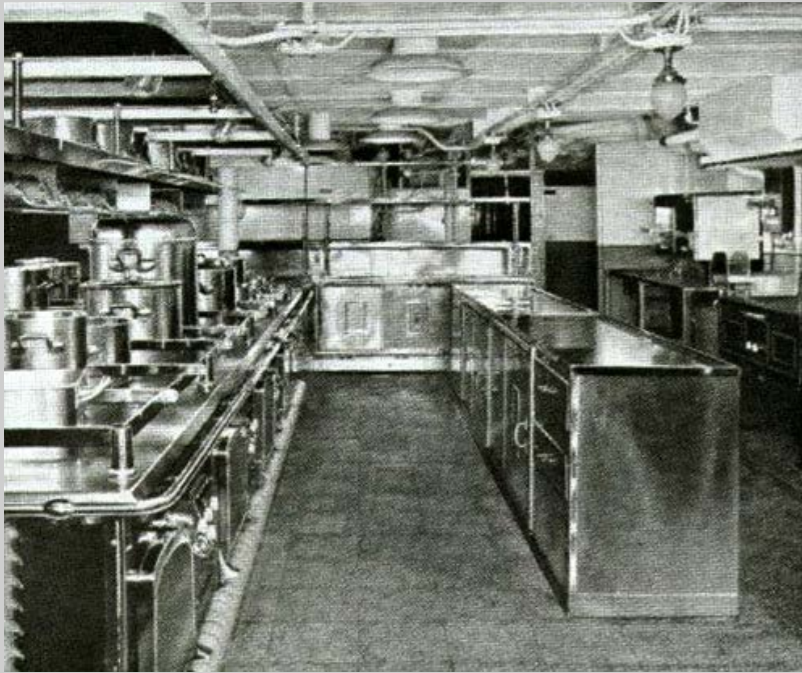
The Supermarine S6B gives the Royal Air Force its third consecutive win in the Schneider Trophy race for seaplanes, thus ensuring the trophy remains forever in the UK.

The Rolls-Royce aero engine which powered this achievement had stainless steel shafts, rods, valves and spindles. www.worldstainless.org/applications/transport_applications

Photo courtesy of: www.wikipedia.com

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1934

SS Queen Mary is launched, with stainless steel featuring strongly in her kitchens, swimming pools, interior decor and turbine engines.

Although stainless steel is very rarely considered as a candidate for ships' hulls, its uses throughout the ship and boat-building industry are many and varied: www.worldstainless.org/transport_applications/shipbuilding

Photo courtesy of: BSSA (British Stainless Steel Association)

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1935

In approximately 1935, sinks made of 18-8 stainless steel begin to be installed in new homes, instead of porcelain-enamelled cast iron sinks.

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Photo courtesy of: JSSA

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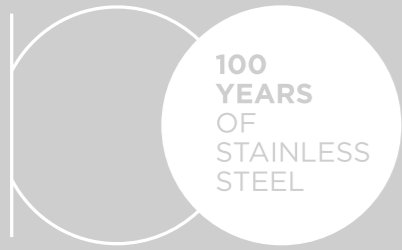
1936

Six Deluxe Sedan stainless steel cars roll off the Ford production line in Detroit.

After driving more than 320,000 km the vehicles were sold to private owners in 1946. Four of the vehicles still exist. The stainless steel bodies have outlasted most of the non-stainless parts of the vehicle. Although modern cars do not use stainless steel extensively, they do make use of stainless steel components in common with trains, ships and airplanes. More information on how stainless steel helps the world move can be found at:

www.worldstainless.org/applications/transport_applications

Photo courtesy of: BSSA (British Stainless Steel Association)



THE HISTORY OF STAINLESS STEEL

1941

A pier in Progreso, Mexico using stainless steel reinforcement is erected. Ever since it has been maintenance free.

Why use stainless steel reinforcement? An interesting question, that is answered by the following website: stainlesssteelrebar.org

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1942

Type 430 stainless steel, a ferritic chromium alloy, is used to make wire 0.1mm in diameter for voice-recording machines.

Thousands of miles of this wire were used for this purpose during World War II. Stainless steel bars and wires enable the world to communicate. In this animation you can discover how much stainless steel is used in the small parts of tools we use every day. www.worldstainless.org/Files/issf/Animations/IT/flash.html

Photo courtesy of: Yio, www.fotolia.com

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1952

Stainless steel turbine blades are a leading feature of the world's first gas turbine driven railway locomotive.

More information on stainless steel in railways:

www.worldstainless.org/transport_applications/railways

Photo courtesy of: Don Ross

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1953

Oxygen breathing apparatus in stainless steel helps Hillary and Tensing to conquer Mount Everest.

Stainless steel also contributes to our health in everyday life through its hygienic properties:

www.worldstainless.org/applications_protection_environment_and_human_health/human_health

Photo courtesy of: Royal Geographic Society

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OF
STAINLESS
STEEL

THE HISTORY OF STAINLESS STEEL



1956

The first stainless steel razor blades are introduced by Wilkinson Sword in England.

Stainless steel is the perfect material for those situations where hygiene is important. Find out more about stainless steel and hygiene at:

www.worldstainless.org/Files/issf/Animations/Hygiene/flash.html

Photo courtesy of: Black Beast

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THE HISTORY OF STAINLESS STEEL



1956

The first major nuclear power plant opens in England.

More information about stainless steel and power generation can be found at: www.worldstainless.org/industrial_applications/power_generation

Photo courtesy of: Sellafield Ltd

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THE HISTORY OF STAINLESS STEEL



1958

Stainless steel is adopted in Japan for railway carriages.

Many railcar operators have chosen to construct carriages from austenitic stainless steel, in preference to alternative materials such as carbon steel and aluminium alloys, as this choice carries several safety-related benefits.

www.worldstainless.org/transport_applications/railways

Photo courtesy of: Tokyu Car Corporation

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THE HISTORY OF STAINLESS STEEL



1966

The world's first tidal power station, near St. Malo, France is completed with stainless steel turbine blades.

More information about stainless steel and power generation can be found at: www.worldstainless.org/industrial_applications/power_generation

Photo courtesy of: www.altenergymag.com

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THE HISTORY OF STAINLESS STEEL

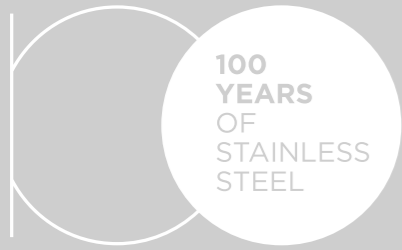


1967 to 1973

NASA uses stainless steel in all 13 Saturn V rockets used as part of the Apollo space programme. In 1969, Apollo 11 brought the first stainless steel to the moon.

Stainless steel is still used for aerospace applications: www.worldstainless.org/transport_applications/aerospace

Photo courtesy of: NASA (National Aeronautics and Space Administration)



THE HISTORY OF STAINLESS STEEL

1980

Italian buses begin using type 304 stainless steel in construction.

The buses are 10% lighter, have a 10% improvement in crash worthiness of the passenger compartment, require less maintenance, and are more fuel-efficient. In 2008, 80% of the buses are stainless. These days even bus shelters are made in stainless steel: www.street-furniture.org/

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1982 to 1986

The Thames Barrier in London becomes the longest movable flood barrier in the world. The ten stainless steel gates protect an area of 125 square kilometers from storm surge tides.

The title of longest flood barrier passes to the Oosterscheldekering dam when it opens in 1986. The dam includes 62 steel doors. Stainless steel does not only help protect us from water, it is also an excellent material to provide us with clean water. More information can be found at: www.worldstainless.org/applications_protection_environment_and_human_health/water

Photo courtesy of: Judith Duddle, provided by BSSA (British Stainless Steel Association)

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THE HISTORY OF STAINLESS STEEL



1984

The Ford Motor Company mass-produces partial stainless steel exhaust systems.

Before the turn of the century, all cars produced in North America will have exhaust systems made completely of stainless steel: www.worldstainless.org/transport_applications/automotive_applications

Photo courtesy of: 3Desc, www.fotolia.com

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THE HISTORY OF STAINLESS STEEL



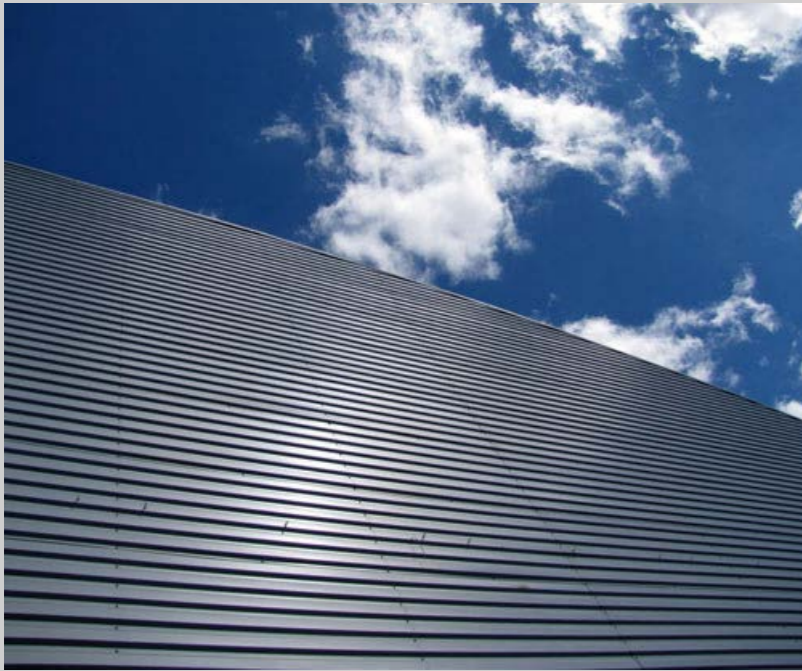
1985

Ferritic stainless steel begins to be used in water piping systems in Japan.

For further information: www.worldstainless.org/applications_protection_environment_and_human_health/water

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1989

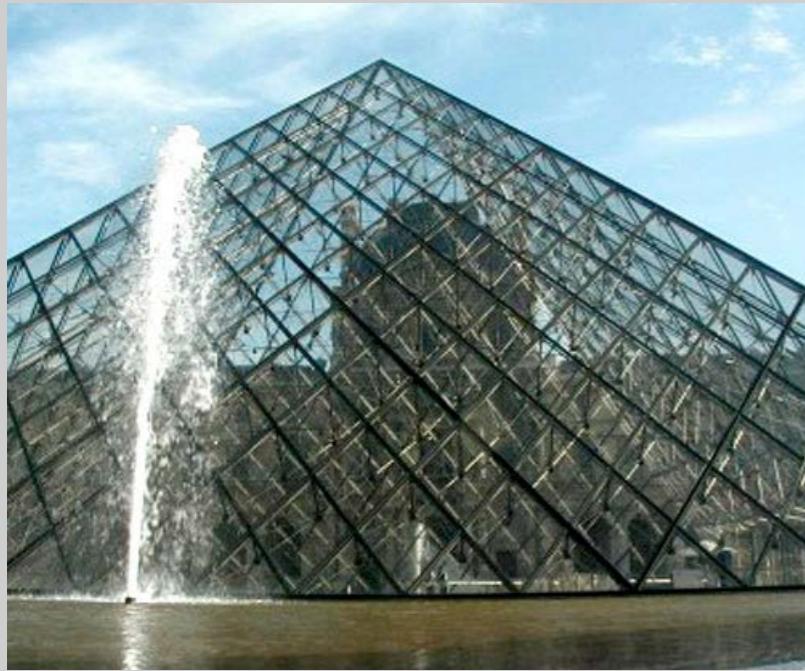
Ferritic stainless steel is first used as a large scale roofing material.

For further information: www.worldstainless.org/applications/architecture_building_and_construction_applications or <https://youtu.be/ZQledV2QFRY>

Photo courtesy of: Jackin, www.fotolia.com

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THE HISTORY OF STAINLESS STEEL



1993

La Pyramide Inversée in front of the Louvre Museum in Paris is completed.

Individual glass panes in the pyramid, 30 mm thick, are connected by stainless-steel crosses 381 mm in length. After dark, the structure is illuminated by a frieze of spotlights.

Photo courtesy of: Dr Nicole Kinsman, IMOA

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THE HISTORY OF STAINLESS STEEL



1995

The building of the European Court of Human Rights is completed. The façade is made of stainless steel.

For further information: www.worldstainless.org/architecture_building_and_construction_applications/building_exteriors

Photo courtesy of: European Court of Human Rights

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THE HISTORY OF STAINLESS STEEL



1998

Stainless steel is used extensively in the Petronas Towers. At 452m, the buildings remain the tallest in the world until 2004.

Stainless steels are not only used for their corrosion resistance, but also for their strength. Therefore they are an excellent material for structural applications. More information can be found on: www.worldstainless.org/architecture_building_and_construction_applications/structural_applications

Photo courtesy of: Shutterstock

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THE HISTORY OF STAINLESS STEEL



2006

China becomes the biggest stainless steel producer in the world.

For more statistics on stainless steel production, visit: www.worldstainless.org/statistics/crude_steel_production

Photo courtesy of: Anton Balazh, www.fotolia.com

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THE HISTORY OF STAINLESS STEEL



2006

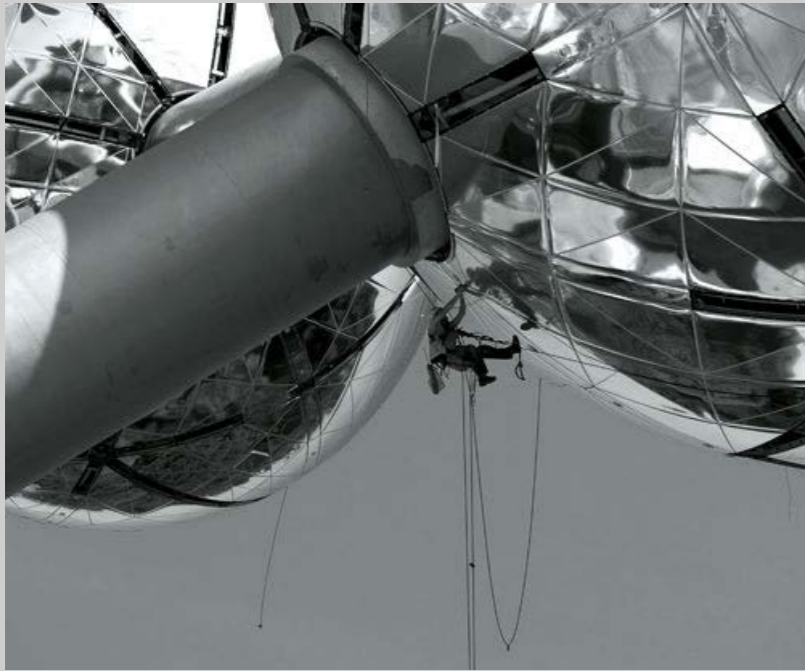
First flight of the Lockheed-Martin Joint Strike Fighter.

For more information on the different categories of stainless steel, visit: www.worldstainless.org/what_is_stainless_steel/categories_grades_productforms

Photo courtesy of: Lockheed-Martin

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THE HISTORY OF STAINLESS STEEL



2006

The Atomium in Brussels, Belgium was renovated with stainless steel cladding.

Many beautiful artworks are clad with or completely out of stainless steel. More examples can be found at: www.worldstainless.org/applications/art

Photo courtesy of: Shutterstock

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THE HISTORY OF STAINLESS STEEL



2010

The Burj Khalifa in Dubai is opened on 4 January 2010. At 829.84m in height, it is currently the tallest structure in the world.

Stainless steels are not only used for their corrosion resistance, but also for their strength. Therefore they are an excellent material for structural applications. More information can be found on: www.worldstainless.org/architecture_building_and_construction_applications/structural_applications

Photo courtesy of: Philipus, www.fotolia.com