We chose 20 memorable stories to tell you from among the 19,000 objects that the Museum holds, studies and shares.

Explore findings, records and accounts whose power and uniqueness never cease to amaze. And explore the history of overlooked discoveries that have silently shaped our everyday habits.

Our collections began to take shape in the 1930s thanks to the support of leading scientists like Guglielmo Marconi. Scientific equipment, models, machinery, art works, books and journals, photographs and documents help us tell the history of science, technology and industry from the 1800s to today.

We preserve this heritage to inspire present and future generations and we see it as a living legacy that is continuously enriched by countless precious individual contributions. Together we can remember our history and pass it on to future generations.

MUSEUM HIGHLIGHTS

20 OBJECTS

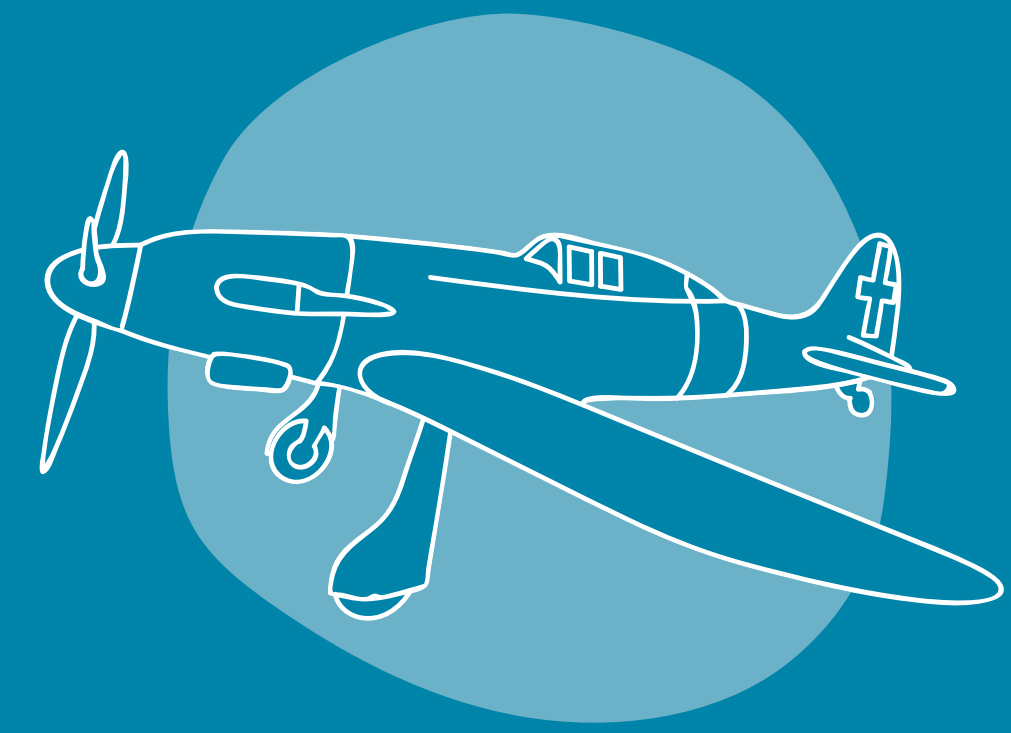
The Museum in 2 hours

Find the 20 objects and learn their stories. Continue exploring on our website, follow us on social media and sign up for the newsletter to find out about events and news in advance.

MUSEUM HIGHLIGHTS

20 OBJECTS

MUSEO NAZIONALE SCIENZA E TECNOLOGIA LEONARDO DA VINCI



01

REGINA MARGHERITA THERMOELECTRIC PLANT
1895

M1

Who greets you when you first arrive at the Museum?

The Regina Margherita owes its appeal to its grandeur and history. It was used in the Gavazzi silk factory in Desio (Milan) to power 1800 looms and light the factory. Italy's royal family was present at its inauguration and it tells the story of a time when Italian industry was gradually turning to electrical power. Its steam engine was built by one of the most renowned workshops in the history of mechanical engineering: Officine Franco Tosi in Legnano, a world of engineering inspired by love, such as that between the Museum founder Guido Ucelli and his wife Carla Tosi.

02

SYNOPTIC PANEL
1985

M0

Have you ever done a giant puzzle?

This electronic panel is made up of about 100,000 cards that fit together like a puzzle. It was used in the Operations Room of the Snam Dispatching Centre to continuously monitor the Italian gas transport network and showed operators the entire structure of methane pipelines and systems, along with the main operating parameters measured minute by minute using remote control devices. It gave them an important overview of the system for the efficient, careful and well-balanced management of transport across the entire network.

03

OLIVETTI PROGRAMMA 101
1960s

M0

Which was your first PC?

The P101 was a programmable calculator produced by Olivetti between 1965 and 1971. At that time, only enormous, expensive electronic processors could perform similar functions. NASA used the P101 to calculate the landing on the Moon. Since it could be placed on a desk, many people consider it the precursor to the personal computer. The project was led by engineer Pier Giorgio Perotto. Architect Mario Bellini designed the case.

04

OLIVETTI ELEA 9003 OPERATOR CONSOLE
1958

M0

How does your computer look like?

The ELEA 9003 was the first commercial transistorized computer to be developed in Italy, by the engineer Mario Tchou and his team. At that time, computers filled entire rooms. They had no monitor or mouses, only consoles. The ELEA was the first to feature an ergonomic interface, achieving the perfect combination of aesthetics and functionality. It was designed by designer Andries Van Onck and architect Ettore Sottsass Jr., who won the Compasso d'Oro prize in 1959.

05

STASSANO FURNACE
1910

Want to see a rare object, one of its kind in Europe?

The Stassano furnace was the first indirect arc furnace used to produce steel. With three electrodes placed horizontally on its upper section, it transformed electrical energy into thermal energy.
Thanks to the heat generated in its lower section, it could produce high-quality steel using iron scraps, rather than iron ore, with enormous economic, environmental, and social benefits. Invented in 1898, it won the "Milestone in the development of metallurgy" prize in 1992.

M0

06

CONTINUUS PROPERZI
1948

Can a metal rod be a lighting rod for innovation?

For centuries, the production of metal semifinished products entailed transforming the casted material into bars or plates, then cooling, moving, reheating and finally moulding them. It required significant amounts of time, space, water and energy to produce just a few kilos of product per day.
In 1948 Ilario Properzi patented the Continuus Properzi to produce kilos of rod with one single machine in only a few minutes starting from casted metal.

M0

07

LEONARDO DA VINCI GALLERIES
2019

Have you seen the largest exhibition in the world dedicated to Leonardo da Vinci?

In 1953 the Museum opened with a major exhibition dedicated to Leonardo da Vinci. The Galleries offer a complete overview of the man and his work as engineer and humanist, with an exhibition of 170 historical models, works of art, ancient volumes and immersive installations.
A journey to discover the unique and innovative facets of Da Vinci's thinking in dialogue with his contemporaries, in which his ability to observe nature and connect ideas transversally still inspires us today.

M2

08

SPACE COVERALLS
2014 and 2019

What does one wear aboard the International Space Station?

During a mission, astronauts wear light overalls or comfortable clothes, such as t-shirts and shorts. To make sure that astronauts are as comfortable as possible the temperature, air pressure and humidity are kept constant inside the ISS. The overalls displayed here are the original ones worn by Samantha Cristoforetti during her first mission in Space and by Luca Parmitano while he was commander of the ISS.

M2

09

MOON ROCK
3.7 billion years

Have you ever seen a real piece of Moon?

This is a piece of the Goodwill Rock, collected in 1972 by the astronauts of the Apollo 17, the last human mission on the Moon. It is a small rock with an immense value, maybe the most iconic symbol of humanity's passion for exploration and for scientific and technological challenges.
It was donated in 1973 by the American President Richard Nixon to the Italian Republic and later entrusted to the Museum. By studying it, scientists hypothesized on the origin and nature of the Moon and caught a glimpse of the Solar System's first instants.

M2

10

GIOVANNI V. SCHIAPARELLI'S MERZ-REPSOLD TELESCOPE
1882

Did you know that Martians were invented in Milan?

In 1886 - when it came to service at the Brera Astronomical Observatory in Milan - the Merz-Repsold telescope was the largest in Italy and one of the most important in the world. With this tool, Schiaparelli conducted his studies on Mars. He observed some structures - shaped like channels - on the surface of the planet. This ignited a debate on whether they actually existed and the possibility of extra-terrestrial life on Mars.

M2

11

CASELLI PANTELEGRAPH
1856 (1933 replica)

When were scanners and faxes invented?

The pantelegraph was invented by the abbot Giovanni Caselli in the mid-1800s. It was the first device that could scan and transmit documents and images. Italy was not yet a unified country, so the first service line was built in France for the business world. It connected Paris to Lyon.
The replica on display was made for the 1933 Chicago World's Fair, when Fascist Italy wanted to highlight national scientific and technological achievements.

M2

12

GUGLIELMO MARCONI'S MAGNETIC DETECTOR
1902

Who invented wireless communications and saved many lives on the Titanic?

Guglielmo Marconi built this detector prototype in 1902 to test radio wave reception over long distances, even on board ships. He would win the Nobel Prize in 1909 with Carl Ferdinand Braun for this discovery.
In 1912, his invention saved the lives of many passengers on the Titanic: thanks to the SOS radio signal, the tragic event showed the world how useful wireless communications could be.

M2

13

DETECTOR UA1
1981

How does one win a Nobel Prize in Physics?

In 1983 the UA1 (Underground Area, Experiment One) demonstrated the existence of the elementary particles W and Z. With this significant discovery Carlo Rubbia and Simon van der Meer won the Nobel Prize. What you see is a section of the central detector: the original device was almost 20 feet long and weighed 2,000 tons. The experiment took place at CERN in Geneva and involved over one hundred physicists from around the world.

M1

14

GR 552 036 LOCOMOTIVE
1900

Can a train unite a country?

Presented at the Universal Exhibition in Paris in 1889, the Gr 552 locomotive was fast and reliable. This was why it was chosen to tow trains on the most important routes of Italy. After the opening of the Frejus between France and Italy in 1871, every week it towed from Bardonecchia to Brindisi the "Indian Mail", the famous train connecting London to Bombay, which was made up of a postal carriage, two sleeping cars and a dining car.

F

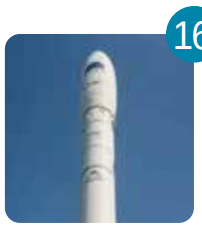
15

SUBMARINE S 506 ENRICO TOTI
1967

Do you know that the Toti travelled 93 km on roads in Lombardy?

Launched in 1967, the Toti was the first submarine built in Italy after World War II. Its job was to patrol the waters of the Mediterranean and detect Soviet submarines.
In 1997 it made its last trip and since 2005 it rests here at the Museum. If you wish, you can tour it with a guide to relive the sailors' emotions.

E



16

VEGA LAUNCHER
2012

Ready for take-off?

The Museum houses the 1:1 scale model of the first Vega (VV01), a vector developed by the European Space Agency (ESA). About 30 meters high and with a mass of 137 tons, it is composed of 4 stages that can transport and release satellites of up to 2.000 kilograms.
Unlike most small launchers, it can carry multiple loads into Space, placing them on different orbits. Vega was developed thanks to a partnership between Italy, France, Belgium, Spain, the Netherlands, Switzerland and Sweden. The first launch took place on February 13, 2012.

E

17

EBE SCHOONER
1921

Can one slice up a ship and create an entire building to host it?

The Ebe was built in 1921 for the transport of goods in the Mediterranean. It turned into a pilot training ship in the 1950s. At the end of its service it was acquired by the Museum, cut into parts and rebuilt for the opening of the new Air and Water Building in April 1964.
It is one of the largest ships kept in a museum.

A0

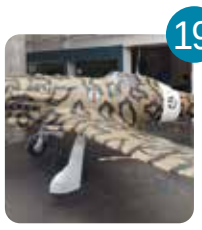
18

CONTE BIANCAMANO OCEAN LINER
1925

Why is a great sea giant parked in a museum?

Diving into history: the prestigious launch in 1925 in Scotland, the first journey on the Genoa-Naples-New York route, the voyages to South America and the Far East, the transport of U.S. troops during World War II, and its final voyages.
Today's survivors are the ballroom and the bridge with the original equipment and some cabins, acquired by the Museum in the 1960s during the disarmament.

A0



19

MACCHI MC 205 V
1943

What does a hunting dog have to do with a plane?

The Macchi MC 205 Veltro was placed in service in 1943 and is considered one of World War II's most beautiful and practical planes. It is equipped with a 1475 cc engine, armed with two machine guns and two cannons.
Its name, Veltro, means greyhound and refers to the famous hunting dog that save Italy mentioned by Dante in his Divine Comedy.
The motto on the fuselage - "nock, draw and release" - is still used by the First Brigade of the Air Force Special Operations.

A1

20

ENRICO FORLANINI'S EXPERIMENTAL HELICOPTER
1877

Have you ever dreamed of flying?

Enrico Forlanini's experimental helicopter was the first object to fly thanks to the thrust of an engine. It had no pilot and was equipped with a light steam engine and two counter rotating propellers placed on the same axis. In 1877 it was presented in Milan to an audience of technicians, engineers and enthusiasts, where it rose about 13 meters and remained in the air for 20 seconds, gently landing back in its starting point.

A1