Stainless steels play an often unnoticed role in our everyday lives. Discover some uses you probably never heard of!
Stainless steel bars and wires in electronics

Shaft

Stainless steel axis are widely used in electronic products, like printers, copycats, electrographs, etc.

Pictures are from chengcg.com
Stainless steel bars and wires in electronics

Screw and bolt

Stainless steel precision screws are inevitable parts of computers and consumer electronics.

Grade: 302HQ / 304 / 304HC / 316 / 316L

Picture from tisco.com.cn
Stainless steel bars and wires in electronics

Antenna, spring

Stainless steel springs are often used in keyboards of computers or mobile phones, in batteries and many other kinds of electronic and electrical products. Stainless steel antennas provide not only function, but also long life due to its corrosion resistance.

Stainless steel spring (302, 304, 304H, 316)
Picture from wlan168.cn/tech

Stainless steel antenna
Pictures from lqsbtldh.cn.china.cn
Stainless steel bars and wires in electronics

Electric resistance and oxidation resistance

Ferritic-chromium-aluminium stainless steels combine a controlled electrical resistivity with outstanding oxidation resistance. The oxidation resistance is a result of the high chromium and aluminum content in the stainless. The heating elements are used in many domestic appliances such as toasters and hairdryers.
Stainless steel bars and wires in electronics

Hard disk drive (HDD)

The HDD (hard disk drive) is a good example for electronic products using stainless steel.

- The cover of HDD can use 304 stainless steel
- The spindle and actuator axis are made from stainless steel cold drawing bar
- Actuator and actuator arm can use TP301L and SUS302
- The disk can be made of 304 stainless steel foil in 40-100 μm thickness
- All the screws can use stainless steel
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Printer (ink-jet type)

Stainless steel filter mesh is used in the ink box of ink-jet printers.

Picture from oaprinter.com
Printer (toner type)

Antistatic brush 316
Screw for toner mixer 304, 316

Picture from koolonfiber.com
Stainless steel bars and wires in electronics

Mobile phone

Stainless steel is used in the parts which require corrosion resistance, machinability, strength.

Picture from sugilab.net
Digital camera

Stainless steel is used in the parts which require corrosion resistance, machinability and non-magnetism.

Picture from sugilab.net
Stainless steel bars and wires in electronics

Earphones

Many earphones use stainless steel for:
- non-magnetic
- aesthetics
- higher strength
- good ductility
- corrosion resistant
- durability

Picture from earphone.pchome.net
Stainless steel bars and wires in electronics

**TV (LCD, PDP)**

Stainless steel is used in the exterior parts as well as the filter mesh for screen printing.

*Picture from webweb.s92.xrea.com*
Stainless steel bars and wires in electronics

Filter mesh printing machine

Stainless steel mesh is used in mesh printers. Stainless steel filter mesh is widely used in many kinds of electronic products.
Grade: 304, 304L, 316, 316L
Fan

Stainless steel fanner shield web protect fan blades, and at the same time it is aesthetic and durable.

Pictures from tech.sina.com.cn
Stainless steel braiding is widely used in electrical wire protective flexible tube and optic fibre cables. Stainless steel flexible tube can prevent electrical wire from destruction by an outside force. It can prevent electrical wire and optic fibre from destruction by e.g. murine bites. Electrical wire and optic fibre cables can easily be curved and constructed. Stainless steel braiding is corrosion resistant, heat-resistant and non-polluting to the environment; stainless steel braiding can also increase the cable’s twist resistance, to prevent destruction by an outside source.

*Pictures from kaiphone.com*
Stainless steel bars and wires in electronics

Stainless steel fibre

Stainless steel fibre and its products are widely used in anti-static and anti-electromagnetic fields.

Stainless steel fibre products can be applied into different applications; such as anti-static brushes, electric conductive wires, and thermal conductive wires.

Steel grade: AISI 304 and AISI 316L

Electric conductive conveyer belts and anti-static belts for machinery equipments and other applications require electric conductivity with high temperature resistance, which can be offered by stainless steel wire.
Stainless steel bars and wires in electronics

Flexible anti-static brush

A flexible anti-static brush made from stainless steel fibres has both softness and durability.
Stainless steel bars and wires in electronics

**Fibre + terylene + cotton**

Fabric combining stainless steel fibre, terylene and cotton can be used in anti-static and anti-electromagnetic fields due to its softness and durability.
Stainless steel bars and wires in electronics

100% stainless steel fabrics

100% stainless steel fabrics can be used in anti-static, anti-electromagnetic and electric conductivity fields.
Shield mesh

EMI (electromagnetic interference) shield mesh is used for the display of laptop and palmtop computers.

The wire is the line of communication of TFT display. The yellow fabric wrap around the wire is made of stainless steel fabric for anti-electromagnetic purpose.
Work clothes

Static electricity is a serious risk when working with fragile electronic equipment. When you discharge static electricity, it causes static shock or electrostatic discharge. This electrostatic discharge can damage electronic equipment. It can also cause explosions when working with flammable liquids or gases. To reduce the risk of static electricity, we use antistatic devices. These devices prevent the buildup of static electricity. They either absorb or dissipate the static electricity, preventing static shock. Antistatic devices are thus useful in protecting electronic equipment or preventing explosions. Antistatic jackets or coveralls are some of the devices you can use as antistatic devices.

So how do antistatic coveralls and jackets work to prevent static shock and prevent damage? They usually make antistatic coveralls and jackets of conductive material, like stainless steels. This distributes any built-up static electricity through the fabric. The distribution of static electricity prevents the accumulation of static electricity in one place and allows the dissipation of static electricity to the ground.

Source and more information: https://staticdefense.com/how-anti-static-clothing-work-and-use-for-workplace-safety/