ARCUS WIRE GROUP
MARINE • INDUSTRIAL • ARCHITECTURAL

STAINLESS STEEL MANUFACTURING PROCESS

Stainless Steel Wire

As well as being made from the highest quality raw material to AISI specifications, HAMMA Strand is manufactured to ensure that impurities are minimised on the finished product.

Impurities such as dust and grease, which attach themselves to the wire during the manufacturing process, can severely impact the passivation layer of stainless steel and are the major cause of premature tea-staining and corrosion.

Listed below are the five major steps that HAMMA undertakes to guarantee the outperformance in corrosion resistance of our cables, and differentiates HAMMA from the rest of the market.

Step 1
HAMMA Strand start life as a high quality stainless steel rod procured from selected sources. The chemical composition of all rod used by HAMMA is guaranteed and can be found on our Mill Certificates.

Step 2
Before manufacturing commences, the rod is descaled, to remove any impurities on the surface picked-up during transport.

Step 3
The stainless rod is then annealed, a process where the rod is heated to a certain temperature, and then drawn down. This process is repeated numerous times until the rod reaches the final drawn wire diameter. The multiple annealing process used to draw the rod is vital in ensuring the wire does not work harden during drawing.

Step 4
After the drawing process, HAMMA uses the wire to form strand, and ultimately wire rope, for the HAMMA Strands.

Step 5
All of this manufacturing is undertaken by HAMMA under strict quality control, and in a state-of-the-art manufacturing facilities. These facilities are kept impeccably clean to ensure impurities do not contaminate the wire, which is a common cause of tea-staining.

Galvanised Wire

As previously mentioned, galvanised wire is essentially zinc coated bright wire. The properties of zinc allow the wire to become corrosion resistant.

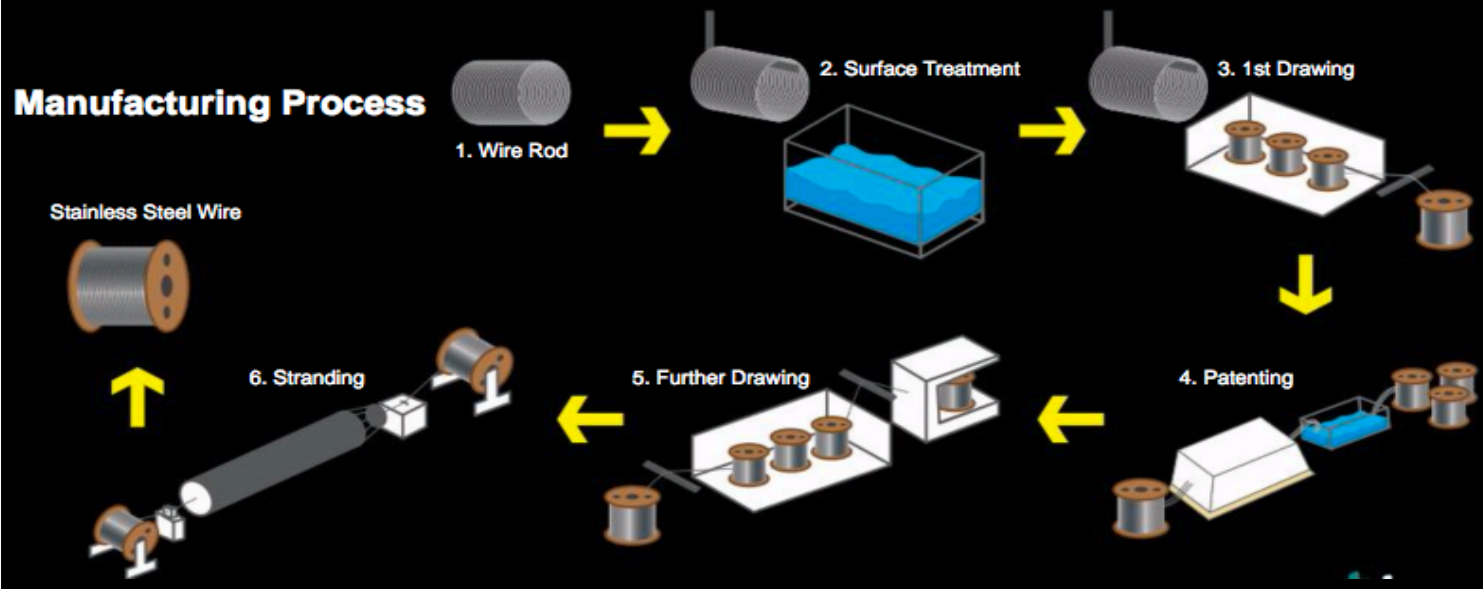
Zinc is more corrosion resistant than steel (but not stainless steel) in most natural atmospheres. The exceptions being ventilated indoor atmospheres where the corrosion of both steel and zinc are extremely low, and certain highly corrosive industrial atmospheres.

HAMMA only supplies galvanised wire that has been manufactured via hot dip galvanising under special orders.

In hot dip galvanising, the steel or iron to be zinc coated is completely immersed in a bath of molten zinc. It is by far the most widely used of the zinc coating processes and has been practiced commercially for almost two centuries.

Many of the unique processes used to manufacture our stainless steel wire rope are also employed in the manufacture of the galvanised wire we supply.

The companies HAMMA source from are both ISO Quality Certified and manufacture to our high standards. The result is a galvanised wire rope of superior quality.



STAINLESS STEEL MANUFACTURING INFORMATION SHEET