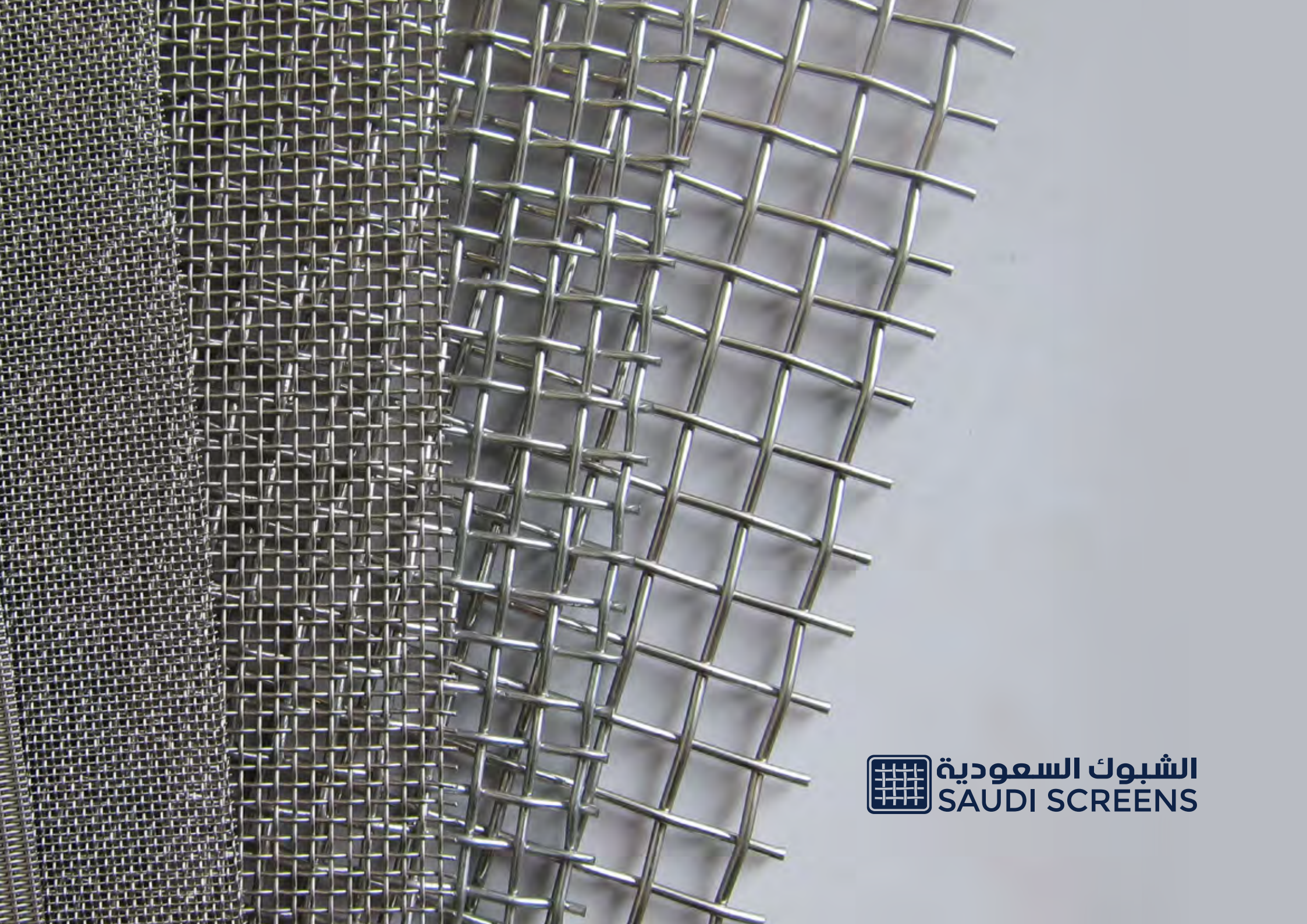


الشبوك السعودية
SAUDI SCREENS

About Us

Saudi Screens is a brand of Cement Service Industries Co. (CemServ) which comes under the umbrella of Al Qahtani Holding. It was founded with the aim of providing high-quality industrial products and services to bulk material handling industries like cement, mining companies, stone crusher plants, quarries, etc.

Al Qahtani Holding was founded by the late Sheikh Abdulhadi Abdullah Al Qahtani in 1948, and it has risen to become one of the largest industrial conglomerates in the Kingdom of Saudi Arabia. Sheikh Abdulhadi was a man who proudly pursued his mission to make a strong contribution to Saudi Arabia's growing economy, and his legacy is a group which has grown beyond what he could have hoped for.

Since its inception, Al Qahtani holding has expanded and diversified into various sectors including beverages production and distribution, manufacturing, oil and gas, petrochemicals, mining, real estate, and the industrial sectors, to name just a few. Each sector of the group retains its own unique characteristics, but all hold true to Al Qahtani's original vision - to be at the forefront of Saudi Arabian business.

CemServ is a premier manufacturer of pre-crimped woven wire mesh in Saudi Arabia. The manufacturing facility in Dammam boasts state-of-the-art equipment for producing high-quality products with great efficiency. Mesh can be produced in a variety of opening sizes, wire diameters, and weave types according to customer specifications. It can supply mesh for various applications, although the majority is for sieving purposes in stone crusher plants, quarries, mining sites, cement plants, etc.

All wire mesh is produced in accordance with International Standards.

A highly skilled team and state-of-the-art equipment ensure that customers will always get the highest quality product and the best value for money.

خدمات الأسمنت
CemServ

القحطاني القابضة
ALQAHTANI HOLDING


MADE IN SAUDI ARABIA
VARIETY OF SIZES AVAILABLE
CUSTOM SIZES CAN BE MADE
AVAILABLE ON REQUEST

What is Pre-Crimped Woven Wire Mesh?

It's a versatile industrial material made from strands of metal wire which are crimped before being woven together. Pre-crimped mesh is ideal for weaves with larger openings because it has great stability. The process also has the benefit of consistently accurate sizing, making it ideal for use in vibrating screens. Numerous styles of crimping have been developed to improve manufacturing efficiencies, function, and looks.

CemServ, stocks a wide variety of precision-cut crimping wheels to crimp high-tensile steel wires across a combination of spacings, crimping types, and wire diameters.

Applications

Stone Crushers

Cement

Mining

Water Treatment/Filtration

Asphalt

Chemical

Architecture

Woven Wire Mesh Fundamentals

- **Mesh Opening / Aperture Width, w**
  Distance between two adjacent warp or weft wires, measured in the projected plane at mid positions (see figure 1)

- **Wire Diameter, d**
  Diameter of the wire in the wire screen (see figure 1)

- **Pitch, p**
  1) Distance between the middle points of two adjacent wires
  2) Nominally the sum of the aperture width ‘w’ and the wire diameter ‘d’ (see figure 1)

- **Open Screening Area, Ao**
  1) Percentage of the surface of all the apertures in the total screening surface
  2) Ratio of the square of the nominal aperture width ‘w’ and the square of the nominal pitch ‘p’

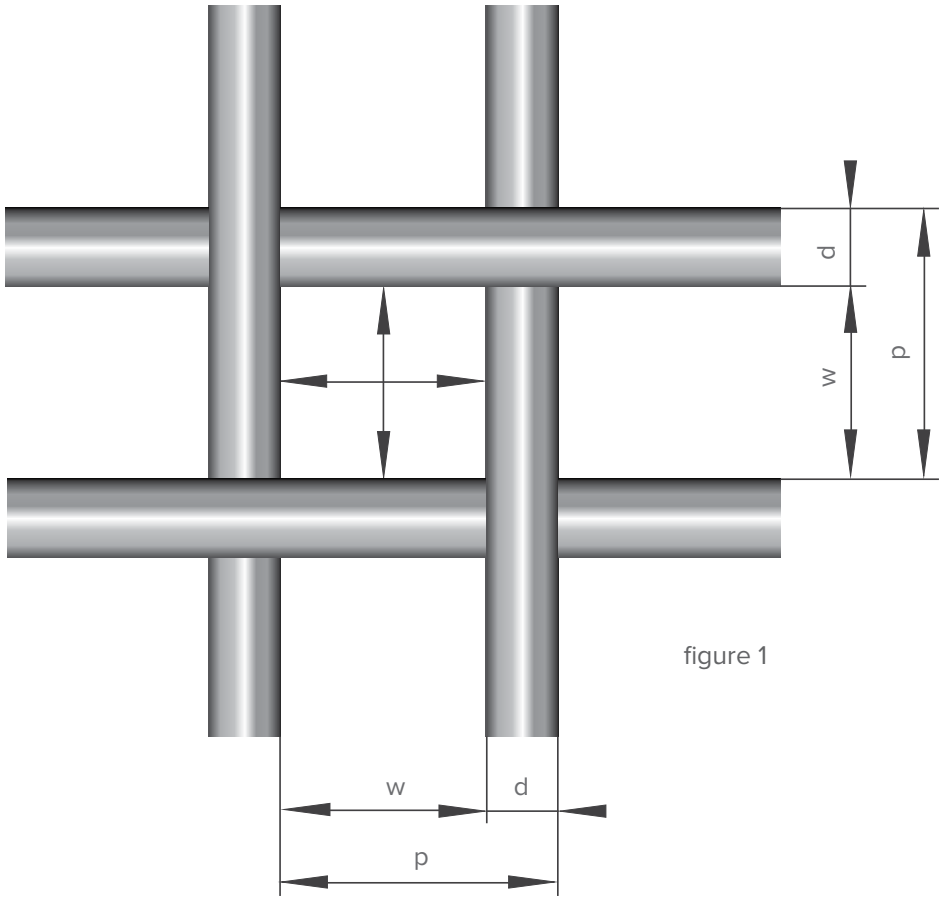


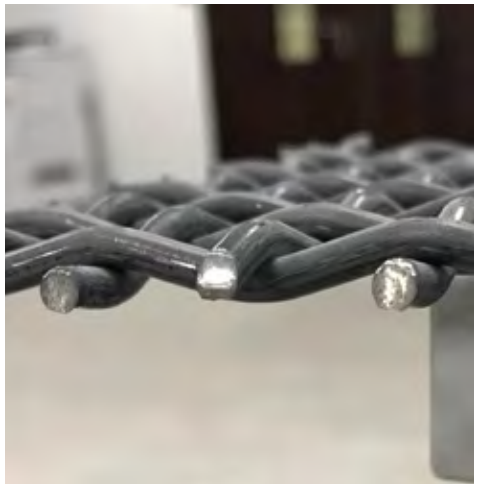
figure 1

p = (w+d), rounded to a full percentage value:

$$Ao = \frac{100\ w^2}{(w + d)^2}$$

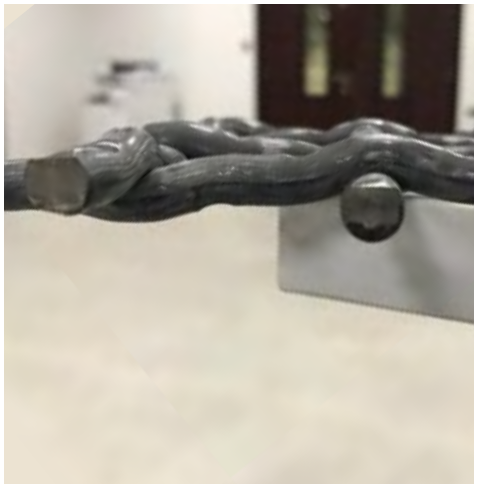
Types of Crimps

Way in which the warp and weft wires are pre-crimped or connected to each other to form the screen (see below figures)



Double Crimp

This the most commonly used crimping style, generally used for smaller mesh openings ranging from 3mm to 16mm. As shown in figure- , the crimping pattern looks like a wave with pre-determined depth to ensure proper fitment with the cross wire. This pattern is generally used for mesh to diameter ratios of 4:1 or less.



Lock Crimp

This type of crimping (as shown in figure-) is characterized by straight sections of wire with intermittent bump at specific distance i.e. the pitch. As shown in figure- , this type of crimping pattern gives dimensional stability due to interlocking of wires, especially when subjected to big lumps of materials. This pattern is suitable to be used for mesh to diameter ratios of 4:1 or more.

Note - various other types of crimp patterns can be provided on request.

Types of Weaves

Way in which the warp and weft wires are woven with each other to form the screen (see below figures)

Plain Weave

Wire cloth in which the wires pass over and under one wire in both directions. This is mostly used for screening/sieving applications in quarries, mining, etc.

Note - various other types of weaves can be provided on request.

- **Firmness Of Mesh**

Tension existing between the crossing warp and weft wires and which, together with the interlocking, determines the firmness of the wire screen

Note - it is affected by the tensile strength of the material, by the relationship of w to d, and by the type and the depth of the crimp.

- **Mass per unit area, ρA**

That quantity calculated using the following equation:

$$\rho A = \frac{d^2 \rho f}{618.1 (w + d)}$$

Where,

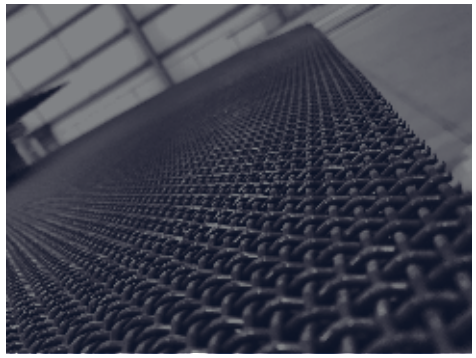
d is the wire diameter, in millimeters
w is the aperture width, in millimeters
f is the crimp type conversion factor (1 for double crimp and flat top and 2 for lock crimp as per ISO 4783-3:1981)
r is the material density, in kilograms per cubic meter

Note - Above equation gives the calculated mass per unit area (kg/m2), although the actual value can be up to 3 % lower.

Mesh Specifications

Opening Sizes:

Meshes can be produced with opening sizes ranging from 3mm up to 100mm

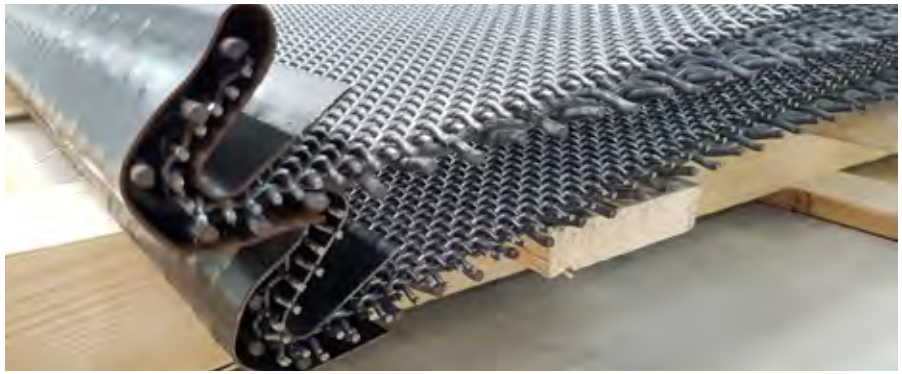


Panel Sizes:

Maximum mesh width of 2.5m and length of 6m can be produced

Edge Hook

Different kinds of edge hooks as illustrated below can be fabricated based on customer requirements



Sandwich Panels

Sandwich panels are a popular item which have been developed in response to customer demand. They offer a highly versatile solution, because they are manufactured from panels comprised of various sizes and/or materials which can be sandwiched together in different combinations. These materials can include stainless steel, carbon steel, or whatever else the customer would like to specify.

Materials

Woven wire mesh can be supplied made from a wide range of materials.

It is understood that customers need to maximise efficiency by keeping equipment downtime to an absolute minimum. So, the mesh needs to retain its integrity even under very demanding operating conditions, which is why high carbon steel (also known as spring steel) wires are used. They possess tensile strength of between 1100 and 1930 MPa and are highly resistant to impact and abrasion. This durability ensures great operational longevity.

For other applications like architectural, food processing, etc. mesh can be produced from other materials like stainless steel SS304, SS316, galvanized steel wires, etc.

Stringent vendor registration and product sample testing processes ensure that only high-quality materials are used in all products. Third-party testing is used to ensure that materials always conform to the required international standards.

Valued Addition

Woven wire mesh can be cut, formed, and welded to meet customer requirements.

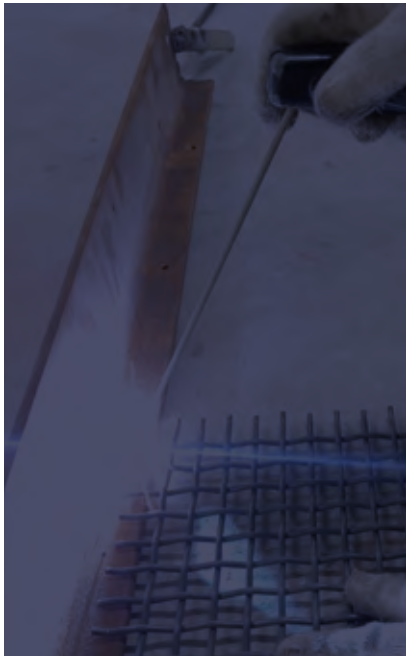
Cutting

Mesh can be precisely cut to the required sizes with the shear machine.

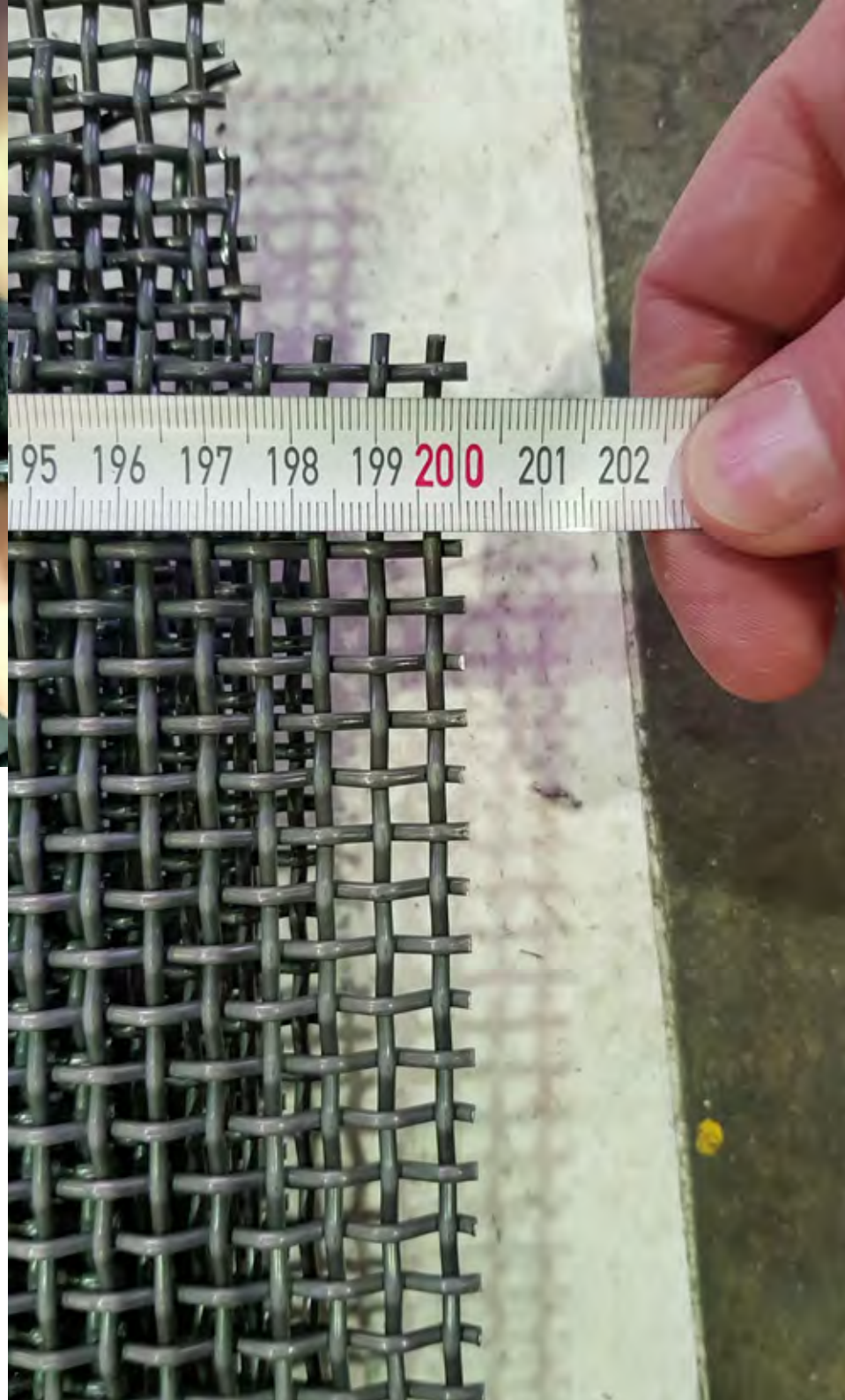
Forming

Mesh can be formed using the press brake in a variety of bending configurations. Various types of edge preparations for carbon steels as well as stainless steels are also possible using the press brake.

Welding



Skilled welders are able to work on the mesh for various purposes, such as to make frames or sandwich mesh.



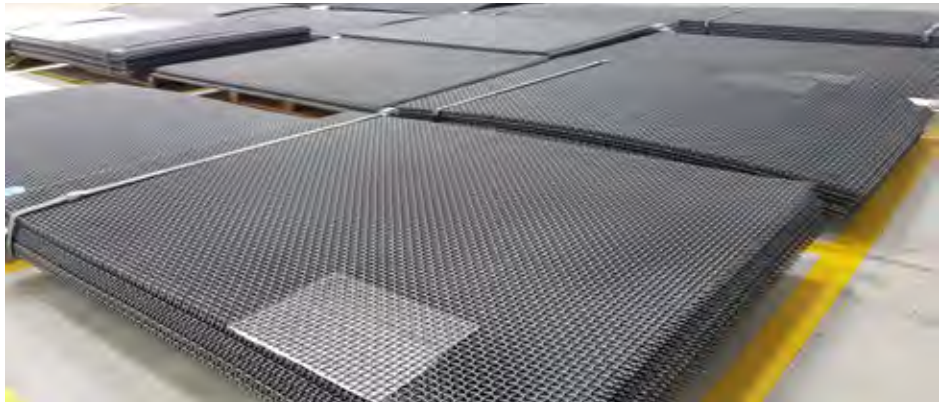
Quality Assurance

At Saudi Screens, Quality is not just a routine but an obsession. Creating a high-quality product is the responsibility of each and every company employee.

A high-quality mesh is one that can sieve the desired particle sizes accurately and also give a long service life. Both can be achieved thanks to a relentless focus on strict quality control throughout all stages of the manufacturing process. Saudi Screen follows international standards ISO 14315, ISO 4782 and ISO 4783.

Packaging & Warehouse

Product packaging is an integral part of the manufacturing process, so all items are packaged with consideration given to size, shape, quantity, and weight. Standard packaging consists of mesh secured with steel straps, but if it is necessary to transport larger orders, tarpaulin covers are added to protect them. Orders are also placed on wooden pallets to assist in proper handling. To ensure convenience, the Saudi Screens warehouse stocks meshes in frequently requested sizes. If a size is popular, then it's likely that it can be supplied quickly.

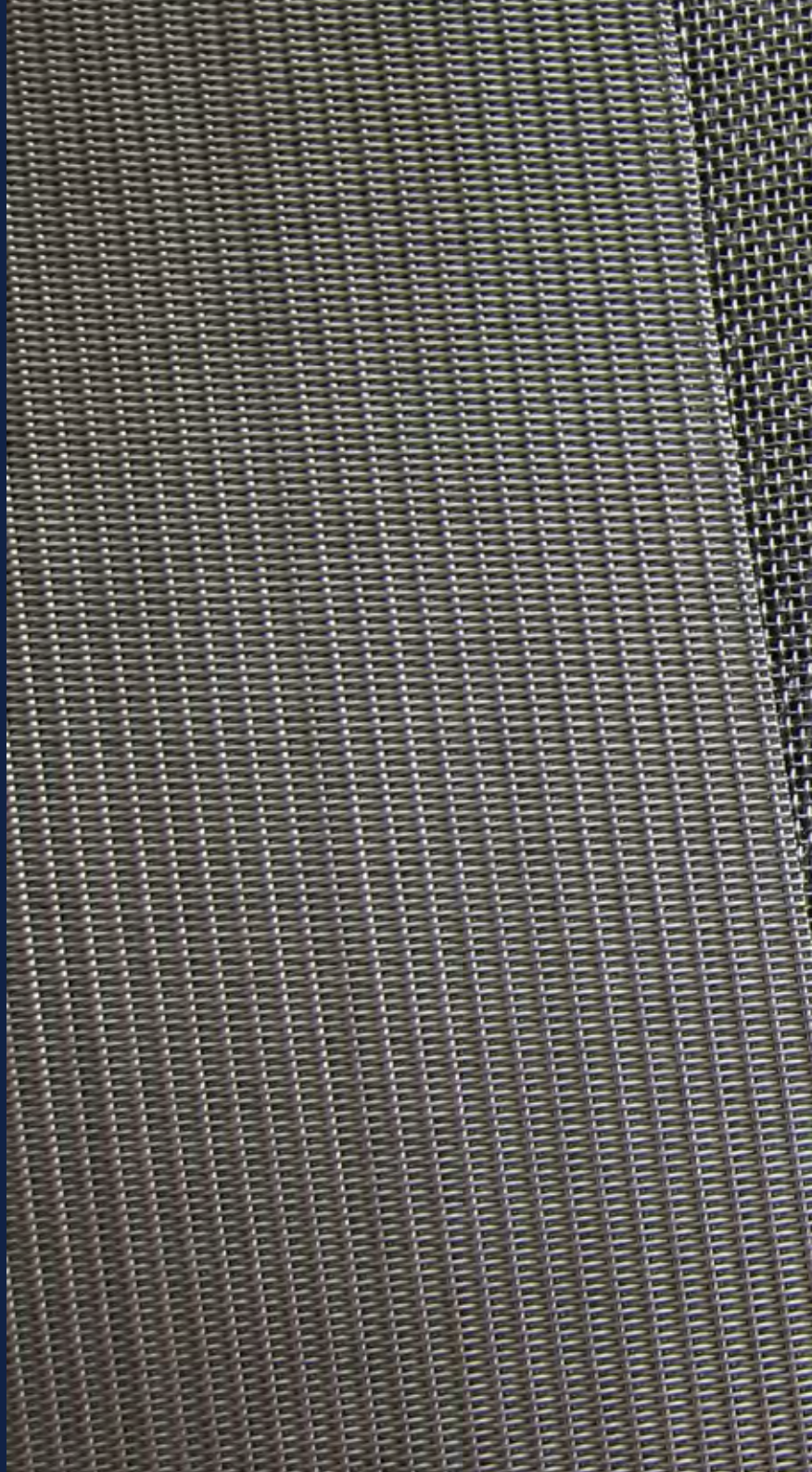


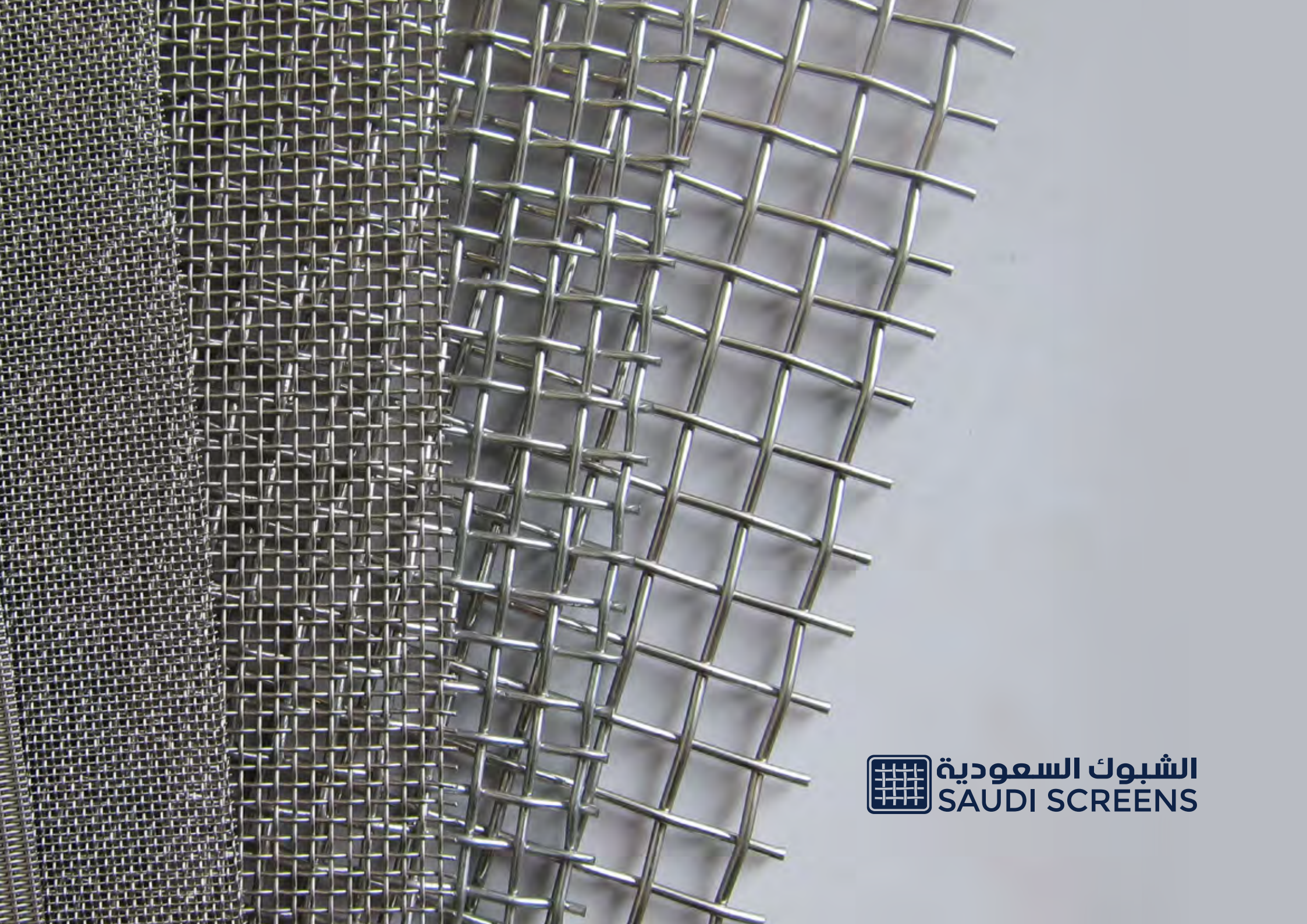
الشبوك السعودية
SAUDI SCREENS

خدمات الأسمنت
CemServ

Office & Factory Address:
3rd Industrial City, Dammam
Kingdom of Saudi Arabia
Tel: +966 13 887 3030
Fax: +966 13 887 6627
Email: sales@cemserv.com.sa
Website: www.cemserv.com.sa

For Sales:
Mob 1: +966 562697835 | Email 1: huzefa.r@cemserv.com.sa
Mob 2: +966 501118421 | Email 2: iliyas.p@cemserv.com.sa





الشبوك السعودية
SAUDI SCREENS