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ABOUT US

COMPLETE SOLUTION OF WIRE MESH

Since its establishment in 1993, SF Enterprises has been dedicated to producing products of the highest quality while providing outstanding customer service. In those processes and sectors that demand a high degree of application specialization, we can provide high-quality products and innovative services since we have it all.

Straightening > Cutting > Welding > Inspection Finished Mesh: > Packing > Loading

These product has been sold in every region of Pakistan, and we have 200 more customers..

SF Enterprises gradually shifted its focus from local sales to foreign trade.

SF Enterprises adheres to the execution of the sustainable development plan, views it as its obligation to help every customer achieve healthy development, and strives to build a peaceful coexistence between the employees, and clients.







QUALITY STANDARD

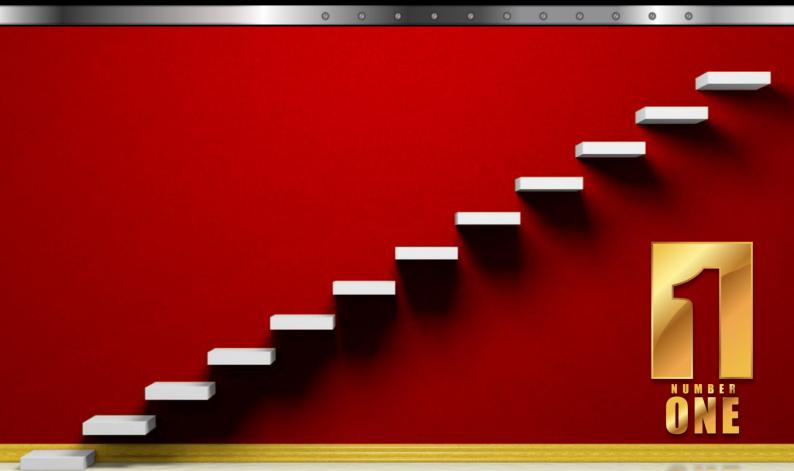
COMPLETE SOLUTION OF WIRE MESH



- 1. Establish a quality management system that meets the requirements of ISO 9001:2015.
- 2. Establish measurable objectives and processes to ensure customer satisfaction.
- 3. Monitor and measure processes to ensure compliance with ISO standards.
- 4. Develop and implement corrective and preventive actions to address any discrepancies.
- 5. Monitor and assess supplier performance.
- 6. Analyze data to identify trends and issues.
- 7. Maintain records to document the effectiveness of the quality system.
- 8. Train personnel on quality processes and procedures.
- 9. Ensure that products and services meet customer requirements.
- 10. Establish a quality policy and review it regularly.





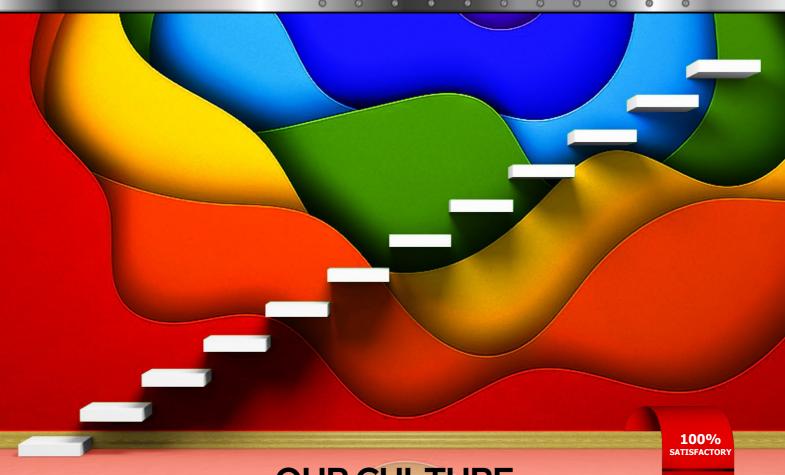


DEVELOPMENT PATH

- Dedicated and experienced employee.
- Consistent quality products.
- On-time delivery.
- Technical staff, with more than 10 years experience.
- 80% repeat customers.
- Reasonable claim refund system.







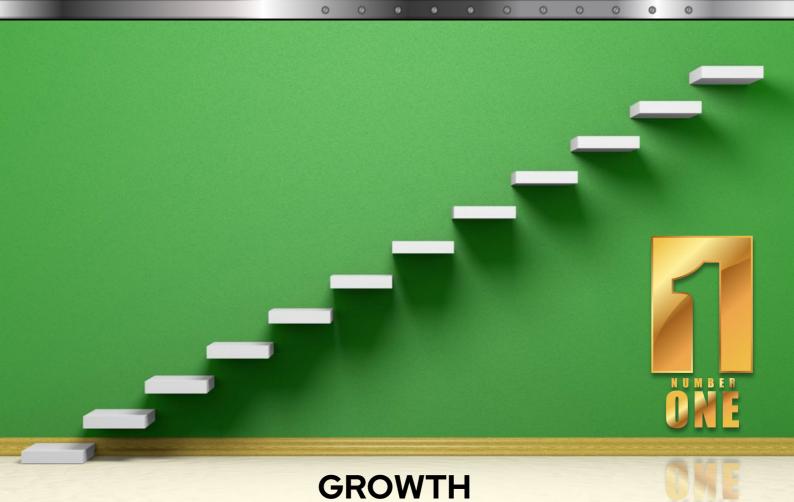
OUR CULTURE

- Collaboration, success sharing, and sustainable development.
- Will remember SF Enterprises, when discussing the wire mesh business.
- Alhumdulilah, everyone will unquestionably select SF Enterprises, who
 assist each client in achieving better development.
- Being honest and not deceiving any of the clients or partners.
- We believe, we can do it.
- All employee at SF Enterprises contribute to its success.
- Mutual admiration, mutual learning, and mutual support.
- Whenever "wire mesh specialist" is mentioned, the name SF Enterprises comes to mind.
- SF Enterprises complies with all national and international trade regulations laws.





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Wire mesh is an increasingly popular material used in a variety of business applications. Its versatility and durability make it a great choice for businesses that need to add strength and protection to their products. Over the past few years, the demand for wire mesh has steadily grown, and as a result, businesses that specialize in this material have seen a significant increase in their business growth.

Wire mesh is commonly used in a variety of sectors, including construction, agriculture, automotive, pet care, manufacturing, filtration, and security.

Wire mesh can be used in many ways, including structural support, filtration, and protection from pests and the elements. It is often used in construction, automotive, and agricultural industries, as well as in the manufacturing of furniture and other products. The demand for wire mesh has been driven by its strength and durability, as well as its cost-effectiveness. The material is also often used in safety products and can be used for a variety of other applications.

Businesses that specialize in wire mesh have seen an increase in their business growth as a result of the growing demand for this material. Companies that have expanded their product lines and invested in new technology have been particularly successful in this regard. As the demand for wire mesh continues to grow, businesses that specialize in this material will continue to see an increase in their business growth.











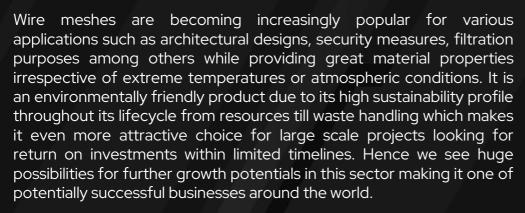
OUR HONOR

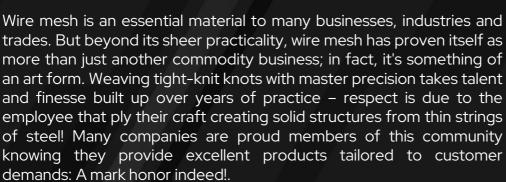
COMPLETE SOLUTION OF WIRE MESH

A wire mesh business is a lucrative industry that has seen tremendous growth over the past years. This rise in demand and market share can be attributed to multiple factors, including its low cost structure, environmental benefits, and advanced production capabilities. The technology used in the production of wire meshes enables it to provide exceptional strength-to-weight ratio works with delicate accuracy as well as dimensional stability during construction into solid panels or weld meshes..



Wire mesh industry is a rapidly growing and dynamic sector of manufacturing. Our company meets the high demand for quality products from the army, navy, air force and many leading companies. With state-of-the-art production methods in place and top materials used, we are striving to exceed customers' expectations with our high-precision wire mesh products that have excellent strength and durability. With our vast experience in delivering successful projects across industries every time, your trust will be rewarded when engaging with us as your partner.



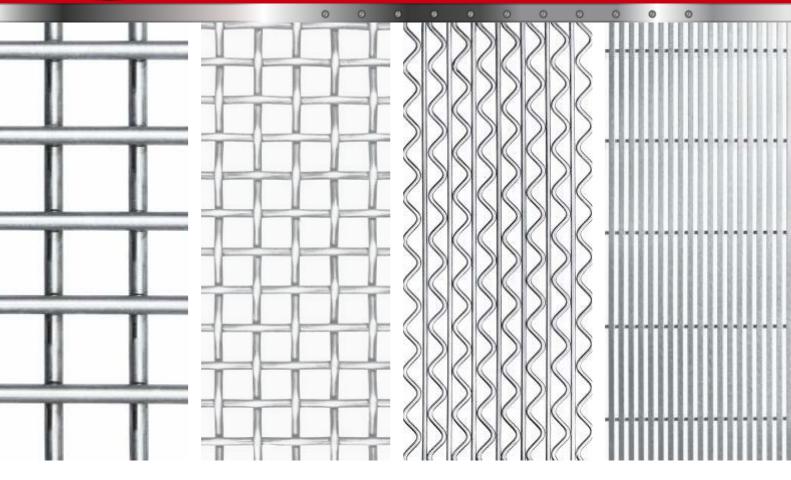












Time to advancement







PRODUCER OF INDUSTRIAL WIRE

WIRE MESH

MANUFACTURER AND IMPORTER

COMPLETE SOLUTION OF WIREMESH

WOVEN WIRE MULTI CRIMP WOVEN WIRE WOVEN WIRE RECTANGULAR FINE WIRE HARP WIRE TYTAN PRESSURE WELDED FLAT TOP PERFORATED SHEET WELDED WIRE MESH STAINLESS STEEL WELDED ELECTRO GALVANIZED WIRFMESH HOT DIPPED GALVANIZED WIREMESH PVC COATED WELDED MESH CRIMPED WIRE MESH CHAIN LINK FENCE

BARBED WIRE RAZOR WIRE ANIMAL CAGE STONE CAGE / GABION BOX FENCING MESH FENCING MESH REGULAR COMBI FENCING MESH FENCING MESH FLATFORM MEDIUM & HEAVY SECURITY FENCING MESH SECURITY FENCING MESH EXTRA SECURITY FENCING MESH COMPOUND GREEN BUILDING DESIGN MESH RAILINGS AND DIVIDER WALLS MACHINE GUARDS REINFORCING WELDED MESH

ISO 9001:2015

www.sfenterprises.com.pk

WELDED WIRE MESH

COMPLETE SOLUTION OF WIRE MESH

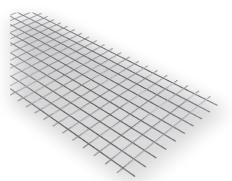


Welded Wire

Weld Mesh is a welded wire mesh which is manufactured from metal wires welded at their intersections. By using different diameter wires it can be made into a light or heavy gauge product. It is manufactured in mild steel, galvanized, and stainless steel.

Special finishes are available including powder coating in any color, triple coating and plastic coating. This provides corrosion resistance and can considerably durability as well as its aesthetic attributes we manufactures Welded wire Mesh Stainless steel is widely popular due to its strength, hygienic and rustproof qualities. We believe in imparting total customer Satisfaction. With a commitment to provide quality Products, we also ensure for the timely delivery of the Products. Our customer orientated services, place us apart from other competitors.

We work for and with customer to achieve the desire Goal. Working on principal of mutual benefits, we always emphasis on our products n quality so that our customer get full satisfaction and value for money.



Typical Progress applications













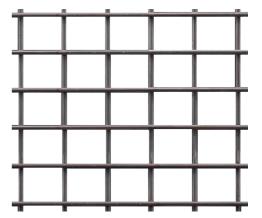


carbon steel, galvanized steel, stainless steel or aluminum. The type of metal used will depend on the intended application of the wire mesh and the environment in which it will be used.

Application

- Wire Mesh for fencing
- Wire Mesh for gabion
- · Shelving for many industry
- · Pallet goods moving
- · Basket for superstore
- · Containers for textile industry
- Mesh Racks

- Perimeter fencing
- Protective caging
- Animal and equipment
- concrete
- Lightweight
- Easy to Install
- Easily cut to fit
- Available in many styles and materials





STAINLESS STEEL WELDED

COMPLETE SOLUTION OF WIRE MESH





Wire diameter 0.25"-1.57 mm

width
roll: 3 ft (36 in.), or 1 m in
metric, customization available

Length
10 ft /roll: 100 ft (1,200 in.), or
30 m in metric, customization
available

Material
Galvanized Steel, Stainless
steel,
acid-resistant steel,
carbon steel, kanthal, inconel

Stainless Steel Welded Wire

Welded stainless steel wire mesh is mainly composed of 304 stainless steel wire and 316 stainless steel wire, due to the material properties, this type of mesh has good corrosion resistance and is suitable for long-term use. Marine grade 316 stainless steel allows for use near the ocean.

Stainless steel welded mesh is welded at right angles, usually squares, from a series of cross and line stainless steel wires. Fixed welds at each intersection of horizontal and vertical lines. 0.25 inch to 1 inch square opening stainless steel welded mesh, also known as stainless steel hardware cloth, welded wire mesh is used in a variety of applications such as: B. Gypsum mesh, mechanical guards, animal fences, flower fences, window guards, access fences, poultry houses, etc.

Application

- industry
- agriculture
- construction
- Breeding
- TransportMining

- Stainless steel
- · High strength
- High temperature resistance













ELECTRO GALVANIZED WIREMESH

COMPLETE SOLUTION OF WIRE MESH



Electro Galvanized

Galvanized steel wire refers to steel wire that has been submerged in a molten zinc bath to create a thin layer of zinc on the wire's exterior surface. This zinc coating gives the wire a bright, shiny appearance while protecting it against corrosion and oxidation in high-moisture environments.

This type of welded wire mesh is designed for building fencing and other infrastructural purposes. It is a type of corrosion resistant wire mesh that mainly used in structural building. It is also available in different forms like rolls and panels for industrial uses.

Galvanized wire mesh can be used for many outdoor residential projects. These include fencing and enclosures, compost bins, pest control, gutter guards, chicken coops, tree guards, cloches and cages, trellises, garden arches, and gabions.



Mesh opening 12.5 x 12.5 mm



Wire diameter bwg 15 gauge - 1.5mm



Width max.

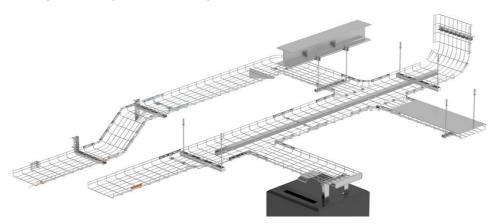


Material Stainless steel, acid-resistant steel, carbon steel, kanthal, inconel

Application

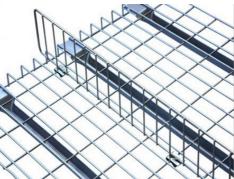
- Coated with a layer of zinc
- Fencing
- · Grilles
- Indoors (House)
- Outdoor industry
- Building construction
- Furniture
- Partitioning
- Animal cage
- Aviaries and other enclosures

- Superior corrosion resistance
- Low carbon steel
- Stainless steel











HOT DIPPED GALVANIZED MESH

COMPLETE SOLUTION OF WIRE MESH



Hot Dipped Galvanized

Welded wire mesh is a prominent material in the concrete, construction, and industrial industries. After welding and surface treatment, it is constructed of low carbon steel wire and stainless steel wire.

Welded wire mesh fabric is widely utilized in building construction, security systems, filtration, food, and agriculture, among other applications.

Plain steel wire is used to make hot-dipped galvanized welded wire mesh. It goes through a heated zinc coating procedure during the processing. This welded mesh ware with square aperture is perfect for animal cage structuring, wire box fabrication, grilling, partitioning, grating, and machine protection fence.

Characteristics of hot-dipped galvanized welded wire include a flat and uniform surface, a solid construction, outstanding integrity, and exceptional corrosion resistance. This type of welded wire have two processing in manufacturing process.



Mesh opening 6.4mm x 6.4mm



Wire diameter 22,23,24



Width x Length max. 2500 mm x 15240 mm



Material

Stainless steel, acid-resistant steel, carbon steel, kanthal, inconel

Application

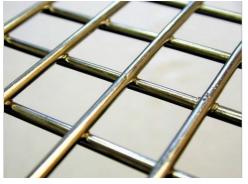
- Architecture
- Soil erosion controls, Sieving and filtration
- Insulation
- Protection
- Reinforcement
- Fence
- Railings
- Gates
- Agriculture product
- Livestock cages and bird cages

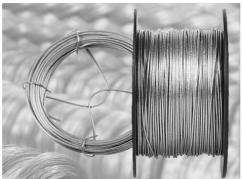
- High corrosion resistance, coated with a layer of zinc, durable and able to withstand harsh environments.
- Aesthetic appeal, a shiny, attractive finish that is pleasing to the eye.
- Cost-effective, due to its durability and corrosion resistance













PVC COATED WELDED MESH

COMPLETE SOLUTION OF WIRE MESH



PVC Coated Wire Mesh

PVC coated wire mesh is available in a variety of materials, including carbon steel and galvanized steel. PVC coating is relatively inexpensive, robust, corrosion resistant, and insulating.

PVC coated wire mesh is available in different colors like green, yellow, white, etc. It is used in guard fence, welded mesh, highway and railway fencing, and window screen mesh.

PVC coated welded wire fence and meshes are both durable and appealing. Welded mesh is covered with a thick coating of PVC, which is heat bonded to the wire. When the wire is bent, the coating is flexible and will not crack. It is stable throughout a wide temperature range, retaining its properties in both hot and cold conditions. PVC-coated welded wire mesh and fence, also known as plastic coated wire products, are very strong and durable. They are long lasting and rust resistant.



Mesh opening 1.05 mm - 2.5 mm



Wire diameter 1.05mm - 1,20 mm



Width max.



Material Stainless steel,

acid-resistant steel, carbon steel, kanthal, inconel

Application

- Fencing,
- Animal cages,
- · Garden trellises,
- Industrial applications,
- Sifting and sorting,
- Protective covering
- · Electrical wiring

- strong, corrosion-resistant material
- PVC coated with a layer of PVC or polyvinyl chloride
- easy to install and is available in a variety of sizes, shapes, and colors.













PVC COATED WELDED MESH SPECIFICATION

COMPLETE SOLUTION OF WIRE MESH

01. Welded wire mesh rolls

Openning	Wire diameter	Available width	
1/4" × 1/4"	0.45mm-0.7mm	300mm-1830mm	
3/4" × 3/4"	0.7mm-2.0mm	300mm-1830mm	
3/8" × 3/8"	0.7mm-1.1mm	300mm-1830mm	
5/8" × 5/8"	0.8mm-1.2mm	300mm-1830mm	
1/2" × 1/2"	0.45mm-1.6mm	300mm-1830mm	
1" × 1"	0.7mm-3.0mm	300mm-2000mm	
1" × 1/2"	0.8mm-1.6mm	300mm-1828mm	
1-1/2" × 1-1/2"	0.7mm-3.5mm	300mm-1828mm	
1" × 2"	1.6mm-2.1mm	300mm-1828mm	
2" × 2"	0.7mm-4.0mm	300mm-2500mm	
2" × 3"	1.5mm-3.5mm	300mm-2000mm	
2" × 4"	2.0mm-4.0mm	300mm-1828mm	
3" × 3"	1.0mm-4.5mm	300mm-2500mm	
3" × 4"	1.5mm-4.5mm	300mm-2000mm	
4" × 4"	1.0mm-4.5mm	300mm-2500mm	
5" × 5"	2.5mm-4.5mm	300mm-2500mm	
6" × 6"	2.5mm-4.5mm	300mm-2500mm	



Openning	Wire diameter	Available width
1/2" × 1/2"	0.45mm-2.0mm	100mm-1830mm
1" × 1"	0.7mm-3.5mm	100mm-2000mm
1" × 1/4"	0.45mm-4.0mm	100mm-2000mm
1" × 1/2"	0.45mm-4.0mm	100mm-3600mm
2" × 2"	0.7mm-6.0mm	100mm-3600mm
3" × 3"	1.0mm-7.0mm	100mm-3600mm
4" × 4"	1.0mm-8.0mm	100mm-3600mm
5" × 5"	2.5mm-9.0mm	100mm-3600mm
6" × 6"	2.5mm-9.0mm	100mm-3600mm

Roll or panel length can be negotiated, welcome to contact us for further information.









CRIMPED WIRE MESH

COMPLETE SOLUTION OF WIRE MESH



Crimped Wire Mesh

Crimped wire meshes are made by weaving pre-crimped wires. If each crimp corresponds to a wire interlace, the mesh is known as plain weave crimping. If the wires are interlaced every three, five, seven, or more crimps, the mesh is known as a crimped mesh with three, five, seven, or more crimps.

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Crimped wire mesh is widely used in industry and construction for screening grain powder, filtering liquids and gases, and other housing applications.



Mesh opening 8mm - 30 mm



Wire diameter 1.0 mm - 3 mm



Width Length max. 1 m X 25 m, 1 m X 30 m, 1.2 m X 25 m and 1.2 m X 30 m



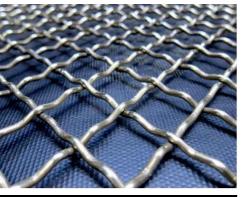
Material

Stainless steel, acid-resistant steel, carbon steel, kanthal, inconel

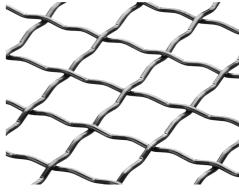
Application

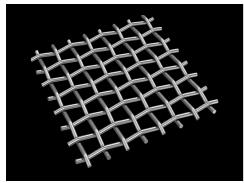
- Architectural decoration
- Engineering purposes in the construction
- Stone walls
- · Agricultural sector
- chicken cages, egg baskets, and fences, can be used in manufacturing industry

- Durable ,Flexible and can be easily formed into different shapes to suit
- Aesthetic appeal, Versatile material that can be used, decorative purposes, for safety or security, or for other purposes.
- · Cost-effective, Easy to install
- Corrosion-resistant can withstand harsh weather and other environmental conditions

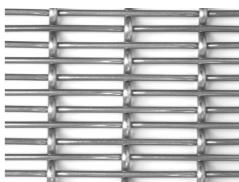






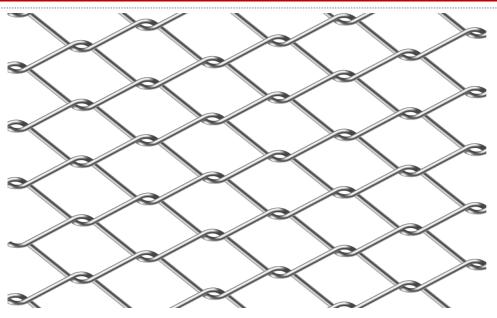






CHAIN LINK FENCE

COMPLETE SOLUTION OF WIRE MESH



Chain Link Fence

You've undoubtedly seen chain link fences more than once, no matter where you reside. In fact, chain link is so common that you've undoubtedly seen it every day. This is partly due to the fact that it is one of the most cost-effective, long-lasting, and adaptable fence materials on the market. Continue reading to learn more about the five most typical uses for this fence material. Galvanized steel wire is the most often used steel wire in the fabrication of barbed wire. It comes in commercial, Class 1 and Class 3 varieties. It is also known as hot dipped galvanized steel wire and electric galvanized steel wire. Steel wire with a zinc-aluminum alloy coating. Wire mesh is widely used in infrastructure projects, business locations, and residential regions. They are also utilized for safety and demarcation around perimeter, security, create privacy, animal enclosures, swimming pools, parking lots, schools, playgrounds, public buildings, airports, and military bases, among other places.











Mesh opening 60 - 70 mm



Wire diameter 2.3 mm - 2.5 mm



Width Length max. 4000 mm

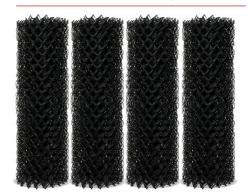


Material
Stainless steel,
acid-resistant steel,
carbon steel, kanthal, inconel

Application

- Perimeter fencing,
- Security fencing,
- · Decorative fencing,
- Residential, industrial, and commercial
- Animal enclosures, such as for dogs or livestock.

- Highly durable, for both residential and commercial
- Minimal maintenance, for those who don't want to spend a lot of time on upkeep.
- Provide excellent security, great choice for homes and businesses
- · Customized to fit any space
- · Affordable, for any budget.
- Easy to install
- Available in a variety of colors, textures, and sizes, for any aesthetic.





BARBED WIRE

COMPLETE SOLUTION OF WIRE MESH



Barbed Wire

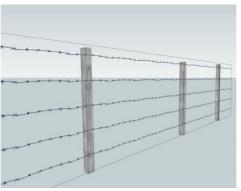
Barbed wire is a type of fencing wire that has sharp edges or points spaced along the strand. It is used to build inexpensive fences and is used for walls surrounding secure properties. Barbed wire was the first wire technology used to restrain cattle. By producing high-quality products in-house, we have been able to establish ourselves as a leading barbed wire manufacturer and barbed wire supplier.

Whichever barbed wire you choose, he recommends using two wires across the fence for excellent protection. These should be placed around 50mm and 150mm above the mesh.

Raw materials:

Galvanized iron wire, hot-dip galvanized wire, mild steel wire, PVC wire. Twist four 12-18 mm barbs onto two leads,

The barb angle is 30-45.









Mesh opening 1.0 - 25 mm



Wire diameter 2.0 – 2.5 mm



Width Length max. 4000 mm



Material

Stainless steel, acid-resistant steel, carbon steel, kanthal, inconel

Application

- · often used in security applications,
- · Around prisons,
- · military bases, high-security areas,
- · agricultural areas,
- · Animal farm

- highly durable in every weather conditions
- · Agricultural, security purposes.
- · Cost-Effective, relatively inexpensive,
- · Easy to install
- Resistant to corrosion and rust.
- Low Maintenance, with many years
- Flexible and can be bent or twisted to fit the desired shape and size.
- an effective deterrent for intruders.





RAZOR WIRE

COMPLETE SOLUTION OF WIRE MESH





Keep your property safe with a razor wire fence. Designed to deter trespassers and climbers in razor-filled openings, this highly secure and versatile fencing system provides a powerful physical deterrent. Consisting of a straight slatted mesh welded together in a diamond pattern, this fence offers an attractive and practical solution for high security applications.

Easily installed on existing or new fence frames, razor wire fences are your first line of defense for medium (standard density) to very high security (high density) perimeters. Available in rolls and sheets in a variety of heights (1.2m, 1.8m, 2.1m, 2.4m) and lengths (6m), they provide fast and effective solutions for residential, commercial and industrial properties.

Choose the ultimate defense for your property with a razor wire fence.











Mesh opening 75 mm × 150 mm



Wire diameter 2.5 mm. Blade length: 20 mm. Blade spacing: 14 mm



Width max.



Material Stainless steel, acid-resistant steel, carbon steel, kanthal, inconel

Application

- Security barrier, other barriers to protect property, such as warehouses or business premises.
- Prisons, military bases, high-security
- Perimeter

- High quality galvanized steel wire, PVC wire or stainless steel wire.
- It has a sharp edge that can cut through flesh and clothing.
- Often used as a barrier to deter intruders.
- Used in conjunction with other security measures, such as CCTV cameras.





ANIMAL CAGE

COMPLETE SOLUTION OF WIRE MESH



Animal Cage

Cage mesh is a kind of welded wire mesh with square or rectangular opening. Heavy-gauge wires ensure a powerful structure and prevent the animals inside from tearing or breaking the cage. Galvanized and PVC coated to prevent corrosion from all weather and animal urine and feces. PVC coated cage wire mesh are available in any color black, green and white etc.

Welded cage mesh are often used in zoos to build permanent bird cages and housings. Rectangular opening is perfect for visibility and airflow. It often works in conjunction with the steel or aluminum frame that forms the pen.

In addition to the sizes in the table below, special sizes are also available. Cage nets also have other uses. For example, it can be used in gardens to protect plants from rabbits, possums, or other ravenous creatures.











Wire diameter

Width max.

Material
Stainless steel,
acid-resistant steel,
carbon steel, kanthal, inconel

Application

- · Laboratory research,
- Pet care, animal husbandry,
- · Zoo exhibits,
- Chicken, cow & goat farms,
- · animal rescue and rehabilitation,

- · Ample space to move around freely,
- Secure locks and latches to ensure the animal can't escape.
- · Easy to clean
- · Ventilation to ensure proper air flow.
- · Accessible doors to allow easy feeding
- · Appropriate size and shape
- Soft bedding material to provide comfort and warmth.
- Plants or toys to keep the animal entertained.
- Non-toxic paint to ensure the animal's safety.





ANIMAL CAGE CUSTOM

COMPLETE SOLUTION OF WIRE MESH



Animal Cage

If you are looking to install a wire mesh cage for an animal, there are a few things you will need to consider.

- 1. The size You will need to make sure the wire mesh cage is large enough to accommodate the size of the animal. It should also be big enough to allow the animal to move around freely and have enough space to play.
- 2. The material Wire mesh cages come in a variety of materials such as plastic, galvanized steel, and stainless steel. Depending on the size and type of animal, you will want to choose a wire mesh material that is strong enough to withstand the animal's weight and activity.
- 3. The design You will want to make sure the wire mesh cage is designed with the animal's safety in mind. Check for sharp edges and make sure the bars are not too close together to prevent the animal from getting injured.



Mesh opening 25mm or 50mm



Wire diameter 2.3mm, 2.5mm, 2.8mm, and 3.0mm



Width max. 4000 mm



Material
Stainless steel,
acid-resistant steel,
carbon steel, kanthal, inconel

Application

- · Cage is a galvanized steel wire mesh,
- · Durable,
- Easy to clean,
- · High level of security for the animals,
- · Commercial used,

- Strong material that is able to withstand wear and tear
- · Locks and latching mechanisms
- Ventilated to ensure
- Suitable size
- · Easy cleaning
- · Safety of the animals



STONE CAGE / GABION BOX

COMPLETE SOLUTION OF WIRE MESH



Stone Cage, Gabion

Based in modern manufacturing facilities conveniently located for nationwide delivery, we manufacture standing and bespoke construction mesh, container barriers and the Gabions series of welded mesh for industrial customers. Gabion boxes are wire mesh cages filled with stones for use in civil engineering and construction projects. They are typically used to create retaining walls, strengthen riverbanks, and protect against erosion. They are also widely used for creating decorative features in gardens and parks. The company's primary activities include providing protection and security for military, peacekeeping, humanitarian and civilian operations. Stone Mesh is Pakistan's largest welded mesh with a nationwide production network. We are fully committed to customer service for all endusers. Concertina barrier products are used extensively by NATO, US, and United Nations offices, and other militaries around the Pakistan. Transforming the traditional sandbag wall concept into an improved bulkhead system has helped overcome the challenges of a labor-intensive and time-consuming military environment that requires mobility and rapid deployment. The Concertainer Barrier promises not only to improve the safety of forces behind explosion-proof walls. but also to provide injection detection and assessment via electronic monitoring systems at designated sites and their on-site areas. clearing the way.









Mesh opening 80 mm × 100 mm



Wire diameter 5mm - 6mm



Width Length max. 4000 mm



Material

Stainless steel, acid-resistant steel, carbon steel, kanthal, inconel

Application

- · Retaining walls,
- Forces, Security control
- · Erosion control,
- Slope stabilization,
- Bank reinforcement,
- Bridge abutments,
- landscaping, garden walls or raised flower beds,
- · Coastal areas,

- Designed to be strong and durable, and able to withstand extreme weather conditions, such as heavy rains, strong winds and extreme temperatures.
- Making them a cost-effective choice for many construction and civil engineering projects,
- Easy to install,
- Can be easily adapted to suit different
- Once installed, require little to no maintenance,









STONE CAGE, GABION SPECIFICATION

COMPLETE SOLUTION OF WIRE MESH

Stone cages are widely used in camps for storage. Easy to load and unload Folding metal storage cage, also called butterfly edge storage cage, can be reused, high quality steel hardened by cold welding, high strength, load bearing, sturdy and convenient transportation. Reduce labor costs for warehouses and packaging companies. Not only for garages, warehouses, and transportation sales, but also for supermarket sales and warehouse displays.

material: Mild steel Q235. zinc plating. Electro-galvanized, stainless steel, galfan, plastic coating (PVC or PE)

DETAIL SPECIFICATION									
model	0	uter Size(mm)	Wire	Mesh Spacing(mm)	Clearance Size			Load Popring(kg)
model	L	W	Н	Diameter(mm)		L	W	Н	Load Bearing(kg)
A-3	800	600	640	6	50*50	760	570	500	800
A-3-1	800	600	640	5.5	50*50	760	570	500	700
A-5	1000	800	840	6	50*50	960	770	700	1200
A-7	1200	1000	890	6	50*50	1160	970	750	1500
A-5(lengthen)	1200	800	840	6	50*50	1160	770	700	1200
B-5(1/2)	1000	800	500	6.4	50*50	960	770	360	1000
B-7	1200	1000	890	6.4	50*50	1160	970	750	2000
C-2	800	500	540	5	25*50	760	470	400	500
C-5	1000	800	840	5	50*50	960	770	700	500
S-5	1000	800	840	6.4	50*100	960	770	700	1000
Copy S-5	1200	800	840	6	50*100	960	770	700	1000
S-7	1200	1000	890	6.4	50*100	1160	970	750	1000
Copy S-7	1200	1000	890	6	50*100	1160	970	750	1000























HESCO BOX / SAND BOX

COMPLETE SOLUTION OF WIRE MESH



Hesco Box Sand Box

HESCO boxes, also known as sandboxes, have a variety of uses in different fields. Here are some common uses: 1.Military: HESCO boxes are widely used in military operations as protective barriers against attacks. They provide protection against small arms fire, shrapnel, and explosives. They can be used to create walls, bunkers, and checkpoints.

2.Humanitarian: HESCO boxes are used in humanitarian operations to protect civilians and critical infrastructure from attacks and natural disasters. They can be used to create safe havens, protect refugee camps, and secure aid distribution centers.

3.Flood Protection: HESCO boxes are used to protect against floods and other natural disasters. They can be quickly deployed and filled with sand to create a barrier to prevent flooding and protect homes and businesses. 4.Landscaping: HESCO boxes can be used in landscaping to create retaining walls, borders, and garden beds. They can be filled with soil and planted with vegetation to create attractive and functional landscaping features. 5.Construction: HESCO boxes are used in construction to create temporary walls and barriers. They can be easily moved and stacked to create the required shape and size.

Overall, HESCO boxes are a versatile and effective solution for providing protection and creating barriers in a variety of applications. Their durability, ease of deployment, and effectiveness make them a popular choice for military, humanitarian, and disaster relief operations, as well as for use in landscaping and construction.



Mesh opening 3 inch - 6 inch



Wire diameter 3mm - 5mm



Width Length max.



Material

Stainless steel, acid-resistant steel, carbon steel, kanthal, inconel

Application

- Military
 - Forces, Security control
- Humanitarian
- Flood Protection
- Landscaping
- Construction
- Archaeology
- Education

Features

- Designed to be strong and durable, and able to withstand extreme weather conditions, such as heavy rains, strong winds and extreme temperatures.
- Making them a cost-effective choice for many construction and civil engineering projects,
- Easy to install,
- Can be easily adapted to suit different
- Once installed, require little to no maintenance,

Sandboxes are typically small containers filled with sand that are used as a play area for children. However, sandboxes have a variety of other uses in different fields. 1.Construction: Sandboxes are used in construction to test the quality of the sand and ensure that it meets the required specifications. Sandboxes are used to test the sand's gradation, shape, and cleanliness.

2.Archaeology: Sandboxes are used in archaeology to recreate the conditions of excavation sites. Archaeologists use sandboxes to practice excavation techniques and to test different methods of excavation.

3.Education: Sandboxes are used in early childhood education to promote sensory play and exploration. Children can use sandboxes to develop their fine motor skills, creativity, and imagination.

4.Therapy: Sandboxes are used in therapy to promote relaxation and reduce stress. Therapists use sandboxes as a tool for play therapy, art therapy, and mindfulness meditation.

5.Military: Sandboxes are used in military training to simulate desert environments. Soldiers use sandboxes to practice navigation, survival skills, and tactics. Overall, sandboxes are a versatile tool with a variety of uses in different fields. Their simplicity and accessibility make them a popular choice for a wide range of applications.

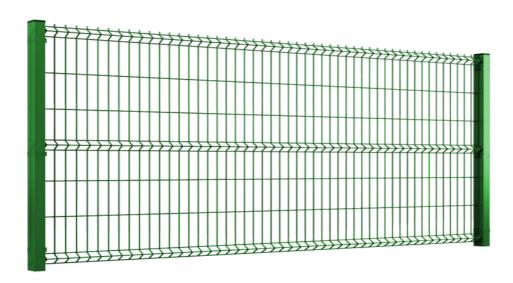






FENCING MESH

COMPLETE SOLUTION OF WIRE MESH



Fencing Mesh

Fence netting, wire mesh fence, protective wire mesh fence, bridge/highway fence mesh, galvanized wire mesh fence, welded mesh panel, etc.

It can be applied as a protective fence for highways, railways, airports, residential areas, harbor gardens, agriculture, etc. Fencing mesh is made of high quality steel wire. Then we do the surface treatment according to the customer's requirements, such as: B. Cold coating (plating), hot dip galvanized coating, PVC plastic coating to passivate mesh surface, plasticizing process, smooth surface.

Fencing mesh is designed to be durable and withstand impact, making it ideal for high-traffic areas. Fencing mesh provides a secure barrier that can help keep unwanted visitors out and protect the property from intruders. Fencing mesh is made from a see-through material, allowing visibility into the enclosed area. Fencing mesh is relatively easy to install, making it a great option for DIY projects. Fencing mesh can be used for both residential and commercial applications, and can be customized to fit a variety of needs. Fencing mesh is designed to withstand harsh weather conditions, including rain, wind, and extreme temperatures. Fencing mesh is an affordable solution compared to other fencing materials, such as wood or iron. Fencing mesh can be used to keep small animals contained in a particular area.



Mesh opening

fence are 2" (typically 9 or 11 gauge wire) and 2-1/4" or 2-3/8" (typically 11-1/2, 12 or 12-1/2 gauge wire)

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Wire diameter

2.3mm, 2.5mm, 2.8mm, and 3.0mm



Width max.

4000 mm



Material

Stainless steel, acid-resistant steel, carbon steel, kanthal, inconel

Application

- Agricultural, erosion prevention
- Animal enclosures,
- · Security fencing, and other barrier
- · soil stabilization, protection of topsoil
- Residential, commercial, and industrial tree guards, decorative fencing, garden partitions, and anti-climb fencing.

Features

- Durability
- Security
- Visibility
- · Easy Installation
- Versatility
- Weather Resistance
- Cost-Effective
- Control





APPLICATIONS

Perimeters

▶ Schools

Retail - Commercial premises

PANELS

Panels 3000m wide with 200 x 45mm mesh, 5mm wires with 2 - 4 reinforcing folds depending on height, Galfan Zinc alloy treated as standard. Vertical wires are at 50mm centers for this panel has 61 vertical wires.

GATES

Flatform Heavy duty single and double leaf gates available

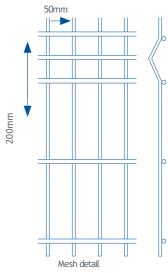
FENCING MESH REGULAR

COMPLETE SOLUTION OF WIRE MESH



Regular is ideal for residential areas, commercial areas, schools, or parking lots. The V-shaped profile reinforcing folds increase the rigidity and strength of the panels. The panels can be stacked on top of each other to create a taller fence.

- Posts can be customised for Barbed / Razor wire mesh
- Mesh 200 x 50mm centers with 45mm gap, 5mm wire (wire measured before coating)
- · Unique vandal-proof panel to post fixing
- Anti-climb design
- 2 4 reinforcement folds depending on height
- Can be stepped to accommodate sloping ground
- 25 Year life



APPLICATIONS

- ▶ Perimeters
- ▶ Schools
- Retail Commercial premises

PANELS

Panels 3000m wide with 200 \times 45mm mesh, 5mm wires with 2 - 4 reinforcing folds depending on height, Galvanized Zinc alloy treated as standard. Vertical wires are at 50mm centers for this panel has 61 vertical wires.

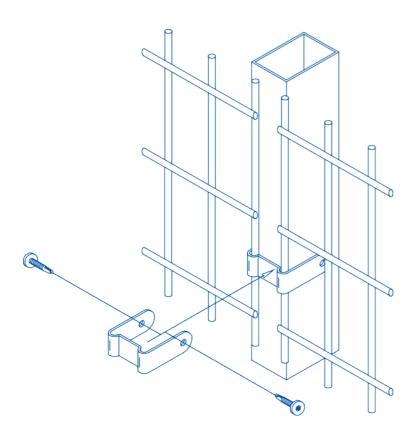
GATES

Flatform Heavy duty single and double leaf gates available

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FENCING MESH REGULAR SPECIFICATION

COMPLETE SOLUTION OF WIRE MESH







Fixing bracket detail

height (mm)	post centres (mm)	post dimensions (mm)	overall post length (mm)
1525	3034	60 x 40	2100
1810	3034	60 x 40	2500
2010	3034	60 x 40	2800
2410	3054	80 x 60	3300

POST OPTIONS

- Overlength set in concrete as standard
- Base plated to bolt down onto concrete
- · Cranked to suit wall mounting

FINISHES

- Panels are Galvanized zinc alloy coated to BS EN 10244-2:2009 class A as standard
- Powder coated to BS EN 13438
- Marine coat for installations with in 500m of salt water or an estuary

STANDARD COLOURS

- Black
- Green
- Other colours are available on client request

COMBIFENCING MESH

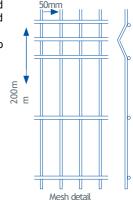
COMPLETE SOLUTION OF WIRE MESH



Combi fence is a design that blends the power of steel with the beauty of natural wood, drawing on our expertise and reputation in steel and timber fences and gates. A level facing surface with no hand or foot grips and closely spaced slats for increased privacy are two additional benefits of the sturdy fence panels and matching gates.

Combi fence provide a more secure solution for businesses, homes, and other properties. These fences are designed to be strong, durable, and aesthetically pleasing.

- Welded mesh panels with timber slats
- Mesh 200 x 50mm centers with 45mm gap, 5mm wire (wire measured prior to coating)
- Unique vandal-proof panel to post fixing
- Can be stepped to accommodate sloping ground
- Posts can be customized for Barbed wire and Razor wire
- Long Life



APPLICATIONS

- ▶ Schools
- Medium High risk
- Storage

PANELS

Mesh with 'V' profile with 2 - 4 reinforcing folds (subject to height). Made using 5mm horizontal and vertical wires with 200 x 50mm mesh centres, welded at intersections.

Timber slats are treated using our treatment, for 25 years life against rot or insect attack.

GATES

Matching single and double leaf gates available

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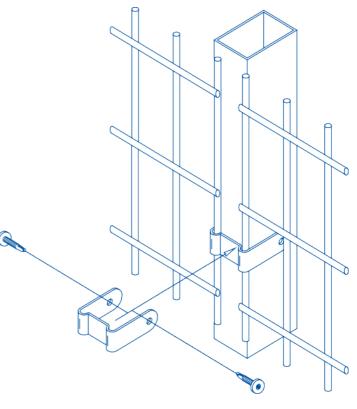
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COMBI FENCING MESH SPECIFICATION

COMPLETE SOLUTION OF WIRE MESH







Fixing bracket drawing

height (mm)	post centres (mm)	timber slats (mm)	post dimensions (mm)	overall post length (mm)
1585	3054	40 x 17	60 x 60	2100
1870	3054	40 x 17	80 x 60	2500
2070	3054	40 x 17	80 x 60	2800
2470	3054	40 x 17	80 x 60 (with spur post)	3300
3170	3054	40 x 17	120 x 60 (with spur post)	3900

POST OPTIONS

- Overlength set in concrete as standard
- Base plated to bolt down onto concrete
- · Cranked to suit wall mounting
- · Spur post as standard

FINISHES

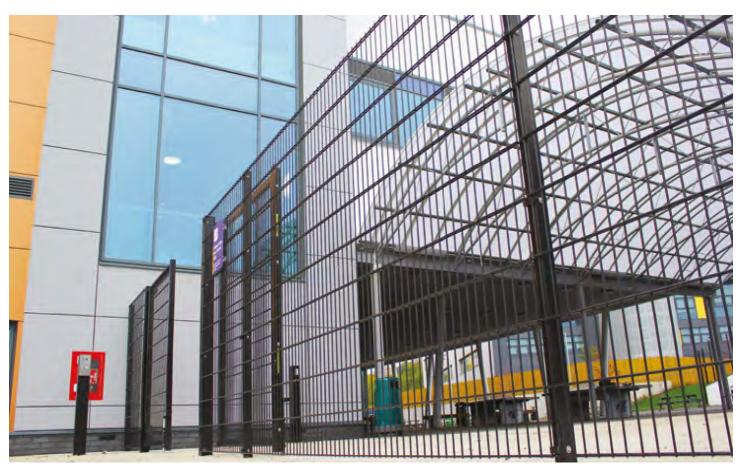
- Panels are Galvanized zinc alloy coated to BS EN 10244-2:2009 class A as standard
- Powder coated to BS EN 13438
- Timber slats are planed, Jakcure vacuum pressure treated as standard
- Marine coat for installations within 500m of salt water or an estuary

STANDARD COLOURS

- Black
- Green
- Other colours are available on client request

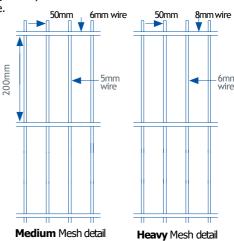
FENCING MESH FLATFORM MEDIUM & HEAVY

COMPLETE SOLUTION OF WIRE MESH



Flatform is a low profile with double horizontal wires. Perfect for commercial sites (schools and playgrounds) or similar installations. Anywhere durability and safety are important. Panels can be stacked to create a 6000mm high fence.

- Available in medium 200 x 50mm wire centres with 45mm gap
 double 6mm wire, 5mm vertical wire
- Available in heavy 200 x 50mm wire centres with 45mm gap
 double 8mm horizontal wire, 6mm vertical wire
- Can be stepped to accommodate sloping ground
- Posts can be adapted to mount CCTV cameras, lighting or physical security devices
- · Posts can be customised for Barbed wire / Razor wire
- 25 year Life



APPLICATIONS

- ▶ Sports
- Industrial sites
- Schools

PANELS

Mesh panels have a flat profile with double horizontal wires, welded at intersections.

GATES

Matching single leaf and double leaf gates available

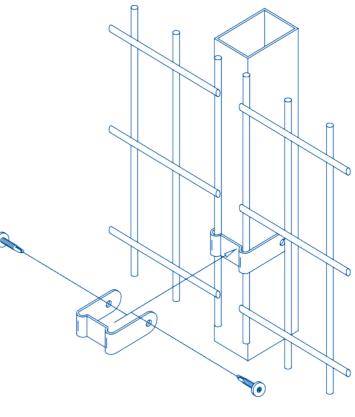
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FENCING MESH FLATFORM MEDIUM, HEAVY SPECIFICATION COMPLETE SOLUTION OF WIRE MESH







Fixing bracket drawing

height (mm)	post centres (mm)	medium	heavy	post dimensions (mm)	overall post length (mm)
1030	3034			60 x 40	1600
1230	3034			60 x 40	1800
1830	3034			60 x 40	2500
2030	3034			60 x 40	2800
2430	3054			80 x 60	3300

POST OPTIONS

- Overlength set in concrete as standard
- Base plated to bolt down onto concrete
- · Cranked to suit wall mounting

FINISHES

- Panels are Galfan® zinc alloy coated to BS EN 10244-2:2009 class A as standard
- Powder coated to BS EN 13438
- Marine coat for installations within 500m of salt water or an estuary

STANDARD COLOURS

- Black
- Green
- Other colours are available on request

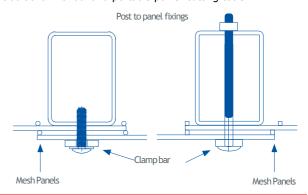
SECURITY FENCING MESH

COMPLETE SOLUTION OF WIRE MESH



Security Fencing Mesh features two layers of anti-climbing mesh panels with small openings to keep feet and toes from getting caught. Prevents objects from passing through. This system is particularly effective over using traditional manual and portable power cutting tools.

- · Posts can be customised for Barbed wire / Razor wire
- · Staggered double skin mesh panels with wire welded at every intersection
- Overlapped by a minimum of 75mm at posts to maintain integrity of protection
- Mesh spacing conforms to Building Regulations
- Can be stepped to accommodate sloping ground
- 25 year life



APPLICATIONS

- Utilities
- ▶ High risk
- Secure compounds

PANELS

Staggered double skin of 76.2mm x 12.7mm resistance mesh up to 2400mm only. Second panel is an internal skin only, single skin then from 2400mm upwards.

GATES

Matching single leaf and double leaf gates available

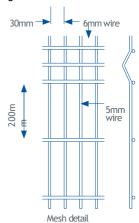
SECURITY FENCING MESH EXTRA

COMPLETE SOLUTION OF WIRE MESH



Extra panels are unique to SF Enterprises and feature vertical and horizontal wires and smaller mesh apertures which are perfect for higher risk applications where security is a priority. Extra has "V" profile reinforcing folds which increase the panels rigidity and strength.

- 200 x 30mm wire centers, 25mm gap with a 5mm wire
- · Unique vandal-proof panel to post fixing
- · Can be stepped to accommodate sloping ground
- Posts can be adapted to mount CCTV cameras, lighting or physical security devices
- Posts can be customized for Barbed wire / Razor wire
- 25 Year Life



APPLICATIONS

- ▶ Industrial sites
- ▶ Medium High risk
- Commercial premises

PANELS

Mesh panels with 'V' profile with 2 - 4 reinforcing folds subject to height are made using 5mm horizontal and vertical wires with 200 x 30mm wire centres, welded at intersections.

GATES

Matching single leaf and double leaf gates are available

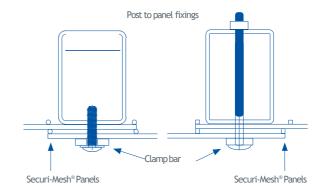
SECURITY FENCING MESH

COMPLETE SOLUTION OF WIRE MESH



Mesh fencing system provides an solution for a wide variety of security perimeter. Both the mesh and posts are designed to meet Home Office specifications for use in utilities sites, high risk locations and secure compounds

- Posts can be customized for Barbed wire / Razor
- · Overlapped by a minimum of 75mm at posts to maintain integrity of protection
- Clamp bar fixings
- Mesh spacing conforms to building regulations for anti-trap
- · Anti-climb design
- · Can be stepped to accommodate sloping ground
- · Custom designs available
- 25 Year Life



APPLICATIONS

- ▶ Utilities
- ▶ High risk
- ▶ Secure compounds

PANELS

Mesh panels are constructed from 76.2 x 12.7mm mesh (3" x 1/2") with 4mm wire. Panel widths are 2515mm as standard, with height up to 5200mm.

GATES

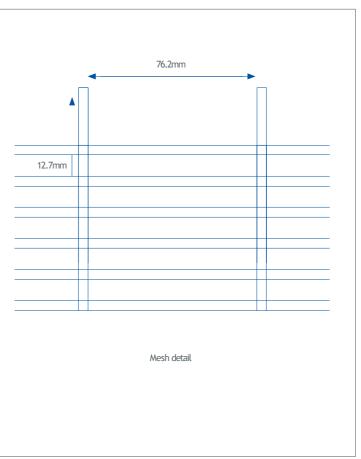
Matching single leaf and double leaf gates available

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SECURITY FENCING MESH SPECIFICATION

COMPLETE SOLUTION OF WIRE MESH





height (mm)	post centres (mm)	post dimensions (mm)	overall post length (mm)
1270	2440	80 x 60	1900
2134	2440	80 x 60	2900
2440	2440	80 x 60	3300
3000	2440	80 x 60	3800
4200	2440	120 x 120	5100
5210	2440	150 x 150	6200

POST OPTIONS

- Overlength set in concrete as standard
- Base plated to bolt down onto concrete
- · Cranked to suit wall mounting

FINISHES

- Panels are Galfan® zinc alloy coated to BS EN 10244-2:2009 class A as standard
- Powder coated to BS EN 13438
- Marine coat for installations within 500m of salt water or an estuary

STANDARD COLOURS

- Black
- Green
- Other colours are available on request of client

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FENCING MESH SPICIFICATION

COMPLETE SOLUTION OF WIRE MESH



HEIGHT (MM)	POST CENTRES (MM)	TIMBER SLATS (MM)	MESH	
1270 - 5200	2440	Dimensions to suit Fence height and location	Staggered double skin of 76.2 x 12.7mm resistance mesh welded at each intersection	Double clad only up to 2515mm high, single clad above 2515mm

POST OPTIONS

- Overlength set in concrete as standard
- Base plated to bolt down onto concrete
- · Cranked to suit wall mounting

FINISHES

- Panels are Galvanized zinc alloy coated to BS EN 10244-2:2009 class A as standard
- Powder coated to BS EN 13438
- Marine coat for installations within 500m of salt water or an estuary

STANDARD COLOURS

- Black
- Green
- Other colours are available on request of client

SECURITY FENCING MESH COMPOUND

COMPLETE SOLUTION OF WIRE MESH



We develop a variety of security interconnects designed for use in internal or external environments, providing both protection and managed access control. A variety of security bond sizes and specifications are available, and we can also design and manufacture bespoke solutions.

- · Gates include slide latch as standard
- Gate options include key lock, magnetic lock
- 25 Year Life

POST OPTIONS

- Overlength set in concrete as standard
- Base plated to bolt down onto concrete

APPLICATIONS

- ▶ High risk
- ▶ Data centres
- ▶ Gas bottle storage
- ▶ Bike storage

STANDARD COLOURS

- Black
- Green
- Other colours are available on request of client

SECURITY FENCING MESH

COMPLETE SOLUTION OF WIRE MESH





MESH STYLE	MESH SIZE (MM)	FEATURES
Fencing Mesh Regular	200 x 50	2 - 4 reinforcing folds according to height
Fencing Mesh Flatform (Medium)	200 x 50	Double 6mm horizontal, 5mm vertical
Fencing Mesh Flatform (Heavy)	200 × 50	Double 8mm horizontal, 6mm vertical
Fencing Mesh Extra	200 x 30	2 - 4 pressed beams according to height
Combi Fencing Mesh	200 × 50	Timber slats inserted between the wires
Security Fencing Mesh	75 x 12.5	Anti-climb design

POST OPTIONS

- Overlength set in concrete as standard
- Base plated to bolt down onto concrete

FINISHES

- Panels are Galvanized zinc alloy coated to BS EN 10244-2:2009 class A as standard
- Powder coated to BS EN 13438
- Marine coat for installations within 500m of salt water or an estuary

STANDARD COLOURS

- Black
- Green
- Other colors are available on request of dient

FENCING SPECTIFICATION

COMPLETE SOLUTION OF WIRE MESH

	Panel Height	600mm-3000mm
	Panel Width	2000mm-3000mm
	Wire Diameter	3mm-6mm
Wire mesh	Hole Opening	50×50mm,50×100mm,50×150mm,50×200mm
Fence panel	Material	Low carbon steel wire,galvanized wire
	Surface treatment	Electric galvanized hto dippedgalvanized,powder coated and pvc coated
	Curve	Type and quantity on customer request
	Square post	40×40mm,50×50mm,60×60mm,40×60mm
	Peace post	50×70mm,70×100mm
Wire	Round post	40×60mm
mesh Fence	Post height	0.8-3.5M
post	Finish	post clips with bolts and nuts post rain post
	Accessorise	post cap, clamps, bolts and nuts
Wire mesh Fence Color	Normal dark green & blac	k









GREEN BUILDING DESIGN MESH

COMPLETE SOLUTION OF WIRE MESH

Material: Stainless steel, hot dipped galvanized

Specification:50mm x 3.0mm, 100mmx4.0mm etc.







RAILINGS AND DIVIDER WALLS

COMPLETE SOLUTION OF WIRE MESH

Material: Stainless steel, hot dipped galvanized, PVC coated, copper coated

Specification: 12.7mm x 1.5mm, 25mmx3.0mm, 40mmx3.0mm, 50mmx4.0mm etc





MACHINE GUARDS

COMPLETE SOLUTION OF WIRE MESH

Material: Stainless steel, hot dipped galvanized, PVC coated, copper coated

Specification: 12.7mm x 1.5mm, 25mmx3.0mm, 40mmx3.0mm, 50mmx4.0mm etc







REINFORCING WELDED MESH

COMPLETE SOLUTION OF WIRE MESH



We have also Reinforcing Welded rebar mesh, also known as road rebar mesh, is made of high-strength wire and is available in square and rectangular mesh configurations. It is widely used in construction and agriculture to reinforce concrete structures, floor slabs, brick walls, etc. due to its excellent corrosion and oxidation resistance, as well as the characteristics of firm structure and quick and easy installation process.













FEATURES & APPLICATION OF REINFORCING WELDED MESH

COMPLETE SOLUTION OF WIRE MESH



Features

- High strength, not easy to break.
- Improve bonding to concrete,
 minimize concrete cracking.
- ◆ Flat even surface and firm structure.
- Durable and long service life.



Applications

- Reinforcement of concrete structures in building
- Reinforcement of road surfaces.
- Reinforcement of masonry walls

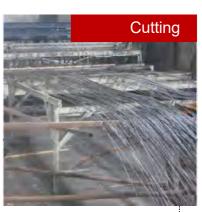
REINFORCING WELDED MESH CYCLE

COMPLETE SOLUTION OF WIRE MESH

Reinforcing welded mesh is also called road reinforcing mesh grid, which is made of high tensile strength wires, and it has square and rectangular mesh types. With the good property of corrosion, oxidation resistant and the feature of firm structure, quick and simple installation process, it is widely used on building and agriculture for the reinforcement of concrete structure, floor slabs, brick walls and so on.















PRODUCTION PROCESS

COMPLETE SOLUTION OF WIRE MESH

Raw material → Testing → Straightening → Cutting → Welding → Inspection

Finished Mesh → Packing → Loading





















PRODUCT KNOWLEDGE

COMPLETE SOLUTION OF WIRE MESH

01.Weight calculation

How to calculate the welded wire mesh roll weight? The welded wire mesh with different hole size have different computational formula, details as below:

1": Wire dia x Wire dia x Length x Width ÷2=kg

1"x1/2": Wire dia x Wire dia. x Length x

Width $\pm 4x3=kg$ 1/2": Wire dia x Wire dia x Length x

Width=kg

1/3': Wire dia x Wire dia x Length x Width x3 x

0.48=kg 1/4,: Wire dia x Wire dia x Length x Width

x2=kg

3/4': Wire dia x Wire dia x Length x Width÷2xl.33=kg

3/8': Wire dia x Wire dia x Length x Width x 1.35=kg

5/8": Wire dia x Wire dia x Length x Width

 $+5x8 \div 2 = kg$

2"x4': Wire dia x Wire dia x Length x Width ÷2 x

0.375=kg 1"x2": Wire dia x Wire dia x Length x Width ÷2

x 0.75=kg 2"x3": Wire dia x Wire dia x Length x Width

÷2 x 0.415=kg 2"x2": Wire dia x Wire dia x Length x

Width ÷4=kg

3"x3": Wire dia x Wire dia x Length x Width \div 6=kg

4"x4": Wire dia x Wire dia x Length x Width $\div 2$ x

0.25=kg 3"x4": Wire dia x Wire dia x Length x Width ÷2

x 0.29=kg

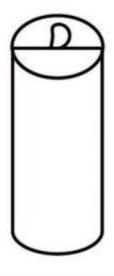
Big hole 25.4÷ (hole size mm+wire dia.mm) x wire dia x wire dia x length m x width m÷2=kgs

2.Roll diameter calculation

How to caculate the roll diameter of welded wire mesh?

D=√ Wire dia.xRoll length *25.5

[Unit of above: "Wire dia." in "mm", "length" " in" " m", "Width" in "m"]



PRODUCT KNOWLEDGE

COMPLETE SOLUTION OF WIRE MESH

Normally the longitudinal wire and cross wire is the same, the edge wire is much more thinner and the edge opening small,

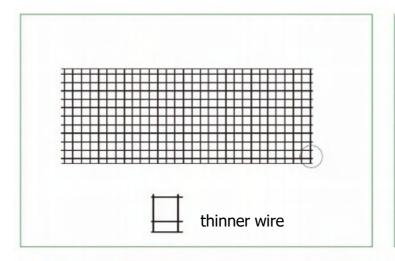
which makes easier to weld sheets together.

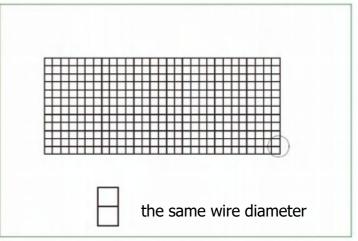
If the mesh opening is 200mm, normally the edge opening is 100mm, then the whole opening will be 200mm when two sheets welded together.

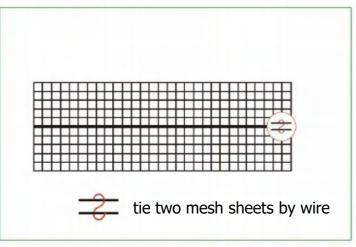
If no edge wire, the user have to tie two mesh sheets by wire.

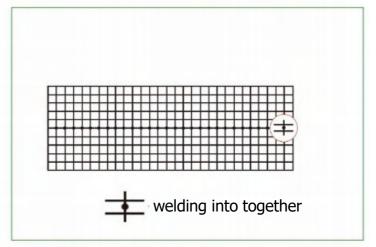
Weight(kg/sheet):

Longitudinal wire dia. x longitudinal wire dia. x 000617 x mesh length x numbers of wire in width direction+cross wire dia. x cross wire dia. x 0.00617 x mesh width x numbers of wire in length direction +edge wire dia. x 0.00617 x me* length x 2









LIFE THEORY

COMPLETE SOLUTION OF WIRE MESH

03. Theoretically life time for difference materials of welded wire mesh.

According to our experience and test, the general lifetime for common material are as below:

Black wire: About 1 year

Electro galvanized before welding: About 1-3 years Electro galvanized after welding: About 2-4 years

Hot-dipped galvanized before welding: About 3-4 years Hotdipped galvanized after welding: About 4-5 years Electro

galvanized with PVC coating About 4-6 years

Hot-dipped galvanized with PVC coating: About 5-8 years

Stainless steel 201: About 2 years

Stainless steel 304: About 5-10 years Stainless steel 316: More than 10 years Stainless steel

316L: More than 10 years

Notice: the above information are theoretically service life time, real material service life time can be different based on different environment.



DIFFERENCE

COMPLETE SOLUTION OF WIRE MESH

04. The difference between "galvanized before welding" and "galvanized after welding"



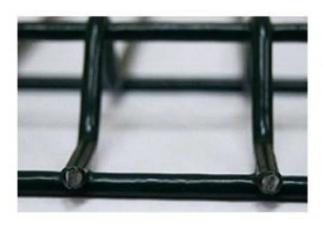


Galvanized before welding

Galvanized after welding

For the galvanized products, zinc coating is the main reason of corrosion resistance. So"galvanized after welding" has longer lifetime than galvanized before welding; not easy to be rusty on welding spot.

05. The difference between " PVC coating " and "powder coating "





- 1) The thickness of PVC coating is thicker than powder coating.
- (2) The surface of powder coating is more smooth than PVC coating.

0

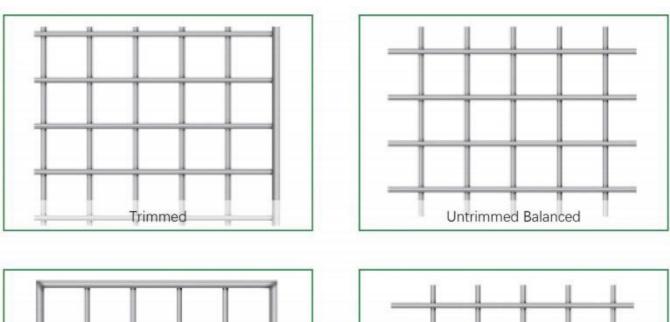
COLOR

COMPLETE SOLUTION OF WIRE MESH

06. Vinyl Coated or Epoxy Paint Available Color

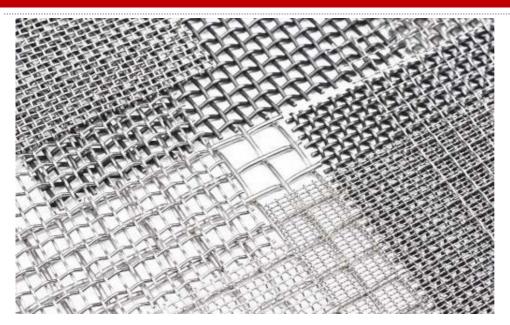


07. Trim and Stub on Edge



WOVEN WIRE

COMPLETE SOLUTION OF WIRE MESH



Woven Wire

A fundamental class of steel mesh is woven wire. Weaved wire with square and rectangular meshes are part of our manufacturing line; they come in single-crimp and double-crimp versions. We also offer the best material options based on a large variety of premium steels of certain species, depending on the application and operating circumstances. We provide woven wire in rolls, sheets, or with hooks so that customers may mount them on sifters and other equipment.

Single-crimp woven

One form of wire with mesh constructed in plain weave is single-crimp woven wire with square meshes. They are constructed from circular wires that have first undergone profiling (crimping), then been interlaced. At the crimp, transverse and longitudinal wires come into touch with one another, forming the meshes. The stability of the weave is guaranteed by the production process. The screens are especially well suited for industrial processing procedures including separation, filtration, classification.

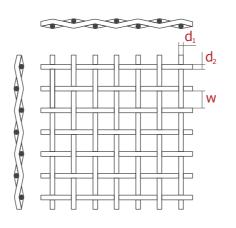


Table 1. Single-crimp woven wires

Mesh size (w) [mm]	(d) [mm]	Weigh t [1 m²]	Open area [%]	Mesh size (w) [mm]	Wire (d) [mm]	Weigh t [1 m²]	Open area [%]	Mesh size (w) [mm]	Wire (d) [mm]	Weigh t [1 m²]	Open area [%]	Mesh size (w) [mm]	Wire (d) [mm]	Weigh t [1 m²]	Open area [%]
1,2	0,8	4,52 4,06	31 36	1,8	1,2	6,10	36	2,5	0,8	2,46	57	2,8	1,5*	6,65	42
1,2	0,0	4,00	30	2	0,8	2,90	51	2,5	1	3,63	51	2,8	1,6**	7,39	41
1,5	0,8	3,53	43	2	1	4,23	44	2,5	1,2	4,95	46	3	0,8	2,14	62
1,5	1	5,08	36	2	1,2	5,72	39	2,5	1,4	6,39	41	3	1	3,18	56
1,6	0,8	3,39	44	2	1,4	7,32	35	2,5	1,6**	7,93	37	3	1,2	4,36	51
1,6	1	4,88	38	2,2	0,8	2,71	54	2,8	0,8	2,26	60	3	1,4	5,66	46
1,6	1,2**	6,53	33	2,2	1	3,97	47	2,8	1	3,34	54	3	1,5*	6,35	44
1,8	0,8	3,13	48	2,2	1,2	5,38	42	2,8	1,2	4,57	49	3	1,6	7,07	43
1,8	1	4,53	41	2,2	1,4	6,91	37	2,8	1,4	5,93	44	3	2**	10,16	36









Material

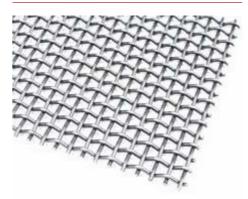
Stainless steel, spring steel, acid-resistant steel, carbon steel, heat-resistant steel, aluminium, kanthal, inconel, duplex

Application

- vibrating sifters
- Screens for calibrators
- Baskets for centrifuges
- Baskets and accessories for hardening
- Filter rings
- Filter segments and elements of filter segments
- Construction and support elements
- Safety grates and covers

Features

- High active surface ratio
- High separation efficiency of grain size classes
- Versatility of applications





WOVEN WIRE SPECIFICATION

COMPLETE SOLUTION OF WIRE MESH

32. 1 1 3.0	Mesh size	Wire (d)	Weight	Open area	Mesh size	Wire (d)	Weight	Open area	Mesh size	Wire (d)	Weight	Open area	Mesh size	Wire (d)	Weight	Open area
3.2	3,2	0,8**	2,03	64	6	1,5*	3,81	64	12	2,5	5,48	68	20	3,5	6,62	72
32 1,4** 8,41 48 6 6 2 6,33 56 12 4 12,70 56 20 5 12,70 64 32 1,6** 6,77 44 6 2,5 9,35 50 12 4,5** 15,59 63 20 6* 17,58 59 32 20 6* 17,58 59 39 20 6* 17,58 59 39 20 6* 17,58 59 39 20 6* 17,58 59 39 20 6* 17,58 59 39 20 6* 17,58 59 39 20 6* 17,58 59 39 20 6* 17,58 59 39 20 6* 17,58 59 39 20 6* 17,58 59 39 20 6* 17,58 59 39 20 6* 17,58 59 39 20 6* 17,58 59 39 20 6* 17,58 59 39 20 6* 17,58 59 39 20 6* 17,58 59 39 20 6* 17,58 59 39 20 6* 17,58 59 39 20 6* 17,58 59 39 20 6* 17,58 59 20 20 6* 17,58 59 20 20 6* 17,58 59 20 20 6* 17,58 59 20 20 6* 17,58 59 20 20 6* 17,58 59 20 20 6* 17,58 59 20 20 6* 17,58 59 20 20 6* 17,58 59 20 20 6* 17,58 59 20 20 6* 17,58 59 20 20 6* 17,58 59 20 20 20 6* 17,58 59 20 20 20 6* 17,58 59 20 20 20 6* 17,58 59 20 20 20 20 20 20 20 20 20 20 20 20 20	3,2	1**	3,02	58	6	1,6	4,28	62	12	3	7,62	64	20	4	8,47	69
3.2	3,2	1,2**	4,16	53	6	1,8*	5,28	59	12	3,5	10,4	60	20	4,5**	10,50	67
3.5	3,2	1,4**	5,41	48	6	2	6,35	56	12	4	12,70	56	20	5	12,70	64
3.5	3,2	1,6**	6,77	44	6	2,5	9,35	50	12	4,5**	15,59	53	20	6*	17,58	59
3.5	3,2	2**	9,77	38	6	3	12,70	44	12,5	2,5**	5,29	69	20	6,3**	19,20	58
3.5 1,2 3,89 55 6,5 1,5° 3,57 66 12,5° 4** 12,32 57 21 4,5 10,09 68 3,35 1,4 5,08 51 6,5 1,6° 4,01 41 12,5 4,** 15,13 54 21 5 12,21 6° 65 3,5° 1,6° 4,6° 61 13 2,5° 5,12° 70 21 6° 16,93 60 33,5 1,6° 6,38 47 6,5° 2 5,88 88 13 3,7,14 66 21 6,3** 18,46 59 13,5° 1,8° 4,76° 44 6,5° 2,5° 8,82° 52 13 3,5° 7,44 66 21 6,3** 18,46 59 13,5° 1,8° 4,76° 44 6,5° 2,5° 8,82° 52 13 3,5° 7,43° 62 22 3,5** 18,46 59 13,5° 1,8° 4,00° 69 7 1,2°* 2,23° 73 13 4,5°* 14,70° 55 22 4,5° 9,71° 69 14 2,5° 4,61° 7,71° 1,4° 2,66° 69 14 2,5° 4,61° 7,2° 22 4,5° 9,71° 69 14 2,5° 4,61° 7,2° 22 5,5° 80 88 14 3 6,73° 68 22 6,5° 16,33° 62 4 1,18° 5,5° 7,18° 5,5° 7,5° 1,4° 4,18° 4,68° 63 1,4° 4,11,29° 60 23 3,5° 5,87′ 7,5° 1,4° 1,6° 3,78° 66 1,4° 4,18° 1,18	3,5	0,8	1,89	66	6,5	1,2	2,38	71	12,5	3**	7,37	65	21	3,5	6,35	73
3.5 1,4 5,08 51 6,5 1,6 4,01 64 12,5 4,5** 15,13 94 21 5 12,21 65 13,5 1,5** 1	3,5	1	2,82	60	6,5	1,4	3,15	68	12,5	3,5**	9,72	61	21	4	8,13	71
3.5 1,5 * 5,72 49 6,5 1,8 * 4,96 61 13 2,5 5,12 70 21 6* 16,93 60 61 3,3 5 1,6 6,38 47 6,5 2 5,98 58 13 3 7,14 66 21 6,57* 13,46 59 13,5 1,8 7,76 44 6,5 2,5 8,82 52 13 3,5 7,14 66 21 2,5,7* 13,66 59 13,5 22 9,24 40 6,5 3 12,03 47 13 4 11,95 58 22 4,5 7,971 66 14 1 2,54 64 7 1,4 2,96 69 14 2,5* 4,81 72 22 4,5 7,971 66 14 1,2 3,52 99 7 1,5* 3,36 66 14 3,5 8,96 64 12 6,5** 11,76 66 14 1,2 3,52 99 7 1,5* 3,36 66 14 3,5 8,96 64 12 6,5** 11,76 66 14 1,2 3,52 99 7 1,5* 3,36 66 14 3,5 8,99 64 12 6,5** 1,785 60 14 1,8* 7,09 48 7 2,5 8,65 60 14 4,5** 13,90 57 23 4 7,53 73 14 1,8* 7,09 48 7 2,5 8,65 60 14 4,5** 13,90 57 23 4 7,53 73 14 1,8* 7,09 48 7 2,5 8,65 54 14 5** 16,71 54 23 4,5** 9,35 70 14 2 8,47 44 7 3 11,43 49 15 3 6,55 69 23 5 11,34 67 4 2,5 12,21 39 7 3,5** 14,82 44 15 3,5 8,41 66 62 23 6* 15,77 63 14,5 1,2 2,1 1,2 3,21 62 8 1,6 3,39 69 15 4,5** 13,19 59 24 4,5** 9,35 70 14,5* 1,2 3,21 62 8 1,6 3,39 69 15 4,5** 15,88 56 14 4,4 6,5** 15,88 56 12 4,5** 9,02 71 15 15 4 10,69 62 23 6,3** 17,70 62 14,5* 1,4 4,2 58 8 1,8* 4,20 67 15 5** 15,88 56 24 4 4 7,26 73 15,8 1,4 4,5** 1,4 4,2 58 8 1,8* 4,20 67 15 5** 15,8 56 14 4 4,5** 15,10 64 24 6* 15,24 64 15,5 1,4 4,5** 13,89 61 9 2,5 6,91 61 17 3,5 7,20 15 1,4 5,5* 1,4 5,5 1,5 1,5 1,4 6,5 1,4 1,4 1,4 1,4 1,4 1,4 1,4 1,4 1,4 1,4	3,5	1,2	3,89	55	6,5	1,5*	3,57	66	12,5	4**	12,32	57	21	4,5	10,09	68
3.5 1.6 6.38 47 6.5 2 5.88 58 13 3 7,14 66 21 6,3** 18,46 59 3.5 1.8* 7,76 44 0 6.5 2.5 8,82 52 13 3,5 9,43 62 22 3,5 6,10 74 3.6 2 9,24 40 6.5 3 12,03 47 13 4 11,95 58 22 4,5 7,76 64 4 0.8 1.69 69 7 1,2** 2,23 73 13 4,5** 14,70 55 22 4,5 9,71 69 4 1 1 2,5*4 64 7 1,4 2,96 69 14 2,5* 4,81 72 22 5 11,76 66 4 1,2 3,5°2 59 7 1,5* 3,36 68 14 3,6*3 8,89 64 22 6,3** 12,85 60 4 1,4 4,61 55 7 1,6 3,78 66 14 3,5 8,89 64 22 6,3** 12,85 60 4 1,6 4,61 51 7 2 5,65 60 14 4,5** 13,90 57 23 4 7,53 73 4 1,8* 7,09 48 7 2,5 8,36 54 14 5** 16,71 54 23 4,5** 9,35 70 4 2,5 1,2 1,2 1,3 39 7 3,5** 14,82 44 15 3,5 8,41 66 23 6** 15,77 63 4,5 1,2 3,21 62 8 1,6 3,39 69 15 4,5** 13,19 59 24 3,5** 5,66 76 4,5 1,2 3,21 62 8 1,6 3,39 69 15 4,5** 13,19 59 24 3,5** 5,66 76 4,5 1,4 4,2 2,5 8 8 1,8* 4,20 67 15 5** 15,88 56 24 4 7,26 73 4,5 1,6 5,33 54 8 2,5 7,56 58 16 3,5 7,98 67 24 5,5** 10,95 68 4,5 1,4 4,2 2,8 8 8 1,8* 4,20 67 15 5** 15,88 56 24 4 7,26 73 4,5 1,6 5,33 54 8 2,5 7,56 58 16 3,5 7,98 67 24 5,5** 10,95 68 4,5 1,6 5,3 51 8 3 10,40 53 16 4,5** 11,96 63 4,5 1,6 5,3 51 8 3 10,40 53 16 4,5** 12,55 61 12 2,4 4,5** 9,02 71 4,5 1,6 5,3 51 8 3,5 10,40 53 16 4,5** 12,55 61 16 24 6,5** 15,64 63 4,5 1,6 4,83 57 9 9 2,5 6,91 61 17 3 5,79 69 5 1,4 3,89 61 9 3 9,3 5,5** 11,66 63 5 1,5** 4,60 59 9 2,5 6,91 61 17 3 5,72 72 25 5 10,59 69 5 1,6 4,83 57 9 4 15,63 48 17 4,5** 11,96 63 5 1,5* 4,60 59 9 3,5 14,24 69 9 1,5 14,43 60 27 4,5** 8,72 72 5 1,2 2,73 67 9,5 2** 4,42 68 17 4,5** 11,96 63 5 1,5* 4,60 59 9 3,5 14,25 55 19 3,5** 11,43 64 10,69 62 27 4,5** 8,72 72 5 1,2 2,73 67 9,5 2** 4,42 69 18 4,5** 11,96 63 5 1,5* 1,6* 4,88 60 10 3 8,80 59 18 6** 19,05 56 5 1,6 4,88 60 10 3 8,80 59 18 6** 19,05 56 5 1,6 4,88 60 10 3 8,80 59 18 6** 19,05 56 5 1,6 4,88 60 10 3 8,80 59 18 6** 19,05 56 5 1,6 4,88 60 10 3 8,80 59 18 6** 19,05 56 5 1,6 4,88 60 10 3 8,80 59 18 6** 19,05 56 5 1,6 4,88 60 10 3 8,80 59 18 6** 19,05 56 5 1,6 4,88 60 10 3 8,80 59 18 6** 19,05 56 5 1,6 4,88 60 10 3 8,80 59 18 6** 19,05 56 5 1,6 4,88 60 10 10 3 8,80 59 18 6** 19,05 56 5 1,6 4,8	3,5	1,4	5,08	51	6,5	1,6	4,01	64	12,5	4,5**	15,13	54	21	5	12,21	65
3.5 1.8* 7.76	3,5	1,5 *	5,72	49	6,5	1,8*	4,96	61	13	2,5	5,12	70	21	6*	16,93	60
3,5 2 9,24 40 6,5 3 12,03 47 13 4 11,95 58 22 4 7,81 72 4 0,8 1,99 69 7 1,2** 2,23 73 13 4,5** 14,70 55 22 4,5 9,71 69 4 1 1,254 64 7 1,4 2,96 69 14 2,5* 4,81 72 22 5 11,76 66 6 4 1,2 3,52 59 7 1,5* 3,36 68 14 3,5 8,89 64 22 6,3** 17,85 60 14 1,4 4,61 55 7 1,6 3,78 66 14 3,5 8,89 64 22 6,3** 17,85 60 14 1,5* 5,20 53 7 1,8* 4,68 63 14 4 11,29 60 23 3,5 5,87 75 4 1,6 4,61 51 7 2 5,55 60 14 4,5** 13,90 57 23 4 7,53 73 14 1,8* 7,09 48 7 2,5 8,36 54 14 5** 16,71 54 23 4,5** 9,35 70 4 2,8 4,7 44 7 3 11,43 49 15 3 6,33 69 23 5 11,34 67 4 2,5 12,21 39 7 3,5** 14,82 44 15 3,5 8,84 166 23 6* 15,77 63 4 2,5 12,21 39 7 3,5** 14,82 44 15 3,5 8,81 66 2 23 6** 15,77 63 4 1,5* 1,2 3,2 1 62 8 1,6* 3,39 69 15 4,5** 13,19 59 24 3,5** 5,66 76 4,5 1,4 4,22 58 8 1,6 3,39 69 15 4,5** 13,19 59 24 3,5** 5,66 76 4,5 1,4 4,22 58 8 1,8* 4,20 67 15 5** 15,18* 56 24 4 7,26 73 4,5 1,5* 4,76 55 8 2 2 7,82 48 8 2,5 5,86 64 16 3 6,22 71 24 4,5** 9,00 71 4,5 1,5* 4,76 56 8 2 2 5,86 64 16 3,5 7,98 67 24 5 10,95 68 4,5 1,5* 4,76 55 1,5* 4,76 55 1,5* 4,76 55 1,5* 4,76 56 8 2 2 5,86 64 16 3 6,22 71 24 4,5** 9,00 71 4,5 1,5* 4,76 56 8 2 2 5,86 64 16 3 6,02 71 24 4,5** 9,00 71 4,5 1,5* 4,76 56 8 2 2 5,86 64 16 3,5 7,98 67 24 5 10,95 68 4,5 1,5* 4,76 56 8 2 2 5,86 64 16 3 5 6,02 71 24 4,5** 9,00 71 4,5 1,5* 4,76 56 8 2 2 5,86 64 16 3 5 6,02 71 24 4,5** 9,00 71 4,5 1,5* 4,76 56 8 2 2 5,86 64 16 3 5 6,02 71 24 4,5** 9,00 71 4,5 1,5* 4,76 56 8 2 2 5,86 64 16 3 5 6,02 71 24 4,5** 9,00 71 4,5 1,5* 4,76 56 8 2 2 5,86 64 16 3 5 6,02 71 24 4,5** 9,00 71 4,5 1,5* 4,76 56 8 2 2 5,86 64 16 3 5 6,02 71 24 4,5** 9,00 71 4,5 1,5* 4,76 56 8 2 2 5,86 64 16 3 5 6,02 71 24 4,5** 9,00 71 4,5 1,5* 4,76 56 8 2 2 5,86 64 16 3 5 6,02 71 24 4,5** 9,00 71 4,5 1,5* 4,76 56 8 2 2 5,86 64 16 3 5 6,02 71 24 4,5** 9,00 71 4,5 1,5* 4,76 56 8 2 2 5,86 64 16 3 5 6,02 71 24 4,5** 9,00 71 24 4,5** 9,00 71 24 4,5** 9,00 71 24 4,5** 9,00 71 24 4,5** 9,00 71 24 4,5** 9,00 71 24 4,5** 9,00 71 24 4,5** 9,00 71 24 4,5** 9,00 71 24 4,5** 9,00 71 24 4,5** 9,00 71 24 4,5** 9,00 71 24 4,5** 9,00	3,5	1,6	6,38	47	6,5	2	5,98	58	13	3	7,14	66	21	6,3**	18,46	59
4 0.8 1.69 69 7 1.2** 2.23 73 13 4.5** 14,70 55 22 4,5 9,71 69 4 1 1 2.54 64 7 1.4 2.96 69 14 2.5* 4.81 72 22 5 11,76 66 4 1 1.2 3,52 59 7 1.5* 3,36 68 14 3 6,73 68 22 6.4* 17,85 60 4 1.4 4.1 4.461 55 7 1.6 3,78 66 14 3,5 8,89 64 22 6,3** 17,85 60 4 1.5* 5,20 53 7 1.6 3,78 66 31 4 4 11,29 60 23 3,5 5,87 75 1.6 4,16 4,61 51 7 2 5,65 60 14 4,5** 13,90 57 23 4 7,53 73 14 1.8* 7,09 48 7 2.5 8,36 54 14 5** 13,90 57 23 4 7,53 73 14 1.8* 7,09 48 7 2.5 8,36 54 14 5** 13,90 57 23 4 7,53 73 14 2.5 8,47 44 7 3 3 11,43 49 15 3 6,35 69 23 5 11,34 67 4 2.5 12,21 39 7 3,5** 14,82 44 15 3,5 8,41 66 23 6** 15,77 63 1.45 1.2 3,21 67 8 8 1.5* 3,01 71 15 4 10,69 62 23 6,3** 17,20 62 1.5* 1.2 3,21 62 8 1.6 3,39 69 15 4,5** 15,88 56 24 4 7,26 73 1.5* 1.4 4.22 58 8 1.8* 4,20 67 15 5** 15,88 56 24 4 7,26 73 1.45 1.5* 1.6 5,33 54 8 2,5 7,56 58 16 3,5 7,98 67 24 54 7,26 73 1.5* 1.8* 6,33 51 8 3 10,40 53 16 4 10,16 64 24 6** 15,24 64 1.5* 1.5* 1.8* 6,33 51 8 8 3 10,40 53 16 4 10,16 64 24 6** 15,24 64 1.5* 1.5* 1.8* 6,33 51 8 8 3 10,40 53 16 4 10,16 64 24 6** 15,24 64 1.5* 2.5* 11,34 11 8 8 4 16,59 48 16 3,5 7,98 67 24 5 10,95 68 1.5* 1.8* 6,33 57 9 9 2 4,62 67 16 6,3** 22,60 51 25 4,5** 8,72 72 5 1.2 2,25 1.3 41 18 8 4 16,59 48 16 4 10,16 64 24 6** 15,24 64 1.5* 1.5* 1.5* 1.5* 1.5* 1.5* 1.5* 1.5*	3,5	1,8*	7,76	44	6,5	2,5	8,82	52	13	3,5	9,43	62	22	3,5	6,10	74
4 1 2 2.54 64 7 1,4 2.95 69 14 2.5* 4.81 72 22 5 11,75 66 4 1 1,2 3,52 59 7 1,5* 3,35 68 14 3 5,58,8 64 22 6,5** 17,85 60 4 1.4 4,46,1 55 7 1,6 3,78 66 14 3,5 8,89 64 22 6,5** 17,85 60 4 1,5* 5,20 53 7 1,8* 4,68 63 14 4 11,29 60 23 3,5 5,87 75 4 1,6 4,61 51 7 2 5,65 60 14 4,5** 13,90 57 23 4 7,53 73 4 1,8* 7,09 48 7 2,5 8,36 54 14 5** 16,71 54 23 4,5** 9,35 70 4 2,8 4,7 44 7 3 11,43 49 15 3 6,35 69 23 5 11,34 67 4 2,5 12,21 39 7 3,5** 14,82 44 15 3,5 8,41 66 23 6* 15,77 63 4,5 1,2 3,21 67 8 1,5* 3,01 71 15 4 10,69 62 23 6,3** 17,720 62 4,5 1,2 3,21 62 8 1,6 3,39 69 15 4,5** 13,19 59 24 3,5** 5,66 76 4,5 1,2 3,21 62 8 8 1,6 3,39 69 15 4,5** 13,19 59 24 3,5** 5,66 76 4,5 1,4 4,22 58 8 18,8* 4,20 67 15 5** 15,88 56 24 4 7,26 73 4,5 1,5* 4,76 56 8 2 2,5 8,84 1 6,6 3,63 5 1,6 3,63 5 1,6 3,63 5 1,6 3,63 5 1,6 3,63 5 1,6 3,6 6,7 6 1,5 1,5* 4,76 56 8 2 2,5 8,8 4 1,6 3,63 5 1,6 3,6 6,3 5 1,6 5,33 5 1,8 8 1,8 4,20 67 15 5** 15,88 56 24 4 7,26 73 4,5 1,6 5,33 5 1,8 8 2,5 7,56 58 16 3,5 7,98 67 24 5 10,95 68 4,5 1,8 8 6,53 5 1 8 3 10,40 53 16 4 10,16 64 24 6* 15,24 64 4,5 1,8 8 6,53 5 1 8 3 10,40 53 16 4 10,16 64 24 6* 15,24 64 64 6,5 1,2 2,2 2,2 48 8 3,5 13,33 48 16 4,5 1,8 8 6,53 5 1 2,4 6,5 2 6,91 61 17 3 5,75 7,59 69 25 6,3** 16,12 64 64 5,5 1,5* 4,40 59 9 2,5 6,91 61 17 3 5,75 7,59 69 25 6,3** 16,12 64 5 1,5* 4,40 59 9 3,5 1,2 4,5 5 2 17 4 9,68 66 26 5 1,5* 4,40 59 9 3,5 1,2 4,5 5 2 17 4 9,68 66 26 5 1,5* 4,40 59 9 9 3,5 1,5 2,5* 6,61 63 17 6,3** 1,5* 1,44 3,60 27 7,5 9,92 71 5 5,5 1,8* 6,65 54 9,5 5 3,5** 11,97 53 18 3,5 7,24 70 28 5,5 1,8* 6,65 54 9,5 5 3,5** 11,97 53 18 3,5 7,24 70 28 5,5 1,8* 6,65 64 10 2 2,5* 6,35 64 18 5 13,81 61 31,5 5 1,5* 1,5* 4,66 57 10 3,5 11,97 53 18 6* 17 6,3** 11,90 55 50 63 4 64 10 0 2 4,24 69 18 4,5** 11,33 64 10 30 6,3** 13,90 68 50 63 64 10 2 2,5* 6,35 64 18 5 13,81 61 31,5 5 13,81 61 31,5 5 13,81 61 31,5 5 13,81 61 31,5 5 13,81 61 31,5 5 13,81 61 31,5 5 13,81 61 31,5 5 13,81 61 31,5 5 13,81 61 31,5 5 13,81 61 31,5 5 13,81 61 31,5 5 13,81 61 31,5 5 13,81 61 31,5 5 13,81 61 31,5 5 13,	3,5	2	9,24	40	6,5	3	12,03	47	13		11,95	58	22	4	7,81	72
4 1.2 3.52 59 7 1,5° 3,36 68 14 3 6,73 68 22 6° 16,33 62 4 1.4 1.4 4,61 55 7 1,6 3,78 66 14 3.5 8,89 64 22 6,3°* 17,85 60 60 4 1,5° 5,20 53 7 1,8° 4,68 63 14 4 11,29 60 23 3,5 1,5° 7,5° 14 1,6 4,61 51 7 2 5,65 60 14 4,5°* 13,90 57 23 4 7,53 73 73 14 1,8° 7,09 48 7 2,5° 8,36 54 14 5°* 16,71 54 23 4,5°* 9,35 70 14 2,8 4,7 4 7 3 11,43 49 15 3 6,3° 69 23 5 11,34 67 14 2,5° 12,21 39 7 3,5°* 14,82 44 15 3,5° 8,41 66 23 6° 15,77 63 14,5° 1,2 3,21 67 8 1,5° 3,01 71 15 4 10,69 62 23 6,3°* 17,720 62 14,5° 1,4 4,22 58 8 16,8° 4,20 67 15 5°* 15,88 56 24 4 7,26 73 14,5° 1,5° 4,76 56 8 2 5,08 64 16 3 5,5° 8,60 7 24 5,5° 10,59 8 14,5° 1,8° 6,53 51 8 8 3 10,40 53 16 4 10,16 64 24 4,5°* 9,02 71 14,5° 1,6 5,33 54 8 2,5° 7,56 58 16 3,5° 7,86 8 16 3,5° 7,86 67 24 5 10,99 68 14,5° 1,8° 6,53 51 8 8 3 10,40 53 16 4 10,16 64 24 6° 15,24 64 15,5° 1,8° 6,53 51 8 8 3 10,40 53 16 4 10,16 64 24 6° 15,24 64 14,5° 2,7,82 48 8 3,5° 13,53 48 16 4,5°* 12,55 61 24 6,3°* 16,64 63 14,5° 2,7,82 48 8 3,5° 13,53 48 16 4,5°* 12,55 61 12 2,55 13,34 41 8 8 4 16,53 14 16 5 15,12 5 8 15 14 14 18 8 4 16,53 14 16 5 15,12 5 8 15 14 14 18 8 4 16,53 14 16 5 15,12 5 8 15 14 14 18 18 18 18 18 18 18 18 18 18 18 18 18	4	0,8	1,69	69	7	1,2**	2,23	73	13	4,5**	14,70	55	22	4,5	9,71	69
4 1,4 4,61 55 7 1,6 3,78 66 14 3,5 8,89 64 22 6,3** 17,85 60 4 4 1,5* 5,20 53 7 1,8* 4,68 63 14 4 11,29 60 23 3,5 5,87 75 4 1,6 4,61 51 7 2 5,65 60 14 4,5** 13,00 57 23 4 7,53 73 4 1,8* 7,09 48 7 2,5 8,36 54 14 5** 16,71 54 23 4,5** 9,35 70 4 2,8 8,47 44 7 3 11,43 49 15 3 6,35 69 23 5 11,34 67 4 2,5 12,21 39 7 3,5** 14,82 44 15 3,5 8,41 66 23 6** 15,77 63 4,5 1,2 3,21 62 8 1,6 3,39 69 15 4,5** 13,19 59 24 3,5** 5,66 76 4,5 1,4 4,22 58 8 1,8* 4,20 67 15 5** 15,88 56 24 4 7,26 73 4,5 1,5* 4,76 56 8 2 5,08 64 16 3 6,02 71 24 4,5** 9,02 71 4,5 1,6 5,33 51 8 3 10,40 53 16 4 10,16 64 24 6** 15,24 64 4,5 2 7,82 48 8 3,5 13,53 48 16 4,5** 12,25 61 24 6,3** 16,64 63 4,5 2 7,82 48 8 3,5 13,53 48 16 4,5** 12,25 61 24 6,3** 16,64 63 4,5 2 7,82 48 8 3,5 13,53 48 16 5 1,2 2,5 1,34 41 8 8 4 16,93 44 16 5 5 15,12 58 25 1,2 2,5 65 69 9 2,5 6,91 61 17 3 5,72 72 25 5 10,59 69 5 1,4 3,89 61 9 9 3,5 12,45 52 17 4 9,68 66 26 26 5 1,2 2,73 67 9 4 15,63 48 17 4,5** 1,43 60 27 4,5** 8,72 72 5 1,5** 4,76 59 9 3,5 12,45 52 17 4 9,68 66 26 5 1,5** 1,5** 4,76 59 9 3,5 12,45 52 17 4 9,68 66 26 5 1,5** 1,5** 4,76 59 9 3,5 12,45 52 17 4 9,68 66 26 5 1,5** 1,5** 4,76 59 9 3,5 12,45 52 17 4 9,68 66 26 5 1,5** 1,5** 4,76 59 9 3,5 12,45 52 17 4 9,68 66 26 5 1,5** 1,5** 4,76 59 9 5,5 3;5 1,5** 4,08 62 10 2,5** 6,61 63 17 6,3** 11,43 60 27 4,5** 8,72 72 25 5 10,59 69 5 1,48 6,05 54 9,5 2,5** 6,61 63 17 6,3** 11,43 60 27 4,5** 8,16 73 5,5 1,5** 4,08 62 10 2,5** 6,61 63 17 6,3** 11,43 60 27 4,5** 8,16 73 5,5 1,5** 4,08 62 10 2,5** 6,61 63 17 6,3** 11,43 60 27 4,5** 8,16 73 5,5 1,5** 4,08 62 10 2,5** 6,61 63 17 6,3** 11,43 60 27 4,5** 8,16 73 5,5 1,5** 4,08 62 10 2,5** 6,61 63 17 6,3** 11,43 60 27 4,5** 8,16 73 5,5 1,5** 4,08 62 10 2,5** 6,61 63 17 6,3** 11,43 60 27 4,5** 8,16 73 5,5 1,5** 4,08 62 10 2,5** 6,61 63 17 6,3** 11,43 60 27 4,5** 11,14 66 56 5,5** 11,5**	4	1	2,54	64	7	1,4	2,96	69	14	2,5*	4,81	72	22	5	11,76	66
4 1,5* 5,20 53 7 1,8* 4,68 63 14 4 11,29 60 23 3,5 5,87 75 4 1,6 4,61 51 7 2 5,65 60 14 4,5*** 13,90 57 23 4 7,53 73 73 73 73 74 1,8** 7,99 48 7 2,5 8,36 54 14 5*** 16,71 54 23 4,5*** 9,35 70 4 2 8,47 44 7 3 11,43 49 15 3 6,35* 69 23 5 11,34 67 4 2,5 10,10 10,0 10 4 1,6 6 23 6** 15,7** 63 4 1,5 1,0 1,3 1,1 4 1,6 1,3 5,78 7,5 6 8 1,5 1,0 1,3 7,8 8 1,5 3,	4	1,2	3,52	59	7	1,5*	3,36	68	14	3	6,73	68	22	6*	16,33	62
4 1,6 4,61 51 7 2 5,65 60 14 4,5** 13,90 57 23 4 7,53 73 4 1,8* 7,09 48 7 2,5 8,36 54 14 5** 16,71 54 23 4,5** 9,35 70 4 2 8,7 44 7 3 11,43 49 15 3 6,35 69 23 5 11,24 67 4 2,5 12,21 39 7 3,5** 14,82 44 15 3,5 8,41 66 23 6** 15,77 63 4,5 1 2,31 67 8 1,5* 3,01 71 15 4 10,69 62 23 6,3*** 17,20 62 4,5 1,4 4,4 22 8 1,6 3,39 69 15 4,5** 13,19 9 2 2,5*	4	1,4	4,61	55	7	1,6	3,78	66	14	3,5	8,89	64	22	6,3**	17,85	60
4 1,8* 7,09 48 7 2,5 8,36 54 14 5** 16,71 54 23 4,5** 9,35 70 4 2,8 47 44 7 3 11,43 49 15 3,6 3,5 69 23 5 11,34 67 4 2,5 12,21 39 7 3,5** 14,82 44 15 3,5 8,41 66 23 6* 15,77 63 4,5 1, 2,31 67 8 1,5* 3,01 71 15 4 10,69 62 23 6,3** 17,20 62 4,5 1,2 3,21 62 8 1,6 3,39 69 15 4,5** 13,19 59 24 3,5** 5,66 76 4,5 1,4 4,22 58 8 1,8* 4,20 67 15 5** 15,88 56 24 4 7,26 73 4,5 1,6 5,33 54 8 2,5 7,56 58 16 3,5 7,98 67 24 5 10,95 68 4,5 1,8* 6,53 51 8 3,10,40 53 16 4 10,16 64 24 6* 15,24 64 4,5 2,7 7,82 48 8 3,5 13,53 48 16 4,5** 12,55 61 24 6,3** 16,64 63 4,5 2,5 11,34 41 8 4 16,93 44 16 5 15,12 58 25 4 7,01 74 5 1** 2,12 69 9 2 4,62 67 16 6,3** 22,60 51 25 4,5** 8,72 72 5 1,2 2,55 65 9 2,5 6,91 61 17 3 5,72 72 25 5 10,59 69 5 1,4 3,89 61 9 3 9,53 51 2,45 52 17 4 9,68 66 26 5 1,5* 4,40 59 9 3,5 12,45 52 17 4 9,68 66 26 5 1,6 4,93 57 9 4 15,63 48 17 4,5** 11,96 63 26 5 1,8* 6,05 54 9,5 2** 4,42 68 17 5 14,43 60 27 4,5** 8,16 73 5 1,8* 6,05 54 9,5 2** 4,42 68 17 5 14,43 60 27 4,5** 8,16 73 5 1,8* 6,05 54 9,5 2** 4,42 68 17 5 14,43 60 27 4,5** 8,16 73 5 1,8* 6,05 54 9,5 2** 4,42 68 17 5 14,43 60 27 4,5** 8,16 73 5 1,8* 6,05 54 9,5 2** 4,42 68 17 5 14,43 60 27 4,5** 8,16 73 5 1,8* 6,05 54 9,5 2** 4,42 68 17 5 14,43 60 27 4,5** 8,16 73 5 1,8* 6,05 54 9,5 2** 4,42 68 17 5 14,43 60 27 4,5** 8,16 73 5 1,8* 6,05 54 9,5 2** 4,42 68 17 5 14,43 60 27 4,5** 8,16 73 5 2,7 7,26 51 9,5 2,5** 6,61 63 17 6,3** 21,63 53 27 5 9,92 71 5 2,5 10,59 44 9,5 3** 9,14 58 18 3** 5,45 73 27 6,3** 15,14 66 5 1,2 2,73 67 9,5 4** 15,05 50 18 4 8,5** 11,43 64 30 6,3** 13,90 68 5,5 1,6 4,88 60 10 3 8,80 59 18 6** 19,05 56 5,5 1,6 4,88 60 10 3 8,80 59 18 6** 19,05 56 5,5 2,6 6,77 54 10 4 14,52 51 19 4 8,83 68 40 6,3** 10,90 75 5,5 2,6 6,77 54 10 4 14,52 51 19 4 8,83 68 40 6,3** 10,90 75 5,5 2,5 9,92 47 11 2,5 5,88 66 19 4,5** 10,94 65 5,5 1,6 4,58 60 10 3 8,80 59 18 6** 19,05 56 5,6 6,1 6,1 6,2 9,5 9,5 47 11 3,5 10,73 58 19 6** 10,90 58	4	1,5*	5,20	53	7	1,8*	4,68	63	14	4	11,29	60	23	3,5	5,87	75
4 2 8,47 44 7 3 11,43 49 15 3 6,35 69 23 5 11,34 67 4 2,5 11,21 39 7 3,5*** 14,82 44 15 3,5 8,41 66 23 6** 15,77 63 4,5 1,2 3,21 62 8 1,6 3,39 69 15 4,5** 13,19 59 24 3,5*** 5,66 76 4,5 1,4 4,22 58 8 1,8** 4,20 67 15 5*** 15,88 56 24 4 7,26 73 4,5 1,5** 4,76 56 8 2 5,08 64 16 3 6,02 71 24 4,5*** 9,02 71 4,5 1,5** 4,76 56 8 2,5 7,56 58 16 3,5 7,98 67 24 4,5*** 10,95 68 4,5 1,5** 4,14 4 1,4	4	1,6	4,61	51	7	2	5,65	60	14	4,5**	13,90	57	23	4	7,53	73
4 2,5 12,21 39 7 3,5** 14,82 44 15 3,5 8,41 66 23 6* 15,77 63 4,5 1 2,31 67 8 1,5* 3,01 71 15 4 10,69 62 23 6,3** 17,20 62 4,5 1,2 3,21 62 8 1,6 3,39 69 15 4,5** 13,19 59 24 3,5** 5,66 76 62 4,5 1,6 5,33 56 8 2 5,08 64 16 3 6,02 71 24 4,5** 9,02 71 4,5 1,6 5,33 51 8 2,5 7,56 58 16 3,5 7,98 67 24 4,5** 9,02 71 4,5 1,6 6,33* 51 8 3 10,40 53 16 4 10,16 64 24 5 10,95 68 4,5 </td <td>4</td> <td>1,8*</td> <td>7,09</td> <td>48</td> <td>7</td> <td>2,5</td> <td>8,36</td> <td>54</td> <td>14</td> <td>5**</td> <td>16,71</td> <td>54</td> <td>23</td> <td>4,5**</td> <td>9,35</td> <td>70</td>	4	1,8*	7,09	48	7	2,5	8,36	54	14	5**	16,71	54	23	4,5**	9,35	70
4,5 1 2,31 67 8 1,5* 3,01 71 15 4 10,69 62 23 6,3** 17,20 62 4,5 1,2 3,21 62 8 1,6 3,39 69 15 4,5** 13,19 59 24 3,5*** 5,66 76 4,5 1,4 4,22 58 8 1,8* 4,20 67 15 5*** 115,88 56 24 4 7,26 73 4,5 1,6 5,33 54 8 2,5 7,56 58 16 3,5 7,98 67 24 5 10,95 68 4,5 1,8* 6,53 51 8 3 10,40 53 16 4 10,16 64 24 4,5** 10,64 64 4,5 2,7 48 8 3,5 13,33 48 16 4,5** 12,55 61 24 6,3*** 10,64 63 4,5** 12,55	4	2	8,47	44	7	3	11,43	49	15	3	6,35	69	23	5	11,34	67
4,5	4	2,5	12,21	39	7	3,5**	14,82	44	15	3,5	8,41	66	23	6*	15,77	63
4,5 1,4 4,22 58 8 1,8* 4,20 67 15 5** 15,88 56 24 4 7,26 73 4,5 1,5* 4,76 56 8 2 5,08 64 16 3 6,02 71 24 4,5** 9,02 71 4,5 1,6 5,33 54 8 2,5 7,56 58 16 3,5 7,98 67 24 5 10,95 68 4,5 1,8* 6,53 51 8 3 10,40 53 16 4 10,16 64 24 6* 15,24 64 4,5 2 7,82 48 8 3,5 13,53 48 16 4,5** 12,55 61 24 6,3** 16,64 63 4,5 2,5 11,34 41 8 4 16,93 44 16 5 15,12 58 25 4 7,01 74 5 1** 2,12 69 9 2 4 4,62 67 16 6,3** 22,60 51 25 4,5** 8,72 72 5 1,2 2,95 65 9 2,5 6,91 61 17 3 5,72 72 25 5 10,59 69 5 1,4 3,89 61 9 3 9,53 56 17 3,5 7,59 69 25 6,3** 16,12 64 5 1,5* 4,40 59 9 3,5 12,45 52 17 4 9,68 66 26 5 1,6 4,93 57 9 4 15,63 48 17 4,5** 11,96 63 26 5 1,8* 6,05 54 9,5 2** 4,42 68 17 5 14,43 60 27 4,5** 8,16 73 5 2 7,26 51 9,5 2,5** 6,61 63 17 6,3** 21,63 53 27 5 9,92 71 5 2,5 10,59 44 9,5 3** 9,14 58 18 3** 5,45 73 27 6,3** 15,14 66 5 3 14,2 2,73 67 9,5 4** 15,05 50 18 4 9,24 67 28 5,5 1,6 4,58 60 10 3,80 59 18 6* 19,05 56 32 6,3** 13,16 70 5,5 1,8* 5,64 57 10 3,5 11,52 55 19 4,88 66 19 4,5** 11,43 64 5,5* 13,81 51 5,5 2,6 6,77 54 10 4 14,52 51 19 4 8,83 68 19 4,5** 10,94 65 55 13,345 42 11 3,81 66 12 9 5,55 1,22 2,54 69 11 3,55 10,73 58 19 6* 18,29 58	4,5	1	2,31	67	8	1,5*	3,01	71	15	4	10,69	62	23	6,3**	17,20	62
4,5 1,5* 4,76 56 8 2 5,08 64 16 3 6,02 71 24 4,5** 9,02 71 4,5 1,6 5,33 54 8 2,5 7,56 58 16 3,5 7,98 67 24 5 10,95 68 4,5 1,8* 6,53 51 8 3 10,40 53 16 4 10,16 64 24 6* 15,24 64 4,5 2 7,82 48 8 3,5 13,53 48 16 4,5** 12,55 61 24 6,3** 16,64 63 4,5** 12,52 61 24 6,3** 16,64 63 4,5** 12,55 61 24 6,3** 16,64 63 4,5** 12,55 61 24 6,3** 16,64 63 4,5** 12,55 61 63 12,5 6,61 63 10 73	4,5	1,2	3,21	62	8	1,6	3,39	69	15	4,5**	13,19	59	24	3,5**	5,66	76
4,5	4,5	1,4	4,22	58	8	1,8*	4,20	67	15	5**	15,88	56	24	4	7,26	73
4,5 1,8* 6,53 51 8 3 10,40 53 16 4 10,16 64 24 6* 15,24 64 4,5 2 7,82 48 8 3,5 13,53 48 16 4,5*** 12,55 61 24 6,3** 16,64 63 4,5 2,7 11,34 41 8 4 16,93 44 16 5 15,12 58 25 4 7,01 74 5 1** 2,12 69 9 2 4,62 67 16 6,3** 22,60 51 25 4,5** 8,72 72 25 5 10,59 69 5 1,2 2,95 65 9 2,5 6,91 61 17 3,5 7,59 69 25 6,3** 16,12 64 5 1,6 4,93 57 9 4 15,63 48 17 <td< td=""><td>4,5</td><td>1,5*</td><td>4,76</td><td>56</td><td>8</td><td>2</td><td>5,08</td><td>64</td><td>16</td><td>3</td><td>6,02</td><td>71</td><td>24</td><td>4,5**</td><td>9,02</td><td>71</td></td<>	4,5	1,5*	4,76	56	8	2	5,08	64	16	3	6,02	71	24	4,5**	9,02	71
4,5 2 7,82 48 8 3,5 13,53 48 16 4,5** 12,55 61 24 6,3** 16,64 63 4,5 2,5 11,34 41 8 4 16,93 44 16 5 15,12 58 25 4 7,01 74 5 1** 2,12 69 9 2 4,62 67 16 6,3** 22,60 51 25 4,5** 8,72 72 5 1,2 2,95 65 9 2,5 6,91 61 17 3 5,72 72 25 5 10,59 69 5 1,4 3,89 61 9 3 9,53 56 17 3,5 7,59 69 25 6,3** 16,12 64 5 1,6 4,93 57 9 4 15,63 48 17 4,5*** 11,96 63 26 26 5 1,8** 6,05 54 9,5 2** 4,42 68	4,5	1,6	5,33	54	8	2,5	7,56	58	16	3,5	7,98	67	24	5	10,95	68
4,5 2,5 11,34 41 8 4 16,93 44 16 5 15,12 58 25 4 7,01 74 5 1** 2,12 69 9 2 4,62 67 16 6,3** 22,60 51 25 4,5** 8,72 72 5 1,2 2,95 65 9 2,5 6,91 61 17 3 5,72 72 25 5 10,59 69 5 1,4 3,89 61 9 3 9,53 56 17 3,5 7,59 69 25 6,3** 16,12 64 5 1,5* 4,40 59 9 3,5 12,45 52 17 4 9,68 66 26 26 5 1,6* 4,93 57 9 4 15,63 48 17 4,5*** 11,96 63 26 5 1,8** 6,05 54 9,5 2,5*** 6,61 63 17 5,3*** 11,96	4,5	1,8*	6,53	51	8	3	10,40	53	16	4	10,16	64	24	6*	15,24	64
5 1** 2,12 69 9 2 4,62 67 16 6,3** 22,60 51 25 4,5** 8,72 72 5 1,2 2,95 65 9 2,5 6,91 61 17 3 5,72 72 25 5 10,59 69 5 1,4 3,89 61 9 3 9,53 56 17 3,5 7,59 69 25 6,3** 16,12 64 5 1,5* 4,40 59 9 3,5 12,45 52 17 4 9,68 66 26 26 5 1,6 4,93 57 9 4 15,63 48 17 4,5*** 11,96 63 26 26 5 1,8** 6,05 54 9,5 2*** 4,42 68 17 5 14,43 60 27 4,5 *** 8,16 73 73 5 2,5 10,59 44 9,5 3*** 9,14 58 18 3*** 5,45 73	4,5	2	7,82	48	8	3,5	13,53	48	16	4,5**	12,55	61	24	6,3**	16,64	63
5 1,2 2,95 65 9 2,5 6,91 61 17 3 5,72 72 25 5 10,59 69 5 1,4 3,89 61 9 3 9,53 56 17 3,5 7,59 69 25 6,3** 16,12 64 5 1,5* 4,40 59 9 3,5 12,45 52 17 4 9,68 66 26 26 5 1,6 4,93 57 9 4 15,63 48 17 4,5** 11,96 63 26 26 5 1,8* 6,05 54 9,5 2*** 4,42 68 17 5 14,43 60 27 4,5*** 8,16 73 5 2 7,26 51 9,5 2,5*** 6,61 63 17 6,3*** 21,63 53 27 5 9,92 71 5 2,5 10,59 44 9,5 3,5** 11,97 53 18 3,** 5,45 73 <td>4,5</td> <td>2,5</td> <td>11,34</td> <td>41</td> <td>8</td> <td>4</td> <td>16,93</td> <td>44</td> <td>16</td> <td>5</td> <td>15,12</td> <td>58</td> <td>25</td> <td>4</td> <td>7,01</td> <td>74</td>	4,5	2,5	11,34	41	8	4	16,93	44	16	5	15,12	58	25	4	7,01	74
5 1,4 3,89 61 9 3 9,53 56 17 3,5 7,59 69 25 6,3** 16,12 64 5 1,5* 4,40 59 9 3,5 12,45 52 17 4 9,68 66 26 26 26 26 26 26 26 26 27 4,5 ** 16,12 64 64 26 26 26 26 26 26 26 26 26 26 26 26 27 4,5 ** 16,12 64 64 26 26 26 26 26 27 4,5 ** 8,16 73 27 6,3 ** 11,91 27 4,5 ** 8,16 73 73 27 5 9,92 71 73 27 6,3 ** 15,14 66 26 27 4,5 ** 8,16 73 73 27 6,3 ** 8,16 73 73 27 6,3 ** 15,14 66 26 10 2,5 ** 4,58 11,97 53 18 3	5	1**	2,12	69	9	2	4,62	67	16	6,3**	22,60	51	25	4,5**	8,72	72
5 1,5* 4,40 59 9 3,5 12,45 52 17 4 9,68 66 26 5 1,6 4,93 57 9 4 15,63 48 17 4,5*** 11,96 63 26 5 1,8* 6,05 54 9,5 2** 4,42 68 17 5 14,43 60 27 4,5 *** 8,16 73 5 2 7,26 51 9,5 2,5** 6,61 63 17 6,3** 21,63 53 27 5 9,92 71 5 2,5 10,59 44 9,5 3** 9,14 58 18 3** 5,45 73 27 6,3 ** 15,14 66 5 3 14,29 39 9,5 3,5** 11,97 53 18 3,5 7,24 70 28 28 5,5 1,4 3,61 64 10 2 4,24 69 18 4,5** 11,43 64 30 6,3 **	5	1,2	2,95	65	9	2,5	6,91	61	17	3	5,72	72	25	5	10,59	69
5 1,6 4,93 57 9 4 15,63 48 17 4,5** 11,96 63 26 5 1,8* 6,05 54 9,5 2** 4,42 68 17 5 14,43 60 27 4,5 ** 8,16 73 5 2 7,26 51 9,5 2,5** 6,61 63 17 6,3** 21,63 53 27 5 9,92 71 5 2,5 10,59 44 9,5 3** 9,14 58 18 3** 5,45 73 27 6,3 ** 15,14 66 5 3 14,29 39 9,5 3,5** 11,97 53 18 3,5 7,24 70 28 5,5 1,2 2,73 67 9,5 4** 15,05 50 18 4 9,24 67 28 5,5 1,4 3,61 64 10 2 4,24 69 18 4,5** 11,43 64 30 6,3 **		-	•		9		9,53	56	17	3,5	7,59	69	25	6,3**	16,12	64
5 1,8* 6,05 54 9,5 2** 4,42 68 17 5 14,43 60 27 4,5 ** 8,16 73 5 2 7,26 51 9,5 2,5** 6,61 63 17 6,3** 21,63 53 27 5 9,92 71 5 2,5 10,59 44 9,5 3** 9,14 58 18 3** 5,45 73 27 6,3 ** 15,14 66 5 3 14,29 39 9,5 3,5** 11,97 53 18 3,5 7,24 70 28 28 5,5 1,2 2,73 67 9,5 4** 15,05 50 18 4 9,24 67 28 28 5,5 1,4 3,61 64 10 2 4,24 69 18 4,5** 11,43 64 30 6,3 ** 13,90 68 5,5 1,6 4,58 60 10 3 8,80 59 18 6* 19,05					9	3,5	12,45	52			9,68	66	26			
5 2 7,26 51 9,5 2,5** 6,61 63 17 6,3** 21,63 53 27 5 9,92 71 5 2,5 10,59 44 9,5 3*** 9,14 58 18 3** 5,45 73 27 6,3 *** 15,14 66 5 3 14,29 39 9,5 3,5*** 11,97 53 18 3,5 7,24 70 28 5,5 1,2 2,73 67 9,5 4*** 15,05 50 18 4 9,24 67 28 5,5 1,4 3,61 64 10 2 4,24 69 18 4,5*** 11,43 64 30 6,3 *** 13,90 68 5,5 1,5* 4,08 62 10 2,5 6,35 64 18 5 13,81 61 31,5 5,5 1,6 4,58 60 10 3 8,80 59 18 6* 19,05 56 32 6,3 **													26			
5 2,5 10,59 44 9,5 3** 9,14 58 18 3** 5,45 73 27 6,3 ** 15,14 66 5 3 14,29 39 9,5 3,5** 11,97 53 18 3,5 7,24 70 28 5,5 1,2 2,73 67 9,5 4** 15,05 50 18 4 9,24 67 28 5,5 1,4 3,61 64 10 2 4,24 69 18 4,5** 11,43 64 30 6,3 ** 13,90 68 5,5 1,5* 4,08 62 10 2,5 6,35 64 18 5 13,81 61 31,5 31,5 31,5 31,5 32 6,3 ** 13,16 70 5,5 1,6 4,58 60 10 3,8 8,80 59 18 6* 19,05 56 32 6,3 ** 13,16 70 5,5 1,8** 5,64 57 10 3,5							4,42	68			14,43	60	27	4,5 **		
5 3 14,29 39 9,5 3,5** 11,97 53 18 3,5 7,24 70 28 5,5 1,2 2,73 67 9,5 4** 15,05 50 18 4 9,24 67 28 5,5 1,4 3,61 64 10 2 4,24 69 18 4,5** 11,43 64 30 6,3 ** 13,90 68 5,5 1,5* 4,08 62 10 2,5 6,35 64 18 5 13,81 61 31,5 5,5 1,6 4,58 60 10 3 8,80 59 18 6* 19,05 56 32 6,3 ** 13,16 70 5,5 1,6 4,58 60 10 3,5 11,52 55 19 3,5 6,91 71 35 5,5 2,6 6,77 54 10 4 14,52 51 19 4 8,83 68 40 6,3 ** 10,90 75						2,5**		63		6,3**			27			
5,5 1,2 2,73 67 9,5 4** 15,05 50 18 4 9,24 67 28 5,5 1,4 3,61 64 10 2 4,24 69 18 4,5** 11,43 64 30 6,3 ** 13,90 68 5,5 1,5* 4,08 62 10 2,5 6,35 64 18 5 13,81 61 31,5 5,5 1,6 4,58 60 10 3 8,80 59 18 6* 19,05 56 32 6,3 ** 13,16 70 5,5 1,8* 5,64 57 10 3,5 11,52 55 19 3,5 6,91 71 35 5,5 2 6,77 54 10 4 14,52 51 19 4 8,83 68 40 6,3 ** 10,90 75 5,5 2,5 9,92 47 11 2,5 5,88 66 19 4,5** 10,94 65 50 6,3 ** <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>58</td> <td></td> <td></td> <td></td> <td></td> <td>27</td> <td>6,3 **</td> <td>15,14</td> <td>66</td>								58					27	6,3 **	15,14	66
5,5 1,4 3,61 64 10 2 4,24 69 18 4,5** 11,43 64 30 6,3 ** 13,90 68 5,5 1,5* 4,08 62 10 2,5 6,35 64 18 5 13,81 61 31,5 31,5 31,5 31,5 32 6,3 ** 13,16 70 5,5 1,6 4,58 60 10 3 8,80 59 18 6* 19,05 56 32 6,3 ** 13,16 70 5,5 1,8* 5,64 57 10 3,5 11,52 55 19 3,5 6,91 71 35 5,5 2 6,77 54 10 4 14,52 51 19 4 8,83 68 40 6,3 ** 10,90 75 5,5 2,5 9,92 47 11 2,5 5,88 66 19 4,5** 10,94 65 50 6,3 ** 8,98 79 5,5 3 13,45 <						3,5**		53					28			
5,5 1,5* 4,08 62 10 2,5 6,35 64 18 5 13,81 61 31,5 31,5 31,5 31,5 31,5 31,5 31,5 31,5 32 6,3 ** 13,16 70 5,5 1,8* 5,64 57 10 3,5 11,52 55 19 3,5 6,91 71 35 35 5,5 2 6,77 54 10 4 14,52 51 19 4 8,83 68 40 6,3 ** 10,90 75 5,5 2,5 9,92 47 11 2,5 5,88 66 19 4,5** 10,94 65 50 6,3 ** 8,98 79 5,5 3 13,45 42 11 3 8,16 62 19 5 13,23 63 63 4 6 4 1 4 4 1 4 1 4 5 1 1 1 1 3 1 3 1 3 1 3 1					9,5	4**		50	18		9,24	67	28			
5,5 1,6 4,58 60 10 3 8,80 59 18 6* 19,05 56 32 6,3 ** 13,16 70 5,5 1,8* 5,64 57 10 3,5 11,52 55 19 3,5 6,91 71 35 5,5 2 6,77 54 10 4 14,52 51 19 4 8,83 68 40 6,3 ** 10,90 75 5,5 2,5 9,92 47 11 2,5 5,88 66 19 4,5** 10,94 65 50 6,3 ** 8,98 79 5,5 3 13,45 42 11 3 8,16 62 19 5 13,23 63 6 1,2 2,54 69 11 3,5 10,73 58 19 6* 18,29 58													30	6,3 **	13,90	68
5,5 1,8* 5,64 57 10 3,5 11,52 55 19 3,5 6,91 71 35 5,5 2 6,77 54 10 4 14,52 51 19 4 8,83 68 40 6,3 ** 10,90 75 5,5 2,5 9,92 47 11 2,5 5,88 66 19 4,5** 10,94 65 50 6,3 ** 8,98 79 5,5 3 13,45 42 11 3 8,16 62 19 5 13,23 63 6 1,2 2,54 69 11 3,5 10,73 58 19 6* 18,29 58													31,5			
5,5 2 6,77 54 10 4 14,52 51 19 4 8,83 68 40 6,3 ** 10,90 75 5,5 2,5 9,92 47 11 2,5 5,88 66 19 4,5** 10,94 65 50 6,3 ** 8,98 79 5,5 3 13,45 42 11 3 8,16 62 19 5 13,23 63 6 1,2 2,54 69 11 3,5 10,73 58 19 6* 18,29 58								59					32	6,3 **	13,16	70
5,5 2,5 9,92 47 11 2,5 5,88 66 19 4,5** 10,94 65 50 6,3 ** 8,98 79 5,5 3 13,45 42 11 3 8,16 62 19 5 13,23 63 6 1,2 2,54 69 11 3,5 10,73 58 19 6* 18,29 58										3,5			35			
5,5 3 13,45 42 11 3 8,16 62 19 5 13,23 63 6 1,2 2,54 69 11 3,5 10,73 58 19 6* 18,29 58					10								40			
6 1,2 2,54 69 11 3,5 10,73 58 19 6* 18,29 58								66					50	6,3 **	8,98	79
								62								
6 1,4 3,36 66 11 4 13,55 54 19 6,3** 19,92 56								58								
	6	1,4	3,36	66	11	4	13,55	54	19	6,3**	19,92	56				

^{*} Only in stainless steel

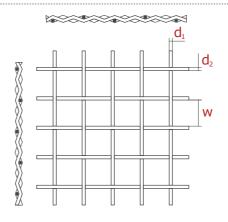
^{**} Only in carbon steel

MULTI CRIMP WOVEN WIRE

COMPLETE SOLUTION OF WIREMESH

Multi-crimp woven wire

One form of wire with mesh constructed in plain weave is multi-crimp woven wire with square meshes. Compared to single-crimp woven wire, they are formed of round wires with a lower wire diameter in comparison to the mesh size. By repeatedly crimping a wire in a vertical plane along the length of a single mesh, the wire is made stiff. They are perfect as structural, protective, and aesthetic components because of their excellent resilience and light weight.



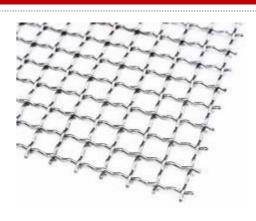


Table 2. Multi-crimp woven wire mesh

Mesh size (w) [mm]	Wire (d) [mm]	Weight [1m²]	Open area [%]	Mesh size (w) [mm]	Wire (d) [mm]	Weight [1m²]	Open area [%]	Mesh size (w) [mm]	Wire (d) [mm]	Weight [1m²]	Open area [%]	Mesh size (w) [mm]	Wire (d) [mm]	Weight [1m²]	Open area [%]
				12	1,4	1,86	80	19	2	2,42	82	31,5	3,5**	4,45	81
5	1	2,12	69	12	1,5*	2,12	79	19	2,5	3,69	78	31,5	4**	5,72	79
5,5	0,8	1,29	76	12	1,6	2,39	78	19	3	5,20	75	31,5	4,5**	7,14	77
5,5	1	1,95	72	12	1,8*	2,98	76	20	2	2,31	83	31,5	5**	8,70	74
6	0,8	1,20	78	12	2	3,63	73	20	2,5	3,53	79	32	2,5*	2,30	86
6,5	0,8	1,11	79	12,5	1,4**	1,79	81	20	3	4,97	76	32	3	3,27	84
6,5	1	1,69	75	12,5	1,6**	2,31	79	21	2	2,21	83	32	3,5	4,38	81
6,5	1,2*	2,38	71	12,5	2**	3,50	74	21	2,5	3,38	80	32	4	5,64	79
7	0,8*	1,04	81	13	1,4	1,73	82	21	3	4,76	77	32	4,5**	7,05	77
7	1	1,59	77	13	1,5*	1,97	80	22	2	2,12	84	32	5	8,58	75
7	1,2	2,23	73	13	1,6	2,23	79	22	2,5	3,24	81	35	3	3,01	85
8	1	1,41	79	13	1,8*	2,78	77	22	3	4,57	77	35	3,5	4,04	83
8	1,2	1,99	76	13	2	3,39	75	23	2	2,03	85	35	4	5,21	81
8	1,4	2,65	72	14	1,4	1,62	83	23	2,5	3,11	81	35	4,5**	6,51	79
8	1,5*	3,01	71	14	1,5*	1,84	82	23	3	4,40	78	35	5	7,94	77
8	1,6	3,39	69	14	1,6	2,08	81	24	2	1,95	85	35	6*	11,15	73
9	1	1,27	81	14	1,8*	2,60	79	24	2,5	3,00	82	40	3	2,66	87
9	1,2	1,79	78	14	2	3,18	77	24	3	4,23	79	40	3,5	3,58	85
9	1,4	2,39	75	14	2,5**	4,81	72	24	3,5*	5,66	76	40	4	4,62	83
9	1,5*	2,72	73	15	1,4**	1,52	84	25	2	1,88	86	40	4,5**	5,78	81
9	1,6	3,07	72	15	1,5*	1,73	83	25	2,5	2,89	83	40	5	7,06	79
9	1,8 *	3,81	69	15	1,6	1,96	82	25	3	4,08	80	40	6*	9,94	76
9,5	1,2**	1,71	79	15	1,8*	2,45	80	25	3,5	5,46	77	40	6,3	10,89	75
9,5	1,4**	2,28	76	15	2	2,99	78	26	2,5	2,79	83	45	3,5*	3,21	86
9,5	1,6**	2,93	73	15	2,5	4,54	73	26	3	3,94	80	45	4*	4,15	84
10	1*	1,15	83	16	1,6	1,85	83	26	3,5	5,27	78	45	5*	6,35	81
10	1,2	1,63	80	16	1,8 *	2,31	81	27	2,5	2,69	84	45	6*	8,96	78
10	1,4	2,18	77	16	2	2,82	79	27	3	3,81	81	50	3,5	2,91	87
10	1,5*	2,48	76	16	2,5	4,29	75	27	3,5	5,10	78	50	4	3,76	86
10	1,6	2,80	74	17	1,6	1,75	84	28	2,5	2,60	84	50	4,5**	4,72	84
10	1,8*	3,49	72	17	1,8*	2,19	82	28	3	3,69	82	50	5	5,77	83
10	2	4,23	69	17	2	2,67	80	28	3,5	4,94	79	50	6*	8,16	80
11	1,2*	1,50	81	17	2,5	4,07	76	30	2,5	2,44	85	50	6,3**	8,95	79
11	1,4	2,01	79	18	1,6	1,66	84	30	3	3,46	83	60	4*	3,18	88
11	1,5*	2,29	77	18	1,8*	2,08	83	30	3,5	4,64	80	60	5	4,88	85
11	1,6	2,58	76	18	2	2,54	81	30	4	5,98	78	60	6*	6,93	83
11	1,8*	3,21	74	18	2,5	3,87	77	30	4,5**	7,45	76	60	6,3**	7,60	82
11	2	3,91	72	18	3*	5,44	73	30	5	9,07	73				
12	1,2	1,39	83	19	1,8*	1,98	83	31,5	3**	3,31	83				

^{*} Only in stainless steel

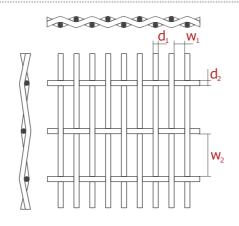
^{**} Only in carbon steel

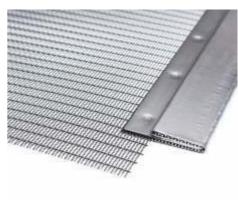
WOVEN WIRE RECTANGULAR

COMPLETE SOLUTION OF WIRE MESH

Woven wire – rectangular meshes

The same techniques are used to create multi-crimp woven wire with rectangular meshes as those with square meshes. The primary distinction is that a mesh's length can be several times longer than its breadth. Rectangular mesh guarantees a larger active surface ratio, which lessens the potential for clogging while boosting the efficiency of the mesh area unit. Woven wire with single or multiple interlacing are available depending on the application (weft).





Woven wire – rectangular meshes with multiple interlacing

The quantity of wires used in the interlacing must be specified when buying woven wire mesh with multiple interlacing (weft) and rectangular meshes.

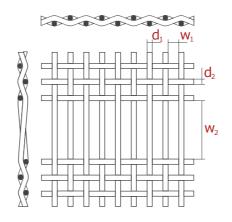




Table 3. Woven wire mesh – rectangular mesh – Type A (single weft)

Mesh size (w ₁ x w ₂) [mm]	Wire (d) [mm]	Mesh size (W ₁ X W ₂) [mm]	Wire (d) [mm]
1x2	0,8	5x20	2,5
1,6x10	1,2	10x12	4
1,8x3,6	1,6	10x20	3,5
1,8x15	1,6	12x14	4
2x4	1,4	14x16	4
2x10	1,6	16x18	4
2,5x5	1,6	18x20	5
3x5	1,6	20x25	5
3x30	2	25x30	6,3
			5

Table 4. Woven wire mesh – rectangular mesh – Type B (multiple weft)

Mesh size $(w_1 x w_2)$ [mm]	Wire (d) [mm]	Mesh size (W ₁ X W ₂) [mm]	Wire (d) [mm]
1,6x35	1,2	5x200	2,5
1,8x35	1,2	6x200	2,5
2x30	1,4	8x50	2,5
2x30	1,6	8x200	2,5
2x50	1,6	8x200	3
2x150	1,4	10x200	3
2,5x150	1,4	12x200	3
3x100	1,4	16x150	5
3x150	1,4	20x200	5
4x40	2,5	30x200	6,3
5x100	2,5		

On request, other configurations may also be created.

Typical applications









FINE WIRE

COMPLETE SOLUTION OF WIRE MESH

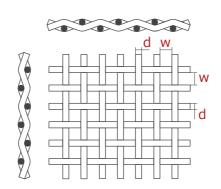


Fine wire

fine-wire mesh The best kind of steel mesh are progress, also known as technological meshes, which are made from round wires. Fine wire are ideal for precise separation and filtering operations because they provide for the best possible selection of parameters, including mesh size, wire diameters, and weave style. fine wire are delivered by us in rolls, sheets, any form, framed, or with hooks so that customers may mount them on sifters and other equipment.

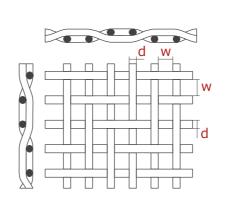
Simple (plain) weave

The most popular kind of weave is this one. Its benefits include great weaving accuracy and simplicity. It ensures attaining extremely precise mesh dimensions as well as a very clear and precise segregation of the material.



Twill (herringbone) weave

The weft wire runs below one or two warp wires and, subsequently, above two warp wires. This type of weave allows for manufacturing a screen with a larger diameter than in a plain weave with the same mesh size.





Wire diameter 0,02 - 1,20 mm

Width max.

4000 mm



Material Stainless steel.

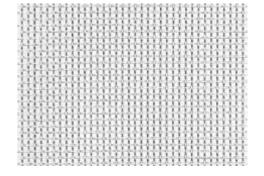
acid-resistant steel, carbon steel, kanthal, inconel

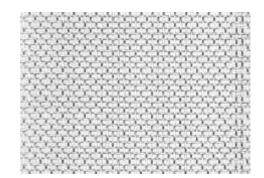
Application

- · Mesh for vibrating sifters
- Rotary mesh for drum traps
- Baskets for centrifuges
- Filter rings
- Filter segments and elements of filter segments
- Mesh and segments for screening loose materials and low-volume weight materials

Features

- · High active surface ratio
- The smallest mesh size among all wire mesh
- Versatility of applications







FINE WIRE SPECIFICATION

COMPLETE SOLUTION OF WIRE MESH

Table 5. Standard fine wire mesh with plain (simple) weave

Mesh size	Wire	Weight	Open Area	Mesh size	Wire	Weight	Open Are	ea Mesh ze	Wire	Weight	Open Area	Mesh size	Wire	Weight	Open Area
[mm]	[mm]	[1m²]	[%]	[mm]	[mm]	$[1m^2]$	[%]	[mm]	[mm]	[1m²]	[%]	[mm]	[mm]	[1m²]	[%]
0,031	0,025	0,14	30,64	0,125	0,09	0,48	33,8	0,35	0,2	0,92	40,5	0,8	0,47	2,21	39,69
0,036	0,028	0,16	31,64	0,13	0,1	0,55	31,95	0,4	0,23	1,07	40,31	0,9	0,3	0,95	56,25
0,043	0,035	0,2	30,39	0,142	0,112	0,63	31,25	0,45	0,2	0,78	47,93	0,9	0,5	2,27	41,33
0,049	0,036	0,19	33,23	0,15	0,1	0,51	36	0,45	0,34	1,86	32,45	1,0	0,3	0,88	59,17
0,05	0,04	0,23	30,86	0,16	0,1	0,49	37,87	0,5	0,2	0,73	51,02	1,0	0,4	1,45	51,02
0,063	0,04	0,2	37,41	0,17	0,12	0,63	34,36	0,5	0,3	1,43	39,06	1,0	0,5	2,12	44,44
0,075	0,05	0,25	36	0,18	0,14	0,78	31,64	0,56	0,28	1,19	44,4	1,2	0,22	0,43	71,41
0,083	0,06	0,32	33,69	0,2	0,08	0,29	51,02	0,6	0,25	0,93	49,83	1,2	0,4	1,27	56,25
0,08	0,05	0,24	37,87	0,2	0,09	0,35	47,6	0,63	0,4	1,97	37,41	1,2	0,5	1,87	49,83
0,09	0,05	0,23	41,33	0,2	0,125	0,61	37,87	0,71	0,3	1,13	49,42	1,25	0,32	0,83	63,4
0,1	0,05	0,21	44,44	0,2	0,14	0,73	34,6	0,71	0,45	2,22	37,46	1,4	0,5	1,67	57,3
0,1	0,65	0,33	36,73	0,2	0,16	0,9	30,66	0,75	0,3	1,09	51,02	1,5	0,5	1,59	49
0,1	0,8	0,45	30,86	0,25	0,16	0,79	37,17	0,75	0,5	2,54	36	1,6	0,4	1,02	59
0,104	0,05	0,21	45,61	0,3	0,2	1,02	36	0,8	0,3	1,04	52,89	1,6	0,5	1,51	58
0,104	0,065	0,32	37,87	0,315	0,2	0,99	37,4	0,8	0,4	1,69	44,44	2	0,58	1,66	61

Table 6. Woven meshless

	al number er 25.4 mm	Wire diar warp wires	neter weft wires	Absolute retention	Nominal retention	Weight	Open area
warp wires	weft wires	[mm]	[mm]	[µm]	[µm]	[kg]	[%]
50	280	0,14	0,10	50-55	50	0,95	61
50	250	0,14	0,11	52-57	55	1,03	61
30	150	0,22	0,17	90-105	90	1,51	60
24	110	0,32	0,24	110-125	105	2,20	49
24	110	0,36	0,25	115-128	110	2,50	49
14	110	0,36	0,25	220-238	200	2,22	62
14	88	0,50	0,32	255-275	250	3,13	48
12	95	0,50	0,30	220-240	220	2,89	63
12	64	0,60	0,42	260-280	250	3,90	57

Basic formulas used for the calculation of parameters:

Open area	$\Delta = \frac{W^2}{(W+D)^2} \times 100$
-----------	---

Number of meshes per inch [25.4 mm] mesh =
$$\frac{25.4}{D+W}$$

Number of meshes
$$L_{cm^2} = \left(\frac{10}{D+W}\right)^2$$

Number of meshes
$$L_{cm} = \frac{10}{D+W}$$
 per 1 cm

Weight
$$M = \frac{12.7 \times D^2}{W+D}$$

Warp – wires arranged along the length of the screen

Weft – wires arranged along the width of the mesh W – mesh (distance measured between the wires)

D – wire diameter

T – division – T = D +W [mm]

A – open area (clearance), total surface area of the meshes expressed as a %

Progress applications

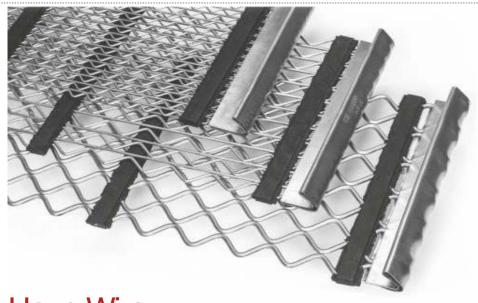






HARP WIRE

COMPLETE SOLUTION OF WIRE MESH



Harp Wire

Harp wire are the best option in the classification of difficult-to-wire mesh materials. wire with square meshes and triangular meshes are both part of our production schedule. TYPE T and TYPE K square meshes, these fall under the category of self-cleaning because of their design, use of waved wires in the horizontal plane, and manner of connecting. Wire self –vibrations effectively the material without clogging the meshes. We provide wire mesh.

Hooks inside the progress let users to attach display to sifters and other devices.

Harp wire – TYPE T

These wire mesh are constructed of circularsectioned wires that are alternately organized with straight and wavy wires in the working plane of the mesh. The wave's arms might be 90° or 60° apart. The diameter of a circle imprinted in the aperture on these wire determines its working size. On decks that are fully loaded, these displays are used (straight wires allow the mesh to be tensioned with large forces, without limiting the vibration possibilities of the wavy wires).

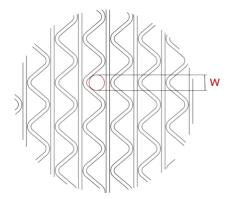


Table 7. Harp wire mesh (TYPE T) (with metal patch)

Mesh size (w) [mm]	Ø of the warp [mm]	Weft wire [mm]	Patch*	Mesh size (w) [mm]	Ø of the warp [mm]	Weft wire [mm]	Patch*
1,2	1	0,8	PU				
				6	2,5	3x1,6/O1,6	rubber
2	1	0,8	PU	6	2	2/2	rubber
2	1,6	0,8	PU				
				7	2,5	2	rubber
2,5	1	0,8	PU	7,5	2,5	2	rubber
2,5	1,6	1,5x0,8	PU	8	2,5	2	rubber
3	1	0,8	PU	8	3	2	rubber
3	1,6	0,8	PU	10	3	2	rubber
3,5	2	1	PU	12	3,5	2	rubber
4,5	2	2,5x1,2	PU				



Wire diameter
TYPE K 0,8 - 6,3 mm
TYPE T 0,8 - 4,5 mm



Material

Stainless steel, spring steel, acid-resistant steel

Application

 Screening of difficult-to-wire materials with high humidity and low flowability

Features

- Independent vibration of wires that create a mesh provide a self-cleaning effect
- Metal patches allow the mesh to be used at an increased operating temperature
- Patches made of abrasionresistant polyurethane and rubber provide an extended operation time of the wire mesh

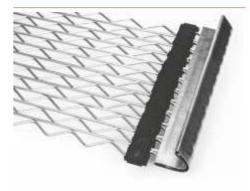


Table 8. Harp wire mesh – (TYPE T) (without metal patches)

Mesh size (w) [mm]	Ø of the warp [mm]	Patch*
4	2/2	rubber
6,3	3,0/3,0	rubber
7	2,5/2,5	rubber
8	3,5/3,5	rubber
9	2,5/2,5	rubber
10	2,5/2,5	rubber
11	2,5/2,5	rubber
12	2,5/2,5	rubber
16	4,0/4,0	rubber
18	4,5/4,5	rubber
20	4,5/4,5	rubber

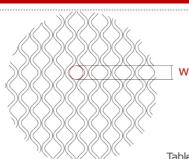
Patch *

HARP WIRE SPECIFICATION

COMPLETE SOLUTION OF WIRE MESH

These TYPE K wire mesh are comprised of circular wires that are waved at a 90° angle in the working plane (horizontal plane) of the wire mesh. The diameter of a circle that is inscribed in the opening (w) determines its working size (w). When wires are stacked side by side, apertures with a square mesh-like form are produced.

Table 9. Harp wire (TYPE K) (with metal patch)





Ø of the warp

[mm]

Table 10. Harp wire –	-(TYPEK
(without metal	patches)

Mesh size (w)

[mm]

Mesh size (w) [mm]	Ø of the warp [mm]	Weft wire [mm]	Patch *
2	0,8	1,5x0,8	PU
2	1	1,5x0,8	PU
2,3	0,8	1,5x0,8	PU
2,5	1	1,5x0,8	PU
2,5	1,2	1,5x0,8	PU
2,7	1,2	1,5x0,8	PU
3	1	2x1	PU
3	1,2	1,5x0,8	PU
3	1,4	1,5x0,8	PU
3,2	1,2	2x1	PU
3,5	1,4	2x1	PU
3,5	1,6	2x1	PU
4	1,4	1,4	PU
4	1,6	1,4	PU
4	2	1,4	rubber
4,5	1,6	3x1,6	PU
4,5	2	2,5x1,2	rubber
5	1,4	2,5x1,2	PU
5	1,6	3x1,6	PU
5	2	3x1,6	rubber
5,5	2	3x1,6	rubber
6	2	3x1,6	rubber
6,3	2	3x1,6	rubber
6,5	2	3x1,6	rubber
7	2	3x1,6	rubber
7	2,5	3x1,6	rubber
7,5	2,5	3x1,6	rubber
8	2	3x1,6	rubber
8	2,5	2	rubber
8,5	3	2	rubber
9	2	3x1,6	rubber
9	2,5	2	rubber
9	3	2	rubber
9,5	3	2	rubber
10	2,5	2,5	rubber
10	3	2	rubber
11	2,5	2	rubber
12	3	2,5	rubber
12,5	3,5	2,5	rubber
13	3	2,5	rubber
13	3,5	2,5	rubber
* Polyurethane (PU)			

1,8	0,8	PU
2,5	1,2	PU
3	1,2	PU
3	1,4	PU
3,15	1,2	PU
3,15	1,4	PU
3,5	1,4	PU
4	2	PU
5	2	PU
6	2	PU
7	2	PU
14	3,5	rubber
15	4,5	rubber
15	5	rubber
16	3,5	rubber
16	4	rubber
16	4,5	rubber
17	3,5	rubber
18	3,5	rubber
18	4,5	rubber
19	3,5	rubber
19	5	rubber
19	4	rubber
20	4	rubber
22	4	rubber
23	4,5	rubber
25	4	rubber
32	4,5	rubber
32	6,3	rubber
35	5	rubber
Progress applications		





^{*} Polyurethane (PU) patches

Normally, we manufacture patches with a width of 25 mm.

In addition, patches with a width of 16 and 35 mm, that can be manufactured on request, are also available.

Rubber patches

Manufactured with a width of approx. 30 mm.

TYTAN PRESSURE WELDED

COMPLETE SOLUTION OF WIRE MESH



TYTAN Pressure Welded

Among the family of steel wire mesh, pressure welded of the TYTAN type are distinguished by having the highest level of durability. Their substantial structure is produced by electric-resistance welding of stainless steel or manganese wear-resistant steel profile wires that are straight round and have a Progress Eco patent. The manufacturing process in use ensures a high level of mesh stability and precise segregation. To allow for unrestricted movement of the material on the mesh surface, working (top) wires should be positioned in accordance with the direction of the material feed.

Fixing and operation

The TYTAN pressure welded must be extremely securely anchored on the sifter.

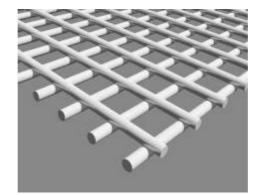
A mesh deck is correctly fastened when no element of the wire mesh breaks away from the supports and falls into self-vibrations during sifter operation.

Otherwise, the mesh would be soon ruined due to wire fractures emerging in the support locations.

The pressure welded mesh can be fixed in two ways.

- Tensioned mesh tensioned with Tensioning bars for pressure wire mesh
- Pressure wire mesh fixed with fastening bars and wedges, screws and hooks.

- round wires



Pressure welded mesh made of round wires with square or rectangular meshes.

\pm

Mesh opening 7,0 - 200,0 mm



Wire diameter



round, profile (type HT and GZ)



Material

Manganese wear-resistant steel, stainless steel, acid-resistant steel, heat-resistant steel

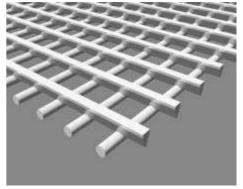
Application

- Initial classification
- Construction elements
- · Safety grates

Features

- · Maximum mesh stability
- · High load carrying ability
- Possibility of using working wires of various shapes and sizes at a specific mesh.

– profile wires



Pressure welded wire mesh made of triangular wires of HT or GZ type.

Progress applications









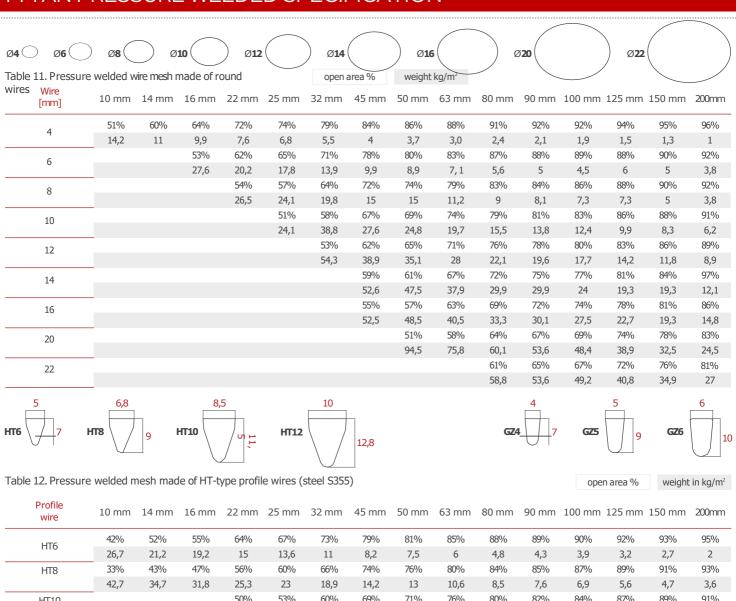
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TYTAN PRESSURE WELDED SPECIFICATION

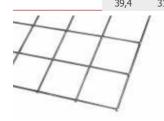
COMPLETE SOLUTION OF WIRE MESH



50% 53% 60% 69% 71% 76% 80% 82% 84% 87% 89% 91% HT10 28 5,5 37 33.7 21.3 19.5 16 13 11.6 10.6 8.6 7.3 51% 58% 67% 69% 75% 79% 81% 83% 86% 87% 90% HT12 36.5 27.6 25.3 16.9 15.2 9,5 7,3 20.8 13,8 11.3

Table 13. TYTAN pressure welded wire mesh made of GZ-type profile wires (steel S355) open area in %

Profile wire	10 mm	14 mm	16 mm	22 mm	25 mm	32 mm	45 mm	50 mm	63 mm	80 mm	90 mm	100 mm	125 mm	150 mm	200mm
GZ4	48%	57%	61%	69%	72%	77%	83%	84%	87%	90%	91%	92%	93%	94%	96%
	23,6	18,5	16,7	12,9	11,6	9,3	6,9	6,3	5,1	4,0	3,6	3,3	2,6	2,2	1,7
GZ5	39%	49%	53%	62%	65%	71%	78%	80%	83%	87%	88%	89%	91%	92%	94%
	39,4	31,5	28,7	22,5	20,4	16,6	12,4	11,3	9,1	7,3	6,6	6,0	4,8	4,0	3,1
GZ6	39%	49%	53%	62%	65%	71%	78%	80%	83%	87%	88%	89%	91%	92%	94%
	39,4	31,5	28,7	22,5	20,4	16,6	12,4	11,3	9,1	7,3	6,6	6,0	4,8	4,0	3,1



The offer also includes pressure welded wire mesh made of round wires with diameters of 2-5 mm and profile wires of type GZ2, GZ3, D8, D10, SA35, SA45, SA50, 28 Sb, 34Sb, 42Sb, 50Sba, pressure welded to transverse wires of a bearing-bar type, from 8 x 2 to 40 x 3 mm. Pressure welded grates made of stainless steels, low-carbon steels with Galfan-type coating, and aluminium alloy.

The maximum size of the pressure welded grates is 6000 x 2000 mm. Grates with a wide range of applications in the construction industry and the architecture industry due to their high manufacturing aesthetics (e.g.: fencing, ceiling, and façade panels).



weight in kg/m²

open area %

FLAT TOF

COMPLETE SOLUTION OF WIRE MESH

Mesh opening 4,0 - 150,0 mm (kwadratowy kształt oczek)

Wire diameter 1,6-12,0 mm

Spring steel, carbon steel, stainless steel, heat-resistant steel

Material





- Classification of aggregates, coal, coke, etc.
- Construction elements and safety grates

Flat Top Mesh

Flat top have a flat working surface because to the sufficient circular embossing portions of the warp and weft wires. This sort of wire mesh arrangement also provides great mesh stability. We provide optimal material solutions based on a comprehensive variety of top-quality steels of certain species, depending on the application and operating circumstances. We supply flat top mesh in sheets or equipped with hooks, ready for installation on sifters and other devices.

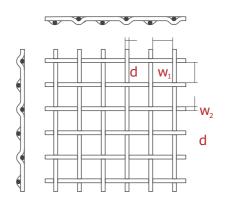
Features

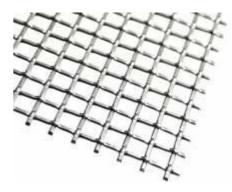
- Flat working area
- Stable structure of the meshes
- High load carrying ability
- High open surface ratio

Flat top mesh

Flat top mesh are considered as heavy type. They are useful for screening material with a big grain size. They are employed in both the initial and final categorization stages.

Pressed mesh TL are an excellent alternative to perforated metal sheet mesh.

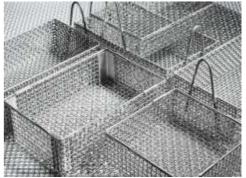




Typical Progress applications







FLAT TOP SPECIFICATION

COMPLETE SOLUTION OF WIRE MESH

Table 14. Fl	at Top mesh T	L									
Mesh size in [mm]	Ø (d) of the warp [mm]	Weigh t [kg/m ²]	Open area [%]	Mesh size in [mm]	Ø (d) of the warp [mm]	Weigh t [kg/m ²]	Open area [%]	Mesh size in [mm]	Ø (d) of the warp [mm]	Weigh t [kg/m ²]	Open area [%]
4	1,6	5,81	51	32	8	20,32	64	63	10	17,40	74
5	1,6	4,93	57	34	8	19,35	66	63	12	24,38	71
8	2,5	7,56	58	35	5	7,94	77	65	8	11,13	79
				35	6,3	12,20	72	65	10	16,93	75
12	4	12,70	56	35	8	18,90	66	65	12	23,75	71
14	3,2	7,56	66	36	8	18,47	67	70	8	10,42	81
14	3,5	8,89	64	40	5	7,06	79	70	10	15,88	77
16	3,2	6,77	69	40	6,3	10,89	75	70	12	22,30	73
16	4	10,16	64	40	8	16,93	69	75	8	9,79	82
18	4	9,24	67	40	10	25,40	64	75	10	14,94	78
20	4	8,47	69	45	6,3	9,83	77	75	12	21,02	74
20	5	12,70	64	45	8	15,34	72	80	8	9,24	83
20	6,3	19,17	58	45	10	23,09	67	80	10	14,11	79
22	5	11,76	66	50	8	14,01	74	80	12	19,88	76
25	4	7,01	74	50	10	21,17	69	90	10	12,70	81
25	5	10,58	69	53	8	13,32	75	90	12	17,93	78
25	6,3	16,10	64	55	8	12,90	76	100	10	11,55	83
30	5	9,07	73	55	10	19,54	72	100	12	16,33	80
30	6,3	13,89	68	60	8	11,95	78	110	10	10,58	84
32	4	5,64	79	60	10	18,14	73	110	12	14,99	81
32	5	8,58	75	60	12	25,40	69	125	10	9,41	86
32	6,3	13,16	70	63	8	11,45	79	125	12	13,35	83



Finger wire

Finger wire are used to classify moist materials from the outset.

These wire mesh are made of one-sided segments formed by round rods embedded in specifically engineered rubber or polyurethane profiles. Using a cascade fastening method, the wire are attached to the sifter's transverse beams. We provide finger screens. Segments will be put on both fixed and mobile sifters.



Opening size od 10,0 - 150,0 mm



Wire diameter od 8,0 - 40,0 mm



Material Manganese steel, spring steel.

Application

- Initial classification of difficult-to-wire, clayey, and contaminated materials
- Recycling

Features

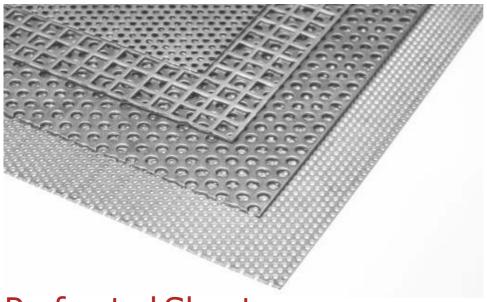
- High load carrying ability
- High performance obtained from the area unit of the wire mesh

applications



PERFORATED SHEET

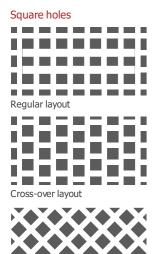
COMPLETE SOLUTION OF WIRE MESH



Perforated Sheet

Perforated metal sheets are a traditional form of steel industrial sheets. The perforation technology-based manufacturing method offers a wide range of hole sizes, shapes, and layout options. This ensures that the optimal operation settings are obtained. This type of sheets is widely used in all types of machinery and devices that operate in both static and dynamic systems.

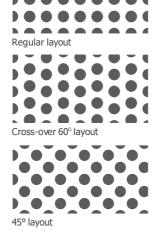
Available hole layouts



45° layout Progress applications

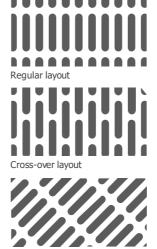


Round holes





Elongated holes





.. _____

Round holes

0,5 - 120,0mm cross-over 60° layout, 45° layout, regular layout

Elongated holes

1,0 x 20,0 - 30,0 x 65,0 mm regular layout, cross-over 60° layout, 45° layout

Square holes

3,0 x 3,0 - 150,0 x 150,0 mm regular layout, cross-over 60° layout, 45° layout

Hexagonal holes

8,0 - 65,0 mm

cross-over layout



Material

Carbon steel 0.5-16.0 mm Acid-resistant steel 0.5-8.0 mm Non-ferrous metal 0.5-4.0 mm

Application

- Plants involved in the processing of fossil raw materials
- Classification of loose materials
- · Mechanical filtration of liquids
- Food industry
- Grating processes in the fruit and vegetable industry

Hexagonal holes



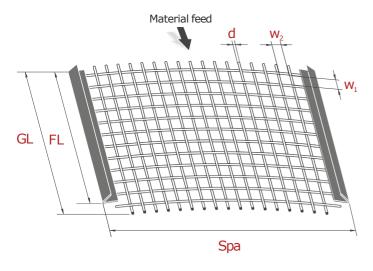
Cross-over layout

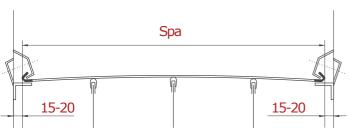
Other Perforated sheet (custom design) are available on client request,

if you have a design to please share with us we have developed according to your need.



Side tensionong





Markings

Spa mesh length inside fittings

FL Width of the hook

 $\operatorname{\mathsf{GL}}$ width of the mesh with overlap

w mesh size

d wire diameter

Unit of measurement: [mm]

Hook model



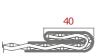


Types of hooks

Z1



Z5



Z1



Z1W





V1



V2



. .

V9

Rubber protective and sealing profiles

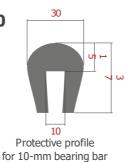
PG1



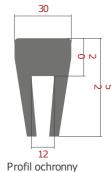
PG8



Pg10

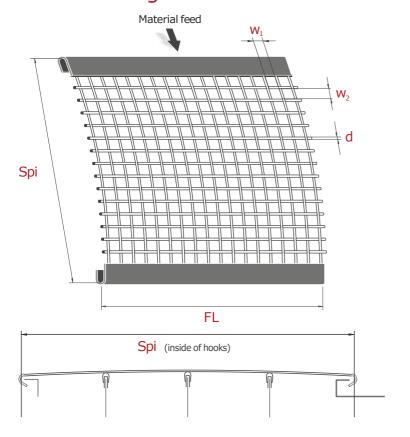


Pg12



Profil ochronny na płaskownik 12 mm

End tensioning



Markings

Spi length of the mesh

FL width of the hook

w mesh size

d wire diameter

Unit of measurement: [mm]

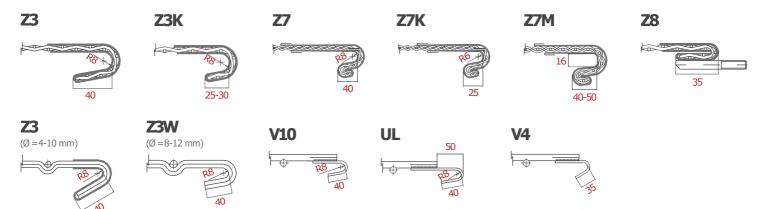
Hook model

U_____

U/S

U/S2

Types of hooks



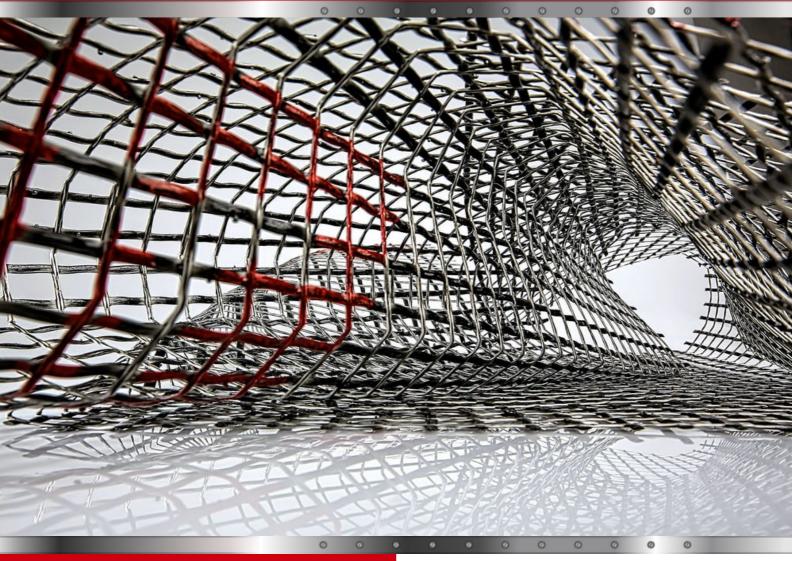
Consulting and service

We offer comprehensive consulting services for industrial mesh, filter segments and the process systems that use them. We will advise you on mesh types, specifications, materials, and installation methods. We have experience in expanding and modernizing existing lines as well as completing new technological lines. We provide our customers with a complete service. We offer expert support for mesh installation, commissioning and operation to maximize your display's potential. We manufacture all items according to our own technical documents or those provided by our customers.





COMPLETE SOLUTION OF WIREMESH



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