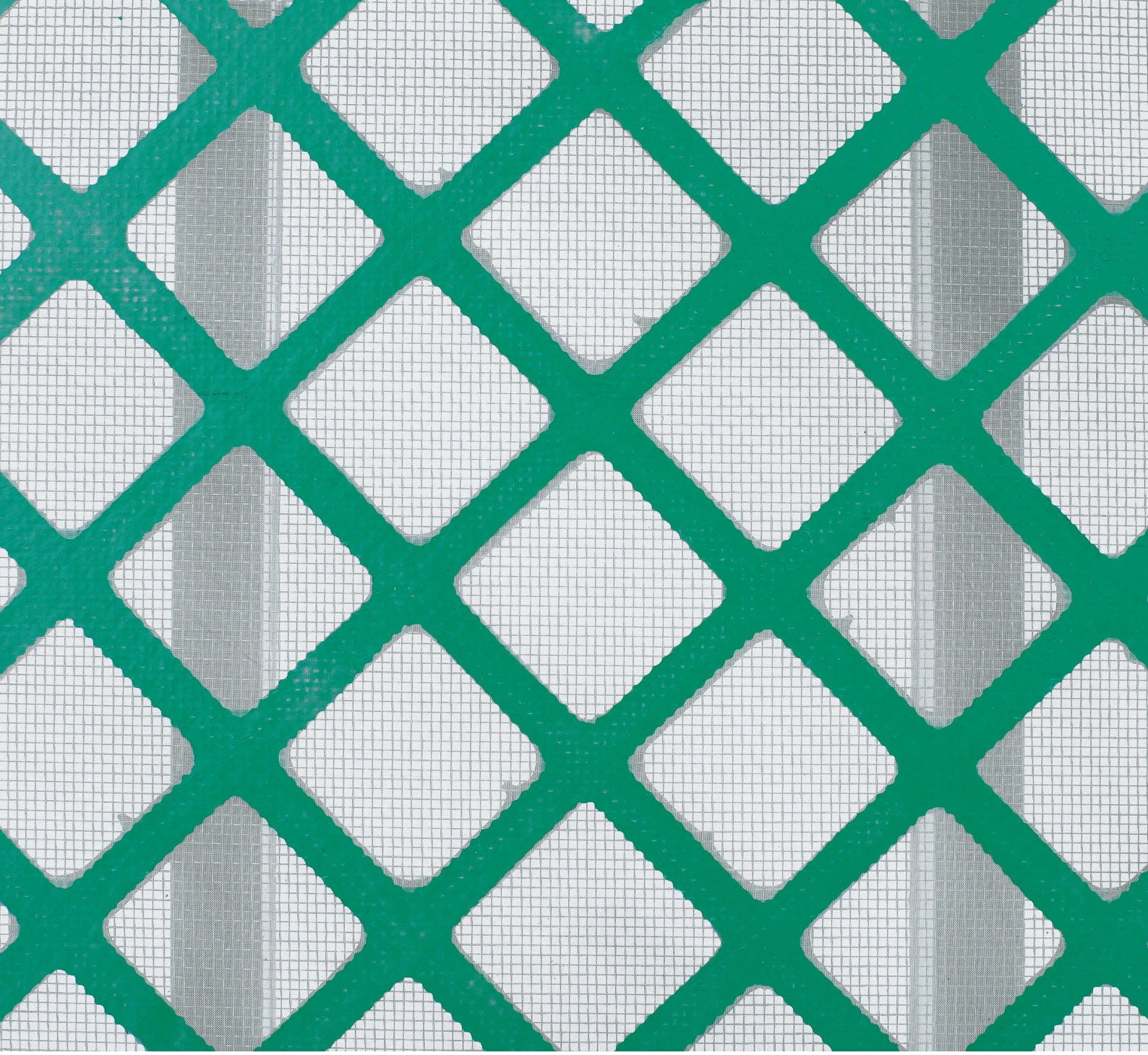


RED STAR
WIRE SCREENS

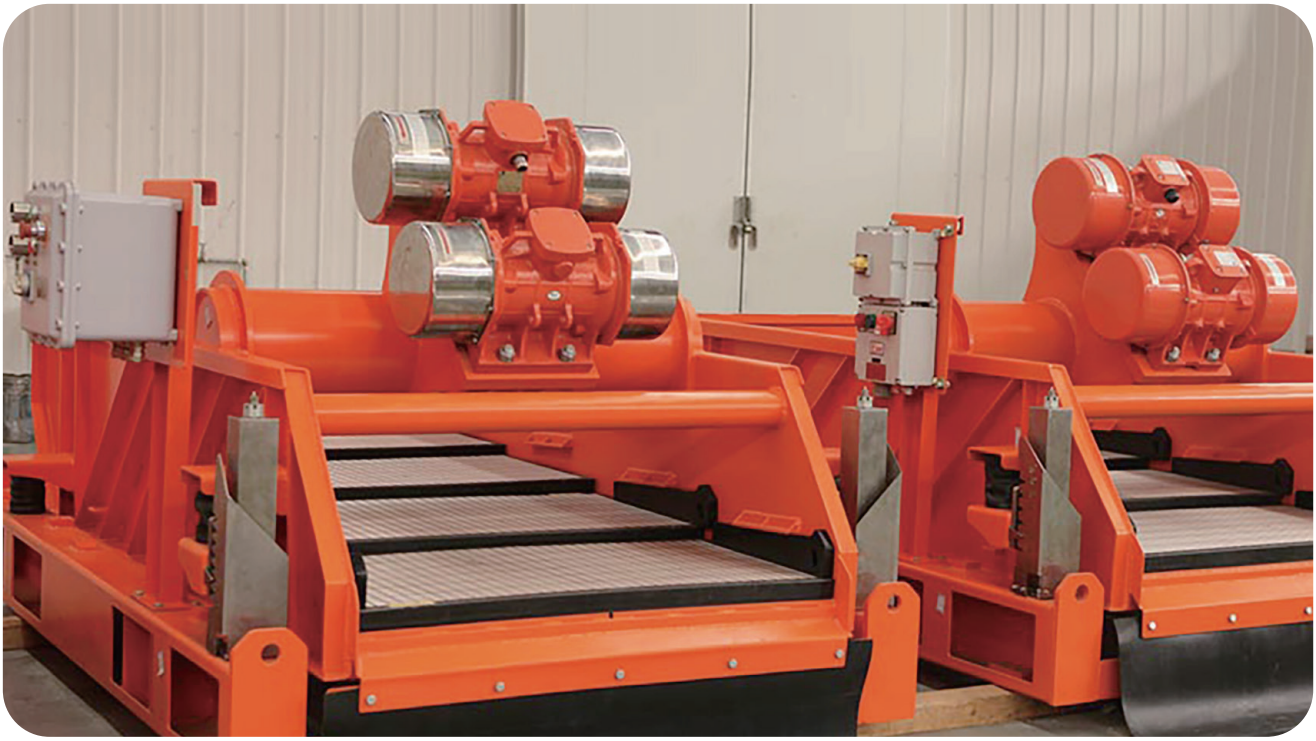
紅星篩網

SINCE 1989

STAINLESS STEEL COMPOSITE SCREEN MESH

▪ STAINLESS STEEL COMPOSITE SCREEN MESH

- Specifically designed for solid-liquid separation in oil drilling fluid applications, this multi-layer functional filter mesh is composed of stainless steel wire mesh of different mesh sizes through a special composite process, typically comprising a support layer, a filtration layer, and a protective layer.
- (1) Support Layer: Constructed from high-stiffness stainless steel wire mesh, ensuring structural stability under high-frequency vibration (1,500–3,000 times per minute) and high-pressure drilling fluid impact;
- (2) Filter Layer: Formed through precision weaving to achieve uniform pore sizes (20–300 mesh options), precisely intercepting rock debris particles ranging from 0.075 to 1.2 mm in drilling fluid;
- (3) Protective Layer: Constructed from acid- and alkali-resistant stainless steel material to withstand corrosion from corrosive media such as hydrogen sulfide and chloride ions in drilling fluid, thereby extending service life.



- Stainless steel composite mesh, featuring a gradient pore size design for graded filtration, with the upper layer intercepting large particles to prevent blockages and the lower layer providing fine filtration to enhance separation efficiency. Additionally, the composite manufacturing process ensures the surface flatness deviation is controlled within 0.5 mm/m, ensuring tight adhesion to the vibrating screen frame and minimizing secondary wear caused by resonance.

- The stainless steel composite mesh meets the technical specifications of the API RP 13C drilling fluid processing standard, making it suitable for complex drilling environments such as shale gas and deep wells. It is a critical consumable for ensuring stable drilling fluid performance and improving drilling efficiency.

▪ *Product Classification*

Metal Frame Composite Vibrating Screen Mesh

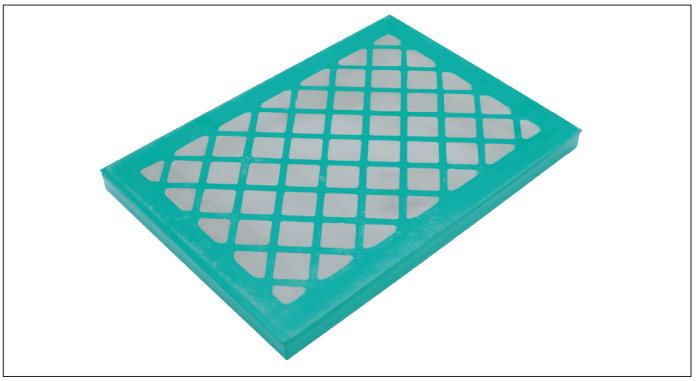
(1) Stainless steel wire mesh is directly bonded to the steel plate. It is then tightly bonded to the steel frame and metal plate.

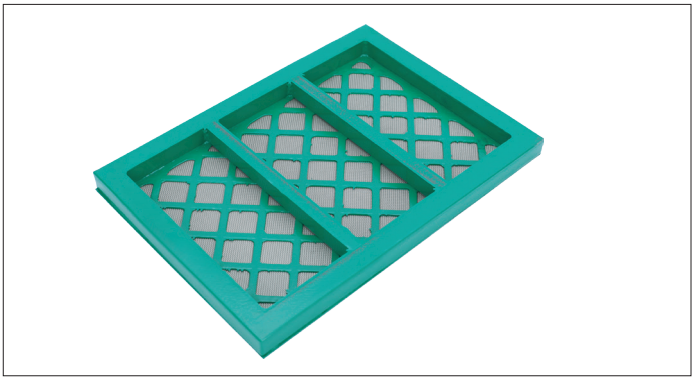
(2) Each layer of wire mesh has different mesh sizes, enabling precise and reasonable micro-screening.

(3) It forms a reliable integrated structure with a high-strength steel frame, reinforced support, and appropriately tensioned screen cloth, significantly enhancing flow capacity, strength, and service life. A quick wedge-tensioning device facilitates screen installation and reduces downtime during machine replacement.

(4) The wire mesh is divided into several independent small sections to prevent localized damage caused by excessive expansion. Additionally, special rubber plugs are used for repairs, saving time and reducing operational costs.

Common mesh size range	Size（mm）
20 – 325	585*1165
20 – 325	635*1253
20 – 325	720*1220
20 – 325	712*1180
20 – 325	737*1067





Wave-shaped Composite Vibrating Screen Mesh

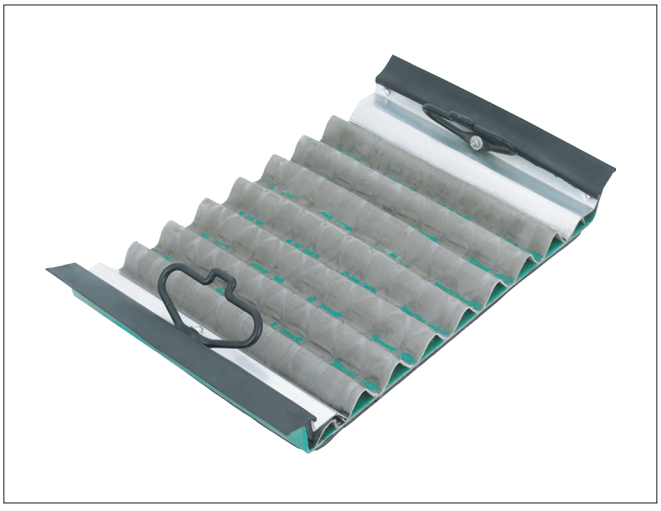
The unique wave-shaped three-dimensional structure effectively enhances the rigidity and overall strength of the screen mesh, extending its service life by 2-3 times compared to flat composite screen mesh.

It effectively disperses the high-frequency vibration stress and material impact force generated during the screening process, significantly reducing metal fatigue.

Enhanced resistance to deformation under material impact ensures sustained screening accuracy.

Increased effective screening area enables processing of larger volumes of drilling fluid, thereby improving the overall efficiency of the solids control system.

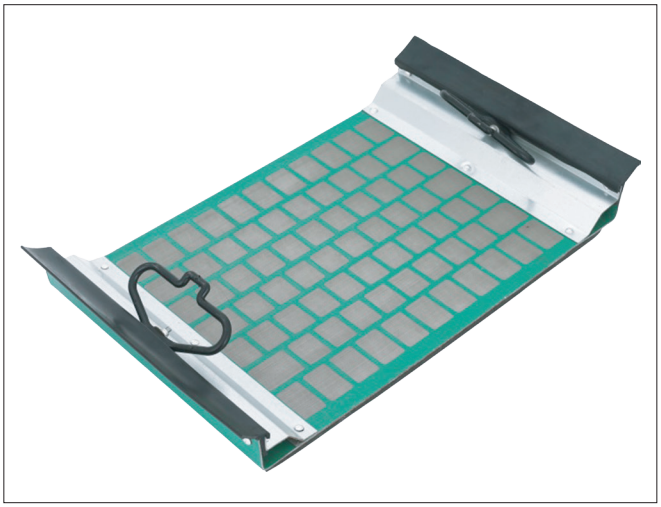
Common mesh size range	Size（mm）
20 – 325	697*1053
20 – 325	697*1050
20 – 325	700*1165



Flat Composite Vibrating Screen Mesh

The flat filter screen surface allows drilling fluid and drill cuttings to be distributed more evenly on the screen, reducing material accumulation and “material leakage.” This increases the effective filter area utilization rate and improves liquid processing capacity. The tensioning structure is easy to install, resulting in more stable screening results.

Common mesh size range	Size（mm）
20 – 325	697*1053
20 – 325	697*1050
20 – 325	700*1165
20 – 325	697*846

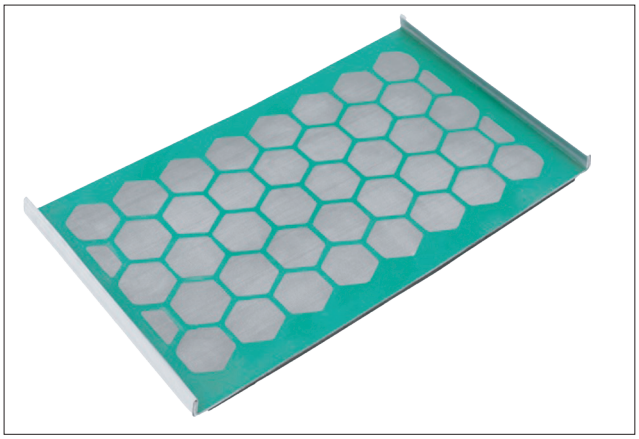


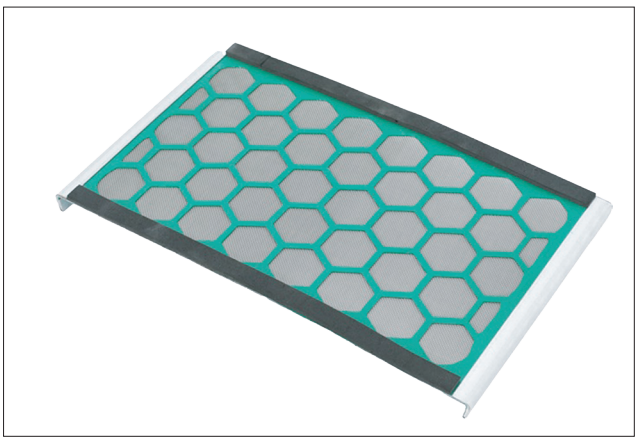
Standard Composite Vibrating Screen Mesh

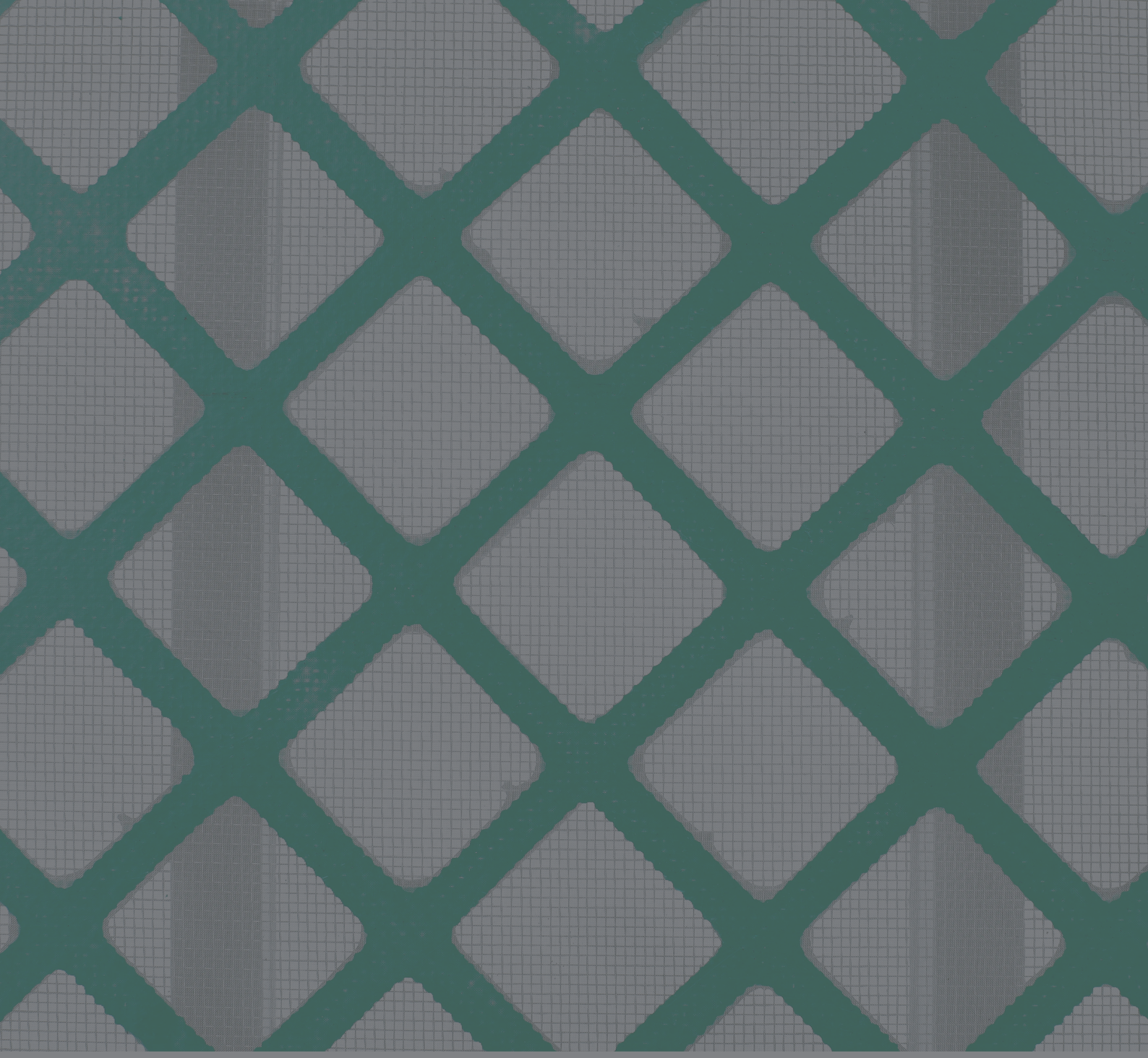
Typically composed of multiple layers (commonly 2-3 layers) of stainless steel mesh with varying degrees of coarseness and functionality. The bottom layer consists of coarse-gauge, large-aperture support mesh, providing strength and impact resistance; the middle layer serves as a transition layer; and the top layer comprises fine-gauge, small-aperture precision filtration mesh.

Screens with different mesh sizes (aperture sizes) can be manufactured to meet diverse drilling solids control requirements, ranging from coarse screening to fine screening.

Common mesh size range	Size（mm）
20 – 325	600*1040
20 – 325	460*1400
20 – 325	1000*1150







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