

# Why choose Red Star's products?

For all of mining, sand & aggregate, hot mix asphalt plants and road construction companies, every cent saved from high quality production, fast parts changes and a longer part wear life will be eventually converted into hard profits and real cost reduction of companies. As the most important part of vibrating screens, a set of high-quality wire cloth with **high accuracy, long wear life and high anti-impact capability** is the assurance of quality production in all industries above.

## Why choose Red Star's products?

### 1. Material, looks the same but different--

Woven screen media is usually made with high carbon or oil tempered wire. The chart below shows common steel wires we use. Among these different varieties steel, Red Star highly recommend you choose 65Mn steel. 65Mn steel is a Chinese GB standard spring steel grade, Manganese (Mn) improves hardenability, so the strength hardness, elasticity is higher than that of 65# steel. 65Mn steel is considered to be equivalent to AISI SAE 1065, and some people also compare 65Mn with AISI/SAE 1075, 1095, 5160; JIS SK5 (SK85) and Chinese 8Cr13Mov.

Working with its raw wire supplier, we offer our clients the best steel wires with the optimum mix of **ductility, hardness and tensile strength**.



- All Red Star wires are customized from steel plans we designated.
- Each batch of steel wire has the certificate issued by SGS.
- Each batch of steel wire will be remeasured and tested in our lab.

序号No	牌号 Grade	化学成分 % Chemical Composition		
		C	Si	Mn
1	45	0.42-0.50	0.17-0.37	0.50-0.80
2	50	0.47-0.55		
3	55	0.52-0.60		
4	60	0.57-0.65		
5	65	0.62-0.70		
6	70	0.67-0.75		
7	65Mn	0.62-0.70		0.90-1.20
8	72A	0.70-0.75	0.15-0.35	0.30-0.60

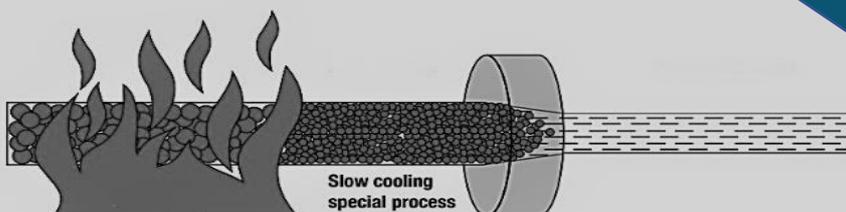
Quality woven wire media is manufactured with a higher carbon and manganese content than traditional high tensile woven wire mesh, providing more resistance to abrasion, longer wear life and better overall performance. Its high ductility, hardness and tensile strength make it less susceptible to breaking in high impact conditions, and its extended wear life reduces downtime and replacement costs.

The best screens must have the right combination of all three critical factors- **ductility, tensile strength and hardness**. To achieve all 3 factors above, Red Star does not only focus on quality materials but also adopts special **heat treatment process** to improve overall performance of steel wires. After treatment, both internal structure and physical properties of steel wire has been significantly improved.



### Patented Process

Wire is heated red and then slowly cooled in a proprietary process before drawing.



Rod is stress relieved prior to drawing.  
**Result:** Excellent tensile strength, hardness and ductility.

[Heat Treatment of High Carbon Steel Wire](#)

This process cannot be seen by our clients. But it makes huge differences between good screen media and a bad one.

## 2. The Devil is in the details that is why we care...

Old manufacturing methods and the use of inferior materials can lead to screen media that simply doesn't last. Some manufactures also use a cheaper method to produce wire mesh. As a result, they are offering woven wire at considerably lower prices. But what you get is a brittle woven wire that breaks easier and wears faster, eventually screens out-of-spec product and cost you significantly more in labor, maintenance and lost production.

Loose weave commonly found in cheap woven mesh which never can be acceptable.

To make right screen media, Red Star, the biggest screen media manufacturer in China, has invested heavily in technology and equipment. We own 10 production lines and more than 600 crimping wheels. But more importantly, we own a capable and professional team of workers who always pay attention to details during the production.



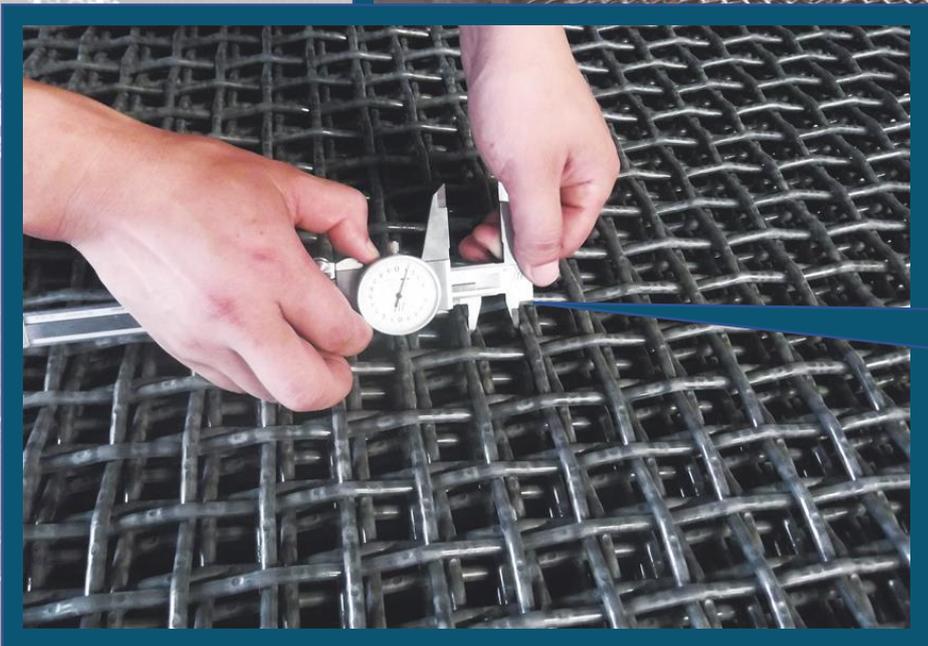


Screen squareness tolerance is controlled within 9mm every 2000mm Diagonal Length.



All these error tolerances are using here are our company's own standard which is higher than the International Standard.

Screen length and width tolerance is  $\pm 5\text{mm}$ .



Aperture tolerance  $\pm 3\%$ .

More details



Good Quality woven mesh has zero tolerance to any movement within crimp or weave. Tight weave improves wear life in the field.



Wire spur should be cut neat. Spur Length should be longer than the wire diameter, but be shorter than half of an aperture. Though it is not a quality problem. But it will be troubles when installation.

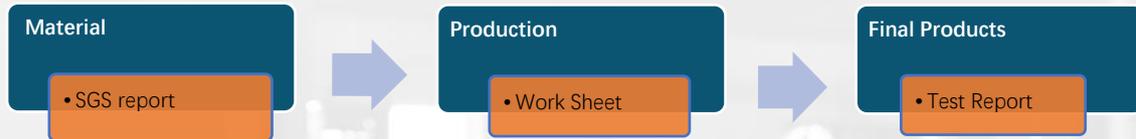


Details make perfection.

The accuracy of crimping wheels decide the accuracy of crimped steel wires and squareness of apertures. The crimping wheels need to be recalibrated after every shift to keep the accuracy.

### 3. Our ultimate goal: Zero Defect.

Building a successful team is not only about finding a group of people with the right mix of professional skills, but also about focusing on the goal, hardworking and leadership. To achieve our goal, namely making right screen media, Red Star has set up a set of strict working procedures to supervise the whole process.



The complete documentation from material to final products ensure quality uncompromised. Product related records shall be retained for at least 10 years to make sure every product we made can be retraceable.

WORK ORDER 工作单	
PO1611-2	Container 容器编号
Run 订单号 1 of 1	Order 订单号
28 pcs 片	Woven 编织
830.0 kg 公斤	Wire-To-Wire 筛网规格
1238	1938
Diameter 直径 3.05 OPG 1 直径 6.35 CRMP 筛网 c1	
MAX 最大直径 1.50 MIN 最小直径 1.25 Set de roue 编号 388 Scalier 筛网规格 790 Shot 筛网规格 5386 Wires of dia 51,944 mm Wires of dia 1,257 mm	
1. Control of quality 质量控制 2. Control of inventory 库存控制 3. Control of production 生产控制 4. Tightness of sample 样品紧度	



Work Sheet example

In last more than 100 years, people constantly tried to improve screening efficiency and avoid problems like: short wear life, blinding or pegging, low throughout rate and less noise... To achieve this goal, people used and invented different materials, new forms of screen media and different shapes of aperture. During the practice, people did solve some problems or at least partly problems. But the perfect solution does not exist. Red Star has no secret weapon that can solve all the problems you may have. But we can always provide the most suitable and the most reliable screen media to you.