



## The Reality of Cheaper Woven Mesh



### Look Past Cheap Price, Choose Return On Investment

When choosing which brand of woven wire screen media to use in your operation, look at the entire picture when comparing Nepean Rubber's proprietary processed OptimumWire® woven wire to the competition.

Cheap pricing up front often leads to higher costs incurred by the end of each screen cloth's life.

### All Wire Is Not Created Equally

Wire with a higher hardness provides better resistance to abrasion, however oil tempered wire does not resist impact and will break easier producing a shorter screen life.

Ductility, hardness and tensile strength is determined by the metallurgical content, or what the wire is made of, and wire processing. The truth is, many competitive manufacturers have less carbon and manganese content, which are two critical ingredients for strength, hardness and abrasion resistance. They also use a cheaper process to draw the wire. As a result, these manufacturers are offering woven wire at prices considerably less. But that is exactly what you get—a brittle woven wire that breaks easier and wears faster that eventually screens out-of-spec product, costing you significantly more in labour, maintenance and lost production.

### The Weave Makes The Difference

Nepean Rubber has the most stringent weaving and finishing quality standards in the industry. Any movement within the crimp causes additional wear and shortens the life of the screen. Our manufacturing process for quality demands zero tolerance to any type of movement within the crimp or weave of our screen media. This improves the wear life in the field. Nepean Rubber strives for manufacturing excellence in its metallurgical content and weaving process every time. That's the built-in integrity we achieve every day. See for yourself.



#### Nepean Rubber believes in product integrity for it's customers

That is why we stand firm in our metallurgical content, proprietary process & manufacturing excellence ensuring that the OptimumWire® screen cloth you purchased in the past is the same you will buy today. This equals a better return on your investment due to less passing of oversize product, screen changes and replacement costs

# Seeing is believing

The charts below compare OptimumWire® against the competition. The higher the carbon and manganese content the better the wear life, higher resistance to abrasion and produces a strong durable wire.


View the charts of the independent laboratory tests below and see for yourself

WIRE DIAMETER .192"						
Supplier	OPTIMUMWIRE®	Brand A	Brand B	Brand C	Brand D	Brand E
Identification & Physical Properties						
Hardness (Rockwell C)	48	40	41	41	40	39
Metallographic Analysis						
Patented	X	X				X
Hard-Drawn					X	
Oil Tempered			X	X		
Chemical Analysis						
Carbon	0.74	0.58	0.54	0.55	0.57	0.48
Manganese	1.16	0.67	0.72	0.77	0.71	0.65

WIRE DIAMETER .243"					
Supplier	OPTIMUMWIRE®	Brand A	Brand B	Brand C	Brand D
Identification & Physical Properties					
Hardness (Rockwell C)	41	39	33	31	37
Metallographic Analysis					
Patented	X				X
Hard-Drawn			X	X	
Oil Tempered		X			
Chemical Analysis					
Carbon	0.72	0.68	0.38	0.49	0.48
Manganese	1.13	0.63	0.70	0.71	0.65

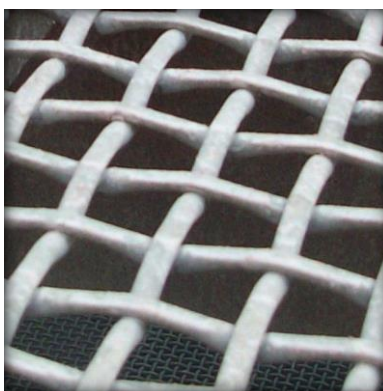
WIRE DIAMETER .362"									
Supplier	OPTIMUMWIRE®	Brand A	Brand B	Brand C	Brand D	Brand E	Brand F	Brand G	Brand H
Identification & Physical Properties									
Hardness (Rockwell C)	39	39	30	27	20	24	21	24	22
Metallographic Analysis									
Hard-Drawn	X		X	X	X	X	X	X	X
Oil Tempered		X							
Chemical Analysis									
Carbon	0.67	0.56	0.50	0.57	0.54	0.46	0.47	0.46	0.50
Manganese	1.12	0.86	0.67	0.68	0.68	0.66	0.71	0.68	0.79

## Field Test Results

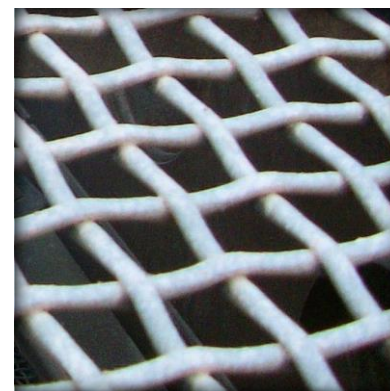


- Achieve up to 40% longer wear life against same Ø wire diameter from competitor screen
- Experience less downtime changing out screens
- Maximise production output
- Maintain production quality

Competitor mesh



OPTIMUMWIRE®



Original wire diameter at installation was 7.9mm

After 103 hours of screening extremely abrasive material the competitor's screen cloth has considerable wear and wire Ø 5.41mm representing 32% wear.

The **OptimumWire®** screen cloth has less wear and Ø of 6.86mm representing 13% wear.

After 180 hours of use & screening 29,758 tons of material, the **OptimumWire®** screen was still screening in-spec material while the competitor had to be replaced.