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# SIEVING FAQ

Clearing up the *most commonly* held misconceptions regarding high-energy sieving

## QUESTION 1

# Can you sieve down to 10um without ultrasonics?

Yes. It's about using the right technology.



### Hi-Sifter

Screens down to 10 $\mu\text{m}$   
using a mechanical  
approach with no  
screen cleaning

10 $\mu\text{m}$



### Elbow-Jet

Separates powders as  
fine as 0.5 $\mu\text{m}$  using  
only airflow.

0.5 $\mu\text{m}$

## QUESTION 2

# High-Energy vs. Ultrasonics?

### ✗ Ultrasonics

“deblinds” material after it has settled in the hole.

Tensioned screens lead to shorter screen life.

### ✓ Hi-Sifter

Keeps particles suspended in the air using vertical energy + tensionless wirecloth. Prevents blinding before it starts.

## QUESTION 3

# Can you screen difficult powders?

***"Clogging and blinding are symptoms of the wrong method."***

The Hi-Sifter's high-energy motion prevents buildup on the screen surface. Powders that normally blind conventional sieves flow cleanly without clogging or interruption.

**Result: Higher Yields, No Downtime**

## QUESTION 4

# Why does it work on heavy metal powders?

**Energy overcomes mass.**

The high-energy vertical spectrum of the Hi-Sifter is powerful enough to keep even the densest particles (like **Tungsten** or **Nickel**) suspended and flowing efficiently on a commercial scale.

This prevents the “packing” effect that plagues other sieves allowing for high volume and efficient separations.

**W**

Tungsten

**Ni**

Nickel

## QUESTION 5

# Can we scale from R&D to production?

Our ISO 9001:2015-certified toll processing center handles everything from 100lb test runs to millions of pounds during full scale production.



## QUESTION 6

# What are some operational benefits?



### Eliminate Screen Logistics & Costs

Stop shipping frames back for "rescreening." The Hi-Sifter allows for immediate, on-site screen changes. Easily swap the working mesh sizes **in as little as 15 minutes** without buying new frames, saving significantly on logistics and inventory costs.



### Maximize Product Yield

High-energy vertical vibration breaks surface tension and **prevents screen blinding**, ensuring high throughput and minimizing the loss of good product to the oversize fraction.



### 24/7 Continuous Operation

Engineered for durability with **zero downtime**. The robust mechanical design eliminates common breakdown points, enabling non-stop production schedules even with difficult powders.

# Now that you know the truth about sieving...

Are you ready to see what the Hi-Sifter can do for your process?

- 98%+ Yields
- No Screen Mesh Blinding
- 15-Minute on the Floor Screen Changes
- Low Cost of Ownership & Operation Over Time

Scan for Info



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[www.elcanindustries.com](http://www.elcanindustries.com)