

# An Easy Way to Monitor a Media Shaker Screen

Establishing and maintaining shaker screen separators for shot sizing can be a challenge.

Motor driven eccentric cams are used to shake a screen stack assembly. Proper adjustment of the upper and lower weights will optimize shot throughout. Once the system is properly tuned, its performance can be easily monitored and maintained.

First, be sure the screens are in good condition. No broken or frayed mesh, no blinded holes, no tramp material, etc. Be sure the amount of media on the screen is closely controlled and don't over or underfeed the system.

Once the system is operating at maximum capacity, you will need to measure and record the vertical motion amplitude. A simple way to do this is with a special decal made by Electronics Inc. called a Screen Check.

The decal has a row of circles, each one larger than the previous. As the screen vibrates all of the circles will vibrate. The optical illusion blurs the images. The smallest circle will appear as two distinct circles separated by some distance. The largest circle appears as a blur. One of the circles will be moving just enough to appear to be a "figure 8". It may be vertical or slanted, depending upon the vibration of the screens. Monitor the decal from time to time. If the figure 8 is made by a larger or smaller circle then the shaker is not vibrating at the same rate and may need adjustment.

Typical problems include:

- Clogged (blinded) screens
- torn or frayed screens
- too little media
- too much media
- contamination - foreign material
- contamination - oil or water on media

The Screen Check is available for free from the Shot Peening & Blast Cleaning Universe web site at:  
[www.shotpeener.com/learning/screen\\_check.html](http://www.shotpeener.com/learning/screen_check.html)

## Screen Motion Check

Tape this decal on the side of the screen separator. Note which circle forms a "figure 8" as the screen vibrates. If a different circle forms a figure 8 during use, the screens are out of adjustment and need attention.



Provided by:



**Electronics Inc.**  
Shot Peening Controls

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