Technical Data Sheet

Piano Wire Screens

A Piano Wire Screen (Cross Harp) is made up of single strands of straight highly tensioned wire, connected at either end of the screen with a sheet metal hook. Spacer strips sit over the top of the stringers to maintain correct aperture. This produces a long, uninterrupted slot between the stringers.

Benefits of the Piano Wire

- Cross harps increase productivity. This results in more tonnes per hour for each square foot of screen area than any other screen surface.
- Piano Wires make screening of sticky and damp materials possible where screening with a woven product would be impossible.
- Piano Wires allow screening at smaller apertures than would otherwise be possible. When screening difficult materials your product could be of better quality than your competition or worth more money per tonne.

Piano Wire Types

- **End Tensioned** – Used in most mobile screening plants
- **Side Tensioned** – Used in place of standard side tension applications

Piano Wire

Standard Apertures to Wire Diameters

The following list of specifications gives all current apertures and wire diameters available.

HARP SCREEN TYPE CHART				
APERTURE	**LIGHT DUTY**	**STANDARD DUTY**	**HEAVY DUTY**	**EXTRA HEAVY DUTY**
Mm	**Wire Dia.mm**	**Wire Dia.mm**	**Wire Dia.mm**	**Wire Dia.mm.**
1.00			0.70	0.80
1.25			0.70	0.80
1.50			0.70	0.80
1.75		0.70	0.80	1.00
2.00		0.70	0.80	1.00
2.50		0.70	0.80	1.00
3.00	0.70	0.80	1.00	1.25
4.00	0.80	1.00	1.25	1.40
5.00	1.00	1.25	1.40	1.60
6.00	1.00	1.25	1.40	1.60
7.00	1.25	1.40	1.60	1.80
8.00	1.25	1.40	1.60	1.80
9.00	1.40	1.60	1.80	2.00
10.00	1.40	1.60	1.80	2.00
11.00	1.60	1.80	2.00	
12.00	1.60	1.80	2.00	
14.00	1.80	2.00		
16.00	1.80	2.00		

Available in both high tensile and stainless

Piano Wire Screen Description

Light Duty:	Use for screening wet sticky materials where screening is *Very difficult or for very high productivity*
Standard Duty:	Use for screening damp materials where screening is *Difficult or for good productivity*.
Heavy Duty:	Use for screening dry abrasive materials *Will give lower productivity*
Extra Heavy Duty:	Use for screening very abrasive, very dry free flowing materials *Will give very low productivity*

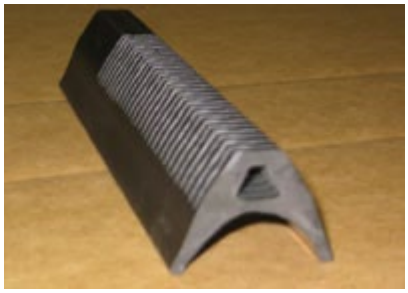
Piano Wire

Spacer Strip Types

The correct spacer type for the screen box and specification is all important. Harp screens are available with four different spacer types.

Round Metal: To suit round support bars or capping rubber

Square Metal: To suit flat bar supports without capping rubber.



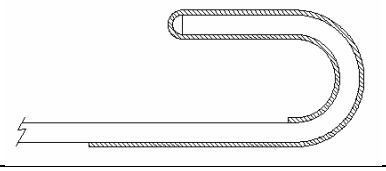
Round Plastic: To suit round support bars or cupping rubber.

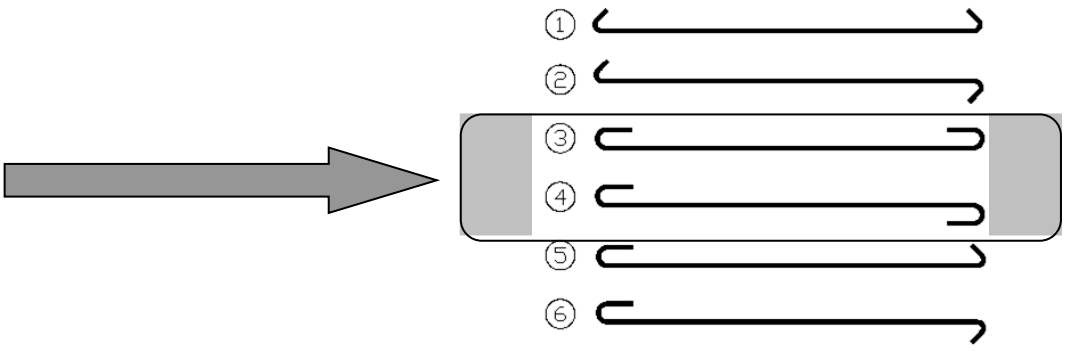
Square Plastic: To suit flat bar supports without capping rubber.

Piano Wire Sheet Metal Hook

The piano wire sheet is installed with the following hook.

180º hooks, with a gap of 20mm, galv sheathing
'E' Type



Hook Orientation

Piano wire screens have hooks orientated in either type 3 or 4. Type 3, see below is the most common for end tension piano wires mobile screening plants.