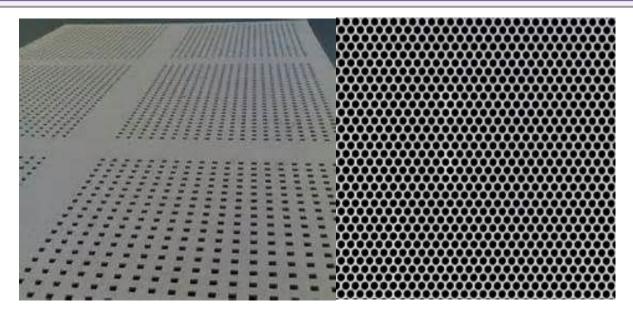
## **Nickel Perforated Metal**



Heanjia Super-Metals offer a broad assortment of hole sizes in nickel perforated metal to meet your filtration needs. For a special perforation size need, you should consult with our team. We have inhouse production department where dies are made to meet the special needs of our customers. New tools are added to our unit to produce specific hole shapes, sizes and patterns following your requirements.

Considerable factors while choosing Nickel Perforated Metal

Thickness: Thinner sheets are easy to perforate

<u>Hole shape and pattern:</u> Round hole perforation is commonly used and is the most affordable pattern. 60 inch staggered round hole is the strongest and extremely versatile pattern.

Hole size: Avoid choosing below 1: 1 ratio for thickness of plate. Prefer 2:1 or bigger.

Bar size: Avoid choosing thinner than 1:1 for sheet thickness

<u>Center distance:</u> it limits the feed rate and hence the production. Prefer to select a pattern with longer center distance.

Open areas: Wide open area proportions increase the risk of distortion, prefer to keep below 70%

<u>Margins:</u> Minimum side margins decrease the sheet deformation. Prefer to use the unfinished end margins.

Main factors for ordering perforated sheets and plates

- 1. Order quantity: Mention the count of plates needed
- 2. Thickness: Mention in gauge numbers or inches
- 3. Material type: State the metal or alloy type needed
- 4. Length and width of perforation sheet: state the area (length and width) of the required sheet. Length will be considered as a long side of the sheet

- 5. Perforation size: Include the size of perforation. Mention it in inches
- 6. Shape: Specify the hole shapes required
- 7. Perforation arrangement: Specify staggered or straight line or other designs. The straight line and staggered are the commonly chosen patterns that offer prolong performance.
- 8. Perforation spacing: It can be stated as the separation among the hole centers, open area % or for small holes, it can be the count of holes per square inch.
- 9. Margins: In case to ignore margins, please state minimum or no margins.

## **Opening tolerances**

Perforated opening			Tolerance on opening	
Standard, mm	USA industrial standard, inch	Additional size, inch	Standard, mm	USA industrial standard, in
125 mm	5 inch	1	± 2.5 mm	±0.100 inch
-	-	4-1/2 inch	1	0.090 inch
106 mm	4-1/4 inch	-	± 2.1 mm	.085 inch
100 mm	4 inch	-	± 2 mm	.080 inch
-	-	3-3/4 inch	1	.075 inch
90 mm	3-1/2 inch	1	1.8 mm	.070 inch
-	-	3-1/4 inch	1	.065 inch
75 mm	3 inch	-	± 1.5 mm	.060 inch
-		2 ¾ inch	1	.055 inch
63 mm	2-1/2 inch	-	± 1.3 mm	.050 inch
-	-	2 ¼ inch	-	.045 inch
53 mm	2-1/8 inch	-	± 1.1 mm	.043 inch
50 mm	2 inch	-	± 1 mm	.040 inch
-	-	1-7/8 inch	-	.038 inch
45 mm	1-3/4 inch	-	± 0.9 mm	.035 inch
-	-	1-5/8 inch	-	.033 inch
37.5 mm	1-1/2 inch	-	± 0.8 mm	.030 inch
-	-	1-3/8 inch	-	.028 inch
31.5 mm	1-1/4 inch	1	0.6 mm	.025 inch
-	-	1-3/16 inch	-	.024 inch
-	-	1-1/8 inch	-	.023 inch
26.5 mm	1 – 1/16 inch	1	± 0.5 mm	.021 inch
25 mm	1 inch	15/16 inch	.5 mm	.020 inch
-	-	-	-	.019 inch
22.4 mm	7/8 inch	13/16 inch	.46 mm	.018 inch
-	-	-	-	.016 inch
19 mm	¾ inch	11/16 inch	.38 mm	.015 inch
-	-	-	-	.014 inch
16 mm	5/8 inch	9/16 inch	.32 mm	.013 inch
-	-	1	1	.012 inch
13/2 mm	17/32 inch	1	.30 mm	.012 inch
12/5 mm	½ inch	15/32 inch	.28 mm	.011 inch
-	-	-	.28 mm	.011 inch
11.2 mm	7/16 inch	-	.26 mm	.011 inch
9.5 mm	3/8 inch	-	.25 mm	.010 inch
8 mm	5/16 inch	-	.25 mm	.010 inch
6.7 mm	17/64 inch	-	.24 mm	.009 inch

6.3 mm	¼ inch	-	.21 mm	.009 inch
5.6 mm	7/32 inch	-	.19 mm	.009 inch
4.75 mm	3/16 inch	-	.17 mm	.008 inch
4 mm	5/32 inch	-	.21 mm	.007 inch
3.35 mm	.0127 inch	-	.19 mm	.006 inch
*	-	-	-	*
2.80 mm	7/64 inch	-	*	.006 inch
2.36 mm	3/32 inch	-	.150 mm	.005 inch
2 mm	0.078 inch	-	.135 mm	.005 inch
1.70 mm	.066 inch	-	.110 mm	.002 inch
1.40 mm	.055 inch	-	.100 mm	.002 inch
1.18 mm	.045 inch	-	.085 mm	.002 inch
1 mm	.039 inch	-	.070 mm	.002 inch
.830 mm	.032 inch	-	60 mm	.002 inch
.710 mm	.027 inch	-	50 mm	.002 inch
.600 mm	.023 inch	-	45 mm	.002 inch
.500 mm	.020 inch	-	40 mm	.002 inch

## Commercial quality perforated sheet

Length or width in inches	Thickness limit		
	3/16 inch- 3/8 inch	Above 3/8 inches to 5/8 inches	Above 5/8 inches to 1 inches
Up to 24 inch	-0 + 7/16 inches	-0 + 12 inch	-0 + 9/16 inch
Above 24 to 36 inch	-0 + 5/8 inch	-0 + 11/16 inch	-0 + ¾ inch
Above 36 to 48 inch	-0 + ¾ inch	-0 + 13/16 inche	-0 + 7/8 inch
Above 48 to 60 inch	-0 + 7/8 inch	-0 + 15/16 inch	-0 + 1 inch
Above 60 to 84 inch	-0 + 1 – ¼ inch	-0+ 1 -5/16 inch	-0 +1-3/8 inch
Above 120 inch	-0 +1 -1/2 inch	-0 +1-9/16 inch	-0 +1 - 5/8 inch