



*Product description: **Silencing mat type: IMI 16P, for water droplet attenuation.***

*Introduction: Noise in cooling tower.*

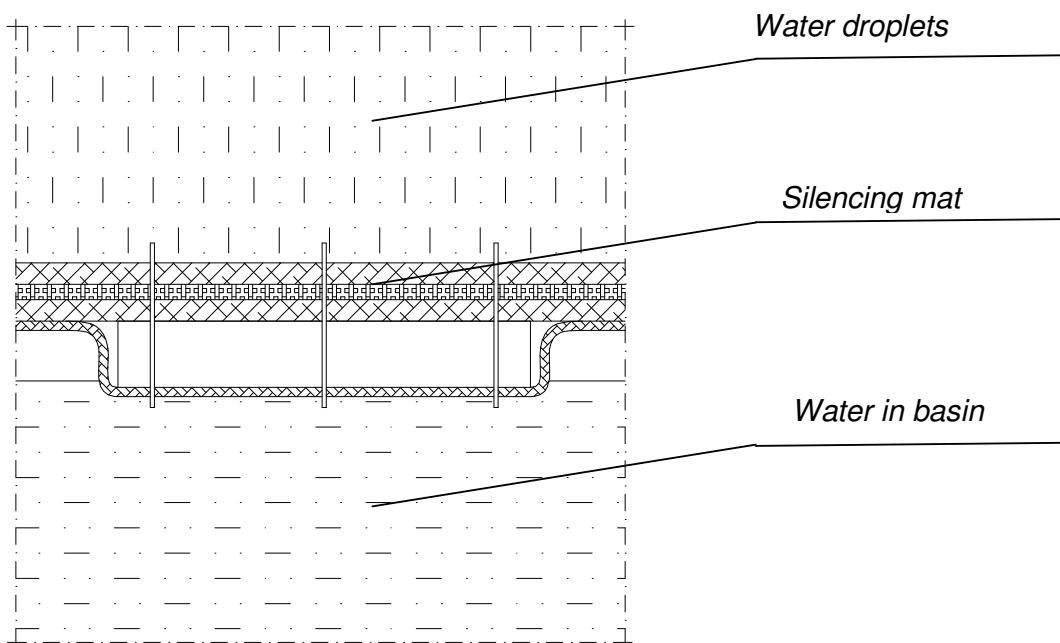
*Water droplets flow through a cooling tower and fall to filled with water basin. The droplets hit a water surface and generate noise. Sound pressure level measured in 1m distance from cooling tower inlet window can be from 83 dB(A) to 88 dB(A) and even higher. The main source of noise is the hit of the droplets to water surface. To have the best results of the noise attenuation one has to act on its source, so eliminate the direct contact of the droplets with water surface. The solution of the problem is silencing mat type: IMI 16P.*

*Floating mat to attenuate cooling towers basins*

*The mat is placed in a cooling tower basin, it floats on the water surface. It is made of three polypropylene grids. The grids are especially assembled together and from the mat. Underneath the mat there are attached floaters to keep it on the water surface. The floaters are especially fastened and additionally protected by a net, what gives reliable design.*

*The droplets first hit the mat fibers and after that flow to basin. Its direct contact with water surface is eliminated. This gives considerable attenuation. The mat does not require any maintenance, it should be kept clean.*

*Fig. 1. Sketch of the mat*





### Technical parameters

The silencing mat is delivered in 1950mm wide rolls. Length of strips are adjusted for customer request. Delivered in rolls, easy to transport.

The technical parameters are shown in the table below:

Silencing mat, polypropylene fibres

No.	Feature	Unit of measure	Value	Standard
1	Mass	kg/m <sup>2</sup>	2,2 (±10%)	PN-EN 965:1999
2	Thickness	mm	16 (±2)	PN-EN 964-1:1999
3	Tensile strength			PN-ISO 10319:1996/ Apl.1998
	- longitudinal	kN/m	1,8 (-0,2)	
- across	kN/m	1 (-0,2)		
4	Extension at maximal load			
	- longitudinal	%	55 (±25)	
	- across	%	50 (±25)	

Maximal deviation In brackets

### Attenuation

The cooling towers silencing mat for attenuation is first of all focused on the reduction of Sound Power Level in source, which is water basin. Because of that considerably lower Sound Pressure Level values are measured in bigger distances.

The Sound Pressure Level measured directly at the cooling tower inlet window with silencing mat is reduced for SPL = 8 dB(A) +/-1 dB(A).

In the case of any question contact our company consultant.