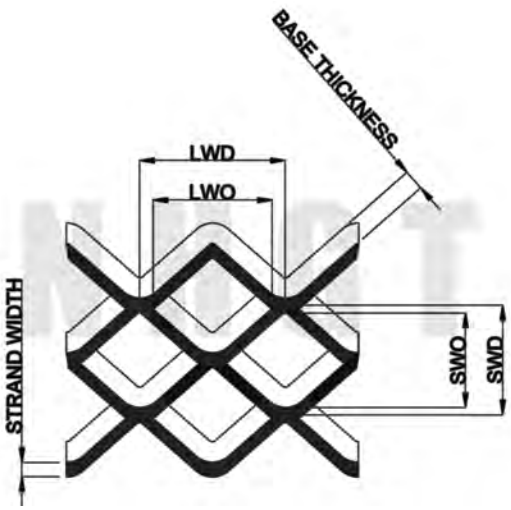
NHGT®

NICKEL MESH (expanded type)

Get Green Energy of Hydrogen in Economical Way.

PRODUCT DETAIL



Features & Benefits

Brief Introduction

The expanded nickel mesh is produced by symmetrically slitting and stretching the nickel sheet or coil. Unlike the square mesh of woven nickel mesh, the expanded nickel mesh is distinguished by diamond shape of openings.

Similar to woven nickel meshes, the expanded mesh is corrosion-resistant to alkaline and neutral solution media. It's mainly used in water electrolysis hydrogen industry to get the green energy of hydrogen in an economical way.

Water electrolysis hydrogen is a process of using electricity to split water into hydrogen and oxygen. In the electrolyzer, the cathode and anode of alkaline electrolysis water are mainly composed of metal alloys, using nickel mesh as the diaphragm. Water will be electrolyzed into hydrogen and oxygen under the action of direct current. And the generated gas needs further dealkalization to get purer.

In the process, nickel mesh is applied instead of noble metals, largely reducing the cost of getting hydrogen.

ECONOMICAL FOR HYDROGEN PRODUCTION

Water electrolysis is so far the most environmentally friendly and sustainable method for green energy production of high-purity hydrogen. However, an obvious disadvantage of high expense caused by using noble metals as electrodes should never be ignored. Thanks to the abundant and economical character of nickel, we can largely cut the cost of hydrogen production by using nickel mesh as an alternative.

A rough coating with a porous structure will be attached to the surface of the nickel mesh by plasma spraying technology. This special treatment will greatly increase the contact area between the nickel mesh and liquid in the electrolytic cell to produce hydrogen effectively.

RESISTANT TO CORROSION

With excellent corrosion-resistant performance, expanded nickel mesh is resistant to alkali salts like nitrate, chloride, and acetate. This performance also works well under an acid atmosphere. For this reason, expanded nickel mesh is widely used in the alkali industry, organic chloride production, and water treatment.

MAGNETIC

Another distinguished feature of expanded nickel mesh is magnetism. With the advantage of good performance in the electric vacuum and electromagnetic control, the expanded mesh is widely used in aerospace, the production of vacuum electrical parts, and electronic instruments.

NICKEL MESH (EXPANDED TYPE)					
OVERALL WIDTH	**OVERALL LENGTH**	**LWD**	**SWD**	**SHEET THICKNESS**	**STRAND WIDTH**
≤ 1.52 m	≤ 11.92 m	1.50 mm	0.80 mm	0.25 mm	0.25 mm
		1.60 mm	0.80 mm	0.05 mm	0.10 mm
		2.00 mm	1.00 mm	0.10 mm	0.15 mm
		2.00 mm	1.00 mm	0.25 mm	0.25 mm
		2.00 mm	1.00 mm	0.30 mm	0.35 mm
		2.50 mm	1.50 mm	0.20 mm	0.25 mm
		4.00 mm	2.00 mm	0.40 mm	0.45 mm
		6.00 mm	3.00 mm	1.00 mm	1.20 mm
SURFACE TREATMENT		NONE PLASMA SPRAY (50%ALUMINUM + 50% NICKEL) PLASMA SPRAY (20%ALUMINUM + 80% NICKEL) PLASMA SPRAY (80%ALUMINUM + 20% NICKEL) FLATENING IS AVAILABLE			

CUSTOMIZED specifications acceptable.

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NHGT was established to provide pure nickel mesh in a variety of specifications for all levels of industries. Powerful production capacity and industry-beating service earned us a good reputation, enabling us to establish sustainable business relationships with worldwide customers. If you want to know more about us, please visit our website http//:nickelgreen.com

NHGT®

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