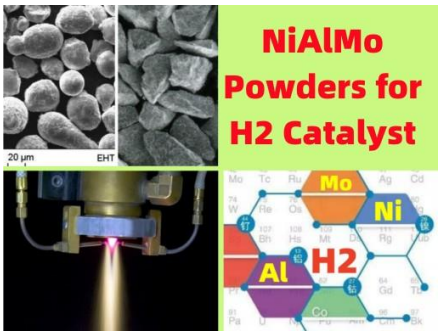
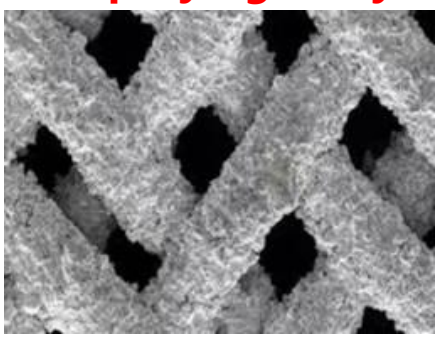
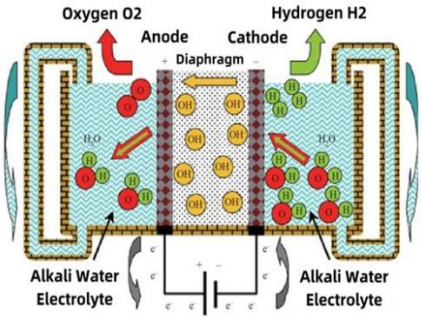
电解氢阴极镍网等离子热喷涂用镍铝钼合金粉

Raney Nickel NiAlMo Powders for Electrolytic Hydrogen Cathode Mesh Plasma Spraying & Hydrogenation Catalyst







NiAlMo 镍铝钼粉等离子热喷涂镍网　　碱水电解制氢原理图

NiAlMo Powder Plasma Sprayed Nickel Mesh　　Alkali Water Electrolytic Hydrogen Schema

1．奥泰新材电解氢阴极镍网等离子热喷涂用镍铝钼合金粉成分

Raney Nickel NiAlMo Powders for Electrolytic Hydrogen Cathode Mesh Plasma Spraying & Hydrogenation Catalyst Chemical Composition

氢能是完全清洁的高效理想新能源。上图右所示碱水电解氢工艺目前在全世界迅速发展，尤其是在欧洲。传统的电解氢发生器阴极采用镍网。为了极大地提高镍网阴极在电解氢中的催化能力，需要在镍网表面制作等离子热喷涂镍铝合金多孔涂层。

Hydrogen is completely the clean ideal energy with high efficiency. Electrolytic Alkali Water production technology, which schematic diagram as above right picture, is now quickly spreading over the world. Traditional hydrogen generators use nickel mesh as the hydrogen generation cathode. For greatly increasing the catalytic capability of generating the hydrogen on the Nickel Mesh Cathode, it is very important to create the porous catalytic coating by Plasma Thermal Spraying on the nickel mesh cathode.

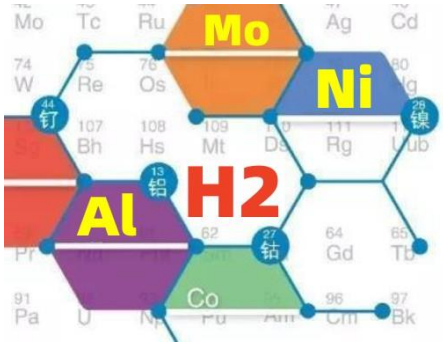
德国航空中心对下图中几十种不同化学成分涂层的研究结果表明，电解氢阴极用镍网表面镍铝合金涂层的最佳成分为 NiAlMo 合金，其中 Al 含量 10-50%，Mo 含量 2-40%为最佳。

According to the scientist research from many plasma thermal spraying powders as below, the Raney Nickel NiAlMo Nickel Aluminum Molybdenum Alloy coating by plasma thermal spraying is the best to increase the catalytic capability of generating the hydrogen on the coated Nickel Mesh Cathode. This best Nickel Aluminum Molybdenum NiAlMo alloy powder requires high Aluminum content about 10-50% and high Molybdenum content about 2-40%, which is non-disclosure now.

2．奥泰新材电解氢阴极镍网等离子热喷涂用镍铝钼合金粉应用

AMTmetalTech Raney Nickel NiAlMo Powders for Electrolytic Hydrogen Cathode Mesh Plasma Spraying & Hydrogenation Catalyst Applications

Pt/C	$LaNi_{4.9}Si_{0.1}$	Pd/Au
Polished Ni		Ni–Sn
Co/C	Ti_2Ni	Ni–S–Co
		Ni_3Al
Ni_1Co_9/C	$Ni_{60}Mo_{40}$	Ni_3Al–Mo
Raney Ni		Ni-S–Mn
Ni–Cr Raney	Ni–S	$Ni_{81}P_{16}C_3$
$Ni_{64}W_{36}$		$Ni_{62}Fe_{35}C_3$
	Fe–Mo	Ni–Co
$MmNi_{3.3}Co_{0.75}Mn_{0.4}Al_{0.27}$	Ni–(Ebonex-Ru)	$Fe_{94}P_4Ce_2$



电解氢热喷涂粉末催化剂对比成分 镍铝钼粉用于加氢催化剂

Plasma Spraying Powders Catalyst Tested Raney Nickel NiAlMo Powders for Hydrogenation Catalyst

生产均匀低氧的原料熔点差异很大的三元高铝高钼的镍合金粉末有较大的挑战性。奥泰新材世界优质电解氢阴极镍网等离子热喷涂用镍铝钼合金粉末采用真空气雾化工艺生产，加氢催化用镍铝钼合金粉末采用熔炼破碎工艺生产。

To produce the high Aluminum & high Molybdenum Nickel alloy NiAlMo powder for melting 3 metals of very big difference melting temperature with homogeneous chemical composition & low oxygen is big challenging. AMTmetalTech is producing Top Quality World Lowest Price NiAlMo high Aluminum & high Molybdenum alloy plasma thermal spraying powders by Vacuum Gas Atomize, and Raney Nickel Powders for Hydrogenation Catalyst by Melting and Crushing in many tons monthly.

奥泰新材世界优质电解氢阴极镍网等离子热喷涂用镍铝钼合金粉末的典型粒度为 25-63um。奥泰新材世界优质加氢催化用镍铝钼合金粉末的典型粒度为 100-300 目、80-150 目、60-100 目、30-80 目等。奥泰新材可以定制电解氢阴极镍网等离子热喷涂及加氢催化用其他成分粒度的镍铝钼合金粉末。

The typical Raney Nickel NiAlMo powder size for Electrolytic Hydrogen Cathode Mesh Plasma Thermal Spraying is 25-63um. The typical Raney Nickel NiAlMo powder size for Hydrogenation Catalyst is 100-300 mesh, 80-150mesh, 60-100mesh, 30-80mesh etc. Other chemical composition and size of Nickel Aluminum Molybdenum Alloy Powder can be customized as well.

3．奥泰新材电解氢阴极镍网等离子热喷涂用镍铝钼合金粉包装

AMTmetalTech Raney Nickel NiAlMo Powders for Electrolytic Hydrogen Cathode Mesh Plasma Spraying & Hydrogenation Catalyst Packagings

奥泰新材世界优质电解氢阴极镍网等离子热喷涂用镍铝钼合金粉包装为 5kg 塑料袋或塑料瓶。加氢催化用镍铝钼合金粉末包装为 50kg 铁桶或粉末泡水入塑料桶。

Packaging of Raney Nickel NiAlMo powder for Electrolytic Hydrogen Cathode Mesh Plasma Thermal Spraying is 5kg plastic bag or bottle. Packaging of Raney Nickel NiAlMo powder for Hydrogenation Catalyst is 50kg Iron Drum or Plastic Drum with powder immersed water.