



## HENAN SYNTHE CORPORATION

ADD: NO. 12 SHANGWU WAIHUAN ROAD, ZHENGHOU, CHINA

TEL: 86-371-6939 2107 FAX: 86-371-6394 4282

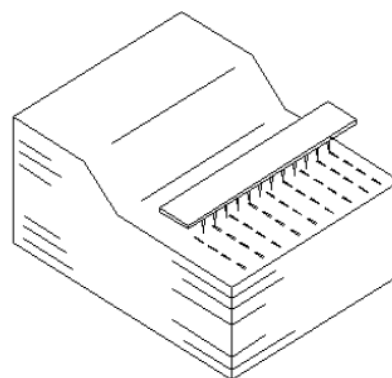
EMAIL: [becky.w@synthe-corp.com](mailto:becky.w@synthe-corp.com)

### DETAIL INFORMATION

#### CERAMIC FIBER MODULE



( Featured Products- Sewing Module)



#### Product Description

According to temperature requirements, ceramic fiber module is manufactured by corresponding ceramic fiber blanket, processed by series work of cutting, folding, inserting firmware and packaging etc. They have excellent thermal insulation and lower density, they are widely used in continuous annealing furnace, regenerative furnace, shuttle kiln, incinerator etc.

#### Featured Products- Sewing Module

To improve the shortcomings of compression modules processed by traditional tri-ply straps, we have researched and developed the whole set of automatic sewing equipment. By using sewn method, the ceramic fiber modules are manufactured and compressed to be installed in specific parts, which can enhance the construction efficiency and lower the cost.

#### Product Application

Metallurgical Industry: Special Alloy Heat Treatment  
Environmental Engineering: Waste Gas Incineration RTO  
Petrochemical Industry: Cracking Furnace, Flue  
Steel Industry: for Annealing, Heat Treatment, Ladle, etc.  
Ceramic Industry: Sanitary Ware Shuttle Kiln  
Glass Industry: Furnace

## Product Superiority- Installation

### Anchoring Parts



*Built-in Anchor*



*Screw Anchor*



*Hanging Buckle Anchor*

**HN Sewing Module** adopts the mounting method to install, which is fast and greatly improves the installation efficiency and saves installation costs. *The traditional module* adopts the installation method of the locking bolt and nut, and each module needs to lock the bolt, cut the strap, and extract the splint, which is time-consuming and laborious and the installation speed is slow.

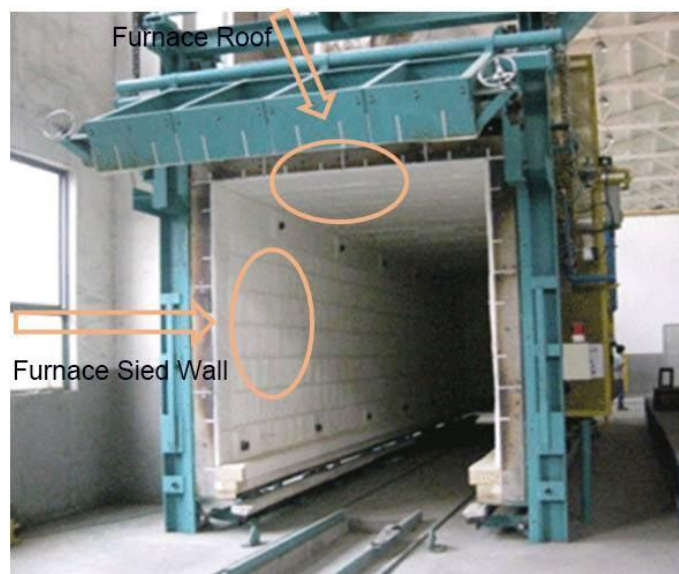
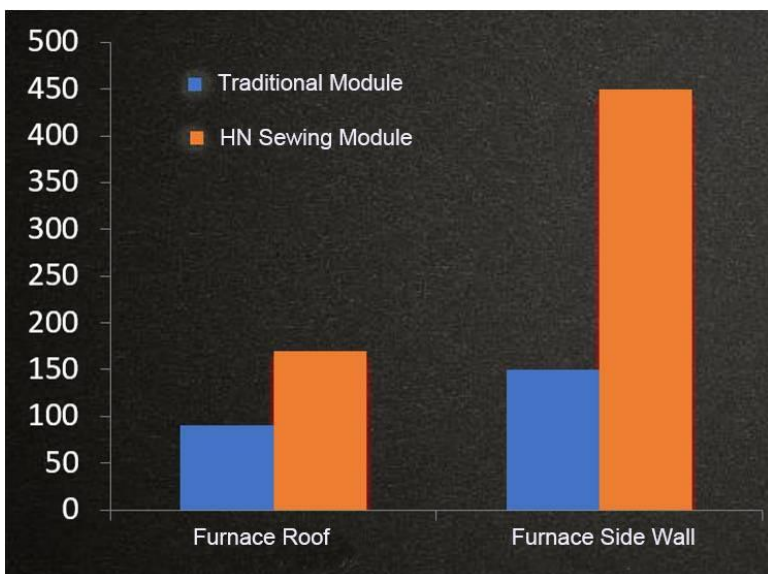


*Traditional Installation*



*HN Module Installation*

### Comparison of Installation Speed



### Product Superiority- Environmental Protection

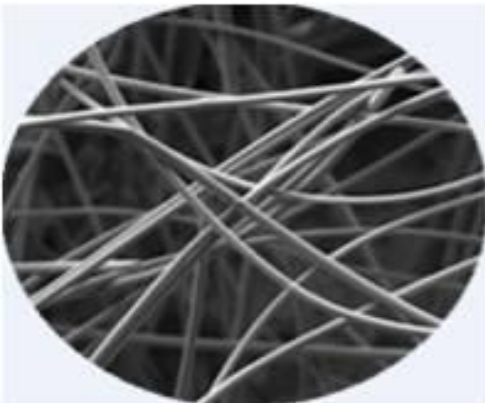


( Traditional Installation Site for Reference)

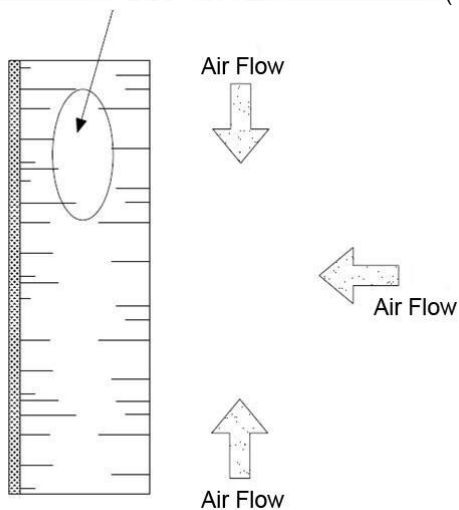
While install traditional modules, the straps and splints need to be removed after installation, resulting in a large amount of construction waste.

For HN sewing modules, there is no construction waste after installation, which achieves the real environmental protection construction.

### Product Superiority- Resistance to Wind Erosion



( Pictures under 300 times Magnifying Glass)



HN sewing module is manufactured automatically, the modules have been completely sewed while finish this manufacturing procedure.

All fibers are oriented perpendicular to the fire surface inside the furnace. At large wind speeds, it is the fiber fracture surface that are eroded, which will prevent the module from falling off.

## Technical Data- HN Module

Item		HN-1260 Module	HN-1430 Module
Chemical Content	Al <sub>2</sub> O <sub>3</sub> ( %)	42-44	34-36
	SiO <sub>2</sub> ( %)	56	49
	ZrO <sub>2</sub> ( %)		14-17
Working Temperature( %)		1100	1300
Density( kg/m <sup>3</sup> )		160-210	160-210
Thermal Conductivity		0.25 (800°C)	0.48 (1000°C)
Shot Content ( %)	Total	43.4	
	+212um	11.3	20
Tensile Strength( MPA)		0.07	0.075
Rebound Recovery( Direction L)		≥5%	≥4%
Shrinkage( %)		1100°C x24h ( 2-3)	1200°C x24h ( 1.5-2.5)

## Comparison of Technical Data from Different Suppliers- Grade 1260 Ceramic Fiber Blanket

Item		HN-1260	ISOWOOL	UNIFRAX
Density( kg/m <sup>3</sup> )		<b>128</b>	128	128
Shot Content( %)	Total	<b>43.4</b>	58.2	45
	+212μm	<b>11.3</b>	13.2	12
Tensile Strength( MPA)		<b>0.07</b>	0.078	0.048
Permanent Linear Change on Heating (%)		<b>2.3</b>	1.8	3
Thermal Conductivity (W/ M.K)	At300°C	<b>0.1</b>	0.076	-
	At450°C	<b>0.13</b>	0.11	0.153
	At600°C	<b>0.25</b>	0.15	-
Chemical Content (%)	AL2O3	<b>44</b>	46	44
	AL2O3+SIO2	<b>98.5</b>	99.5	97



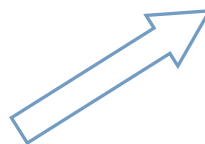
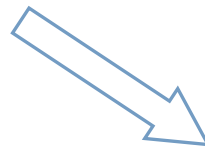
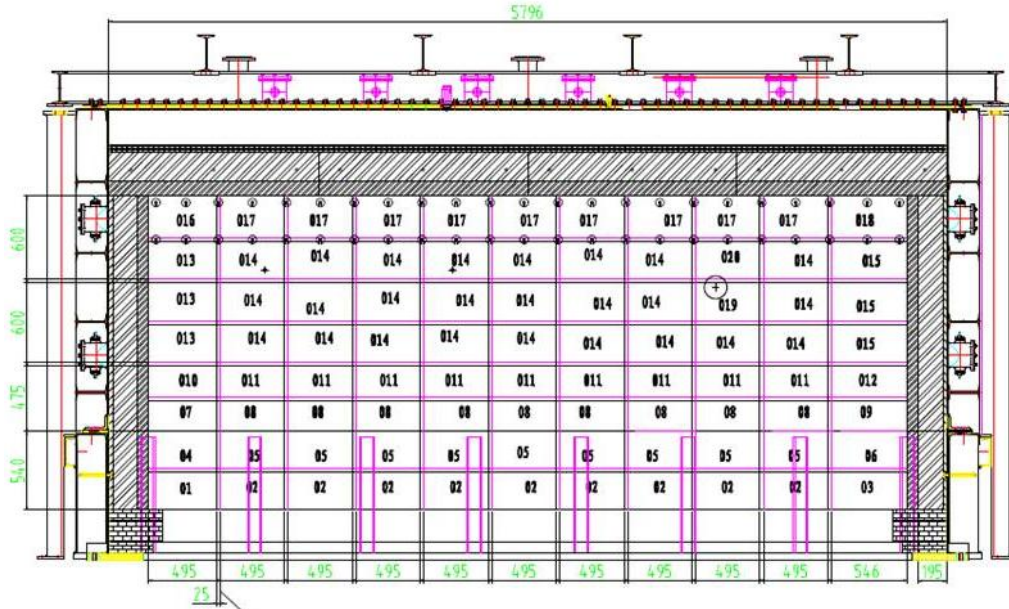
### Project Case

Equipment: Metal Heat Treatment Furnace

Application Industry: Special Alloy Heat Treatment

Working Temperature 1400 ° C

Furnace size: 7000x4000x3000(MM)



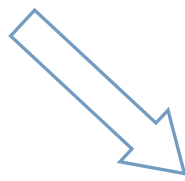
**Project Case**

Equipment: Metal Heat Treatment Furnace

Application Industry: Lead Melting

Working Temperature 700 ° C

Furnace size: 12000x4500x1200(MM)



左侧



右侧



**Project Case**

Equipment: Metal Heat Treatment Furnace

Application Industry: Continuous Galvanizing Line ( CGL)

Working Temperature 700-1400 ° C

Furnace size: 150000x2500x2500(MM)

