



ABOUT LAVA

Based in Dalian,China P.R.,which is located in the center of North China,famous for its heavy industry,particularly in CERAMIC & REFRACTORIES manufacturing. Keeping the concept “Make Energy Efficiency Simpler” in mind, striving to be the most reliable supplier in REFRACTORY and INSULATION material industry worldwide, years of non-stop innovation

and team-working transformed us to be now a leading supplier of refractory and insulating materials in this field.

LAVA committed to developing and manufacturing high quality products for its customer. Customers accept our products at first, then gradually getting fond of them, and finally they find that they have already relied on

them. Up to now,we have established cooperative relationships with many Giant Companies in refractory field.

We are continue to serve all of our customers with best products and services.We are always on the road and never stop!

STEEL FIBER

Steel fibers serve to reinforce the refractory concretes and aid in the prevention of cracking and spalling of the refractory material when exposed to thermal shock.

Dispersion is further aided by the optimum Aspect Ratio design guaranteeing rapid fiber separation during the mixing phase. It could improve the performance of the refractory materials, and increase the corrosion resistance, thermal cycle impact and abrasion resistance significantly. The stainless-steel fiber products of our company are divided into melt extraction method, cutting method and shearing method according to the production process.

- Melt Extract Stainless Steel Fiber

Melt extract steel fiber is the product that our company imports technology and equipment from America exclusively to fill the blank of this era in China. Melt Extract stainless fibers are fully annealed and therefore are more pliable and ductile. This is of particular benefit during the mixing cycle and when the refractory composite is installed. These pliable fibers are not only more user-friendly than the stiff” needle-like” cut fibers, but also have better flow characteristics.

- Cutting Stainless Steel Fiber

Cut by stainless steel wire, with higher tensile strength and flexibility. Divided into end hooked and corrugated shape.

- Shearing Stainless Steel Fiber

Cut by stainless steel belt. Divided into corrugated shape and straight bar.

SIZE	CHEMIC ELEMENT(%)					
	C	P	Mn	Si	Cr	Ni
AISI330	≤0.40	≤0.04	≤2.00	≤0.75	17-20	33-37
AISI310	≤0.40	≤0.04	≤2.00	≤1.50	24-26	19-22
AISI316	≤0.40	≤0.04	≤2.00	≤1.00	16-18	10-14
AISI314	≤0.40	≤0.045	≤2.00	1.5-3.0	23-26	19-22
AISI309	≤0.40	≤0.04	≤2.00	≤1.00	22-24	12-15
AISI304	≤0.40	≤0.04	≤2.00	≤2.00	18-20	8-10
AISI301	≤0.40	≤0.04	≤2.00	≤2.00	16-18	6-8
AISI201	≤0.40	≤0.06	5.5-7.5	≤1.00	16-18	3.5-5.5
AISI446	≤0.40	≤0.04	≤1.50	≤2.00	23-27	
AISI430	≤0.40	≤0.03	≤1.00	≤2.00	16-18	
NAS430A	≤0.40	≤0.03	≤0.50	≤0.50	16-18	

	SIZE(mm)			
	20	25	30	35
Length	20	25	30	35
Width	0.75-1.5	0.75-1.5	0.75-1.5	0.75-1.5
Thickness	0.2-0.75	0.2-0.75	0.2-0.75	0.2-0.75

■ APPLICATION



METALLURGICAL INDUSTRY

The refining outside the furnace airbrush, dipping tubes, slag dam, bag lining cover, the triangle electric furnace, furnace cover, the molten iron trench cover, the torpedo cans, coke oven door, the heating furnace of steel rolling door, furnace roof, burn tsui, annular furnace baffle wall, hearth roll, forging steel furnace, steel tanks etc, items can be used for various refractory kiln linings.



KILN

Sintering furnace, reduction furnace, finer, the flue, furnace burning tsui and other heat-resistant linings.



ELECTRIC POWER INDUSTRY

Thermal power plant boiler heat resistant linings.



THE CONSTRUCTION INDUSTRY

Steel fiber mixed with mixes clay is rapid development of new composite materials in recent years, especially for the steel fiber concrete fastest development. Steel fiber with excellent tensile, bending, shear and crack resistance, impact resistance, resistance to fatigue, high toughness properties, are all items widely used in construction, road, bridge, tunnel, airport pavement, hydraulic harbor, military engineering, all kinds of buildings and products etc.



PETROLEUM CHEMICAL INDUSTRY

Especially in the refining the lining of catalytic cracking units.



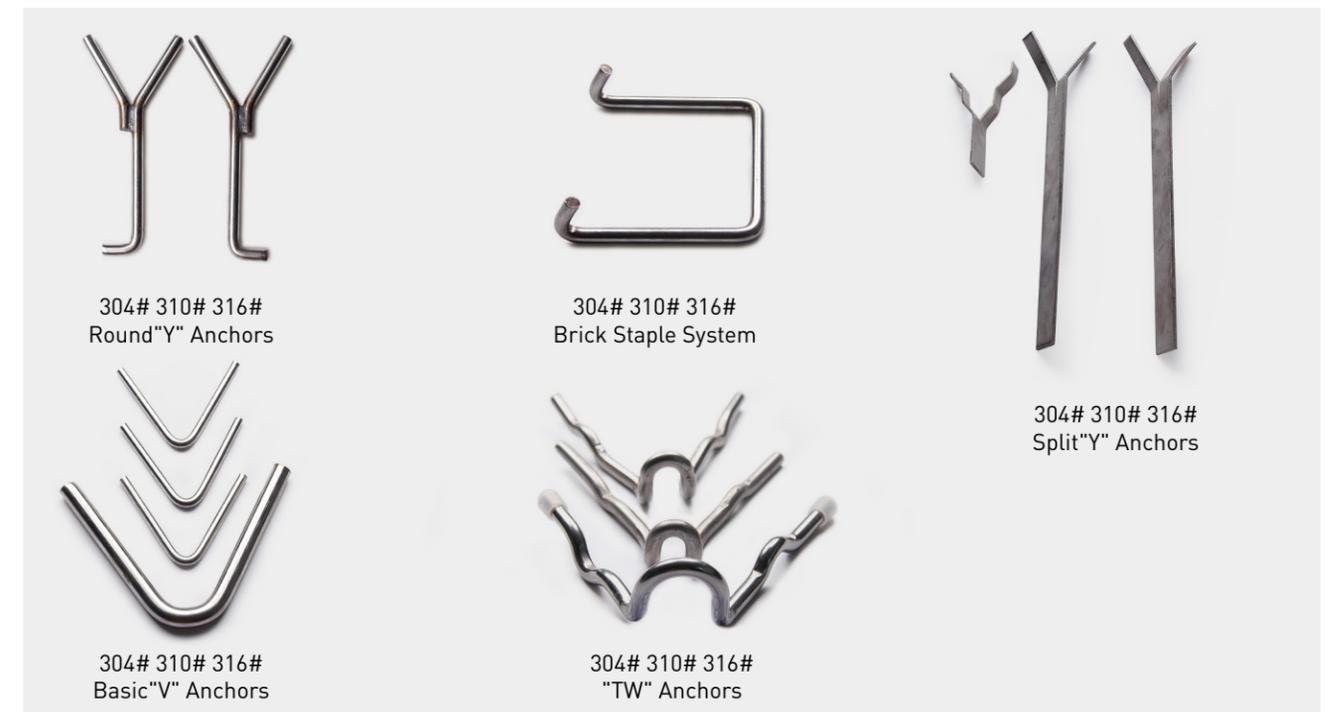
ENVIRONMENTAL PROTECTION INDUSTRY

INCINERATOR

STEEL ANCHOR

LAVA supplying a comprehensive range of Steel Anchors. each model is custom made depending on the design and the application. Due to the relatively high temperatures at which refractory bricks are applied, care must be taken in the selection of the correct alloy. For denser bricks, heavier staples can also be supplied. To hold refractory anchor bricks in specific positions from a wall or a ceiling our Scissor clips or Brick Claws can be used. Tie back refractory anchors are great for holding back brick anchors in side wall applications. We also create tailor-made consoles for many different applications.

All models can be corrugated or specially formed for superior holding power. We can produce the anchors to suit stud welding techniques, hand welding techniques, or the mechanical bolt-on technique of fastening to the vessel.



■ Product Data

ASTM	DIN EN	C	Si	Si	P	S	Ni	Cr	Mo	Al	Nb	Cu	Ti
410	1.4006	≤ 0.15	≤ 1.0	≤ 1.0	≤ 0.040	≤ 0.03		11.5-13.5					
430	1.4016	≤ 0.12	≤ 1.0	≤ 1.0	≤ 0.040	≤ 0.03		16-18					
304	1.4301	≤ 0.08	≤ 1.0	≤ 1.0	≤ 0.045	≤ 0.03	8.0-10.5	18-20					
304L	1.4306	≤ 0.03	≤ 1.0	≤ 1.0	≤ 0.045	≤ 0.03	9.0-12.0	18-20					
321	1.4878	≤ 0.08	≤ 1.0	≤ 1.0	≤ 0.045	≤ 0.03	9.0-12.0	17-19					5 x C - 0.70
321H	1.4541	≤ 0.12	≤ 1.0	≤ 1.0	≤ 0.045	≤ 0.015	8.0-10.5	17-19					5 x C - 0.80
309	1.4833	≤ 0.20	≤ 1.0	≤ 2.0	≤ 0.040	≤ 0.03	12-15	22-24					
309S		≤ 0.08	≤ 1.0	≤ 2.0	≤ 0.045	≤ 0.03	12-15	22-24					
310	1.4841	≤ 0.25	≤ 1.5	≤ 2.0	≤ 0.040	≤ 0.03	19-22	24-26					
310S		≤ 0.08	≤ 1.5	≤ 2.0	≤ 0.040	≤ 0.03	19-22	24-26					
316	1.4401	≤ 0.08	≤ 1.0	≤ 2.0	≤ 0.045	≤ 0.03	10-14	16-18	2.0-3.0				
330		≤ 0.15	≤ 1.5	≤ 2.0	≤ 0.040	≤ 0.03	33-37	14-17					
347	1.4550	≤ 0.08	≤ 1.0	≤ 2.0	≤ 0.045	≤ 0.03	9.0-12	17-19			0.8-1.1		
Incoloy 800	1.4876	≤ 0.1	≤ 1.0	≤ 2.0	≤ 0.045	≤ 0.02	30-34	19-23		0.15-0.6			0.15-0.60
Incoloy 800H	1.4969	0.05-0.1	≤ 1.0	≤ 2.0	≤ 0.045	≤ 0.02	30-34	19-28		0.15-0.6			0.15-0.60
Incoloy 825	2.4858	≤ 0.025	≤ 0.5	≤ 1.0	≤ 0.03	≤ 0.015	38-46	19.5-23.5	2.5-3.5				0.6-1.2
Incoloy 600	2.4816	≤ 0.08	≤ 0.5	≤ 1.0	≤ 0.03	≤ 0.015	≥ 72.0	14-17	2.0-3.0	≤ 0.30		≤ 0.50	≤ 0.30
Inconel 601	2.4851	≤ 0.1	≤ 0.5	≤ 1.0	≤ 0.015	≤ 0.015	58-63	21-25		1.0-1.7			
Inconel 625	2.4856	≤ 0.1	≤ 0.5	≤ 0.5	≤ 0.015	≤ 0.015	≤ 58	20-23	8-10	≤ 0.40	3.2-4.2		≤ 0.40
Monel 400	2.4360	≤ 0.3	≤ 0.5	≤ 2.0		≤ 0.025	≤ 63					28-34	
253 MA	1.4835	0.05-0.1	≤ 2.0	≤ 0.8	≤ 0.04	≤ 0.03	10-12	20-22	N=0.14-0.2	Ce=0.03-0.08			