



Colloid Mill

——Zhengzhou Runxiang Machinery Equipment Co.,ltd.

——Grace



PART 01

Product Introduction



Product Presentation



Type



Electric Motor Versi



Diesel Engine Version



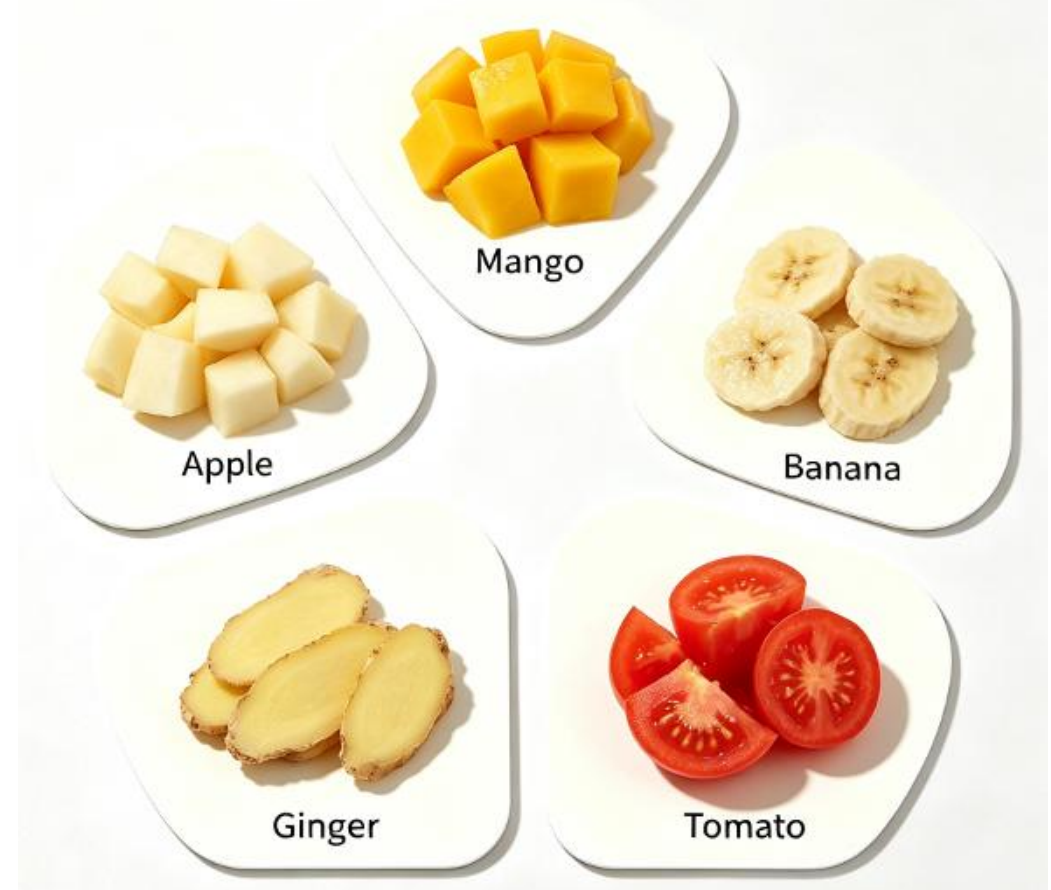
Suitable Raw Materials



Nut Butter Materials



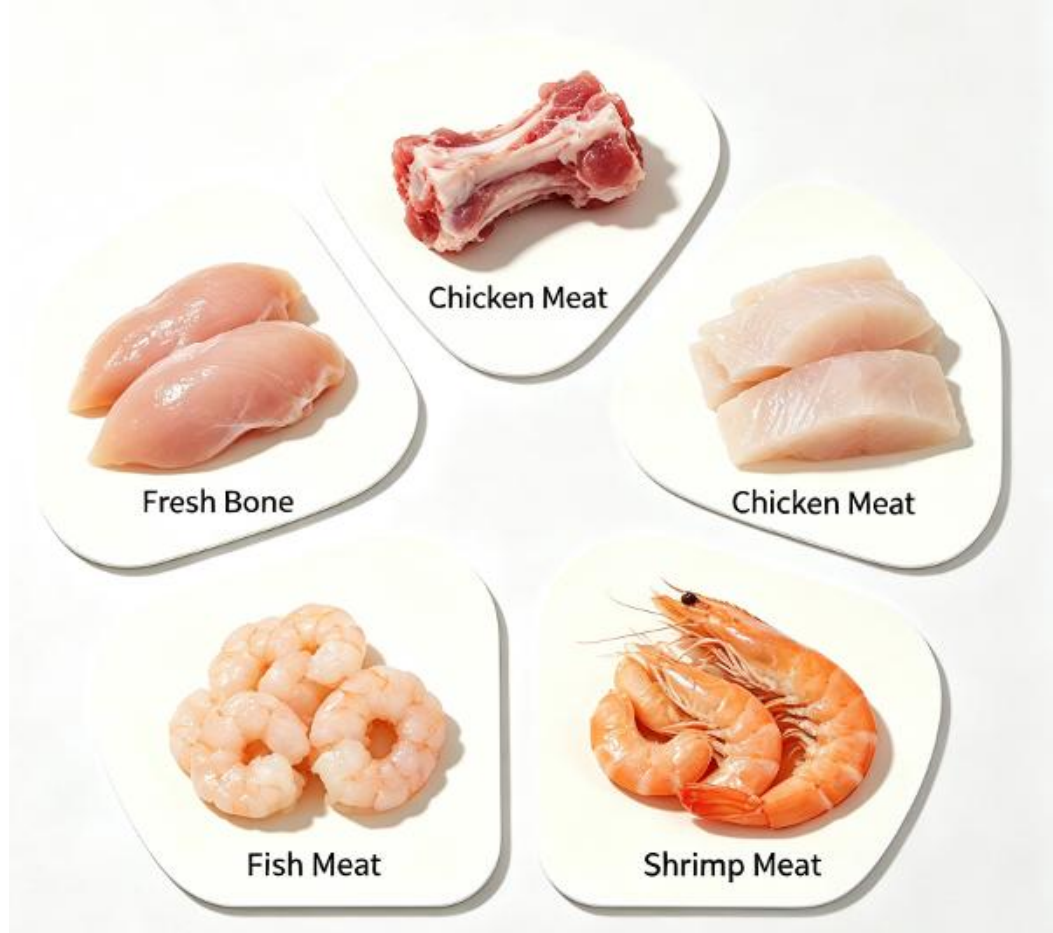
Fruit & Vegetable Pulp



Suitable Raw Materials



Meat & Seafood Raw Materials



Seasoning Raw Materials





Machine Features



- Suitable for various raw materials: nuts, fruits & vegetables, seasonings, meat products.
- Output fineness range: 2–50 microns.
- Stainless steel construction, durable and food hygienic.
- Equipped with water inlet for water cooling to prevent material deterioration.
- Simple structure and easy operation.
- Notes:
- Applicable materials: semi-fluid, slurry and paste materials (bone mud, sesame paste, fruit pulp, sauces).
- Must feed with liquid/water; dry grinding is not allowed.





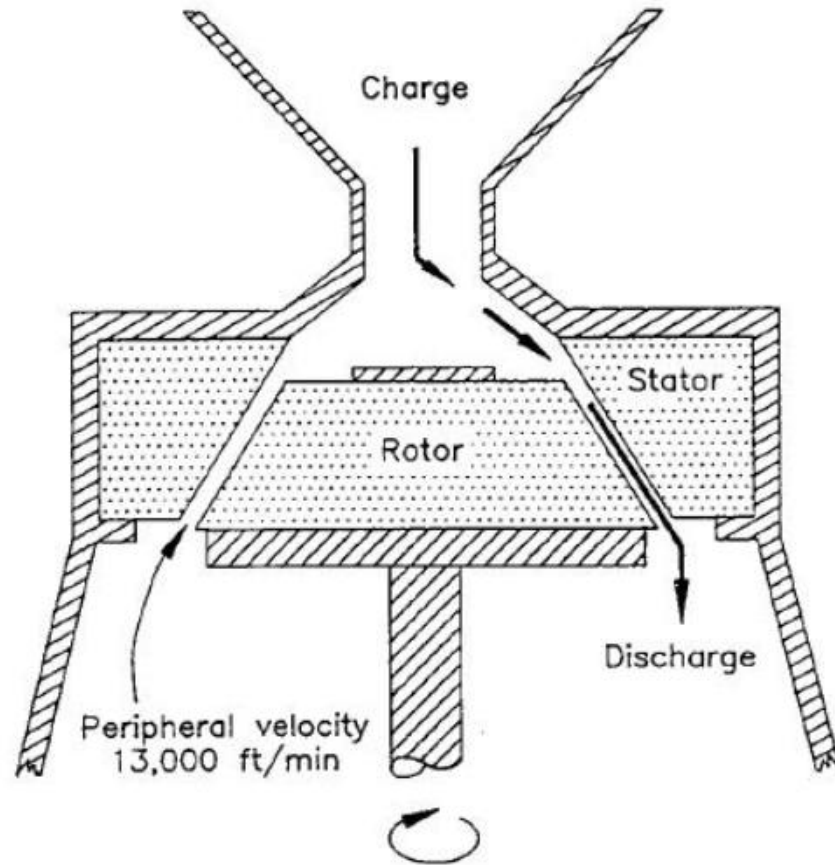
Machine Structure



- Simple structure, easy to operate.
- Adjust the fineness via the handles on both sides: turn clockwise for finer output, turn counterclockwise for coarser output.
- ⚠ **Notice:** Adjust in small increments each time. Do not let the rotor rub directly against the stator.



Working Principle



- Material is fed from the top hopper,
- then enters the gap between the rotating rotor and fixed stator.
- The high-speed relative movement generates shear force and friction to crush and refine materials.
- The refined slurry is discharged outwards.



Machine Details



Grinding Head Assembly



Internal Grinding Chamber,
Stator & Rotor, Cooling Water
Inlet & Outlet



Grinding Gap Adjustment Screw
Assembly



Price&Parameter



Model	WSS-50	WSS-80	WSS-110	WSS-130	WSS-180	WSS-240	WSS-300
Output size	50-100 mesh	50-100 mesh	100-200 mesh	100-200 mesh	100-200 mesh	100-200 mesh	60-200 mesh
Capacity (kg/h)	10-15	30-70	150-200	300-500	800-1000	1500-2000	3000-4000
Power	1.1kw	4kw	7.5kw	15kw	22kw	45kw	75kw
Dimension (mm)	530*260*580	640*410*900	700*430*980	830*440*1100	830*490*1100	1320*600*1280	1500*800*1120
Weight(kg)	50	150	175	285	340	1300	1600
EXW price (304 stainless steel)	\$1170	\$1880	\$2390	\$2790	\$3750	\$8120	\$16250



Display of different models



Model	WSS-50	WSS-80	WSS-110	WSS-130	WSS-130
					
WSS-50	WSS-80	WSS-110	WSS-130	WSS-130	WSS-180
10-15kg/h	30-70kg/h	150-200kg/h	300-500kg/h	300-500kg/h	800-1000kg/h



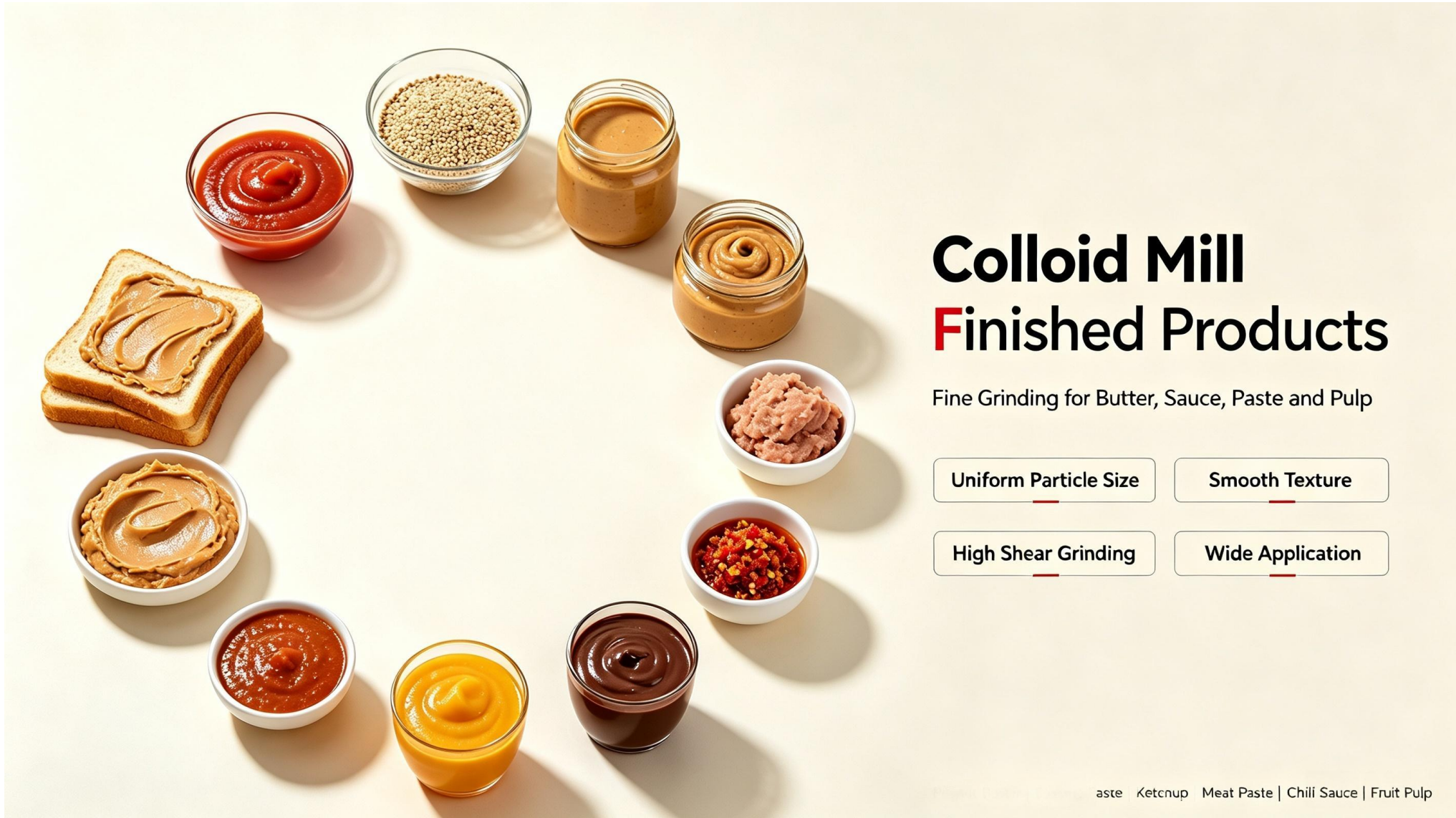
Application Scenarios



- **Food Industry:** Peanut butter, chili sauce, hot pot base, soybean milk, coconut milk, bone mud, chocolate paste, fillings.
- **Daily Chemical & Cosmetic:** Toothpaste, shampoo, facial cream, lotion, sunscreen, wax emulsification.
- **Pharmaceutical & Chinese Medicine:** Ointment, herbal liquid, medical gel, suspension.
- **Chemical & Pesticide:** Water-based paint, ink, waterproof coating, pesticide emulsion, cutting fluid.



Finished Product Display



Colloid Mill Finished Products

Fine Grinding for Butter, Sauce, Paste and Pulp

Uniform Particle Size

Smooth Texture

High Shear Grinding

Wide Application

Peanut Butter | Ketchup | Meat Paste | Chili Sauce | Fruit Pulp



Colloid Mill with Material Circulation Pipe



- **Difference between standard colloid mill and colloid mill with circulation pipe:**
- The only difference is the additional material circulation return pipe.
- The processed slurry can flow back to the feeding hopper for re-grinding to ensure stable and qualified fineness.
- The circulation pipe can be removed for direct discharging.
- **Notice:** The circulation pipe is only suitable for liquid and semi-liquid materials with good fluidity.





Wear Parts & Accessories

Stator (Static millstone)



Rotor (Moving millstone)

Stator (Static millstone) It remains stationary with oblique internal teeth. Materials are subjected to strong shearing and friction when passing through the tooth grooves for fine grinding.

Rotor (Moving millstone) It rotates at high speed. Cooperating with the stator, it realizes crushing, emulsification, homogenization and grinding of materials.

Price: USD 259 per set (minimum model)



Vertical Colloid Mill



Main differences:

For vertical colloid mill: the motor and grinding head are vertically coaxially arranged. The feeding hopper is on the top, and materials flow down into the grinding chamber by gravity.

Horizontal Colloid Mill : The motor and grinding head are horizontally arranged side by side.

Vertical type: Small footprint, suitable for small-batch production.

Vertical feeding enables easy material intake.

Note: If material leakage occurs, materials may seep down into the motor. Material overflow shall be controlled during long-time continuous processing.



Peanut Butter Production Line



The flow chart



Supply System



Machine material-- food grade 304 stainless steel



宝钢不锈钢® 宝钢德盛不锈钢有限公司 BAOSTEEL DESHENG STAINLESS STEEL CO., LTD		产品质量证明书 INSPECTION CERTIFICATE		 福建省罗源县金港工业区2号 邮编 350601 JINGANG INDUSTRIAL ZONE, LUOYUAN COUNTY 350601 FUJIAN P. R. CHINA TEL (0591) 62586127 FAX (0591) 62586258																							
订货单位 CUSTOMER	无锡艺钦金属材料有限公司			产品名称 PRODUCT	冷轧钢卷																						
收货单位 PURCHASER	上海欧冶物流股份有限公司(代北方公司送无锡众旺)			代 CUSTOMER'S NO.	F011A27101L19006 6010																						
标 准 SPECIFICATION	PJ/BGDS01004-2019 BN1TL/BN1D4			客户订单编号 CUSTOMER ORDER NO.	L190066																						
				签发日期 DATE OF ISSUE	20241027																						
				表面加工等级 SURFACE FINISH	No. 2B																						
				许可证号 LICENSE NO.	合同号 WILL'S NO.	L190066010																					
序号 NO	钢卷号 COIL NO	件数 QTY	炉号 HEAT NO.	生产日期 PRODUCTION DATE	尺寸及规格 MATERIAL DESCRIPTION		化学成分 CHEMICAL COMPOSITION % (熔体分析 HEAT ANALYSIS)										拉伸试验 TENSILE TEST (G.L=L)				弯曲 BEND	硬度 HARDNESS					
					名义尺寸 NOMINAL SIZE	实际尺寸 ACTUAL SIZE	边部 状态	重量 MASS (kg)	C Si Mn P S Cr Ni Cu N										屈服 Y.S.	抗拉 T.S.	伸长 EL	断面 收缩 RA	180° d=	维氏 HVS			
					mm	mm	mm	mm	1=10° 2=10° 3=10° 4=10°										MPa	MPa	%	%	mm	mm			
1	L121220200900	1	51E540	20241023	1.740*1219.0	1.740*1219.0	毛边	21650	130	40	911	45	2	1409	122	21	183	260	999	999	100	100	275	276			
2	L121220201100	1	51H162	20241023	1.740*1219.0	1.740*1219.0	毛边	21689	129	35	949	48	2	1413	114	21	183	505	999	1051	54	100	100	271	272		
合 计 Total		2						43339																			
备 注 REMARKS																											
注 释 NOTES																											
屈服 Y.S.=YIELD STRENGTH 抗拉 T.S.=TENSILE STRENGTH 伸长 EL=ELONGATION G.L.=GAUGE LENGTH L1=5.65SORT (F0) L2=50MM L3=80MM L4=200MM L5=10.35SRT (F0) *0 平均值 AVERAGE *1 屈服点延伸 YIELD POINT EXTENSION *2 屈服比 YIELD RATIO *3 晶间腐蚀 INTERGRANULAR CORROSION																											
会 签 SURVEYOR TO																											
WE HEREBY CERTIFY THAT MATERIAL DESCRIBED HEREIN HAS MANUFACTURED AND TESTED WITH SATISFACTORY RESULTS IN ACCORDANCE WITH THE REQUIREMENTS OF THE ABOVE MATERIAL SPECIFICATION																											
质量负责人 QUALITY MANAGER																											

溧阳瑞达新材料集团有限公司

LIYANG RUIDA NEW MATERIALS
GROUP CO., LTD

收货单位:
Purchaser
牌 号:
Steel Species
标准:
Standard

无锡华鑫金属制品有限公司

SUS304

JIS G4305:2021

产品质量证明书 INSPECTION CERTIFICATE

合同号:
Contract No.
产品名称
Product Name

JSHYHT20250417B01

冷轧 不锈钢卷

Stainless Steel Cold Rolled Coil



NO:DLCC2250504036
Tel: 0519-80698999
Fax: 0519-80698999
地址: 江苏省溧阳市高新区
Add: Liyang High-tech Zone,
Jiangsu Province

发货日期:
Delivery Date
交货状态:
Delivery Condition

2025年05月04日

固溶酸洗

Solution & Anneal

序号 No	钢卷号码 Coil No.	钢种 Grade	表面状态 Surface State	边部 M/C	规格尺寸 Specification & Dimension			重量 Weight	化学成分(%) Chemical Composition (%)								力学性能 (L0=50mm) Mechanical Property			硬度 Hardness HV	钢坯号码 Slab No.	建议开卷方式				
					厚度 Thickness mm	宽度 Width mm	长度 Length m		C	Mn	Si	P	S	Ni	Cr	N	伸长 EL %	抗拉 T.S. MPa	屈服 Y.S. MPa							
1	DL5541219B	SUS304	NO.2B	M	2.85	1250	333	9.569	0.045	0.91	0.42	0.031	0.002	8.02	18.18	0.051	55	694	327	179	J525101627	上开				
2	DL5541320B	SUS304	NO.2B	M	1.15	1250	1000	11.227	0.047	0.91	0.43	0.032	0.008	8.00	18.24	0.061	57	714	354	168	J525104724	上开				
3	DL5541252B	SUS304	NO.2B	M	1.97	1250	576	11.241	0.042	0.90	0.52	0.032	0.002	8.03	18.04	0.055	52	721	363	174	J525102124	上开				
4	DL5541197A	SUS304	NO.2B	M	1.15	1250	1000	11.227	0.047	0.91	0.43	0.032	0.008	8.00	18.24	0.061	57	714	354	168	J525102127	上开				
5	DL5541153BA	SUS304	NO.2B	M	1.55	1250	739	11.265	0.061	1.09	0.46	0.033	0.005	8.01	18.12	0.054	53	705	320	175	J515111721	上开				
6	DL5541252A	SUS304	NO.2B	M	1.97	1250	576	11.271	0.042	0.90	0.52	0.032	0.002	8.03	18.04	0.055	53	701	340	175	J525102124	上开				
合计 Total								55.814																		
说明: 1. 本证明书不得伪造, 复印件需加盖经销商红章方有效。 This certificate shall not be forged, copy needs stamp dealer red chapter party effectively. 2. 边部Edge: M-Mill表示毛边; C-Cut表示切边。 3. 本产品经检测无辐射污染, 未添加汞, non-radiative contamination, No mercury is added. 4. 本表产品已按上述要求制造和检验, 其结果符合要求, 特此证明。 We hereby certify that the product described herein has been manufactured and tested with satisfactory results in accordance with above material specification. 备注: 本公司取得资质证书 1. ISO9001:2015质量管理体系; 2. 欧盟压力容器PED认证; 3. CPR欧盟建筑材料认证。 Remarks: Following quality certification is available: 1. ISO9001:2015 Quality Management System; 2. European Union pressure equipment PED certification; 3. CPR European Union certification of building materials.																										

• Require of warehouse space



We have a standardized workshop of 3000 square meters, more than 80 workshop workers, 15 sales team, 16 technical team, 6 after-sales service team.



we Have a complete factory production, quality supervision and delivery process, as well as a complete after-sales service system.



Various aspects of themachine

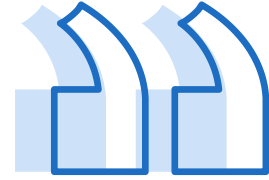


Core advantages:

1. Efficient production
2. Cost advantage
3. Stable quality
4. Environmental protection and energy saving



Packing System



After the machine test is completed, we will wrap the machine with plastic wrap to avoid scratches



Whole Container without wooden case packing



1set machine/package
Wooden Case Packing





THANKS

