

高温导热油泵

High temperature heat transfer oil pump



辰禹（重庆）流体设备有限公司

Chenyu (Chongqing) Fluid Equipment Co.,
LTD

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产品性能简介 Product performance profile

应用领域 Application area

WRY 系列高温热油泵适用于热载体加热系统。

The WRY series high temperature oil pump is suitable for heat carrier heating systems.

参数范围 Parameter range

流量: 1~1500 m³/h Flow rate: 1~1500 m³/h

扬程: 10~135 m Head: 10~135 m

温度: -20~350 °C Temperature: -20~350 °C

功率: 0.75~500 kW Power: 0.75~500 kW

材质 Material quality

过流部件材质可根据用户不同需求, 选用 QT450-10、20CrMo、ZG230-450、304、316、316L 等。

The material of the flowing part can be selected according to the different needs of users, such as QT450-10, 20CrMo, ZG230-450, 304, 316, 316L, etc.

泵轴 Pump spindle

42CrMo 调质和高温淬火处理、镀铬。

42CrMo tempering and high frequency quenching treatment, chromium plating.

密封形式 Sealing form

◇ 石墨碳纤维填料+双端面机械密封

◇ Graphite carbon fiber filler + double end face mechanical seal

- ◇ 石墨碳纤维填料+单端面机械密封
- ◇ Graphite carbon fiber filler + single end face mechanical seal
- ◇ 石墨碳纤维填料+氟橡胶密封
- ◇ Graphite carbon fiber filler + fluororubber seal

结构设计 Architectural design

- ◇ 卧式蜗壳单级单吸离心泵;
 - ◇ Horizontal volute single-stage single suction centrifugal pump;
 - ◇ 轴向吸入，垂直排出;
 - ◇ Axial suction, vertical discharge;
 - ◇ 主要尺寸和性能指标符合 API 610;
 - ◇ Main dimensions and performance indicators comply with API 610;
- 第十版:
- ◇ 后抽出式设计，带轴承支架;
 - ◇ The rear-pull-out design is equipped with a bearing bracket;
 - ◇ 与泵体整体浇注的脚支撑和分体式中心支撑两种支撑;
 - ◇ There are two kinds of support: foot support and separate center support which are cast together with the pump body;
 - ◇ 根据用户需求可以在泵盖处加设水冷却装置，适用于输送温度 $\leq 350^{\circ}\text{C}$ 的高温介质。
 - ◇ According to user needs, water cooling device can be added at the pump cover, which is suitable for conveying high temperature medium with temperature $\leq 350^{\circ}\text{C}$.

轴承 Bearing

NSK、SKF 耐高温轴承。NSK, SKF high temperature bearings.

☞ 联轴器 Clutch

柔性联轴器、叠片联轴器 Flexible coupling, laminated coupling

根据需求可以增加中间节 Intermediate sections can be added as needed

产品型号分类 Product model classification

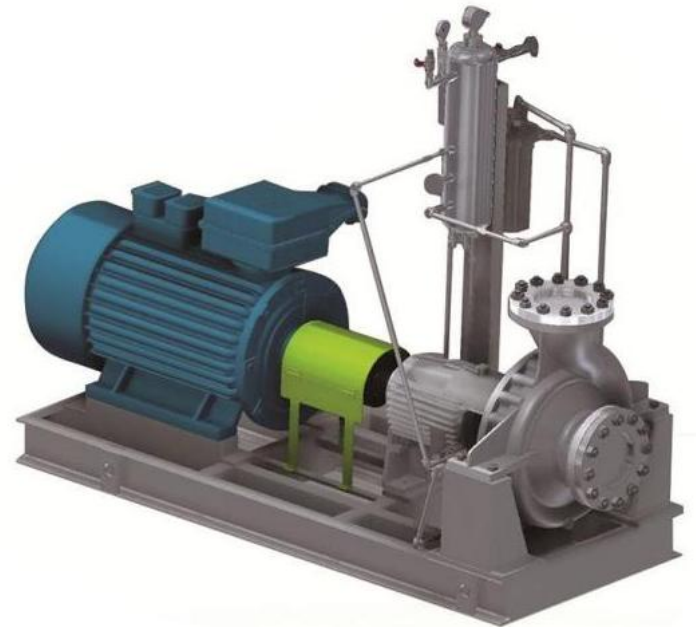
☞ 双端面金属波纹管机械密封高温热油泵

Double end face metal bellows mechanical seal high temperature hot oil pump

- ✧ 适应工况：适用于输送高品质合成导热油
- ✧ 使用温度 $\leq 350^{\circ}\text{C}$
- ✧ 应用行业：有机硅、多晶硅、硬脂酸、纺织印染、聚酯化纤等大型聚合装置热媒站及对热媒循环系统有较高要求的工况环境。

Adaptation to working conditions: Suitable for conveying high quality synthetic heat transfer oil

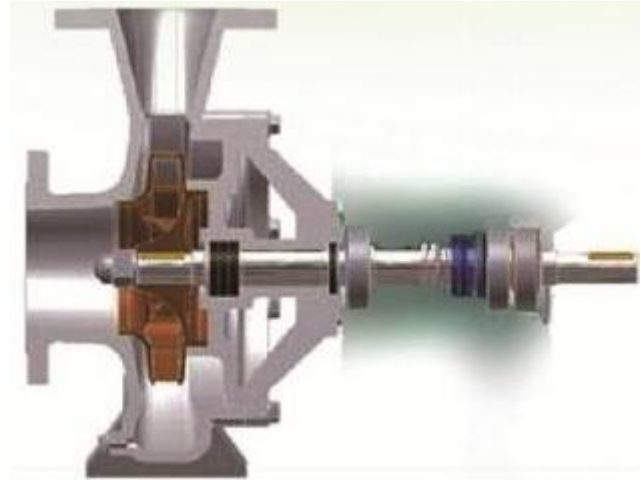
The operating temperature is $\leq 350^{\circ}\text{C}$.



Application industries: silicone, polysilicon, stearic acid, textile printing and dyeing, polyester fiber and other large polymer plant heat medium station and working environment with higher requirements for heat medium circulation system.

单端面金属波纹管机械密封高温热油泵

Single end face metal bellows mechanical seal high temperature hot oil pump



- ◇ 适应工况：适用于输送高品质合成导热油。
- ◇ 应用行业：有机硅、多晶硅、硬脂酸、纺织印染、小型聚合装置热媒站。
- ◇ Adaptation: Suitable for the transportation of high quality synthetic thermal oil.
- ◇ Application industry: silicone, polysilicon, stearic acid, textile printing and dyeing, small polymer plant heat medium station.



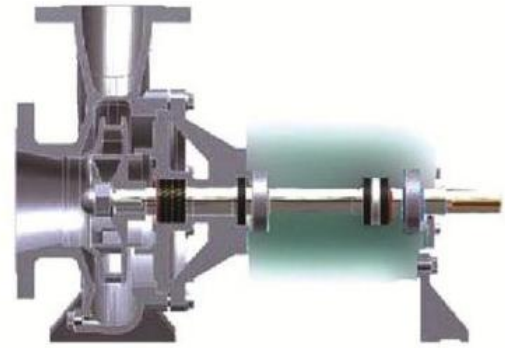
石墨碳纤维轴封+氟橡胶油封

Graphite carbon fiber shaft seal + fluororubber oil seal

- ◇ 适用工况：适用于高温矿物导热油以及含微量颗粒的高温介质
- ◇ 应用行业：木材加工煤焦油加工、苯酐行业、筑路机械以及热载体加热系统。

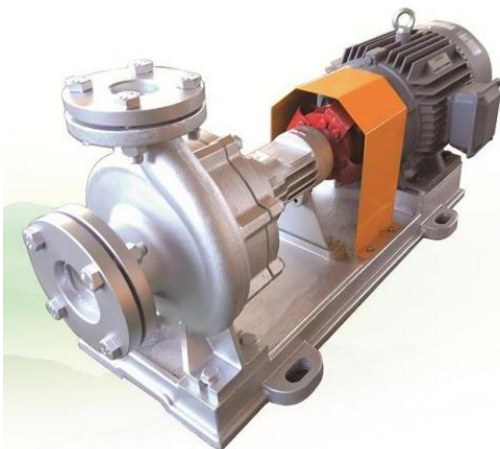
◇ Applicable working conditions: suitable for high temperature mineral thermal oil and high temperature medium containing trace particles.

◇ Applicable industries: wood processing, coal tar processing, phthalic anhydride industry, road construction machinery and heat carrier heating system.



风冷结构 Wind cooling structure

- ◇ 适应工况：适用于输送温度 $\leq 350^{\circ}\text{C}$ 的高温介质特点；
- ◇ 泵盖的风冷优化设计，有效降低介质温度向轴承部位传导，延长轴承使用寿命。借用电机降温风扇的空气对流，降低整机温度。轴承间距大，轴承负荷低，使用寿命长。



◇ Operating Environment Compatibility: Designed for high-temperature media with maximum temperature $\leq 350^{\circ}\text{C}$.

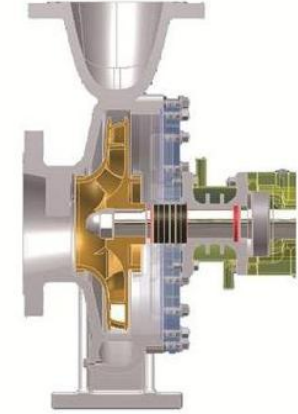
◇ The pump cover features optimized air cooling



system that minimizes heat transfer from the medium to bearings, significantly extending bearing service life. Utilizing airflow from the motor's cooling fan, the system effectively reduces overall equipment temperature. The large bearing spacing and low load configuration ensure prolonged operational durability.

🔥 水冷结构 Water-cooled structure

- ◇ 适应工况：适用于输送温度 $\leq 350^{\circ}\text{C}$ 的高温介质。
- ◇ 特点：根据客户要求，可以在泵盖和轴承中间加设冷却水套，屏蔽介质高温向轴承传导，保证机组在高温工况下正常运转。增强油封密封效果，延长油封使用寿命。



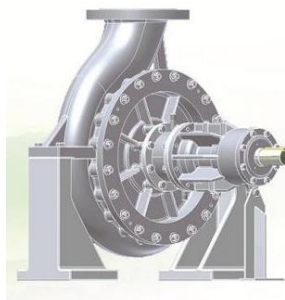
◇ Operating Environment Compatibility:

Designed for high-temperature media with temperatures $\leq 350^{\circ}\text{C}$.

- ◇ **Key Features: Customizable cooling water jacket installation between pump cover and bearings, effectively shielding high-temperature media from bearing heat transfer to ensure stable operation under extreme conditions. Enhanced oil seal sealing performance significantly extends the service life of sealing components.**

🔥 泵体支撑结构 Pump body support structure

- ◇ 适用于叶轮直径 $\leq 420\text{mm}$ 规格型号；
- ◇ 特点：整体浇铸，结构紧凑，外观优美。
- ◇ Suitable for impeller diameter $\leq 420\text{mm}$ specification;
- ◇ Features: integral casting, compact structure, beautiful appearance.



- ◇ 适用于叶轮直径 $> 420\text{mm}$ 的规格型号；
- ◇ 特点：径向热膨胀平衡，高温状态下运转平稳。
- ◇ Suitable for impeller diameter $> 420\text{mm}$ specification and model;
- ◇ Features: radial thermal expansion balance, stable operation at high temperature.

驱动方式 Driving modes



电动机驱动
Electric motor drive

柴油机动力驱动
Diesel engine power drive

适用于现场用电不方便或临时停电应急使用。配用功率： $\leq 200\text{kW}$

Suitable for temporary power supply or emergency use in case of temporary power failure. Power distribution: $\leq 200\text{kW}$



产品性能参数

Product performance parameters

Model	Flow	Head	Speed	Power		Efficiency	Electric machinery	NPSN
				shaft power	matched power			
型号	流量 m ³ /h	扬程 m	转速 r/min	功率kw		效率 %	电机 (Y型)	汽蚀余量NPSH
				轴功率	配用功率			
20-20-100	1	10	2800	0.11	0.37	26	A02-7112	2
20-20-125	1.5	22	2800	0.3	0.75	30	80	2
25-25-160	3	27	2900	0.74	1.5	30	90S	2
32-25-180	3.2	50	2900	2.42	3	18	100L	
32-32-160	6	28	2900	1.31	1.5	35	90S	2
40-25-160	10	28	2900	1.73	2.2	44	90L	2
40-25-200	6.3	65	2900	4.29	5.5	26	132S	2
40-25-180	6.3	50	2900	3.9	5.5	22	132S	
40-25-250	6.3	80	2900	6.24	7.5	22	132S	2
50-32-160	12.5	30	2900	2.17	3	47	100L	2
50-32-200	12.5	50	2900	4.3	5.5	40	132S	2
	18	40		4.4		45		
50-32-180	16	32	2900	3.7	4	38	112M	
50-32-250	12.5	80	2900	8.58	11	32	160M	2.2
	18	70		10.04		33		
50-32-230	16	60	2900	8.7	11	30	160M	
65-50-160	20	32	2900	3.17	4	55	112M	2
65-50-170	20	38	2900	3.82	5.5	55	132S	2
	32	32	2900	4.1		56		
	40	25	2900	4.5		57		
65-40-200	25	50	2900	6.5	7.5	52	132S	2
	30	48		7		56		
65-40-180	25	35	2900	4.6	5.5	52	132S	
65-40-250	25	80	2900	11.8	15	46	160M	2.2
65-40-230	20	51	2900	6.3	7.5	44	132S	
65-40-315	25	125	2900	22.4	30	38	200L	3.3
65-40-300	22.5	100	2900	17	22	36	180M	
80-65-160	60	25	2900	6.55	7.5	70	132S	2
80-50-200	40	52	2900	9.3	15	61	160M	2
	50	50		10.8		63		
	60	46		11.9				
80-50-190	45	40	2900	8.2	11	60	160M	
80-50-185	40	40	2900	6.9	7.5	62.9	132S	
80-50-180	40	32	2900	6	7.5	58	132S	
80-50-250	50	80	2900	19.1	22	57	180M	2.2
	60	72		19.9		59		
80-50-230	43	60	2900	12.8	15	55	160M	
80-50-315	50	125	2900	33.4	45	51	225M	3.3
80-50-300	45	100	2900	24.5	30	50	200L	
100-65-200	80	53	2900	16.7	22	69	180M	3
	100	50		19		71.5		3.8
100-65-190	94	44	2900	16.1	18.5	70	180M	
100-65-180	87	38	2900	13.2	15	68	160M	
100-65-170	65	40	2900	10.6	11	66	160M	

2 级电机 2-stage motor

Model	Flow	Head	Speed	Power		Efficiency	Electric machinery	NPSN
				shaft power	matched power			
型号	流量 m ³ /h	扬程 m	转速 r/min	功率kw		效率 %	电机 (Y型)	汽饰余量NPSH
				轴功率	配用功率			
100-65-250	80	85	2900	28.9	37	64	200L	2.8
	100	80		32.5		67		3.4
100-65-240	95	72	2900	28.6	37	65	200L	
100-65-230	90	65	2900	25.3	30	63	200L	
100-65-315	80	130	2900	48	75	59	280S	3.6
	100	125		55.8		61		3.3
100-65-300	95	113	2900	49.5	55	59	250M	
100-65-290	90	100	2900	43	55	57	250M	
100-65-280	82	84	2900	33.5	45	56	225M	
100-80-160	100	32	2900	12	15	73	160M	3.8
125-80-160	160	32	2900	18.34	22	76	180M	5.6
125-80-200	160	50	2900	28.7	37	76	200L	5.2
	180	45		29.4		75		5.3
125-80-250	160	80	2900	47.75	55	73	250M	4.8
125-80-230	140	70	2900	38.7	45	69	225M	
125-80-315	160	125	2900	80.1	90	68	280M	4.4
125-100-200	180	52	2900	34.2	45	74.5	225M	5.6
	200	50		35.6		76.5		6.1
125-100-190	178	40	2900	26.6	37	73	200L	
125-100-250	200	70	2900	50.2	55	76	250M	5.5
	230	62		51.8		75		6.4
125-100-240	190	63	2900	44	55	74	250M	
125-100-230	180	57	2900	40	45	70	225M	
125-100-220	170	51	2900	34.7	45	68	225M	
125-100-210	150	70	2900	40.1	45	70	225M	
125-100-270	250	75	2970	66.3	75	77	280S	6
125-100-275	300	70	2970	74.3	90	77	280M	6
125-100-315*	200	125	2970	95.9	110	71	315S	5.5
	230	115		104.4		69		6
125-100-300	180	100	2970	71	90	69	280M	
150-125-200	250	56	2970	49.5	75	77	280S	5.5
	300	50		52		79		
150-125-250	300	80	2970	83.79	110	78	315S	6
	400	70		97.76		78		
150-125-240	300	70	2970	73.3	90	78	280M	
150-125-230	270	65	2970	62.9	75	76	280S	
150-125-220	250	48	2970	43	55	76	250M	
150-125-315*	300	125	2900	134	160	76	315L	7
	400	110		151.7		79		8
200-150-250	400	80	2970	109.8	132	79.4	315M	6
	450	70		114.3		75		

4 级电机 Level 4 motor

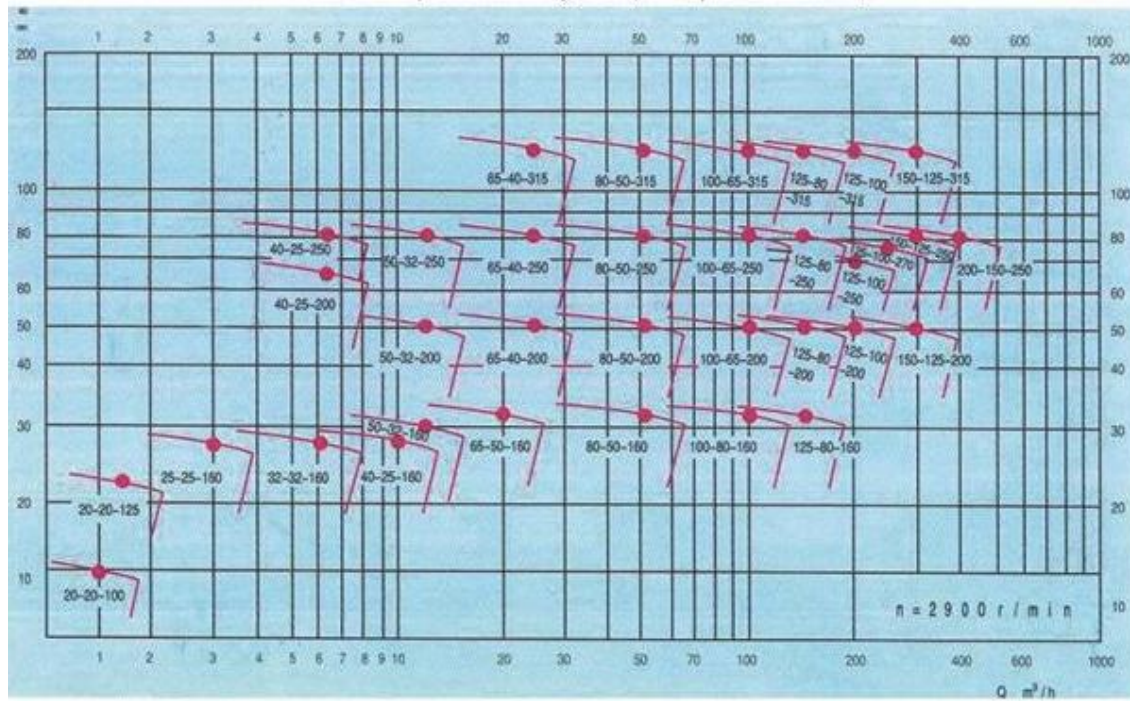
Model	Flow	Head	Speed	Power		Efficiency	Electric machinery	NPSN
				shaft power	matched power			
型号	流量 m ³ /h	扬程 m	转速 r/min	功率kw		效率 %	电机 (Y型)	汽饰余 量NPSH
				轴功率	配用功率			
100-80-400	85	46	1480	17.84	22	59.7	180L	5
100-100-450	167	64	1480	42.8	55	68	250M	1.5
125-100-400	200	50	1480	36.31	45	75	225M	5.5
125-100-380	160	55	1480	32.38	37	74	225S	5.5
150-125-400	300	50	1480	53.39	55	76.5	250M	5.4
	250	56		49.83				
150-150-315	220	32	1480	24.3	30	79	200L	1.6
150-150-450	265	61	1480	62	75	73	280S	1.8
150-150-560*	300	100	1480	120	160	68	315L	2.7
150-150-630*	360	115	1480	179.1	200	63	315L	2.2
200-150-315	400	32	1480	43.9	55	79.4	250M	3.6
200-150-400	400	50	1480	69.83	75	78	280S	3.7
200-150-390	350	50	1480	62.3	75	76.5	280S	3.4
200-150-380	330	45	1480	53.5	75	75.5	280S	
200-150-430	400	60	1480	83.79	90	78	280M	3.4
200-150-500*	400	80	1480	117.76	132	74	315M	3.4
200-150-560*	400	110	1480	171	200	70	315L	3.2
200-200-315	340	31	1480	35	45	82	225M	2
200-200-630	600	132	1480	295	355	74	450M	3.8
250-200-400*	500	50	1480	86.2	110	79	315S	4.5
	500	60		108.9	132	75	315M	
250-200-500*	500	80	1480	142.4	160	76.5	315L	4.5
	600	80		172	200	76		
	700	70		180.3		74		
250-200-480	400	65	1480	97	110	73	315S	
250-200-560*	500	110	1480	208	250	72	355M	5.8
250-250-560*	850	107	1480	309	355	79.1		4
250-250-630*	850	128	1480	368.3	400	78.2		4.5
300-250-400*	800	50	1480	132.84	160	82	315L	6.3
300-250-500*	800	80	1480	229	250	80.4	355M	5.9
	1000	80		287	315	76	355L2	7
	1200	70		310	355	74	450M2	8.2
300-300-560*	1420	107	1480	429.9	500	86		5
300-300-630*	1550	135	1480	680	800	82.8		5.5
400-400-500*	2200	75	1480	510	600	88		6.3
400-400-560*	2050	103	1480	622.1	710	88		7.5
400-400-630*	2300	130	1480	940	1120	88		8.5

表中带*的型号为中心支撑。

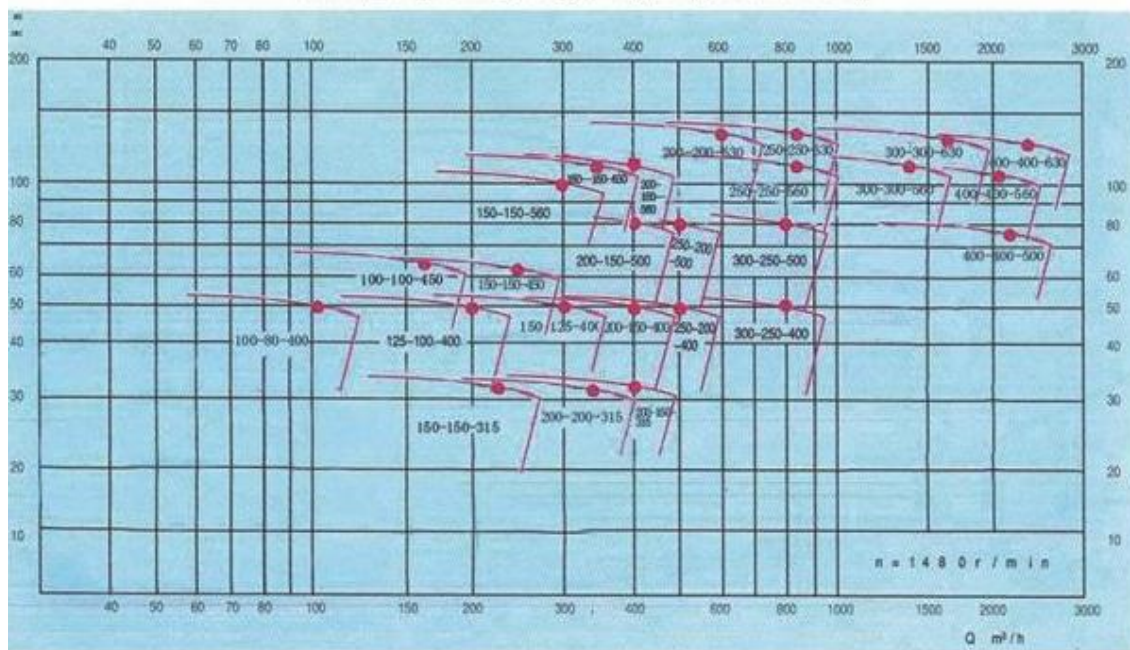
The model with * in the table is the central support.

型谱图 Spectra

型谱图 (2级电机)
model spectrum figure (2-bipolar motor)



型谱图 (4级电机)
model spectrum figure (4-bipolar motor)



产品应用领域 Product application areas

- ◇ 石油化工：原油、天然气生产、输送过程的加热，聚合、缩合、蒸馏、熔融等。
- ◇ 合成纤维：聚酯、化纤、聚合、熔融、纺丝、热固、纤维、整理、延伸等。
- ◇ 纺织印染：热定型、烘干、热熔、染色、洗涤、轧光、熨平、热风拉幅等。
- ◇ 木材及造纸：木材工业中木材烘干、纤维板、刨花板等热压成型；造纸工业中干燥、热熔、熔蜡及波纹纸加工等。
- ◇ 有机硅：单体合成；加热、反应、浓缩、伴热等。
- ◇ 焦化及焦油深加工：贮气罐、混合站、分配站的加热、保温；焦油、葱油、洗油、萘油、酚油及煤焦化行业、中类似液流输送。
- ◇ 塑料及橡胶：热压、热延、挤压、捏合、轧光、混合、密恋、硫化成型等。
- ◇ 炭素工业：石墨电极、炭素制品、沥表熔化、混捏锅加热、挤压成型等。
- ◇ 其他行业食品、油脂、太阳能、电梯、电子、医药、采暖设备、筑养路、冶金、机械加工、油漆工业等。
- ◇ Petrochemicals: Heating processes for crude oil and natural gas production, transportation, polymerization, condensation, distillation, and melting.
- ◇ Synthetic Fibers: Polyester, chemical fibers, polymerization, melting, spinning, heat curing, fiber processing, finishing, and extension.
- ◇ Textile Dyeing: Heat setting, drying, hot-melt, dyeing, washing, calendering, ironing, and thermal wind stretching.
- ◇ Wood & Paper: Wood drying in wood processing, thermal pressing of fiberboards and particleboard; papermaking processes including drying, hot-melt, wax melting, and corrugated paper manufacturing.
- ◇ Organic Silicones: Monomer synthesis; heating, reaction, concentration, and thermal management.





✧ Coking & Tar Processing: Heating and insulation for gas storage tanks, blending stations, and distribution centers; tar, anthracene oil, wash oil, naphthalene oil, phenol oil processing, and coal coking

industry liquid flow conveyance.

✧ Plastics & Rubber: Hot pressing, hot stretching, extrusion, kneading, calendaring, mixing, compounding, and vulcanization molding.

✧ Carbon Industry: Graphite electrodes, carbon products, surface melting, mixing pot heating, and extrusion molding.

✧ Other Sectors: Food & Oil, Solar Energy, Elevators, Electronics, Pharmaceuticals, Heating Equipment, Road Construction & Maintenance, Metallurgy, Mechanical Processing, Paint Industries.