Widethroat W Range W系列大开口泵



One Company, Unlimited Solutions

The Mono Pedigree Mono 的由来和发展

Mono have been at the forefront of progressing cavity pump design since 1935. With the experience gained from over 70 years we are able to reflect the varying needs of our extensive customer base worldwide. And an all-round efficiency and quality which our customers demand, and to which we are committed.

A long term commitment which is underlined by our attainment, in 2001, of ISO 9001:2000. The W Range has been developed out of this commitment.

Mono 泵业自从1935年以来就处于螺杆泵设计的前沿。有着超过70年积累的经验,我们能满足全球范围客户的不同需要。我们对客 户在效率和品质的全方位要求,也做出了承诺。

2001年我们通过了IS09001:2000认证,强化了我们对客户的长期承诺保证。



Features and Benefits 泵的特性和优点

The design of the W range is such that many different applications can be handled. The standard design consists of an enlarged rectangular inlet with a screw conveyor to assist the product into the pumping element. Options exist that can modify the inlet with either large diameter augers, integral bridge breakers or both.

Pumps are available in most cases as Monobloc® (close coupled) or as a bareshaft pump.

Dry solids approaching 40% can be handled by the pumps when fitted with either the integral bridge breakers or large augers.

The pump has been designed to facilitate maintenance through its simple design and the use of a plug in shaft facility.

The pumps are available in a range of materials to ensure a wide variety of products can be handled. Shaft sealing is a hard faced, single mechanical seal, with packed gland available as an option.

W系列泵的设计可以使其适用于许多不同的工况。

泵的标准设计包含一个带有螺旋推进器和增大的矩形进料口,螺旋推进器用于帮助介质进入泵的吸入腔。同时也可以选择加大的 螺旋推进器和破桥装置,或者两者同时使用。

当泵配备加大的螺旋推进器和破桥装置时,可以用以输送含固量达40%的介质。

泵采用简单的插入式轴结构以便于维护。

泵体有多种材质可供选择,可以满足输送不同介质的需求。轴封为机械密封,也可选择填料密封。



Widethroat W Range

W系列大开口泵

The Widethroat range has been designed to handle highly viscous materials such as sludges, slurries, thick non-flowing pastes and de-watered sludge cake with viscosities up to 1,000,000 cP.

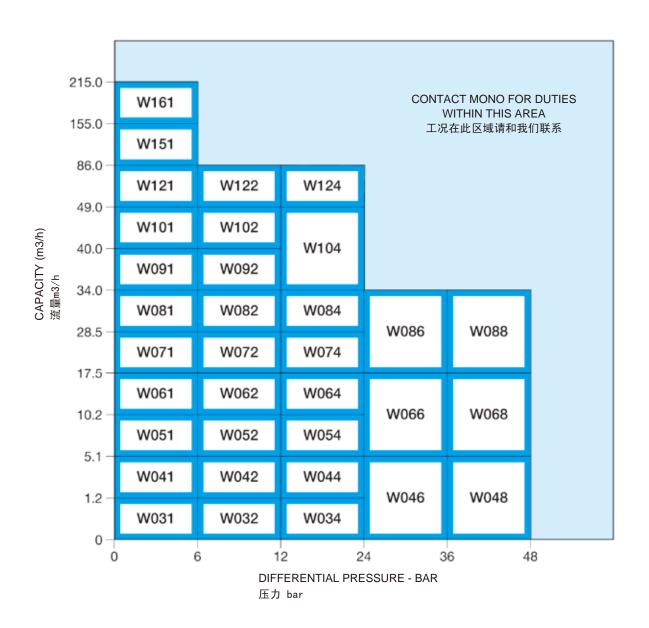
The range is based on single, two, four, six and eight stage pumps which can develop pressures up to 48 bar and capacities up to 215m3/h.

For the many difficult and varied applications encountered, the pumps are run at a relatively slow speed, therefore the pump will handle shear sensitive products with minimal product damage, abrasive solids in suspension and highly viscous materials.

大开口系列泵设计用于输送高粘度的介质例如污泥,泥浆,粘稠而不流动的浆料以及粘度达到1,000,000 mPas的脱水泥饼。 本系列包括单级,两级,四级,六级和八级泵,最大压力可达48bar,最大流量可达215m3/h。 对于许多复杂多变的工况,泵以较低的速度运行,因此泵能够以最小的损伤来输送剪切敏感产品,悬浮液以及高粘度介质。

Performance Data 性能数据

Typical Performance Data for the Widethroat W range W系列泵的性能参数



NOTES:

- 1. The tabulated performance data shown is based upon handling clean water at 20oC.
- 2. For guidance in selection of a pump for use with other fluids of varying abrasion and viscosity refer to Mono Pumps Ltd., Audenshaw, Manchester.

注意:

- 1. 表中所显示的性能数据是基于20度的清水介质。
- 2. 运用于其它不同磨蚀度和粘度的流体时请和我们联系。

Widethroat W Range Applications 大口径W系列的应用



A W064 model installed at a sewage treatment works to control sewage odours, caused by a belt press feeding dewatered sludge cake directly onto an open-air conveyor and into an open skip for disposal. The cast iron W064, with an integral bridge breaker fitted as an option, delivers the sludge cake at the required rate of 2.5m3/h and pressures of up to 12 bar. It operates eight hours per day, six days a week and daily fills up the four enclosed skips with sludge cake.

W064型安装在污水处理厂,用以控制由带机脱水污泥直接进入户外的螺 旋推进器或者料仓时产生的异味。铸铁材料泵体,加装破桥装置,在流 量2.5m3/h,12bar压力下输送脱水污泥。每天工作8小时,每周六天,污 泥饼每天装满四个封闭的料车。

Problems arose at a water treatment works with the discharge of sludge cake by chute into a mobile skip for disposal on landfill sites. As the sludge is a relatively immobile solid, the only way to load the skip evenly was by manually raking it out. The installation of a W054 pump loads the kip via a 15 metre long, 150mm diameter flexible hose, and the non-pulsating nature of the pump provides an even output of 1.5m3/h. As the pump operates at a pressure of 1 bar, it compresses the

cake still further. Significant cost savings are achieved as a result - the skip now holds 6 tonnes rather than 4.5.

用以解决在污水处理厂把脱水泥饼通过斜槽排入移动的运料车运到填埋 场时产生的问题。脱水污泥是非流动介质,要使均匀装车唯一的途径是 人工耙整。用W054泵装车时通过一个15米长,150mm直径的柔性软管输送 到料车上,流量稳定为1.5m3/h,由于泵本身产生的压力,进一步压缩了 泥饼,其结果是目前运料车可以装6吨而不是之前的4.5吨,显著地节约 了运行成本。





A custom-built W082 is speeding up waste disposal at a Scottish tannery. Previously the 'fleshings' were shovelled manually from the processing area to a skip, this method was highly labour intensive. The cast iron W range pump with large auger and hopper were specially modified in order to handle this difficult material. The fleshings waste is gravity fed into the hopper, then pumped at 5.5m3/h at a pressure of 3 bar, along 30m of pipe direct to an outside skip for disposal.

特殊设计的W082泵用在苏格兰的一家制革厂,显著提高了污水处理的效率。以前刮肉是人工从处理区铲到料车,这种方法劳动强度很高。W泵 配备有专门设计的大螺旋推进器和缓冲料斗,以处理这种难以输送的介质。刮肉肥料靠重力进入料仓,然后在3bar的压力下以5.5m3/h的流量 沿着30米厂管路直接输送到外面的运料车以备后续处理。

A total of 9 stainless steel W range pumps have been installed at a plant in Greenwich to handle highly viscous materials and transfer it along several hundred metres of pipework. Operating at speeds of between 123rpm and 196rpm, delivering gluten at a capacity of 4.5m3/h to 40.5m3/h and pressures of 3 to 8 bar. Extreme reliability was specified by the customer, as the pumps have to operate 24 hours a day, seven days a week with minimum downtime for repairs.

共有9台W系列泵不锈钢泵安装在格林威治的一家工厂,沿着几百米厂的管路输送高粘度介质。工作转速在123rpm196rpm之间,压力在3到8bar,以 4.5m3/h到40m3/h的流量输送面筋。鉴于泵必须24小时运行,每周七天,以 及最短的停机修理时间,客户对泵提出了极高的可靠性要求。





A customer, producing mechanically deboned meats, which are frozen before export to food manufacturers worldwide, has installed a stainless steel W062 pump. The meat puree is gravity fed into the inlet hopper for transfer to the freezer plates. The efficiency of the freezing system relies on a constant flow rate of 5 tonnes per hour, to prevent the plates standing idle or a delay further up the line.

一个机械化生产剔骨肉的客户,需要将剔骨肉冷冻后输送到世界各地的 食品加工厂,该客户安装了一台不锈钢W062泵。肉泥靠重力流入料仓后 输送到冷冻板,冷冻系统的效率取决于每小时5吨的稳定流速,以防止冷 冻板闲置并延误生产线。

This site's sludge dewatering unit, installed at a large sewage treatment works, is a belt thickening system, comprising $3 \times 3m$ wide belt of 0.7mm mesh, located above a collection sump. As the dewatered sludge reaches the end of the belt it is deposited into the inlet hopper of the W072 pump and transferred to holding tanks at 14m3/h. Ideal for thick non-flowing sludges and slurries the W range incorporates an auger system which help to feed the sludge to the pumping element without bridging or blocking.

某大型污水处理厂采用带式脱水机,带宽3*3m,0.73mm的网眼。当脱饼达带的末端,落入W072的泵进料口,以14m3/h流速输送到泥饼池。W系列泵 特别适合输送粘稠非流动污泥和泥浆。使用大螺旋推进器能帮助污泥进入 吸入室而无挂料或者堵塞。





A leading designer and manufacturer of machinery for producing savoury pies, pasties and sausage rolls is incorporating stainless steel W032 pumps into its sausage roll manufacturing machines. Transferring prepared sausage meat in a continuous uniform length to the pastry casing at a capacity of between 5-10m3/h, the W range features an auger feeding system to ensure the sausage meat is consistently fed from the extended hopper inlet to the pumping element.

一个著名的馅饼和香肠设备制造商将不锈钢W032运用到香肠卷灌装机 上,以5-10m3/h的流速把已经制备好的香肠肉以连续均匀的输送到馅 饼盒中,该泵安装了一个螺旋推进器从而确保香肠肉从送料斗均匀连 续地进入泵的吸入腔。

Total Quality- Guaranteed 全面质量保证

It is the policy of Mono Pumps Ltd. to achieve Total Quality performance in every aspect of customer service.

This commitment to quality, which has been recognised by our attainment of ISO 9001 Part 1 of Lloyds Register of Quality Assurance, can be seen in the high standards of pre and post sales support which we offer.

We use the latest technology, such as computer-based flexible manufacturing systems, computerised bar stores and information systems.

These control systems are supported by advanced manufacturing facilities, for example, a comprehensive stator manufacturing plant, to ensure that we always produce pumps and parts to a consistently high standard.

By using only genuine Mono spares you automatically reduce the risk of pump breakdown and preserve the full Mono guarantee. Mono spares result in lower fitting costs, greater efficiency, reduced running costs and longer pump life - as well as guaranteed quality and value for money.



Mono公司的宗旨是在针对客户各方面的服务都达到全面质量要求。 我们对质量的承诺体现在我们提供的高标准的售前售后服务,而我 们的承诺通过则IS09001得到强化。

我们使用最新的技术,如计算机柔性制造系统,计算机条形码库存 信息系统,这些控制管理系统以先进的制造设备提供保证,如综合 定子制造厂,以确保我们总能以一致的高标准生产泵和部件。 使用原产Mono部件,可以有效降低运行风险并享有Mono的全面质量 保证,使用Mono的备件意味着较低的安装成本,更高的运行效率, 减少运行成本并提高泵的寿命一品质保证,物有所值。

FEATURES	DESCRIPTIO	BASIC PU		BASIC PUMP CODING					基本泵的编码				STD. VA			7
特 点	说 明			3		· ·	6	<u> </u>		<u> </u>	10	- /	_	13	_	_
BODY MATERIALS	Cast Iron	1 C	ľ									Í				
泵体材质	Stainless Steel	S	1													
PUMP DESIGN 设计			W	1												
	1.2m ³ /h @ 350 rev/min			0	3	1										
NOMINAL PUMP	5.1m ³ /h @ 350 rev/min			0	4	1										
CAPACITY AT	10.2m ³ /h @ 350 rev/min			0	5	1										
MAXIMUM	17.5m ³ /h @ 350 rev/min			0	6	1										
SPEED	28.5m ³ /h @ 350 rev/min			0	7	1										
AND ZERO				0	8	1										
PRESSURE	40m ³ /h @ 250 rev/min			0	9	1										
最大转速和	49m ³ /h @ 200 rev/min			1	0	1										
零压力下的	86m ³ /h @ 200 rev/min			1	2	1										
额定流量	155m ³ /h @ 200 rev/min			1	5	1										
良いに主	215m ³ /h @ 200 rev/min			1	6											
PUMP	One					1										ļ
STAGES	Тwo					2										
泵级数	Four					4										
汞纵剱	Six					6										
	Eight					8										
PRIME MOVER						Ť	Α									
ARRANGEMENTS	Monobloc						В									ļ
AND BUILD SELECTION	Body Options						C									
驱动装置的	Body Options						D									
构造和选择	Bareshaft						Н									
MECHANICAL	Standard Auger							J								
SEAL PUMP	Large Auger							Ĥ								
DESIGN								D								
机械密封设计	Bridge Breaker Drive Options							E								
PACKED GLAND	Standard							S								
PUMP DESIGN	Large Auger							L								
填料密封设计								В								
жналон	Bridge Breaker Drive Options							С								
DESIGN NUMBER 设计号									1							
STATOR MAT'L 定子	RA, RR etc.									Α	1					
ROTATING PARTS 转动部件	1, 3, 4, 5, 8										3					
	Cast Iron Widethroat size 06											1				
TYPICAL BASIC	four stage. Mechanical seal,															
	Monobloc Build C with Bridge	С	W	0	6	4	С	E	1	A	4					
PUMP CODING	Breaker option E, Natural rubber	ľ	··	ľ	ľ	Ι.	ľ	-	ľ.		·					
典型编码	stator, Code 4 rotating parts															
	'G' - Standard Bloc										İ					
PRIME MOVER	'H' - Standard Bareshaft															
AND PORT	'C' - Bareshaft - Mono Australia Only	1														
OPTIONS	'A' - ANSI + Access Ports	С	W	0	6	4	С	E	1	A	4	Ζ	G			
驱动装置和相应	'E' - Standard ANSI															
的接口选择	'J' - Japan															
					1 N /I				μ. Λ.			-			_	
FULL PUMP CODING TO BE STAMPED ON PUMP NAMEPLATE																

Stators:

定子

Various options available including Natural (A) and Nitrile (R) rubber. Special materials can be supplied for difficult applications.

定子材质有多种选择,包括天然橡胶,丁腈橡胶 等,对苛刻工况可提供特殊材质的定子。

Rotors:

转子

Standard rotors are available in either tool steel with hard chrome plate (hcp) and stainless steel with or without hcp. Special rotor materials can be supplied to suit the product being pumped.

标准转子可使用有镀铬的工具钢或镀铬的不锈钢。 特殊介质可以提供特殊材料的转子。

Sealing:

密封 Hard faced, single mechanical seal is standard, packed gland available as an option.

标准配置为机械密封,也可以提供填料密封。

Drives:

驱动电机 Close coupled (Monobloc) or direct drive fixed and v/speed motors available. 可选择直联,定转速或变频调速,手动调速等电机。

Options:

更多选择

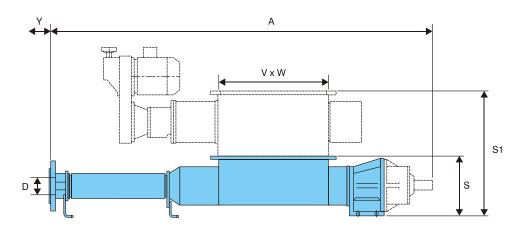
Integral bridge breakers, large auger conveyors and hopper sizes to suit application. 针对不同的工况可选择大螺旋推进器或者破桥装置。

Accessories:

附件

Relief valves and product sensing equipment can be readily supplied. 可根据要求提供阀门,料位探测仪等附件。

W Range Dimensions W系类泵尺寸



MODEL 型号	STAN	DARD + BRII 标准+防堆	DGE BREAKER 者器	STD 标准	BRIDGEBREAKER 防堵器			ARGE AUGER 1径螺旋输送器		ALLMODELS 所有型号
	Y	Α	V x W	S	S1	Y	Α	V x W	S	D
W032	720	1156	320 x 170	185						*
W034	750	1638	320 x 170	212						50
W041	835	1324	350 x 250	232						65
W042	835	1523	350 x 250	232	412	770	1842	750 x 250	282	65
W044	890	1987	350 x 250	245	425	880	2293	750 x 250	295	80
W051	1045	1594	500 x 250	247						80
W052	1050	1859	500 x 250	260	435	770	2010	750 x 250	310	80
W054	1100	2500	500 x 250	285	460	765	2657	750 x 250	335	100
W061	1265	1845	650 x 360	285						100
W062	1270	2249	650 x 360	310	515	1030	2484	1000 x 360	375	100
W064	1330	2964	650 x 360	320	525	1035	3212	1000 x 360	395	125
W071	1300	2034	650 x 360	330						125
W072	1300	2402	650 x 360	330	525	1025	2675	1000 x 360	415	125
W074	1410	3395	650 x 360	405	600	1035	3665	1000 x 360	465	125
W081	1300	2078	650 x 360	330						125
W082	1370	2581	650 x 360	340	550	1040	2865	1000 x 360	505	125
W084	1440	3590	650 x 360	405	615	1030	3847	1000 x 360	505	150
W091	1550	2407	800 x 450	360						150
W092	1550	2869	800 x 450	360	575	1045	3053	1000 x 450	505	150
W101	1550	2485	800 x 450	360						150
W102	1625	3153	800 x 450	405	655	1042	3410	1000 x 450	550	150
W121	1600	2784	800 x 450	450						200

NOTES:

- All dimensions in millimetres unless otherwise stated and for guidance only. For full certified drawings refer to Mono Pumps Ltd., Audenshaw, Manchester.
- 2. Shaft diameters are to BS 4506: 1970 and keyways to ISO R773.
- 3. End Cover dimensions to BS EN 1092.
- 4. Dimension Y is the preferred dismantling space. Consult Mono Pumps Ltd. Audenshaw, Manchester for minimum dismantling space.
- 5. Please refer to Mono Pumps Ltd. Audenshaw, Manchester, for hopper drilling details.
- 6. V&W Standard hopper size. For extended hopper sizes, please refer to Mono Pumps Ltd.
- 7. For models and dimensions not shown above, please contact Mono Pumps Ltd.
- * 11/2" BSP outlet provided

注意:

- 1. 除特殊说明外,所有尺寸均以mm计。
- 2. 轴径BS4506:1970标准,键槽IS0 R773标准。
- 3. 端盖尺寸BS EN 1092 标准。
- 尺寸Y是推荐的拆卸预留空间。有关最小的拆卸空间可进 一步与我们联系。
- 5. 关于进料斗的详细情况,请向我们咨询。
- V&W表示标准口径进料斗尺寸。对于加大型进料斗,请向 我们咨询。
- 7. 对于上表中未显示的规格型号及尺寸,请向我们咨询。
- * 1.5" BSP出口尺寸

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