



川源(中国)机械有限公司  
GSD (China) Co., Ltd.



# SRB

## 沉水式罗茨鼓风机

SRB submersible roots blower

# SRB 沉水式罗茨鼓风机

## SRB submersible roots blower

### 特点 Features



#### ■ 安装简便、占地空间小

风机安置在水槽中，无需固定底座，配管短，占地小。与使用陆上型风机相比较，无需另建设风机房，系统空间利用率高，节约整体成本。

#### ■ 低噪声、节约降噪投入

沉水式罗茨鼓风机在水下运行，声音在空气和水的界面被折射入水里，噪音低，无需额外增加降噪设施投入。

#### ■ 高效率、低故障

沉水式罗茨鼓风机采用联轴器连接，传动效率高。无需皮带维护，降低故障发生频率。

#### ■ 散热好，使用寿命长

整机水下运行，比陆上型风机散热降温效果更好，延长鼓风机使用寿命。

#### ■ Easy installation and small footprint

The submersible blower is installed in the water tank, and the base needn't be fixed, with short pipeline and small footprint. Compared with the land type blower, there is no need to build a blower room, the system space utilization is high, and the overall cost is saved.

#### ■ Low noise, saving investment in noise reduction

Submersible roots blower operates underwater, and the sound is refracted into water at the air-water interface. The noise is low, there is no need to make additional investment in noise reduction facilities.

#### ■ High efficiency, low faults

Submersible roots blower is connected by a coupling with high transmission efficiency. No belt maintenance is required and the frequency of faults is reduced.

#### ■ Good heat dissipation and long service life

The whole machine runs underwater, bringing a better cooling effect than that of the land type blower and prolonging the service life of the blower.

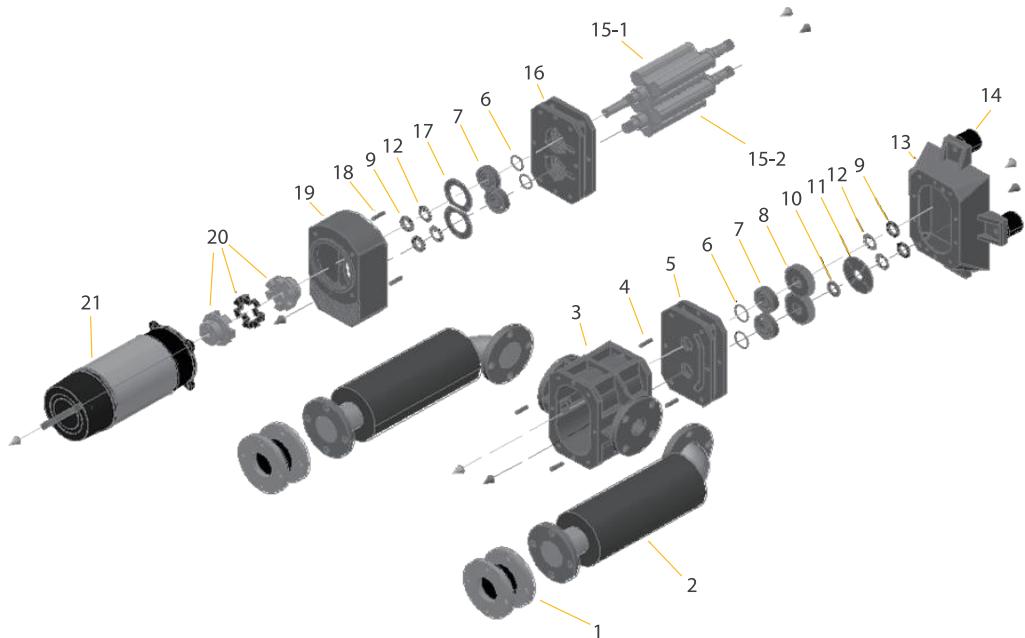
### 用途 Application

SRB 沉水式罗茨鼓风机是在陆上型罗茨鼓风机技术基础上开发的产品，因其潜水式安装、占地面积小、水冷运行、噪音小等优势，广泛应用于河道治理、水产养殖、一体化污水处理系统、工业废水处理、小区生活污水处等各类污水处理的曝气增氧。

SRB submersible roots blower is a product developed on the basis of land type Roots blower technology. Due to its advantages of submersible installation, small footprint, water-cooled operation and low noise, SRB is widely used for increasing oxygen aeration of various kinds of sewage treatment such as rivercourse treatment, aquaculture, compact sewage treatment unit, industrial wastewater treatment and domestic waste water treatment in residential quarters etc..



## 结构图 Construction



NO.	名称	NAME	材质 MATERIAL
1	防震接头	Flexible joint	Synthetic Rubber
2	消音器	Silencer	Q235
3	鼓风机本体	Casing	HT250
4	弹簧定位销	Positioning pin	50
5	后轴承座	Bearing housing	HT250
6	V型油封	V-ring	NBR
7	轴承	Bearing	GCr15
8	齿轮	Gear	20CrMnTi
9	防松螺丝	Lock nut	45
10	垫片	Washer	Q235
11	甩油片	Oil splash	Q235

NO.	名称	NAME	材质 MATERIAL
12	垫圈	Washer	Q235
13	脚底齿轮箱	Base gear box	HT250
14	减震垫	Vibration isolator	Synthetic Rubber
15-1	主动叶轮	Drive shaft	HT250
15-2	被动叶轮	Driven shaft	HT250
16	前轴承座	Bearing housing	HT250
17	轴承固定片	Bearing washer	Q235
18	定位销	Positioning pin	45
19	中承座	Oil box	HT250
20	联轴器	HRC Couplings	HT250
21	马达	Motor	HT200

## 型号说明 Type description

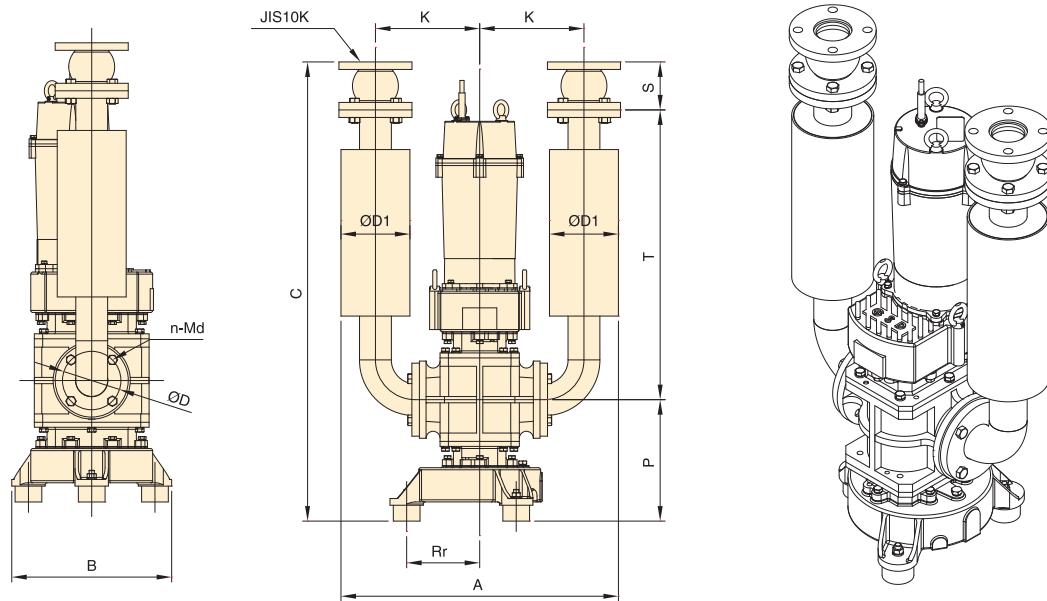


## 性能参数 Performance parameters

型号 Type	口径 Dia.	转速 RPM	1000mmAq		2000mmAq		3000mmAq		4000mmAq		5000mmAq		6000mmAq	
			Qs	La	Qs	La	Qs	La	Qs	La	Qs	La	Qs	La
SRB-40-1.5	1.5"	1450	1.47	1.1	1.35	1.2	1.25	1.3	-	-	-	-	-	-
SRB-40-2.2	1.5"	1450	1.47	1.5	1.35	1.6	1.25	1.7	1.18	1.8	1.07	2.0	0.96	2.1
SRB-50-2.2	2"	1450	2.23	1.2	2.1	1.3	1.89	1.5	1.75	2.0	-	-	-	-
SRB-50-3.7	2"	1450	2.23	1.2	2.1	1.4	1.89	1.6	1.75	2.0	1.66	2.3	1.57	2.5
SRB-65-2.2	2.5"	1450	3.46	1.5	3.33	1.7	3.24	2	-	-	-	-	-	-
SRB-65-3.7	2.5"	1450	3.46	2.6	3.33	2.7	3.24	2.9	3.14	3.2	3.05	3.5	-	-
SRB-65-5.5	2.5"	1450	3.46	3	3.33	3.2	3.24	3.3	3.14	3.6	3.05	3.9	3	4.3
SRB-80-3.7	3"	1450	4.41	2.6	4.17	2.8	4.02	2.9	3.84	3.5	-	-	-	-
SRB-80-5.5	3"	1450	4.41	3	4.17	3.2	4.02	3.5	3.84	3.9	3.72	4.6	-	-
SRB-80-7.5	3"	1450	4.41	3.2	4.17	3.5	4.02	3.9	3.84	4.7	3.72	5.6	3.56	6.4
SRB-100-5.5	4"	1450	6.38	3.2	6.05	3.6	5.83	4.2	5.64	5.1	-	-	-	-
SRB-100-7.5	4"	1450	6.38	3.2	6.05	3.6	5.83	4.2	5.64	5.1	5.46	5.7	5.19	6.8
SRB-125-7.5	5"	1450	10.92	3.8	10.36	4.6	10	6.0	9.63	7.2	-	-	-	-
SRB-125-11	5"	1450	10.92	5.6	10.36	6.5	10	7.5	9.63	8.8	9.25	10.1	-	-
SRB-125-15	5"	1450	10.92	7.5	10.36	8.1	10	8.9	9.63	10.0	9.25	11.4	8.88	12.7



## 外形尺寸图 Installation dimensions

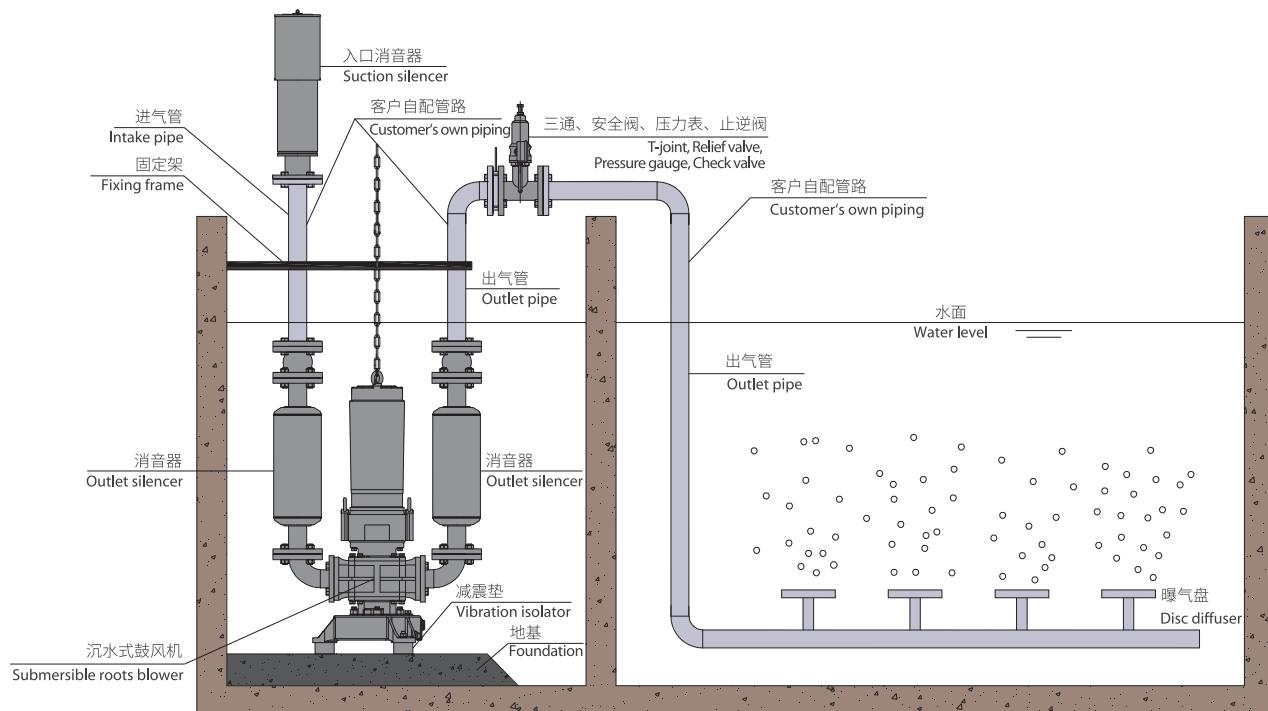


单位: Unit(mm)

型号 Type	A	B	C	K	P	Rr	S	T	ØD	ØD1	n-Md
SRB-40-1.5	653	384	1027	245.5	236	R175	95	696	110	159	4-M16
SRB-40-2.2	653	384	1027	245.5	236	R175	95	696	110	159	4-M16
SRB-50-2.2	691	384	1064	258	251	R175	105	705	125	159	4-M16
SRB-50-3.7	691	384	1064	258	251	R175	105	705	125	159	4-M16
SRB-65-2.2	659	384	1124	267.5	291	R175	115	718	145	159	4-M16
SRB-65-3.7	659	384	1124	267.5	291	R175	115	718	145	159	4-M16
SRB-65-5.5	659	384	1124	267.5	291	R175	115	718	145	159	4-M16
SRB-80-3.7	765	384	1384	278	321	R175	135	928	160	219	8-M16
SRB-80-5.5	765	384	1384	278	321	R175	135	928	160	219	8-M16
SRB-80-7.5	765	384	1384	278	321	R175	135	928	160	219	8-M16
SRB-100-5.5	901	462	1451	344	353	R220	150	948	180	219	8-M16
SRB-100-7.5	901	462	1451	344	353	R220	150	948	180	219	8-M16
SRB-125-7.5	1072	462	2058	394	428	R220	165	1465	210	290	8-M16
SRB-125-11	1072	462	2058	394	428	R220	165	1465	210	290	8-M16
SRB-125-15	1072	462	2058	394	428	R220	165	1465	210	290	8-M16



## 安装示意图 Installation sketch map



## 应用案例 Applications

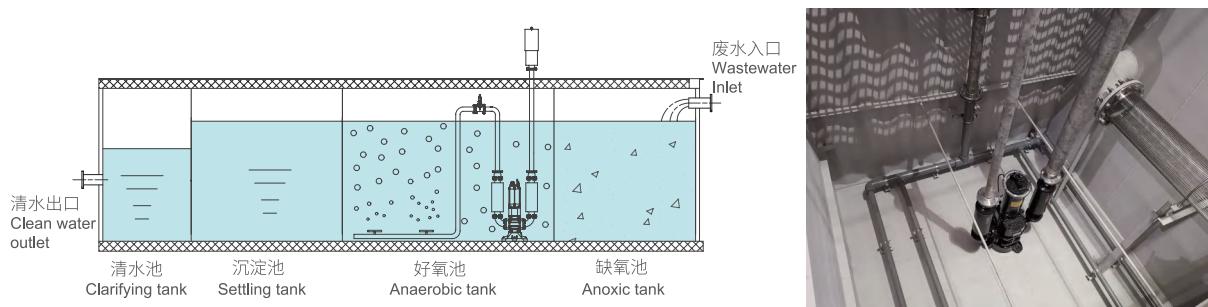
### 河道治理 River course treatment



对于中小河道，水深较浅、水面狭窄，没有航运要求，适合采用SRB沉水式罗茨鼓风机的曝气形式。利用沉水式鼓风机对水体进行增氧，不破坏河道景观，是河道治理的理想设备。

For medium and small rivercourses, where the water depth is shallow, the water surface is narrow, and there is no shipping requirement, it is suitable to adopt the aeration by submersible roots blower . The submersible blower, which is used to aerate water without destroying the rivercourse landscape, is an ideal equipment for river course treatment.

### 一体化污水处理设备 Compact sewage treatment unit



一体化污水处理系统广泛应用于农村的生活污水处理，城乡近郊未覆盖管网的临时性生活污水处理，无管网铺设的景区、宾馆等的污水就地处理，水体治理中的控源截污。沉水式罗茨鼓风机配套一体化污水处理系统，相比于陆上型风机能为整个系统减少设备安装体积、减少安装成本，并完美的契合了使用者对一体化污水处理系统性能稳定、故障少、占地小、低噪音环境友好等要求。

The compact sewage treatment unit is widely used in rural domestic sewage treatment, temporary domestic sewage treatment in urban and rural suburbs where pipe network is not reached, local sewage treatment in scenic spots and hotels etc. where no pipe network is laid, and as well as source control and sewage interception in water treatment. Compared with the land type blower, submersible roots blower with the compact sewage treatment unit can reduce the installation space and lower the installation cost of the whole system and perfectly satisfy the user's requirements on the compact sewage treatment unit in the aspects of stable performance, less failure, small footprint, low noise and environment friendly.



欢迎索取以下产品型录



### 泵系列

潜水泵系列 | 陆上泵系列 | 特种泵系列



### 搅拌推流系列

搅拌机系列 | 推流器系列



### 供氧曝气系列

曝气机系列 | 曝气盘系列 | 曝气管系列



### 风机系列

磁悬浮鼓风机 | 空气悬浮鼓风机 | 三叶罗茨鼓风机系列



### 污泥处理设备

带式脱水机 | 厢式压滤机 | 叠螺式脱水机 | 污泥干化设备 | 浅层高效气浮设备



### 智能化系列

智能设备 | 水务设备健康管理 | 水务系统工艺优化智联管理



### 反应器及套装设备

芬顿反应系统 | MBR生物膜反应器 | 预制泵站 | 一体化污水处理设备



### 耗材药剂及相关设备

生物绳 | PAC 聚合氯化铝 | PAM 聚丙烯酰胺 | 泡药设备

GSD 的经营理念

**G-Green**绿色 **S-Safe**安全 **D-Development**永续经营



川源

水处理系统专业合作伙伴

免费咨询电话

**400-657-9066**

数据来源：公司实验室数据及客户实际使用数据，具体使用环境不同，  
数据可能存在差异。

The data on the brochure is based on the laboratory testing data and  
customers' actual operation data in the past. The actual data may be  
different in different application conditions.

本型录内容如有变更，恕不另行通知。  
We reserve the right to change content without notice.

川源（中国）机械有限公司版权所有 all rights reserved. CY-37

