



安装系统IV
Installation system IV

安装系统IV主要由手拉葫芦、起吊柱、吊架座、起吊环链、吊钩、旋转卸扣、导杆、托架等组成。潜水搅拌机通过导轮沿导杆上下移动，起吊架安装在吊架座上并可绕其定位轴线旋转360°，以方便安装及维护。为增加潜水搅拌机运行时的可靠性，减缓潜水搅拌机运行中的振动，托架侧面直接焊固在导杆上，焊接时必须保证托架中心线与导杆中心线垂直，并在同一平面内，潜水搅拌机与托架之间加设减震块。该安装系统全部采用与预埋件焊接方式固定，不采用膨胀螺栓固定方式。

根据池型结构的不同，该安装系统分为附壁式和桥架式两种安装方式。其安装图及预埋件布置分别如图7、图8、图9所示。

IV installation system mainly by the hand, and lifted the column, hanger seat, the rings chain, hooks, guide bar, brackets etc. Submersible mixer guide through the guide bar, move up and down within hanger Installation of the suspension seat around its axis positioning and can rotate for 360°, with convenient installation and maintenance. To increase the reliability of operation submersible mixer, slow down the operation of the submersible mixer, "vibration Frame side directly welded solid in guide stem, welding must ensure that bracket center line and guide bar center line, and in the same vertical plane within, submersible mixer and bracket adding damping piece of between. The installation All systems use with embedded parts welding way, do not use a fixed expansion bolt way.

According to the pool of the different structure type, the installation system is divided into general attached and bridge posture two installation. The installation drawing layout and embedment parts respectively, as shown in figure 7 figure 8, shown in figure 9.

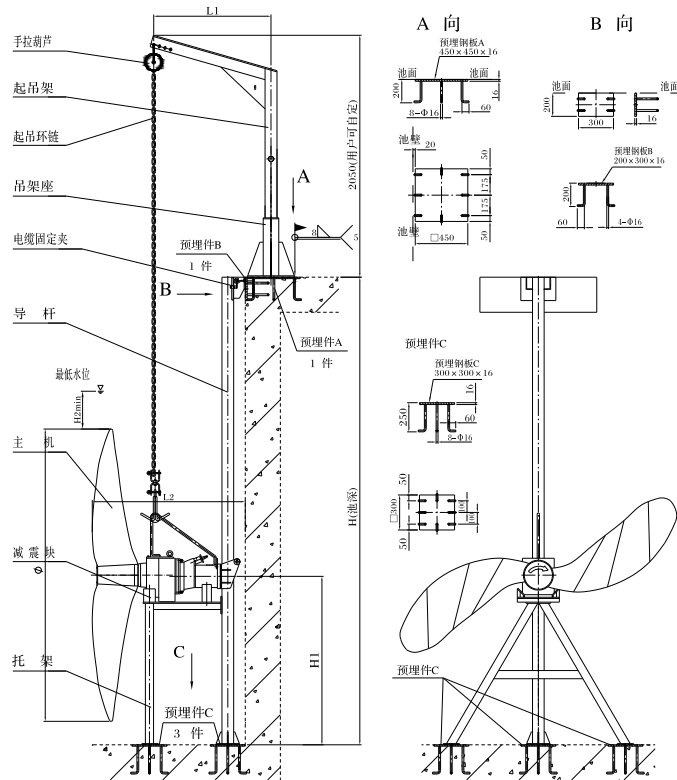


图7 附壁式安装示意图
Figure 7 with wall installation schemes

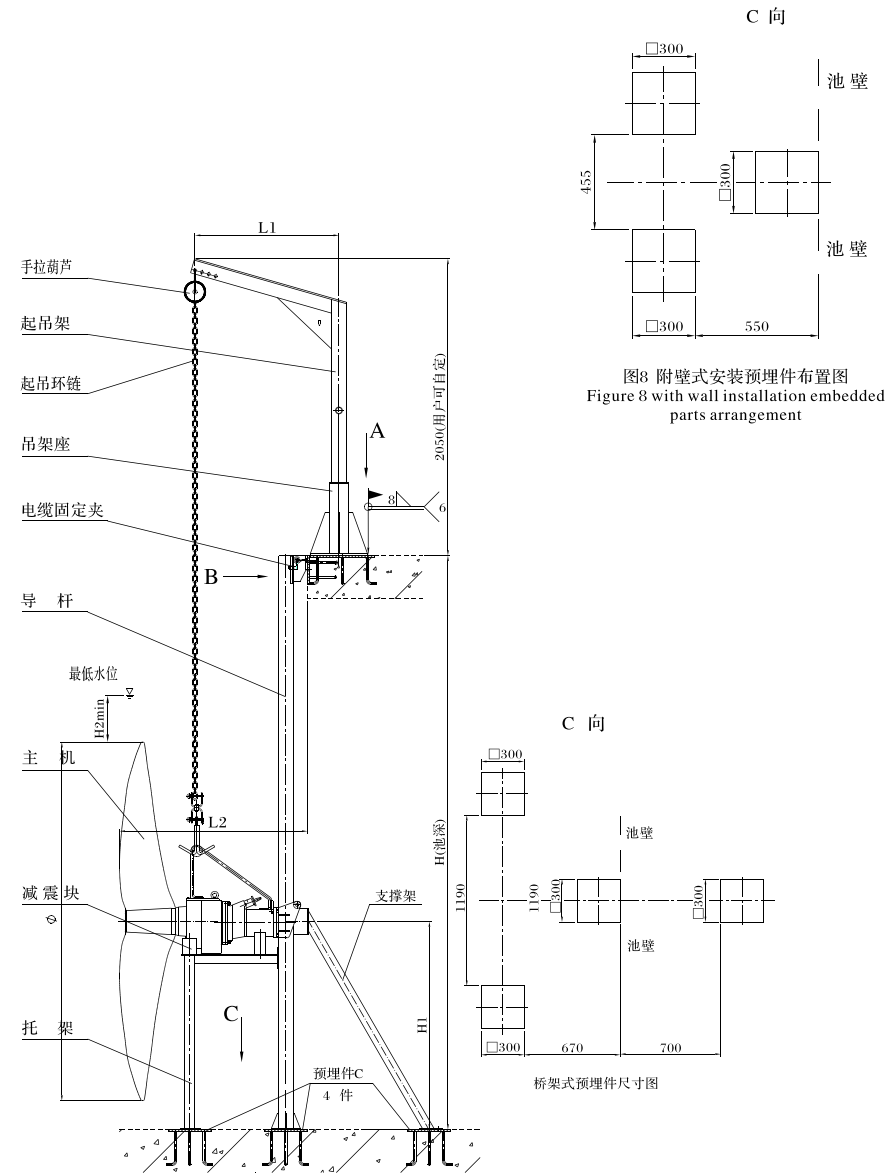


图9 桥架式安装预埋件布置图
Figure 9 bridge posture installation embedded parts arrangement

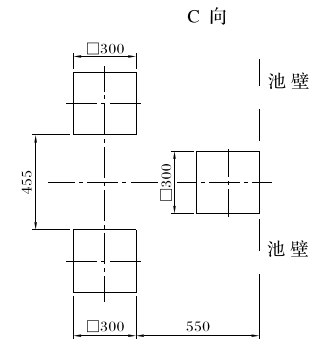
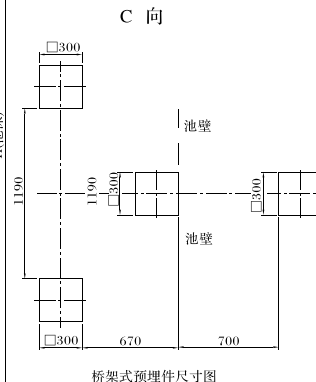


图8 附壁式安装预埋件布置图
Figure 8 with wall installation embedded parts arrangement



桥架式预埋件尺寸图



主要安装尺寸

Main installation size

表3 混合型多功能旋流式潜水搅拌机主要安装尺寸 Table 3 mixed multi-function swirling submersible mixer main installation size

序号 NO.	型号 Model	H1 (mm)	H2 (mm)	L1 (mm)	L2 (mm)	L3 (mm)	配套安装系统 Supporting installation system
1	QJB0.85/8-260/3-740	100	500	330	650	400	I
2	QJB1.5/6-260/3-980	100	600	330	650	400	I
3	QJB2.2/8-320/3-740	200	600	317	900	550	II
4	QJB4/6-320/3-980	200	600	317	900	550	II
5	QJB1.5/8-400/3-740	200	700	317	940	550	II
6	QJB2.5/8-400/3-740	200	700	317	940	550	II
7	QJB3/8-400/3-740	200	700	317	940	550	II
8	QJB4/6-400/3-980	200	700	317	940	550	II
9	QJB4/12-620/3-480	350	1100	317	1175	1050	III-1
10	QJB5/12-620/3-480	350	1100	317	1175	1050	III-1
11	QJB7.5/12-620/3-480	350	1100	317	1250	1050	III-2
12	QJB10/12-620/3-480	350	1100	317	1250	1050	III-2
13	QJB12/12-700/3-480	350	1100	317	1250	1050	III-2
14	QJB15/12-620/3-480	400	1500	317	1650	1350	III-3
15	QJB18.5/12-620/3-480	400	1500	317	1650	1350	III-3
16	QJB22/12-620/3-480	400	1500	317	1650	1350	III-3

表4 推流型多功能旋流式潜水搅拌机主要安装尺寸 Table 4 push flow type multi-functional swirling submersible mixer main installation size

序号 NO.	型号 Model	H1 (mm)	H2 (mm)	L1 (mm)	L2 (mm)	配套安装系统 Supporting installation system
1	QJB1.5/4-1100/2-60/B	750	1000	810	1100	IV-1
2	QJB2.2/4-1100/2-80/B	750	1000	840	1130	IV-1
3	QJB3/4-1100/2-100/B	750	1000	840	1130	IV-1
4	QJB4/4-1100/2-130/B	750	1000	840	1130	IV-1
5	QJB1.5/4-1400/2-43/B	900	900	910	1100	IV-2
6	QJB2.2/4-1400/2-50/B	900	900	940	1130	IV-2
7	QJB3/4-1400/2-65/B	900	900	940	1130	IV-2
8	QJB4/4-1400/2-75/B	900	900	940	1130	IV-2
9	QJB1.5/4-1600/2-39/B	1100	850	910	1100	IV-2
10	QJB2.2/4-1600/2-43/B	1100	850	940	1130	IV-2
11	QJB3/4-1600/2-51/B	1100	850	940	1130	IV-2
12	QJB4/4-1600/2-62/B	1100	850	940	1130	IV-2
13	QJB1.5/4-1800/2-34/B	1100	850	910	1230	IV-3
14	QJB2.2/4-1800/2-39/B	1100	850	940	1280	IV-3
15	QJB3/4-1800/2-44/B	1100	850	940	1280	IV-3
16	QJB4/4-1800/2-52/B	1100	850	940	1310	IV-3
17	QJB5.5/4-1800/2-62/B	1100	850	940	1350	IV-3
18	QJB2.2/4-2200/2-30/B	1450	800	940	1280	IV-4
19	QJB3/4-2200/2-34/B	1450	800	940	1280	IV-4
20	QJB4/4-2200/2-38/B	1450	800	940	1310	IV-4
21	QJB5.5/4-2200/2-43/B	1450	800	940	1350	IV-4
22	QJB3/4-2500/2-29/B	1450	800	940	1280	IV-4
23	QJB4/4-2500/2-33/B	1450	800	940	1310	IV-4
24	QJB5.5/4-2500/2-39/B	1450	800	940	1350	IV-4
25	QJB7.5/4-2500/2-43/B	1450	800	940	1350	IV-4

表5 推流型多功能旋流式潜水搅拌机IV型安装系统预埋件布置位置尺寸

Table 5 push flow type multifunctional swirl submersible agitator type IV installation of embedded parts location system size

序号 NO.	型号 Model	X (mm)	Y (mm)	Z (mm) 桥架式
1	QJB1.5/4-1100/2-60/B	440	500	-
2	QJB2.2/4-1100/2-80/B	440	530	-
3	QJB3/4-1100/2-100/B	440	530	-
4	QJB4/4-1100/2-130/B	440	530	-
5	QJB1.5/4-1400/2-43/B	640	500	-
6	QJB2.2/4-1400/2-50/B	640	530	-
7	QJB3/4-1400/2-65/B	640	530	-
8	QJB4/4-1400/2-75/B	640	530	-
9	QJB1.5/4-1600/2-39/B	640	500	-
10	QJB2.2/4-1600/2-43/B	640	530	-
11	QJB3/4-1600/2-51/B	640	530	-
12	QJB4/4-1600/2-62/B	640	530	-
13	QJB1.5/4-1800/2-34/B	840	500	-
14	QJB2.2/4-1800/2-39/B	840	530	500
15	QJB3/4-1800/2-44/B	840	530	500
16	QJB4/4-1800/2-52/B	840	530	500
17	QJB5.5/4-1800/2-62/B	840	530	500
18	QJB2.2/4-2200/2-30/B	1190	670	700
19	QJB3/4-2200/2-34/B	1190	670	700
20	QJB4/4-2200/2-38/B	1190	670	700
21	QJB5.5/4-2200/2-43/B	1190	670	700
22	QJB3/4-2500/2-29/B	1190	670	700
23	QJB4/4-2500/2-33/B	1190	670	700
24	QJB5.5/4-2500/2-39/B	1190	670	700
25	QJB7.5/4-2500/2-43/B	1190	670	700

选型 selection

多功能旋流式潜水搅拌机的选型是非常重要的，选型方案的正确与否直接影响到设备的运行效果以及未来的运营成本。不同的池（罐）体或容器以及不同操作目的的搅拌过程需要什么样的流动场，需要提供多大的能量以及不同规格的搅拌机能提供什么样的流动场、供给多大的能量。这些需要用户给予配合，为了选择恰当型号的潜水搅拌机，以达到最佳的效果，请用户提供如下资料，以便为您正确选型：

1. 使用场合及目的；
2. 池型；
3. 池子尺寸：平面尺寸、池深、水深；
4. 介质参数：密度、粘度、含固率、温度、PH值等；
5. 是否配导流罩
6. 其它要求。

为了满足不同环境下都能达到最佳的搅拌效果，我公司提供了两个系列近四十种不同型号的多功能旋流式潜水搅拌机，并对各个规格的潜水搅拌机进行了推力和流场测定。我公司可为用户提供选型，用户也可自行参考我公司出具的流场图进行选型。

Multi-functional swirling submersible mixer selection is very important, and the selection plan of correct or not directly affects the operation of equipment effect and operation cost of the future. different Pool (pot) body or containers as well as different operation purpose of the mixing process need what kind of flow field, the need to provide to DuoDa energy, and various specifications of mixer can provide what kind flow field, the energy supply DuoDa. The need to cooperate with customers, in order to choose appropriate type of submersible mixer, in order to achieve the best effect, please provide the following information, user For you to correct selection:

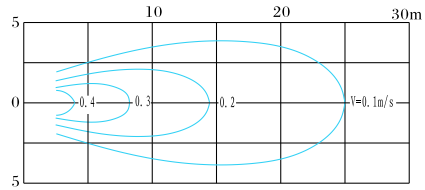
1. the usage situation and purpose;
2. pool type;
3. pool size: plane size, deep pool, water depth;
4. medium parameters: the density, viscosity, including solid rate, temperature, PH value, etc.;
5. deserve to diversion hood
6. and other requirements.

In order to meet in different environment can achieve optimal mixing effect, my company provides a series of two nearly 40 different types of multi-function screw streaming submersible mixer, and right Various specifications of submersible mixer thrust and the flow field measurement. Our company can provide users with selection, users can also be issued by the company to reference I flow chart for selection.

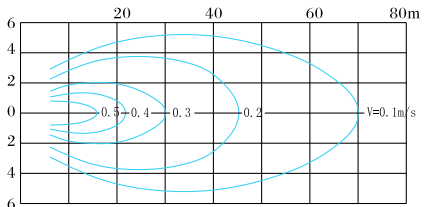


潜水搅拌机流场图

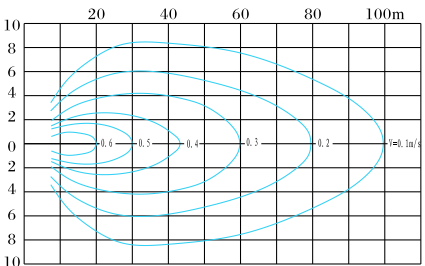
Submersible mixer flow field figure



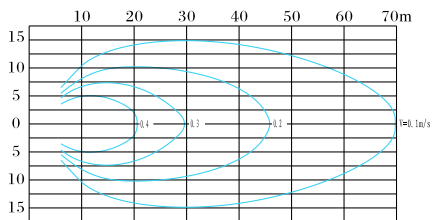
QJB0.85/8-260/3-740、QJB1.5/6-260/3-980、
QJB1.5/8-400/3-740



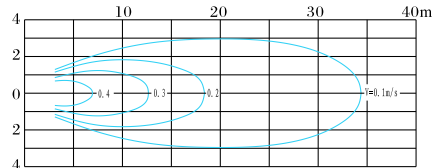
QJB4/12-620/3-480、QJB5/12-620/3-480



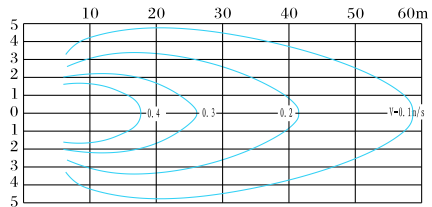
QJB7.5/12-620/3-480、QJB10/12-620/3-480、
QJB12/12-620/3-480、



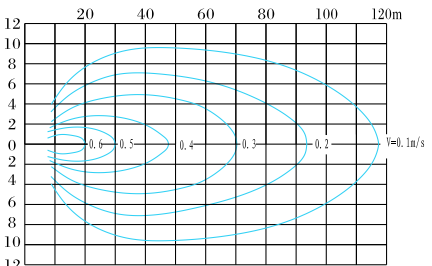
QJB5.5/4-1800/2-62、QJB3/4-2200/2-34、
QJB4/4-2200/2-38、QJB5.5/4-2200/2-43、
QJB3/4-2500/2-29、QJB4/4-2500/2-33、
QJB5.5/4-2500/2-39、QJB7.5/4-2500/2-43



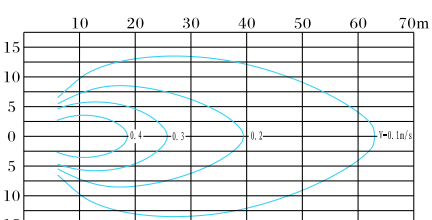
QJB2.2/8-320/3-740、QJB4/6-320/3-980、
QJB2.5/8-400/3-740、QJB3/8-400/3-740、
QJB4/6-400/3-980



QJB1.5/4-1100/2-60、QJB2.2/4-1100/2-80、
QJB3/4-1100/2-100、QJB4/4-1100/2-130、
QJB1.5/4-1400/2-43、QJB2.2/4-1400/2-50、
QJB3/4-1400/2-65、QJB4/4-1400/2-75、
QJB1.5/4-1600/2-39、QJB2.2/4-1600/2-43、
QJB1.5/4-1800/2-34、QJB2.2/4-1800/2-39



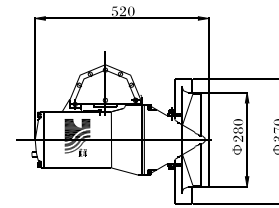
QJB15/12-620/3-480、QJB18.5/12-620/3-480、
QJB22/12-620/3-480



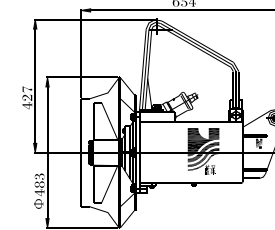
QJB3/4-1600/2-51、QJB4/4-1600/2-62、
QJB3/4-1800/2-44、QJB4/4-1800/2-52、
QJB2.2/4-2200/2-30

潜水搅拌机外形尺寸图

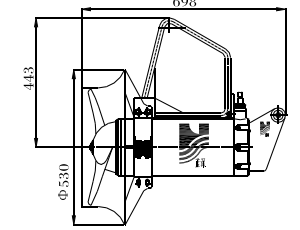
Submersible mixer shape dimension drawing



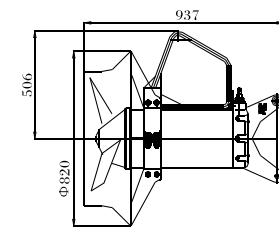
QJB0.85/8-260/3-740
QJB1.5/6-260/3-980



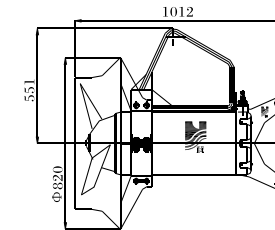
QJB2.2/8-320/3-740
QJB4/6-320/3-980



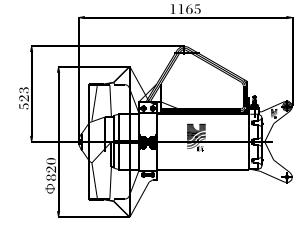
QJB1.5/8-400/3-740
QJB2.5/8-400/3-740
QJB3/8-400/3-740
QJB4/6-400/3-980



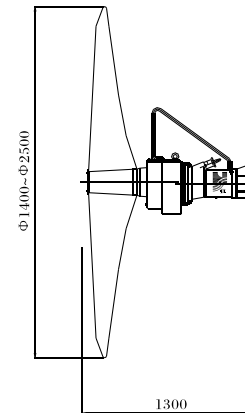
QJB4/12-620/3-480
QJB5/12-620/3-480



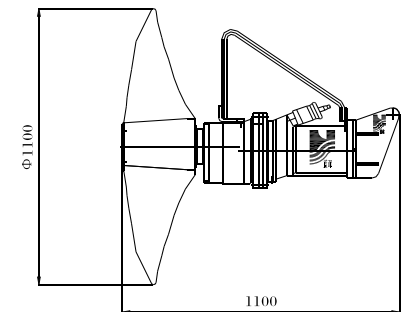
QJB7.5/12-620/3-480
QJB10/12-620/3-480
QJB12/12-700/3-480



QJB15/12-620/3-480
QJB18.5/12-620/3-480
QJB22/12-620/3-480



Φ1400、Φ1600、1800、Φ2200、
Φ2500潜水推进器外形图



Φ1100潜水推进器外形图



应用实例

Example of application

和传统长轴搅拌相比，QJB型潜水搅拌机的优点在于可产生不同的流向。由搅拌机的不同安装位置，可得到不同效果的多种流动模式。从而在池中创造更好的流动模式，消除搅拌死角。搅拌机所需的配套功率是按池容积大小，介质的密度、粘度和池型尺寸等确定，根据具体情况，应选用一台或多台搅拌机。

为保证搅拌机在不同池型中的运行达到高效节能的效果，可参考下列的典型安装形式

When comparing with traditional long-shaft agitator, QJB type submersible agitator has advantage of producing different directions of flowing water. Different mounting position of agitator can have different flowing modes. So that it produces better flowing modes in pool, eliminating agitating dead zone. The match power of agitator is determined according to size of pool volume, density of medium, viscosity, pool type and size, please select one or more agitators according to specific cases.

In order to get high efficient energy saving purpose of agitator in pools of different shapes, please refer to the following typical mounting forms.

混合搅拌系列

Mixed agitating series

圆形池 Round pool



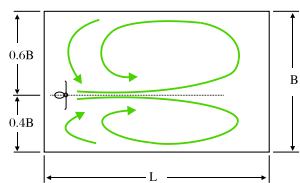
该旋转流动模式是最简单的一种，在相对较短的运行时间内就可创造高的流速，在非溶性固体物含量高的介质中，这是一种高效的搅拌方式。然而必须注意，较重的物质可能沉积在池底中央。

This rotating flowing mode is the simplest one, it is able to create high flow velocity in a shorter time, it is a high efficient agitating method in medium that has high non-dissolving solid content. Notice, the heavier matter may deposit in center of pool.

方形池 Square pool

如按下图方式安装搅拌机可在方形池形成高效的搅拌效果，当使用一台搅拌机时，池长宽比大于5，否则应安装多台搅拌机。若长宽比不大于2.5可得到最佳运行效果。

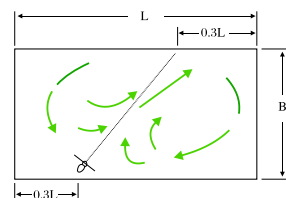
Install the agitator in square pool according to the following diagram, it is able to obtain high efficient agitating effect. When using only one agitator, aspect ratio of pool should be more than 5, otherwise, please use more agitators. If the aspect ratio not exceeds 2.5, it is able to get optimum running effect.



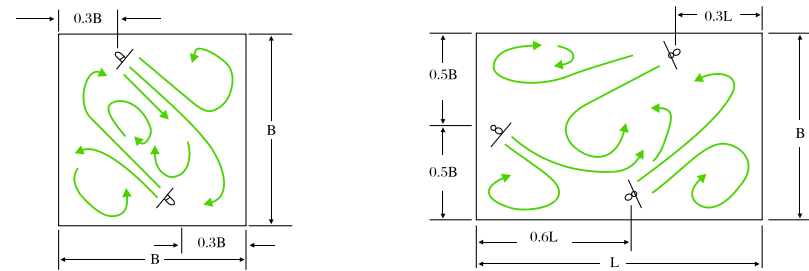
在池宽小于5-8倍的叶轮的情况下，可按上图安装方式
When the pool width is smaller than 5-8 times of impeller, the installation method as shown in above diagram can be adopted

如果搅拌机轴线与池中中线7-10°安装，可形成全池搅拌而不会产生旋转。池中液体的深度应在池的直径的0.3-1倍之间。

When the agitator is installed with 7-10° between axis and pool center line, it is able to form a full-pool agitation without producing rotation. The liquid depth in the pool should be 0.3-1 times of pool diameter.



在较大池中，搅拌要可按上图安装
In larger pool, agitator can be installed according to the above diagram



当使用多个搅拌机时，推荐用上图的安装方式
When using many agitators, the installation method as shown in above diagram is recommended

低速推流系列

Low-velocity plug-flow series

池形 pool form

