



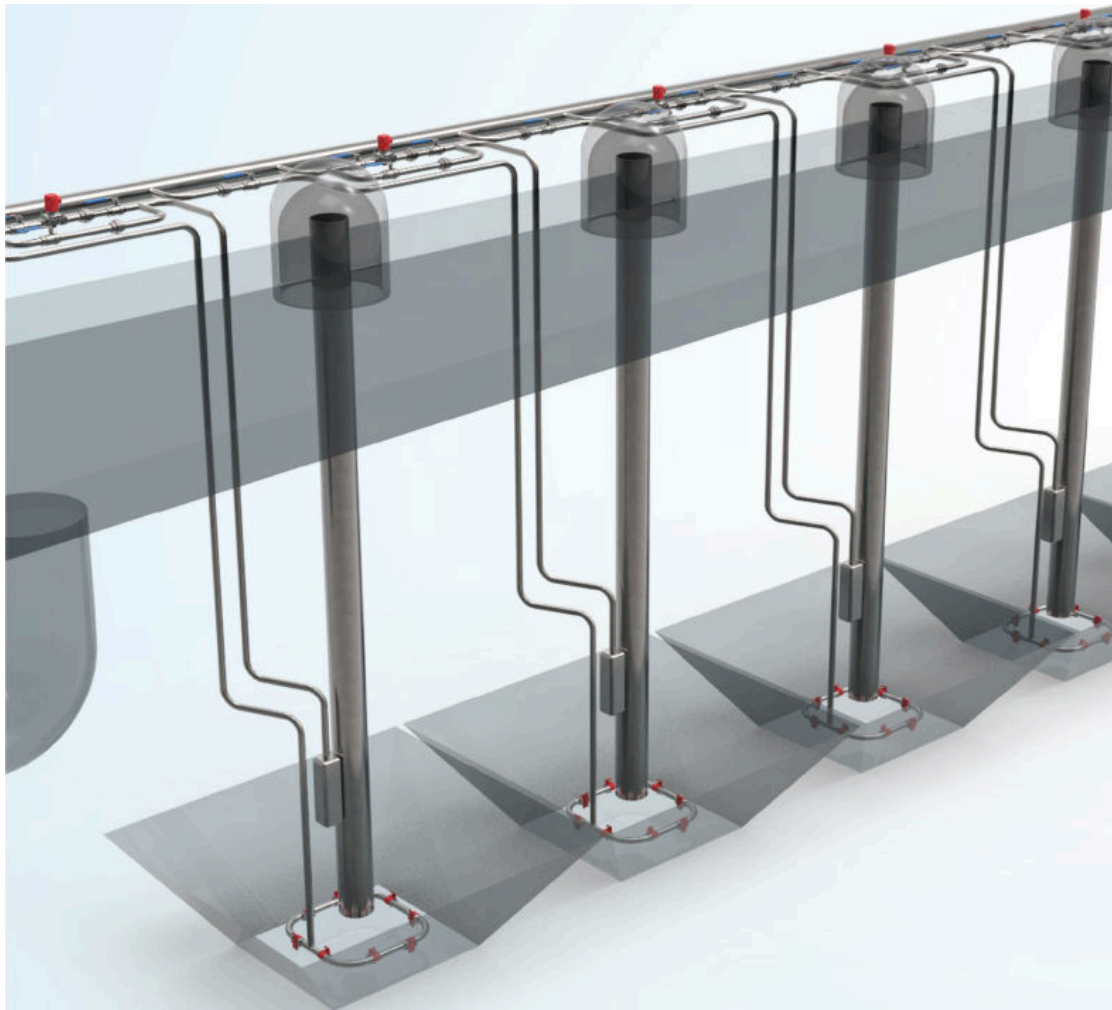
HIGH EFFICIENCY SLUDGE REMOVAL SYSTEM USING AIR LIFT WITH AGITATOR

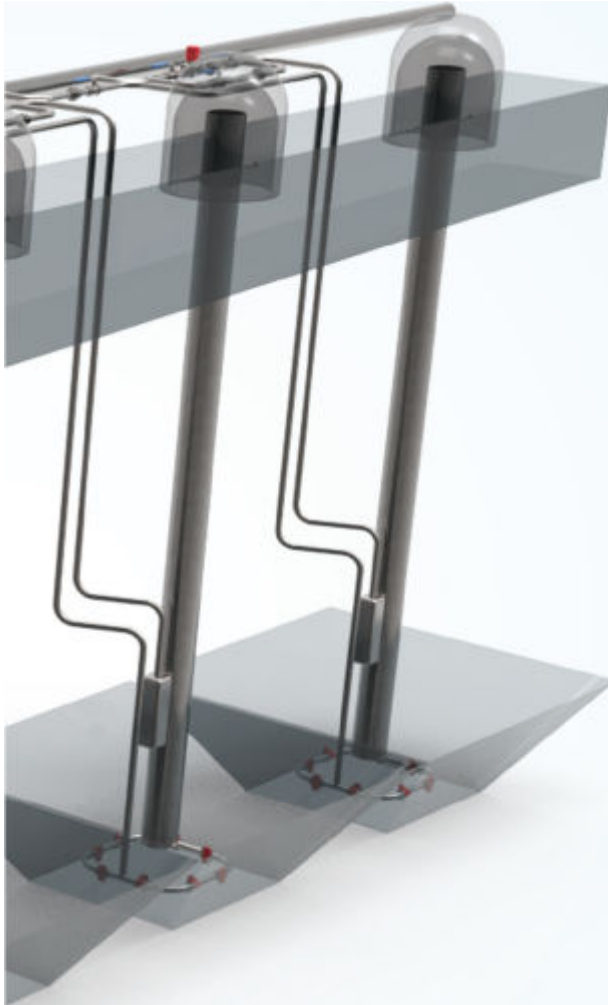
JV8100 Series | Projects Reference has exceeded fifty in domestic market.



Introduction

The patented air lift and agitation system is developed in response to the common problems found in sludge discharge such as the limited suction area of traditional submersible pumps, uneven sludge discharge in collection hoppers and the impeller wear and tear problems. The air lift and agitation system can be retrofitted to any tupe of existing sludge scrapers. The system is suitable for sand drainage in the sedimentation tanks. The air lift and agitation system is also able to handle high sludge concentration, low water wastage, not limited by the depth of the tanks and there are no wear and tear parts underwater.





Equipment Features

- Simple structure and zero maintenance under water
- High sludge concentration removal and low water wastage
- Flexible layout, can be operated individually or multiple discharge
- Patented agitator device, resolve sludge compaction problem at hoppers

Technical parameters

Scope of application | Bottom sludge scraper, chain scraper, wire rope scraper and travelling bridge scraper

Sludge characteristics | Suitable with most sludge with solid content of 0.5%~6%, able to deal with sludge compaction problem

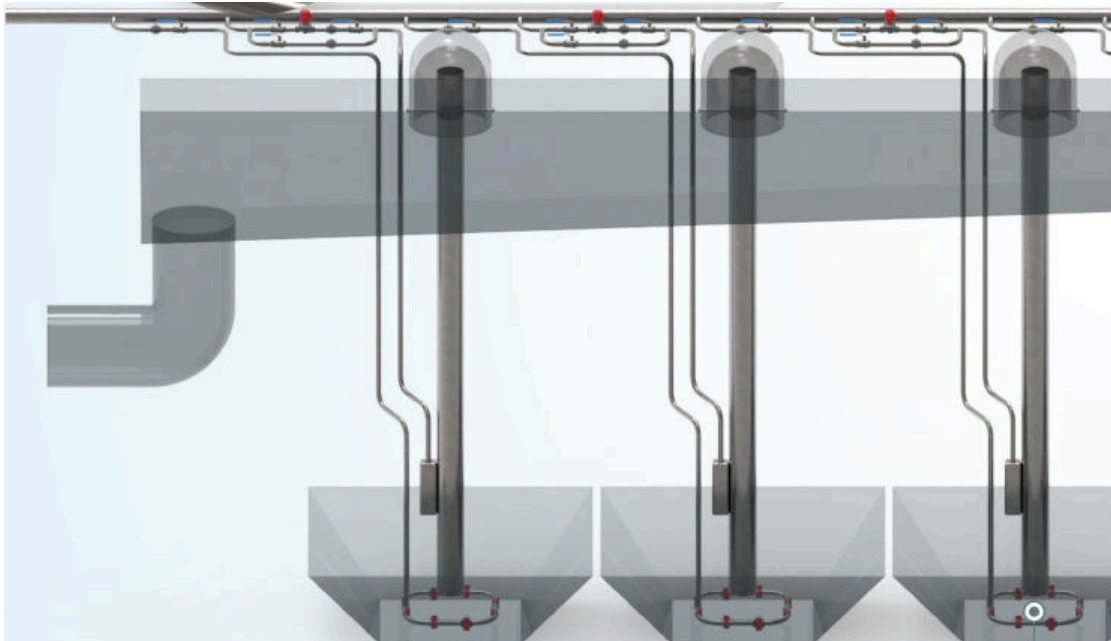
Basic operating principles

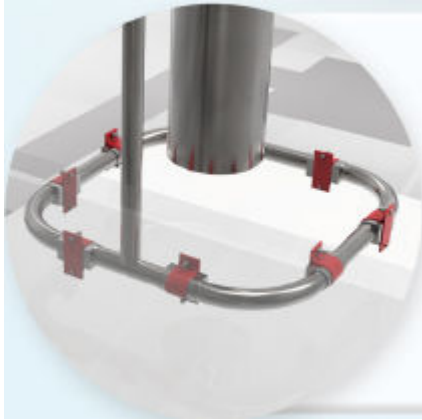
High pressure air from the air compressor enters the air tank, then through the air supply pipe and the patented nozzle outlet to the sludge discharge pipe. A section of air is then formed in the sludge pipe and floats up, thereby driving the bottom sludge upwards to be discharged.



Solenoid valve and manual control valve

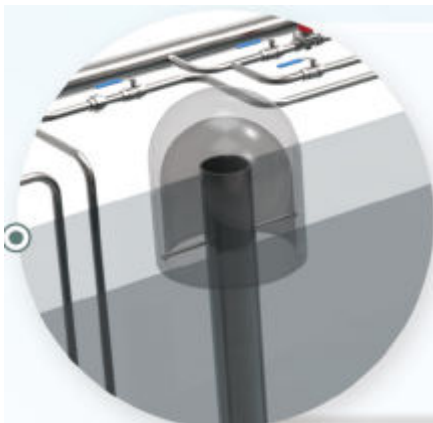
Equipped with control valves according to needs, can be left unattended for 24 hours with fully automatic control solenoid valves.





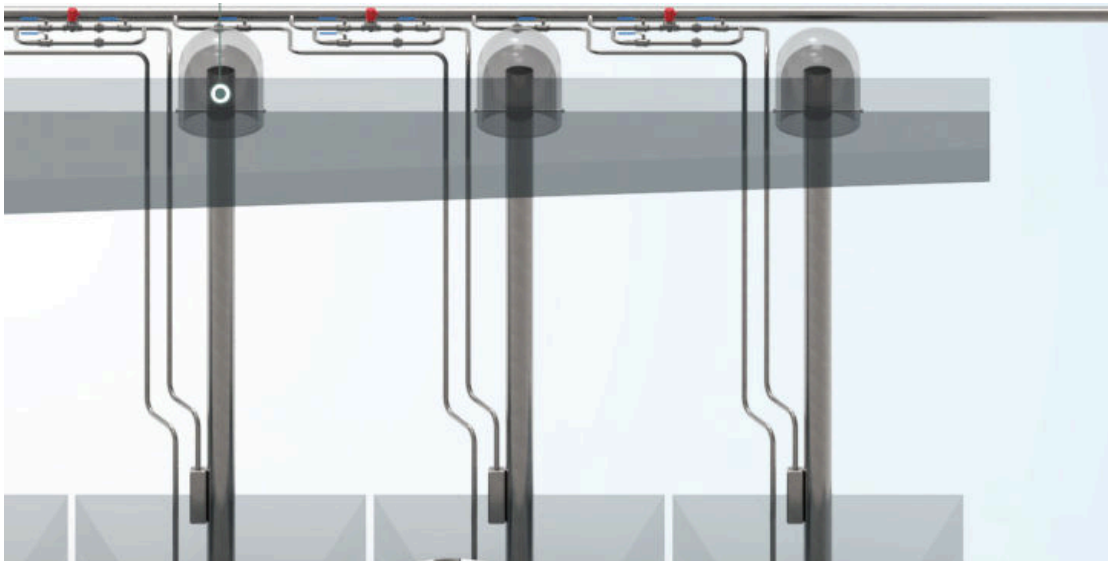
Patented air flow agitating device

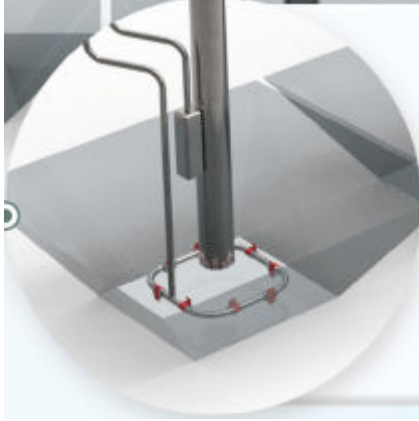
Through the patented design of the nozzle and layout, compressed air is used to disperse and stir, effectively solving the sludge compaction problem before sludge is lifted.



Sludge pipe and top cover

The newly designed stainless steel sludge pipe cover can effectively prevent splashing and has reliable strength.

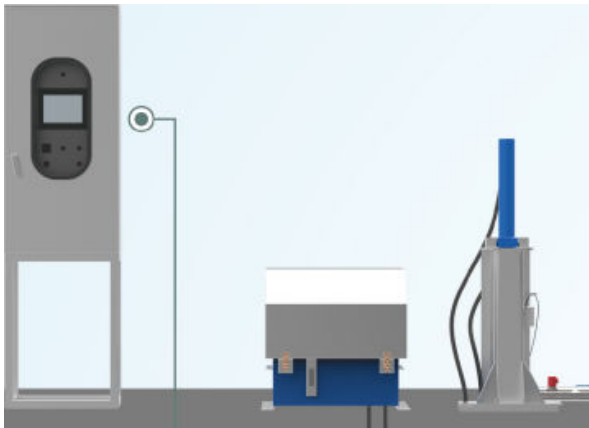




Hopper details

The size and number of hoppers are designed according to different sludge volume requirements. Based on accumulated data and sludge discharge experiences, the patented air lift system can achieve a maximum sludge discharge concentration of 5-8%.

Power and control system



Air compressor and air tank

The air lift sludge removal system is mainly powered by high pressure air. An air compressor, air tank, pressure regulator and the air pipes with suitable pressure rating will need to

be installed on the floor level or in the control room. The system is highly practical in application and suitable for any site condition and different usage.

Control cabinet

PLC touch screen control is adopted which can be connected to existing equipment, making it easier for operators to set and modify the operating parameters. Full operation interface is provided.

Hydraulic bottom sludge scraper

The characteristics of the fourth generation of hydraulic bottom sludge scraper include few moving parts, less maintenance, continuous transportation of sludge, high reliability, easy installation, sludge thickening etc.

More than 100 plants has been installed domestically.

Details refer to scraper brochure.



The application in CHINA



Longbridg,Shanghai



Baotou,Inner Mongolia



Jiaxing,Zhejiang



Shangyu,Shaoxing



Huzhou,Zhejiang



Tongxiang,Zhejiang