# **SCRAP-VAC**

(Sludge Removal Technologies)





# **Presentation Agenda**

**Company Profile** 

**Sludge Removal Technologies** 

1 Company Profile

2. Sludge Removal Technologies

- Company: Dong Yang Water Technologies Co., Ltd.
- Representative : Heung yeon Won
- Date of foundation: 1986. 06. 01
- Head office, plant: 38, 1315 Beon-gil, Hoguk-ro, Pocheon city, Gyeonggi-do
- Technology research institute: 672, Samyang-ro, Gangbuk-gu, Seoul
- Product line: Chemical feeding system(dry, wet type), Inclination plate settler
   Water treatment system including suction type sludge collection,
   removal system, Flocculation, Coagulation system, Etc.
- Contact: Tel. 82-2-996-9231 Fax. 82-2-996-9233 e-mail. soho996@chol.com www.dowatech.kr
- Corporate authentication: ISO9001, ISO14001, Venture business,
  Technology innovation type SMEs(INNO-BIZ) etc.
- Product authentication : Performance authentication(SMBA),
  Excellent product authentication(PPS)
- Major patent: Precipitation complex chemical input system
  Upstream inclination plate precipitation system and many others







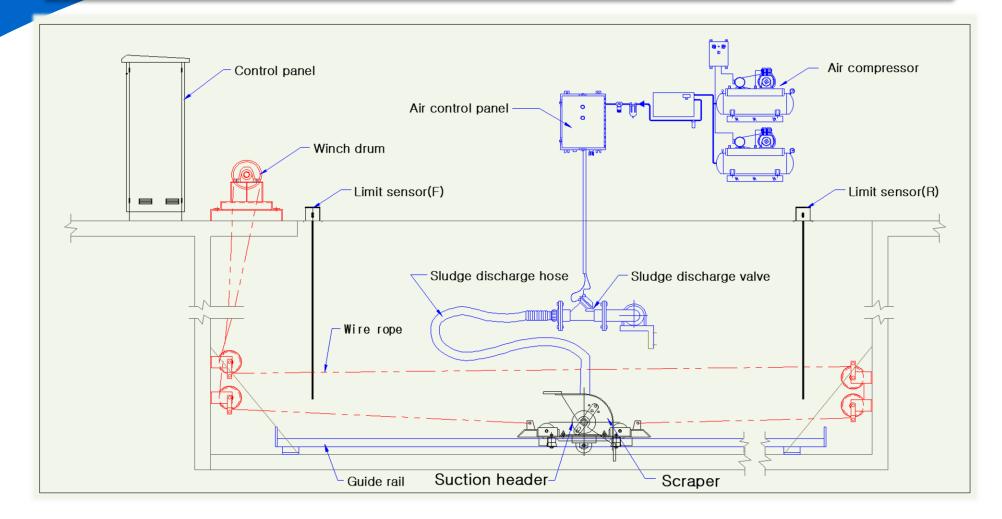


## Suction Type Sludge Collector(SCRAP-VAC)





# Suction Type Sludge Collector(SCRAP-VAC)



#### Suction Type Sludge Collector(SCRAP-VAC)

#### Improvement of Existing sludge collector demerit

- Sludge bridge and rabbit hole phenomenon
- Collector Driven Load phenomenon by sludge jamming
- Aggravation of treated water quality by sludge decomposition and re-suspension phenomenon

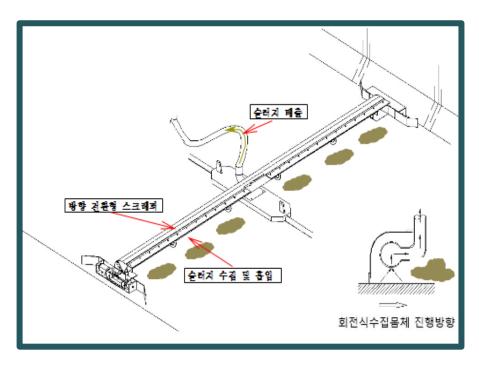


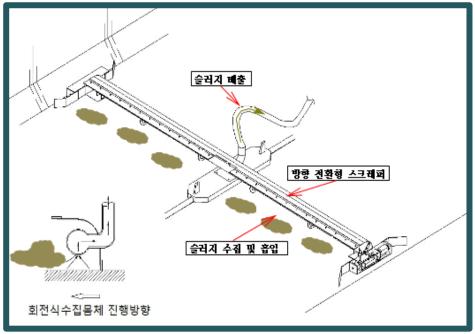
Existing sludge collector

#### Suction Type Sludge Collector(SCRAP-VAC)

#### Scraper for sludge collection

- Scraper application to 90° bending phenomenon
- Change of scraper form depending on movement direction(90° switch)







#### Suction Type Sludge Collector(SCRAP-VAC)

#### Sludge discharge facility and method

- Discharge of sludge by using head difference based siphon or self priming pump
- Sludge collector and discharger are built in one system.

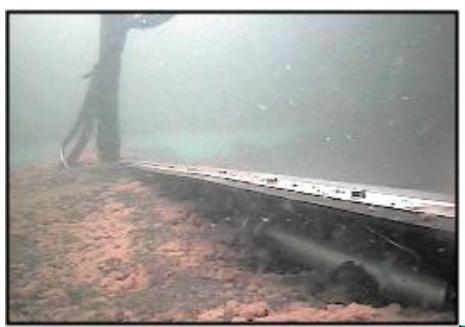




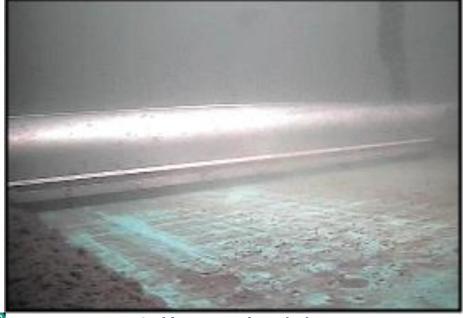
#### Suction Type Sludge Collector(SCRAP-VAC)

#### Sludge removal capacity

- Confirmed that sludge collected efficiently based on process operation.
- Confirmed that sludge in front of scraper was discharged efficiently from sludge suction pipe.
- Confirmed that sludge at the back side of scraper was discharged efficiently.







After removing sludge

#### Suction Type Sludge Collector(SCRAP-VAC)

- Sludge discharge hopper & drawing v/v not required
- Existing Suction type sludge collector applied by substitute facility
- Realization of facility miniaturization by application of small collection, small discharge method
- Reduction of linked process load by control of effluence quantity

- ► Reduction of initial project cost
- Improvement of moisture content and effluence problem
- Increase of price competitiveness through cost reduction
- Efficiency increase of concentration process and dehydration process

# Thank you for your attention!

www.dowatech.kr