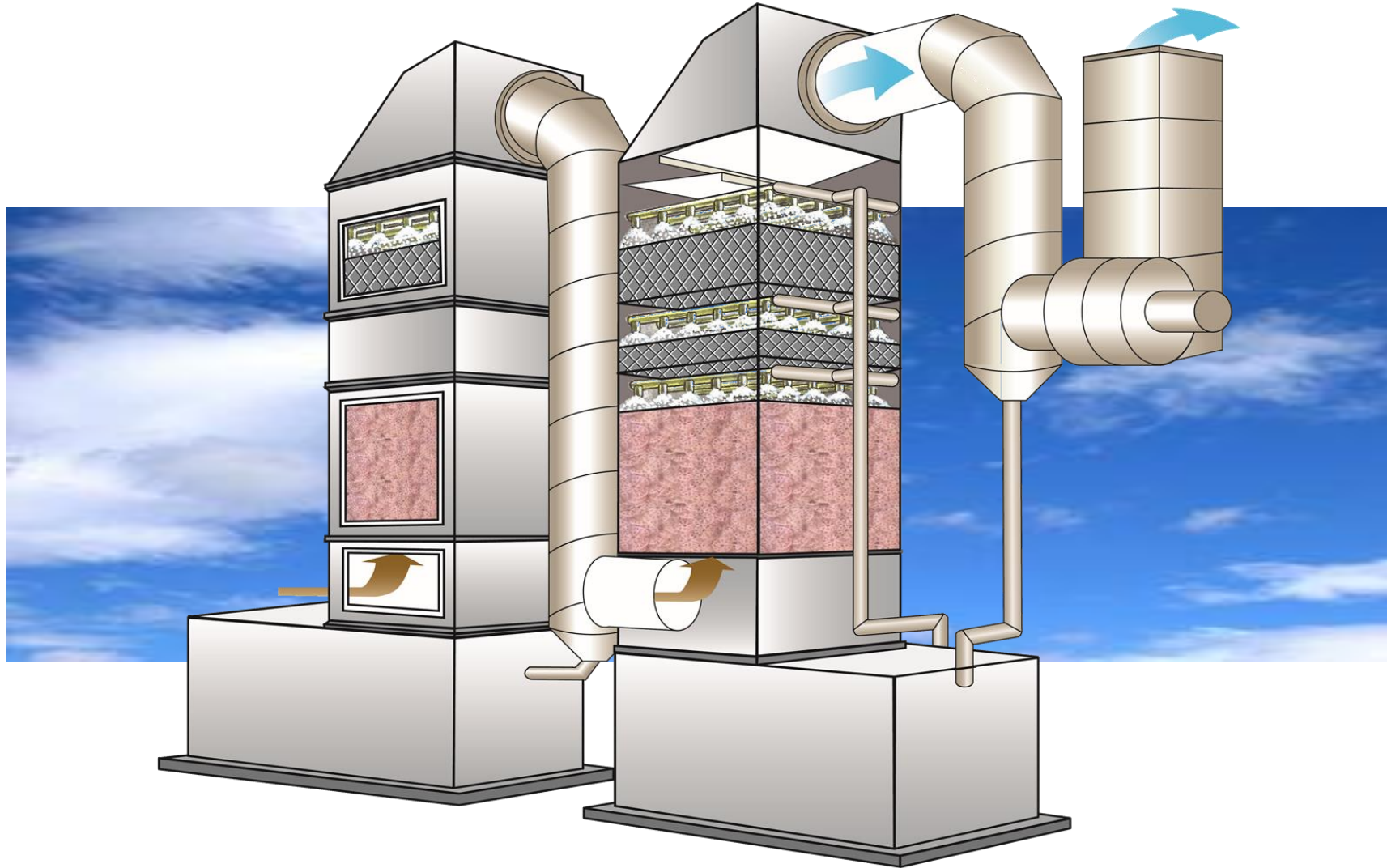# TS Scrubber System
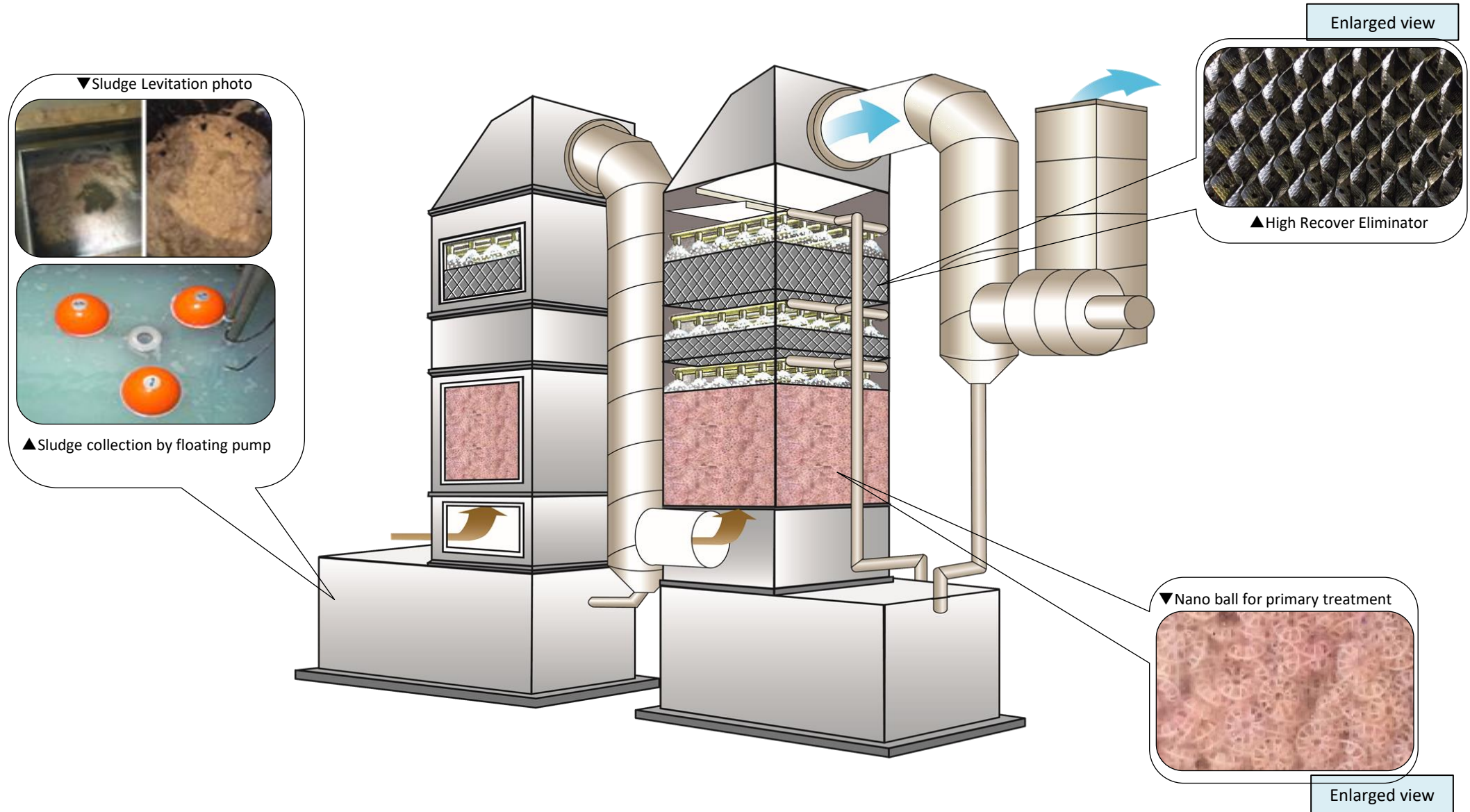
Scrubber for collect paint mist
and adsorb solvent mist
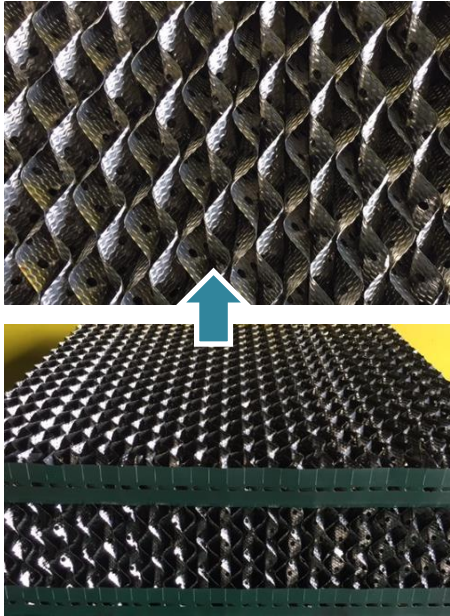
♦TS COATING TECHNOLOGY LABORATORY CO.,LTD
♦TS COATING (THAILAND) CO.,LTD.

TS Scrubber System

Using TS 1502 (recovery mist) and TS 1400 (solvent mist adsorbent) for Paint mist and Solvent mist for TS scrubber,
It is an excellent scrubber system that purifies dirty exhaust emerging from the painting booth.

Enlarged view

▼Sludge Levitation photo

▲Sludge collection by floating pump

▲High Recover Eliminator

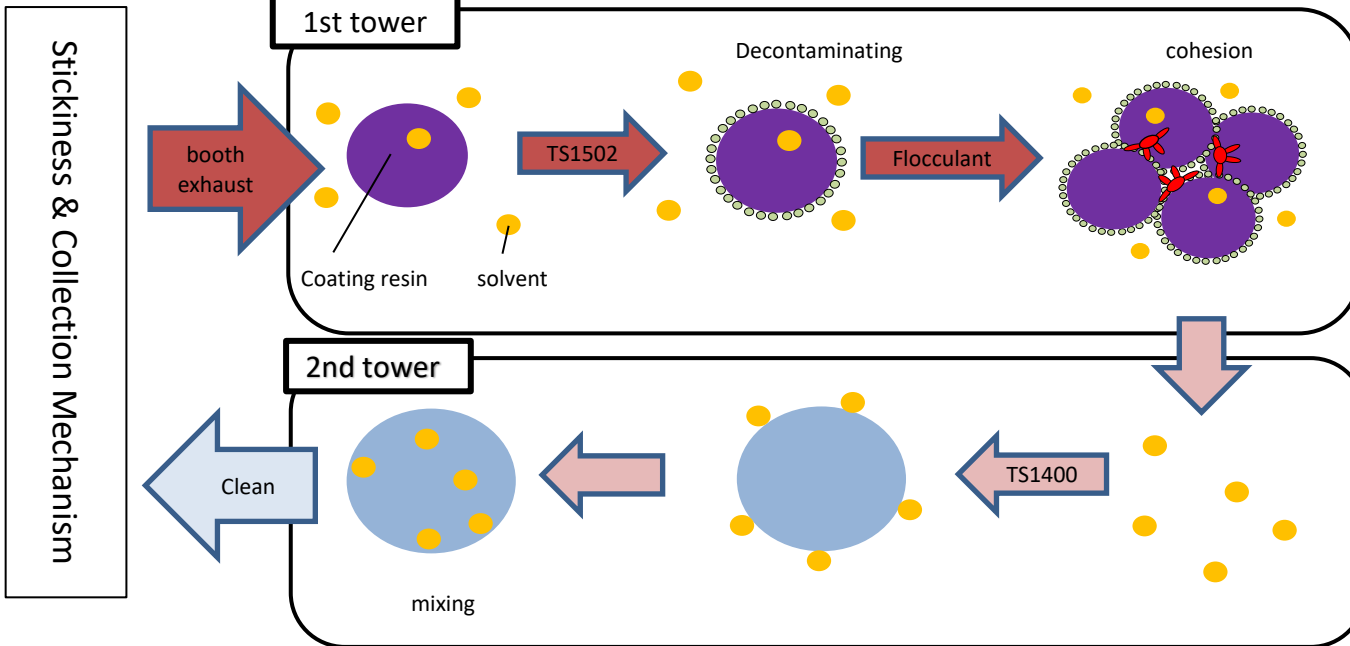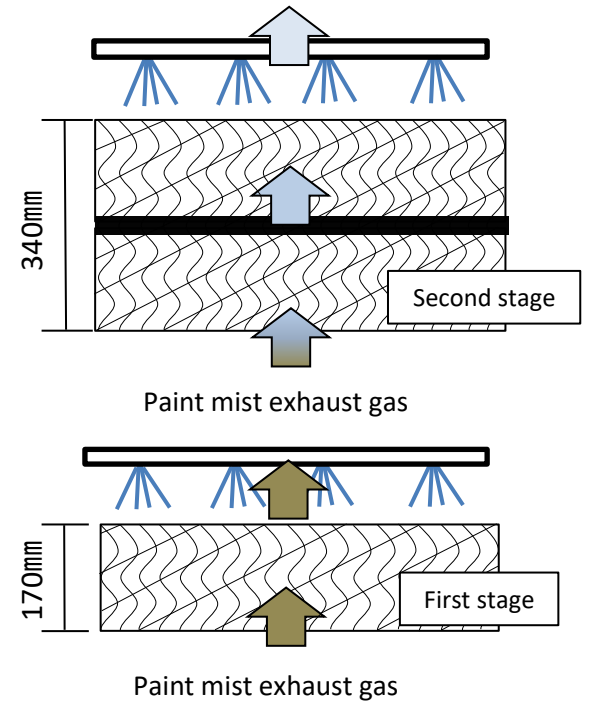▼Nano ball for primary treatment

Enlarged view

High Collect Eliminator

Gas-liquid contact is made by passing through the eliminator,
the 1st tower is treat by TS1502
moreover ,The solvent is adsorbed by TS1400 in the 2nd tower.

Using TS1502＆TS1400

① **Efficient unadhesion**
② **Easy for collection and processing**
③ **Organic solvent is OK for collection and recycle**
④ **Not Clogging up**

340mm

Second stage

Paint mist exhaust gas

170mm

First stage

Paint mist exhaust gas

Stickiness & Collection Mechanism

1st tower

Decontaminating

cohesion

booth exhaust

TS1502

Flocculant

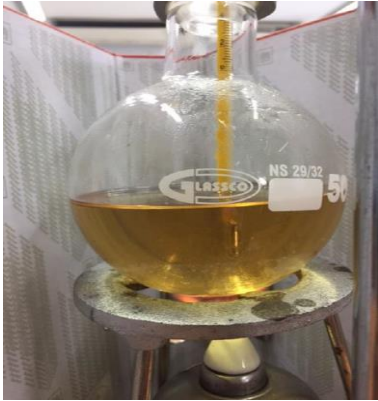Coating resin

solvent

2nd tower

Clean

TS1400

mixing

▲Bottle test photo

□The floating sludge can be easily collected,
Industrial waste disposal is possible with sandbags
and etc.　Because main ingredient of TS1502 is
bentonite , So it's harmless.

Distillation of Collected Solvent

□The solvent adsorbed by TS 1400 can be easily taken out by distillation equipment.

▲Distillation test photo

Recycle of TS1400

□The dirty TS 1400 itself can also be regenerated by vacuum distillation under reduced pressure and reused.

▲Vacuum distillation result photo

Solvent Mist Reduction Rate by TS Scrubber

※△= more than 70%   ○=more than 80%

Name of substance	Substance concentration reduction rate	TS 1400 adsorptivity	Solubility in water
Toluene	△ ～ ○	○	0.47 g /L
Xylene	○	○	Insoluble
Butyl acetate	△ ～ ○	△ ～ ○	07g100ml(20℃)
Ethyl acetate	△ ～ ○	△ ～ ○	8.3g100ml(20℃)
MIBK	△ ～ ○	△ ～ ○	1.91g100ml(20℃)
MEK	△ ～ ○	△ ～ ○	27.5g100ml(20℃)
Methanol	△ ～ ○	△	Optionally mixing
IPA	△ ～ ○	△	Optionally mixing
n-butanol	△ ～ ○	△	12.5g100ml(20℃)
Cyclohexane	○	△ ～ ○	Insoluble
Ethylbenzene	○	△ ～ ○	0.015g100ml(20℃)

TS Scrubber · Related Equipment Installation

●TS Scrubber System
(For paint factory)

Installation Date : May 2018

●TS Scrubber System
(For food factory / restaurant)

●Paint Booth System

Installation Date : April 2010

●Paint Mist Collection System
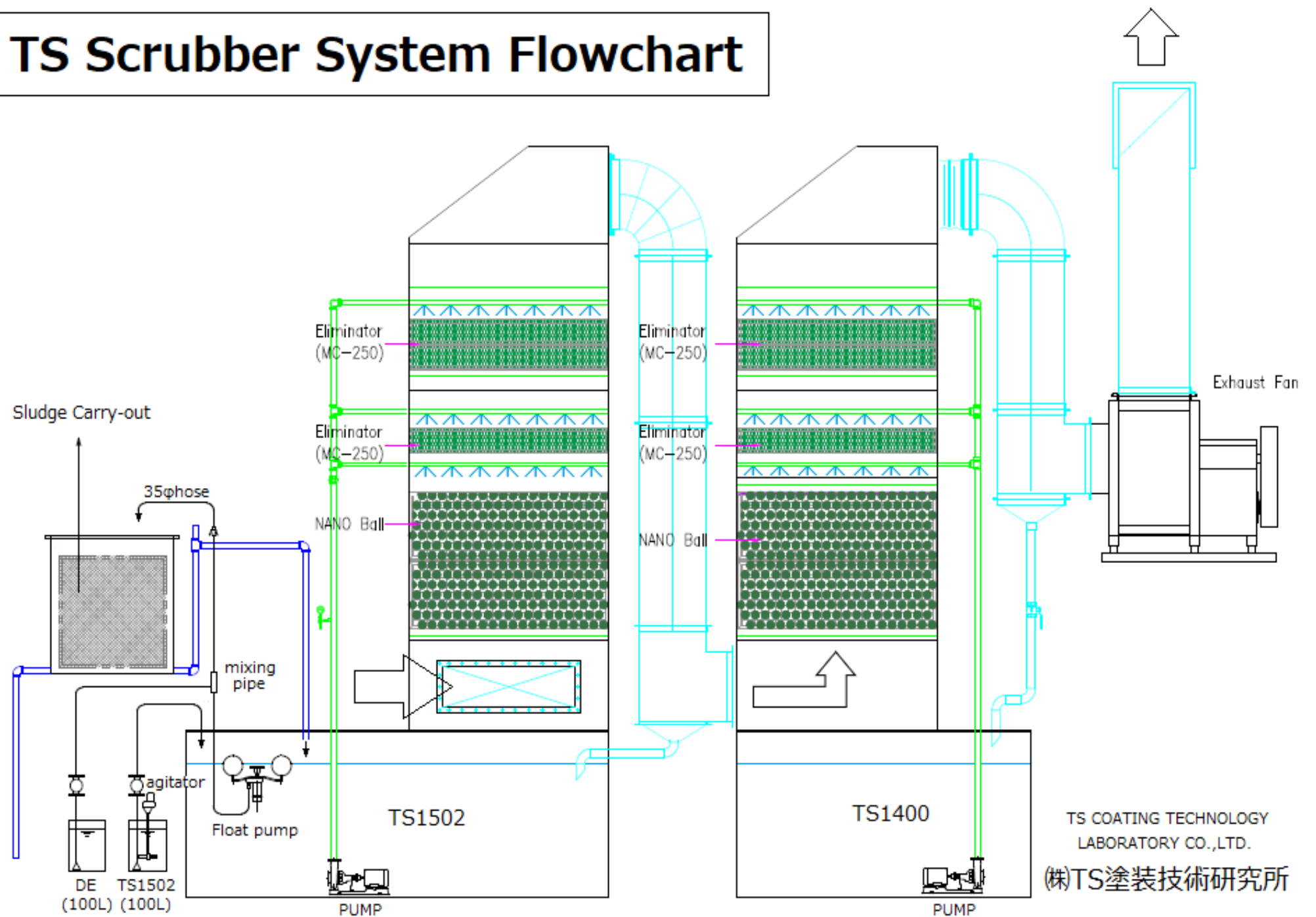

Installation Date : May 2018

●Activated Carbon System

Installation Date : May 2018

●VOC Gas Deodorization System

Installation Date : March 2015

TS Scrubber System Flowchart

Sludge Carry-out

35φhose

Eliminator (MC-250)

Eliminator (MC-250)

NANO Ball

mixing pipe

agitator

Float pump

DE (100L)

TS1502 (100L)

TS1502

PUMP

Eliminator (MC-250)

Eliminator (MC-250)

NANO Ball

Exhaust Fan

TS1400

PUMP

TS COATING TECHNOLOGY
LABORATORY CO.,LTD.

㈱TS塗装技術研究所

TS Scrubber Specification

Scrubber specification	TSB−150		TSB−200		TSB−250		TSB−300	
	TS1502	TS1400	TS1502	TS1400	TS1502	TS1400	TS1502	TS1400
Tank capacity (L)	3000	1800	3600	2400	4800	3200	5600	4000
Dimension (length) mm.	1000	1000	1500	1500	1500	1500	2000	2000
Dimension (width) mm.	2500	1500	3000	2000	3000	2000	3500	2500
Dimension (height) mm.	5400	5400	5400	5400	5400	5400	5400	5400
Scrubber Size (W) mm.	1000	1000	1500	1500	1500	1500	2000	2000
Scrubber Size (L) mm.	1500	1500	1500	1500	2000	2000	2000	2000
Scrubber Size (H) mm.	4200	4200	4200	4200	4200	4200	4200	4200
Nano ball for primary processing（m3）	1.35	1.35	2.03	2.03	2.7	2.7	3.6	3.6
Eliminator（MC−250）（Q'ty）	18	18	27	27	36	36	48	48
Pump capacity（LPM）	900	1200	1100	1680	1610	2250	2100	3210
Motor（kW）	7.5	11	11	15	15	20	20	30
Spray ring（Q'ty）	5	7	7	9	9	13	9	13
Header pipe（size）	100A	100A	100A	150A	150A	200A	200A	250A
Exhaust capacity（m3/min）	150		200		250		300	
Static pressure（Pa）	1500		1500		1500		1500	
Motor（kW）	11		15		20		25	
Air supply duct size（WxH）mm.	800×400	1200×400	1200×400	1400×400	1200×400	1600×400	1800×400	1900×400
Air speed（m/s）	1.67	1.67	1.48	1.48	1.39	1.39	1.25	1.25
Chemical Treatment for used	DE＆TS1502	TS1400	DE＆TS1502	TS1400	DE＆TS1502	TS1400	DE＆TS1502	TS1400
Gross weight（Kgs.）	2550	2260	3020	2750	3560	3250	4085	3775

Contact Us :