

# *JS Registered New Technology on its Innovation Program*

*— Achieve massive reduction of screenings and compact treatment to reduce LCC—*

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Japan Sewage Works Agency (JS) has been running [\*JS Innovation Program\*](#) since 2011. The program aims to encourage the development of new technologies that meet various needs of municipal wastewater treatment business and facilitate their introduction to our entrusted projects.

This time, JS registered the following technology on *JS Innovation Program*.

## **Crushing/Dewatering Functioned Screen Unit with Vertical Screw**

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**Developer:** *JS, Sumitomo Heavy Industries Environment Co., Ltd.*

**Technology Summary:** Screen unit that has two functions of conventional screen crusher and fragments collection/conveying. The screen unit enables compact screenings treatment. Besides, in-water crushing of screenings that washes fecal matter effectively and dewatering during conveying massively reduce the generation of screenings. The unit is expected to reduce LCC by the reduction of disposal costs for screenings and omitting the subsequent facilities.

\* *Note that JS Innovation Program verifies registered technologies for their applicability only at JS' entrusted projects. The verification is not valid for any project other than JS' management.*

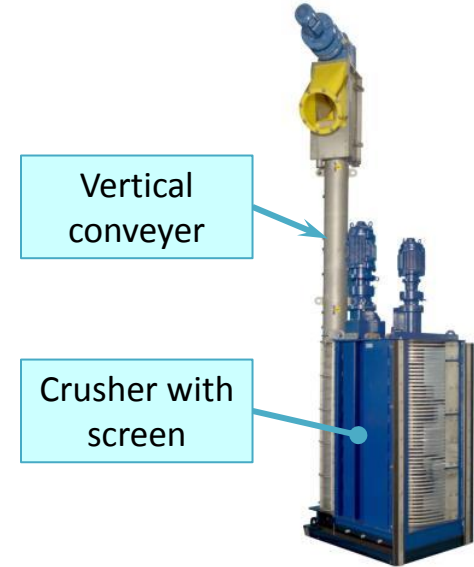
# Crushing/Dewatering Functioned Screen Unit with Vertical Screw

## Technology Summary

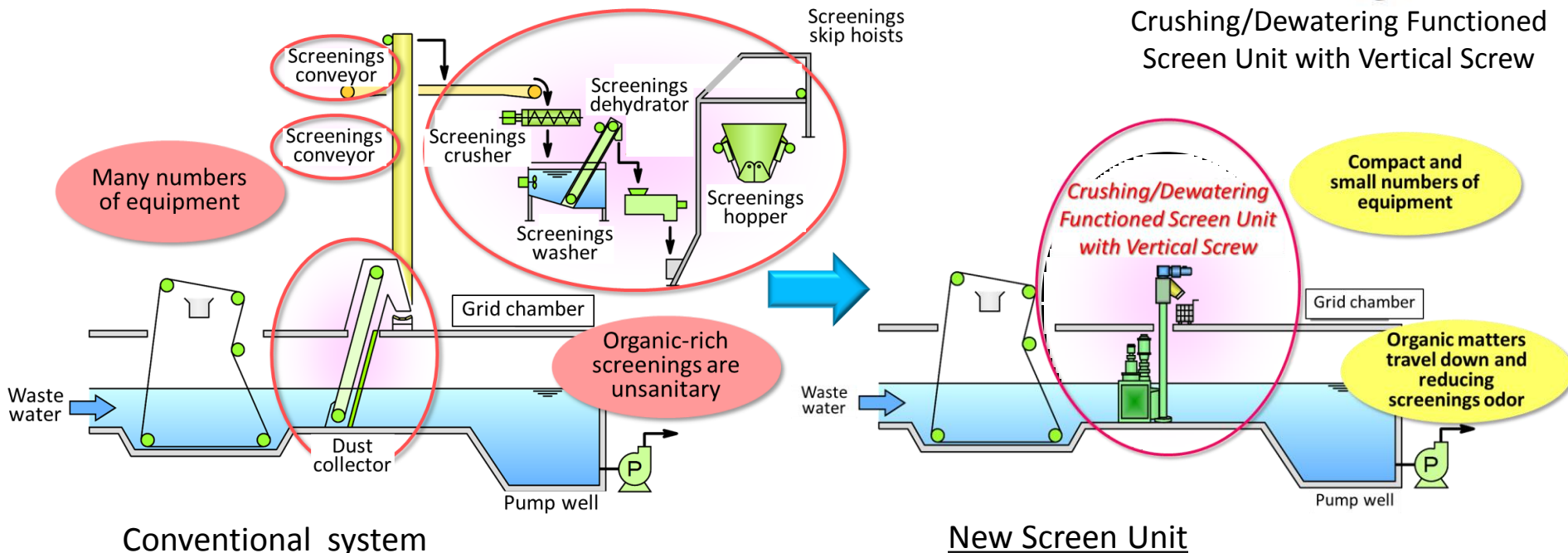
- ▶ Function as a remover/washer/dehydrator of screenings with compact body
- ▶ Crush screenings in water and dehydrate them during conveyance → Massively reduce the generation of screenings by 1/20 of weight

## Benefits

- ▶ May not need a conveyance or storage of screenings → Can reduce facilities costs
- ▶ Reduce screenings disposal costs, labor for inspection and O&M

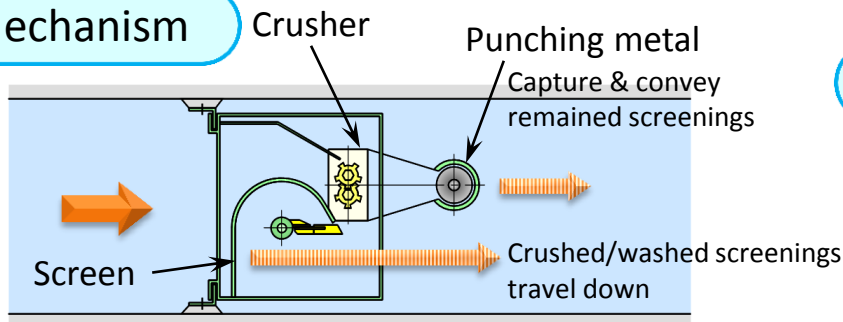


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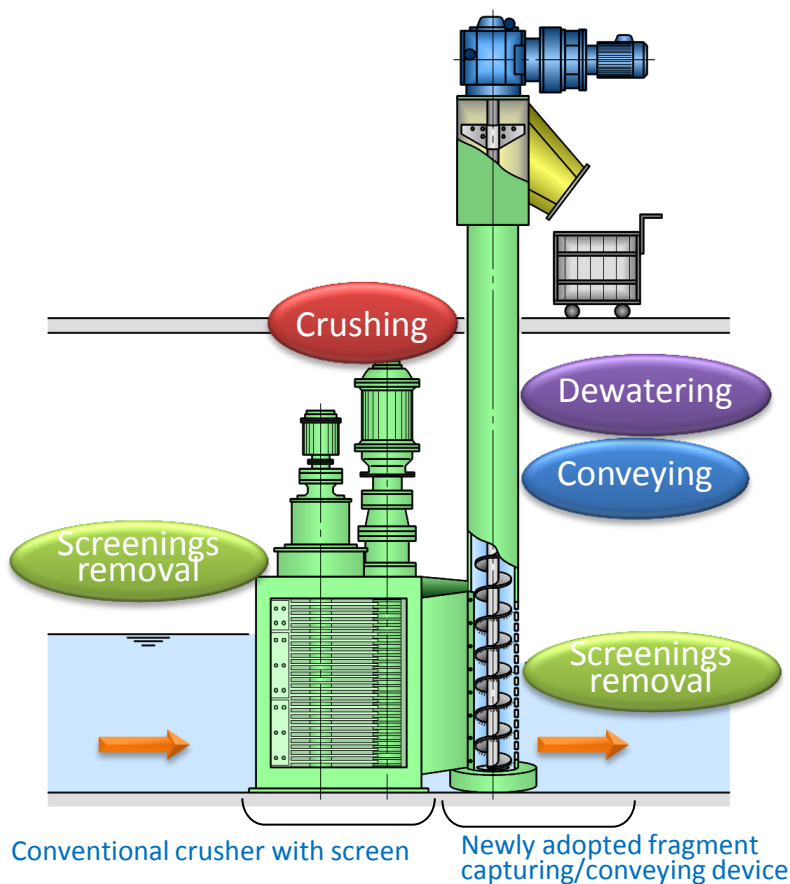
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## Mechanism



Developer: JS, Sumitomo Heavy Industries Co., Ltd.

## Reduce generation of Screenings



A conventional screen unit remains 50kg screenings per day

**1/20 or less**



The new screen unit remains 10kg screenings per week

## Scope of Application

- ▶ Sewage collection system: Separate system
- ▶ Channel: Width of 600mm and over, Depth of 7m or less
- ▶ Ceiling height: Depth of channel + 3m and over