

# GN Vacuum Vibrating Screen

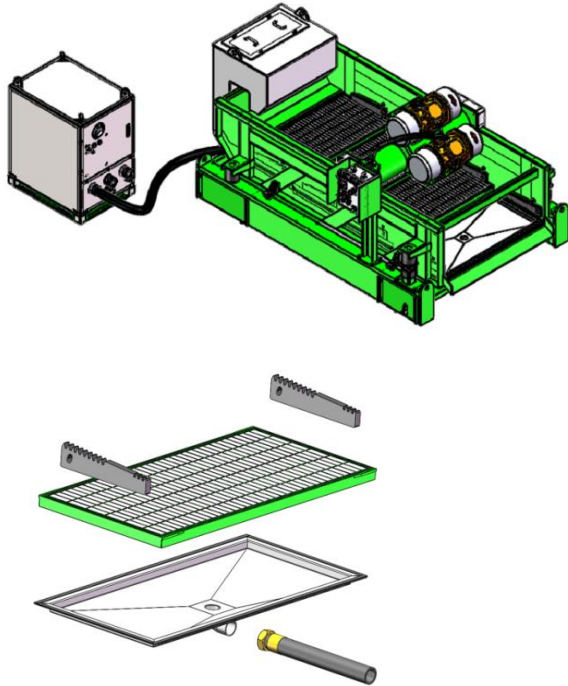
(Environmental, Mining, Construction, Chemical Screening)

2021/01/25

***Hebei GN SEPARATION & CONVEYING CO., LTD***

# Vacuum Dewatering Vibrating Screen

## Introduction



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The Vacuum Dewatering Vibrating Screen is a screening equipment composite of vibration screen and vacuum device. It is usually used in the field of dewatering vibrating screen.

Its working principle is to install a set of vacuum collecting hopper under the last screen of the equipment to form a certain frequency of vacuum pressure suction on the screen surface through pulsating airflow, to achieve double separation by vibration and vacuum suction thereby improving the recovery efficiency of liquid and reducing the liquid content of discharged solids.



Working Video: <http://www.gnsolidscontrol.com/video/vist-vacuum-screen-technology-for-shaker-test-video>

# Vacuum Dewatering Vibrating Screen

## Vacuum Unit Specs

Item	Parameter	Model: GNVIST03A
Air Source Pressure Requirement	0.7 –1.0 Mpa (100-150PSI)	
Air Consumption	4.5m <sup>3</sup> /min(160CFM)	
Connectable Suction Hopper Qty	3台	
Adaptable Vibrating Screen	Single-layer high frequency vibrating screen, GN double-layer vibrating screen	
Suitable Materials	Oily or wet solids	
Recovery Efficiency	The dewatering efficiency increased by more than 30% compared with traditional vibrating screen	
Adaptable Temperature	-15 +85°C	
Liquid Inlet Size & Qty.	2寸, (3个)	
Liquid Outlet Size & Qty.	2寸, (1个)	
Air Inlet Size	1寸	
Dimension & Weight (LxWxH)	1058x730x1068mm ( 350KG )	
Remark	Pneumatic automatic control, no power required, adjustable suction and discharge time	



The parameters for reference only. GN company may adjust it according to the improvement situation. When purchasing, please contact the GN sales representative in time, and the final technical agreement shall prevail.

# Vacuum Dewatering Vibrating Screen

## Components, Connection Port, Control

### I. Components

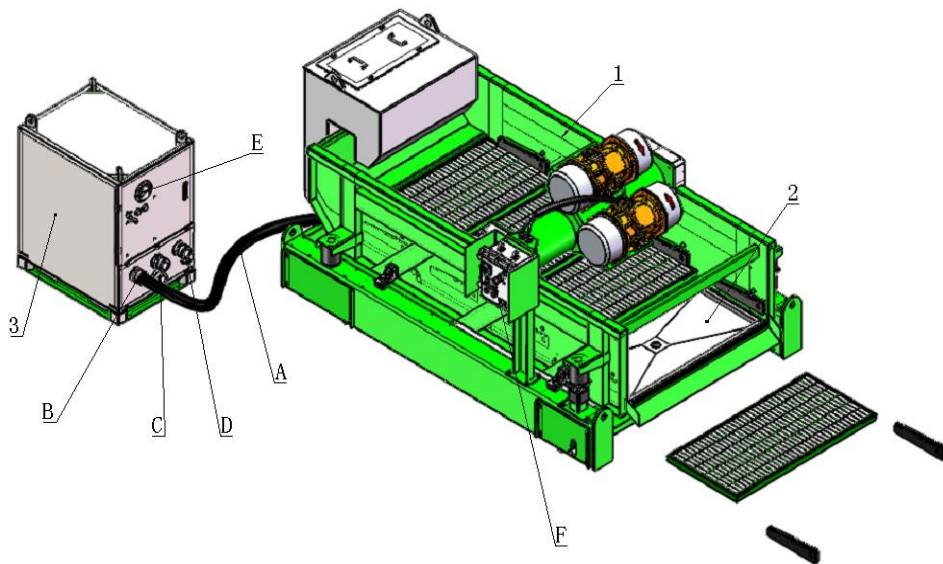
1. Vibrating Screen;
2. Vacuum collecting tray/hopper;
3. Vacuum Unit.

### II. Connection Port of Vacuum Unit

- A. No. 1 Vibrating Screen connecting pipe;
- B. No. 2 Vibrating Screen connecting pipe;
- C. No. 3 Vibrating Screen connecting pipe;
- D. Air inlet of vacuum unit

### III. Control

- E. Control panel of vacuum unit;
- F. Vibrating Screen control panel



The vacuum unit can be connected to 1/2/3 sets of Vibrating Screen.

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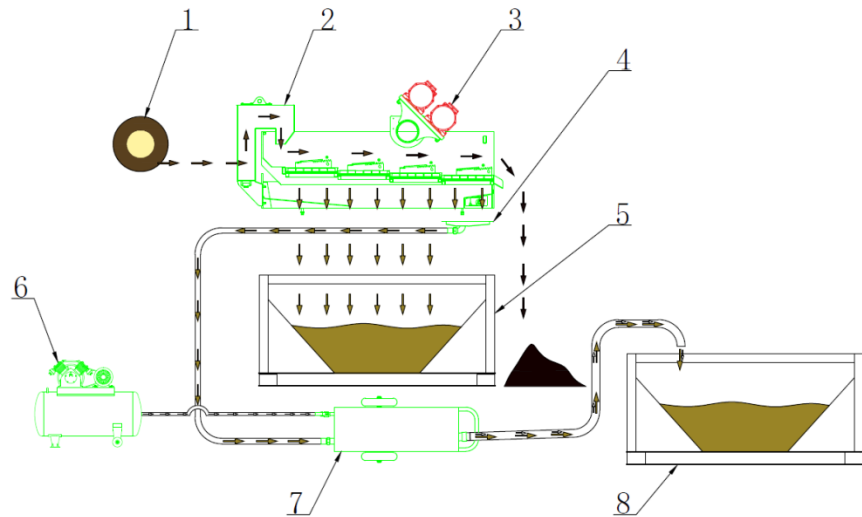
## Workflow Diagram

### •Part A

The 1 (feeding material) to be processed is transported through the pipeline into 2 (feed box), and then the material enters 3 (Screen Deck) for screening treatment, the filtrate goes through the screen surface and flows down to 5 (Mud receiving tank 1) except the filtrate passing through first screen at the equipment front discharge port.

### •Part B

6 (Air compressor) drives the 7 (vacuum unit) to run, 7 (vacuum unit) produces intermittent vacuum pressure that is transmitted to 4 (vacuum collecting hopper) through the hose. With better sealing between 4 (vacuum collecting hopper) and the first screen at the deck discharge port, the material on the first screen is sucked into 4 (vacuum collecting hopper) under negative pressure condition. The liquid collected by 4 (vacuum collecting hopper) enters into 7 (vacuum unit), finally the liquid from 7 (vacuum unit) is discharged into 8 (Mud receiving tank 2)



- 1. Feeding Material; 2. Feeder Box;
- 3. Screen Deck; 4. Vacuum Collecting Hopper;
- 5. Mud Receiving Tank 1; 6. Air Compressor;
- 7. Vacuum Unit; 8. Mud Receiving Tank 2

# Contact

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