

Air-Mixed Jet Pump

M-JET

High-Efficiency Suction-Based Grit Removal Solution



Superior Grit Lifting Efficiency

Equipped with strong vacuum suction that can lift highly concentrated grit.

Easy Maintenance

Thanks to its simple design, breakdowns are rare — the only regular upkeep required is simple maintenance on the pressurized water pump.

Cleans the Grit

While being transferred through the pipes, the grit is cleaned using pressurized water and mixed air.

Conveyors Not Required

Grit is transferred via pipes, eliminating the need for separate conveyor equipment and helping to minimize odors.

Enables Automatic Operation

Equipped with an automatic unclogging function that backwashes the suction port if it gets clogged in order to keep the grit lifter up and running.

Multiple Grit Lifters can be Operated by One Power Source

By simply toggling the pressurized water valve, multiple grit lifters can be operated in sequence using a single pressurized water pump.

Uses the Floor Above Aqueducts Efficiently

With minimal equipment on the floor, the area remains open, clean, and easy to maintain.



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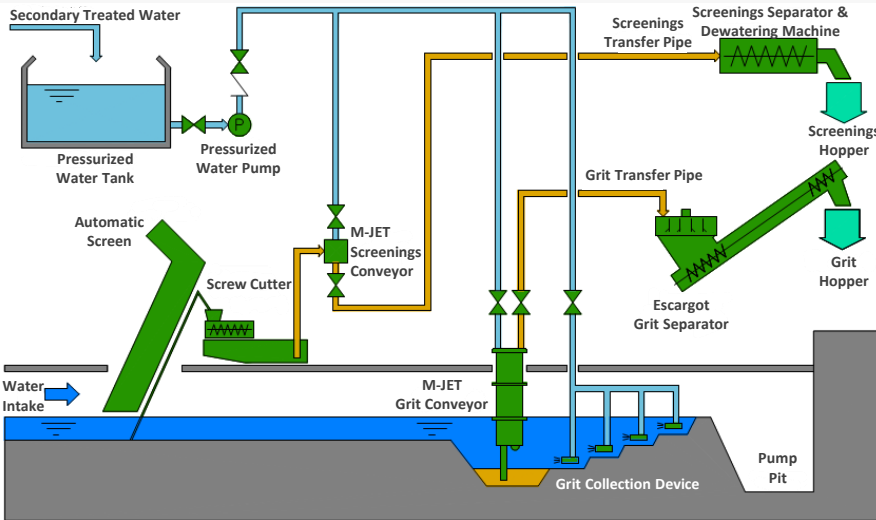
“Clean” Grit Chamber

High-Efficiency Suction-Based Grit Removal Solution

The **Sand Pumping & Collecting System** is an exceptional suction-based, continuous-operation grit removal solution engineered for use in rainwater and sewage grit chambers at wastewater treatment plants and relay pump stations. Utilizing powerful suction technology, this system seamlessly combines grit extraction, transfer, and grit cleaning in a single compact unit.

Designed for maximum efficiency and reliability, it minimizes maintenance while ensuring optimal grit handling performance — making it an ideal choice for modern treatment operations.

Applications



Conventional grit chamber

- Splashing of wastewater
- Generation of odors
- Image of dirtiness and smelliness

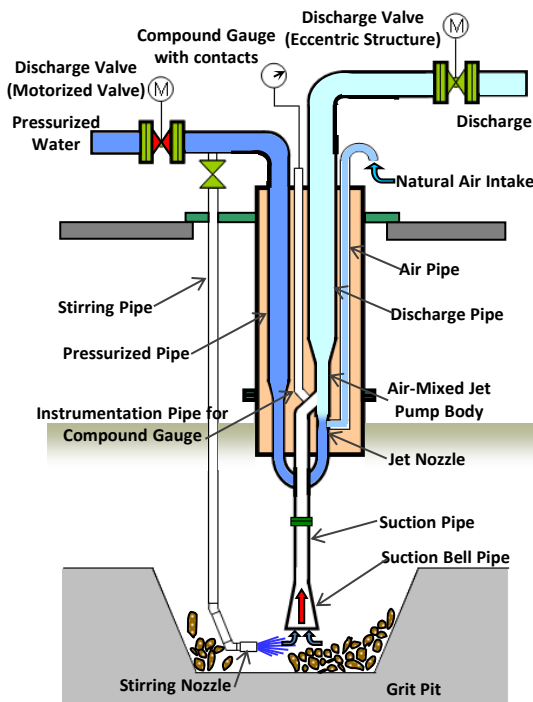
“Clean” grit chamber

- No wastewater splashing
- Odor generation minimized
- Clean

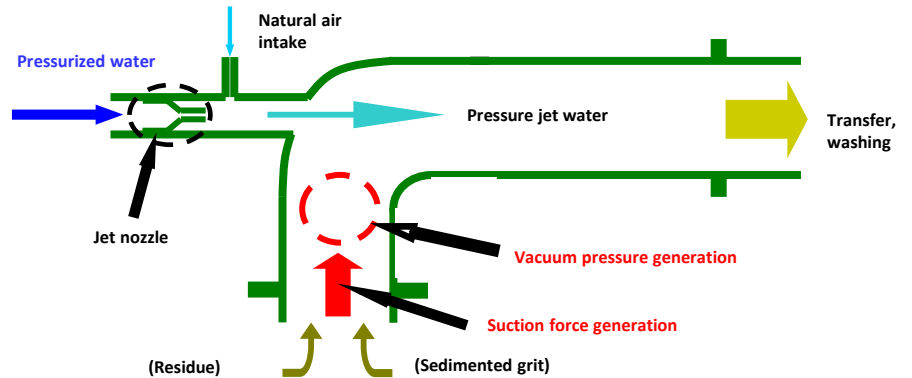
Facility Upgrade into M-JET

- No Need for Additional Conveying Equipment
- Clean Operation – No Splashing or Dripping
- Effective Odor Suppression

Structure Overview



Principle of M-JET Suction



1. **Pressurized Jet Injection:** Pressurized water is injected through a jet nozzle and mixed with air to create a pressure jet water flow.
2. **Vacuum Pressure Generation:** This process generates vacuum pressure, resulting in a suction force.
3. **Suction of Residue and Grit:** The suction force enables the removal of crushing residue and sedimented grit.
4. **Transfer and Cleaning:** The collected material is transferred and cleaned through a piping system.



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