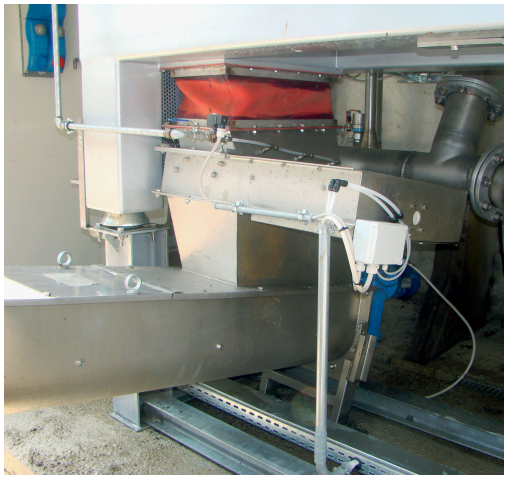
SLIDE GATES VGA

Decanter Off-spec sludge Gates



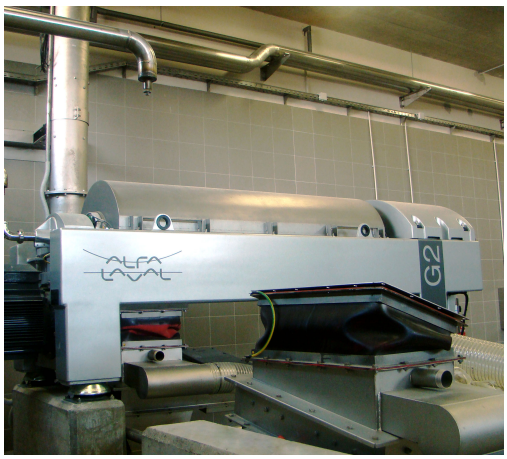
MACHINE DESCRIPTION

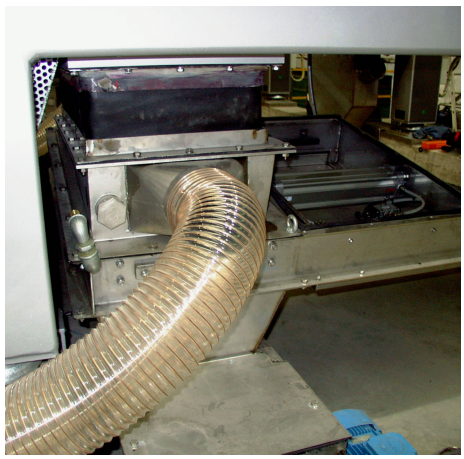
The **VGA** series gate valve is an **On-Off** device designed for installation at the outlet of centrifuges. The valve opens and closes the flow of material to be intercepted by means of the movement of a steel blade, bringing about the action of a pneumatic actuator activated by the relative solenoid valve. The gate valve has two operating positions:

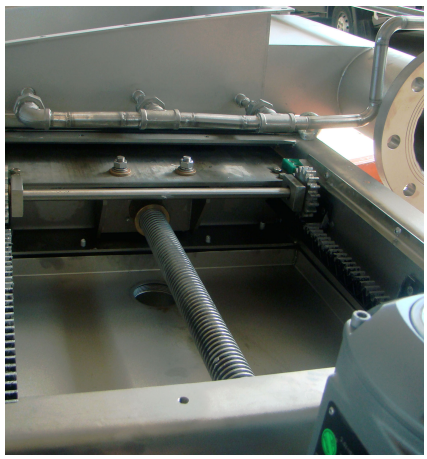
1. COMPLETELY OPEN POSITION.
2. COMPLETELY CLOSED POSITION.

The valve open/closed status is detected by two magnetic proximity switches installed on the cylinder of the pneumatic actuator near the two stroke end points of the relative piston.
The valve is specially designed according to a compact design so that the dimensions of the decanter to which it is connected remain unchanged, making sure there are no projecting parts or parts that limit access to the decanter.

To ensure perfect alignment of the blade, the unit is equipped with two rack shafts placed on the sides of the blade, on which, two cogged wheels forming an integral part of the blade slide. Further reliability of movement of the blade is provided by a series of sliding rollers installed on all the internal side panels of the valve outlet side. All the sliding rollers and supports are protected from the direct flow of sludge.







In the inner perimeter of the valve, on the inlet spout side, a heavy-duty industrial gasket is fitted to ensure a water-tight seal against atmosphertic pressure with the valve closed. The valve is also provided with a drainage hopper that must be placed at the decanter outlet and a suitable flexible rubber bellows for coupling it with the decanter outlet flange. The valve is equipped with high pressure nozzles for washing the sludge from the blade with the valve closed.

WORKING LOGIC FOR SLIDE GATES VGA

The gate valve is designed specifically for installation at the outlet of a decanter. The aim is to divert the sludge and water deriving from washing of the decanter towards the drainage hopper outlet by its closure. The valve movements must be controlled by means of an electric panel with external control (not included in the supply) which must power the coil of the pneumatic actuator solenoid valve. The valve is normally open and closes when the actuator solenoid valve coil is energized. The movements are only possible in the presence of a suitable compressed air pressure value. The change in status of the two proximity magnetic sensors installed on the pneumatic actuator cylinder allow the electric control panel to define whether the valve is completely open or completely closed. Management of the operating logic is the responsibility of those who process the automation of the electric control panel.

MAIN FEATURES FOR SLIDE GATES VGA

1. THE RANGE OF GATE VALVES COVERS THE WHOLE RANGE OF DECANTER CURRENTLY IN PRODUCTION, BASED ON CORRECT APPLICATION AND THE FEATURES OF THE MATERIALS HANDLED.
2. THE UNIT IS EQUIPPED WITH A SET OF HIGH PRESSURE NOZZLES FOR INTERNAL CLEANING. THE WASHING SYSTEM ALLOWS TO DISCHARGE SOLID SLUDGE HAVING A HIGH DRY SOLID CONTENT BUT STILL NOT MEETING THE SLUDGE REQUIREMENT FOR DISPOSAL.
3. THE ENTIRE PROCESS OF THE MACHINE MUST BE AUTOMATED DEPENDING ON THE MACHINES CONNECTED.
4. INSTALLATION IS EASY AND FAST.
5. MAINTENANCE, WHEN REQUIRED, IS QUITE EASY.
6. THE UNIT HAS A PORT FOR SAMPLING THE SLUDGES TO BE ANALYZED (OPTIONAL).

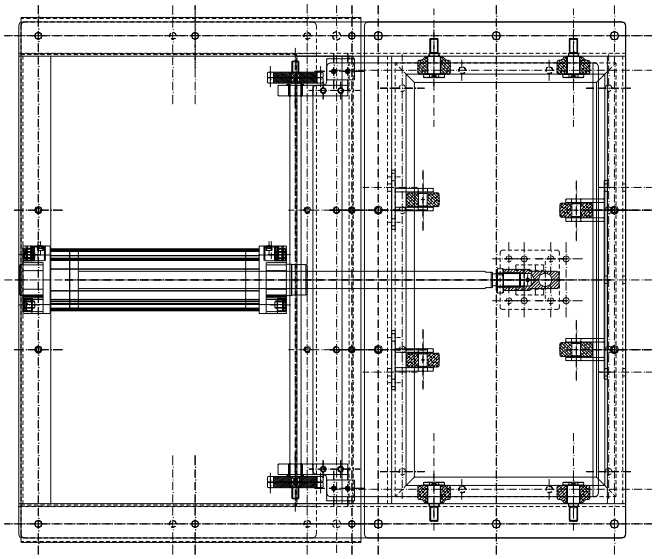
Configuration available:
1. PNEUMATIC ACTUATOR WITH SOLENOID VALVE AND LIMIT SWITCHES.
2. AUMA ELECTRIC ACTUATORS.

R.E.M. VGA slide gates can be equipped with the following accessories:
- CONTROL CABINET.
- ATEX OR UL NEMA 7 EX-PROOF VERSION.
- PNEUMATIC ACTUATOR.
- ELECTRICAL ACTUATOR.
- SAMPLING SCOOP.

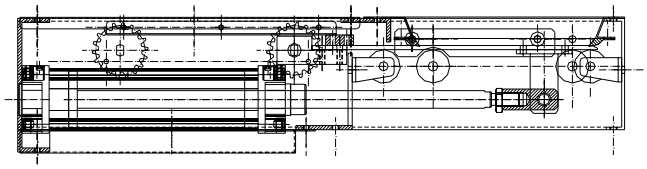
STANDARD DIMENSIONAL DATA FOR SLIDE GATES VGA

VGA MODELS	VGA10	VGA20	VGA40	VGA45	VGA60	VGA80	VGA95	VGA100	VGA115
INLET - mm	370 x 180	480 x 260	468 x 286	590 x 310	690 x 381	690 x 381	750 x 400	800 x 454	850 x 500

Fabricated parts material: *Stainless Steel AISI304 / *Stainless Steel AISI316
Rollers material: *Teflon



GATE CLOSED



GATE OPEN