APPLY AS Moseidsletta122 4068 Stavanger, Norway

Tel: +47 51 63 90 00

E-mail: <u>Utility.Products@apply.no</u>



apply.no

Sack Slitter SSGD 200 -Front loading

The advantages of APPLY's automatic sack slitting machine are hands-free cutting of sacks containing dry chemicals, and automatic feeding into a mud mixing hopper by screw conveyor. Various models can be delivered, having footprint, and parallel or sequential operation. The machine SSGD with Gravity Drum has a very robust and well proven sack cutting principle by using gravity force to feed the sacks over rotating saw blades, and a rotating drum to separate the dry chemical from the split wrappings of the sack. This machine is a typical part of a Mud Additive Plant, including also a lifting table to align sacks delivered on a Euro pallet at the same level as the feeding table. Other machines in such a plant is a big bag slitter for sacks 1m³, two or three mud hoppers based on venturi eductors, a dual liquid additive skid, and a couple of bulk surge tanks for dosing of bulk chemicals as barite and bentonite. The SSGD machine shown in pictures here, has front loading of sacks, and the drum is 200cm long. Another similar model has side entry for feeding of the sacks over its roller table.



The SSGD machine consists of these main elements:

- Sack roller table connected to a gravity chute having two shafts with rotating knife blades
- Rotating sieve drum for separation of the dry chemicals and the sack wrappings after the slitting

 $\mathsf{\Lambda}\mathsf{PPLY}$

- Reservoir for up to 20 sacks with a dosing screw for controlled feeding of dry chemicals to a nearby hopper
- Compactor for sack remains of all types: Plastic, paper, woven materials, jute, and combination of these materials with dual layers
- Fan and filter for dust free environment, to provide underpressure inside the machine where the cutting and tumbling of the sack happens

To the right is shown the sack feeding roller table with chute covered by a flexible a rubber curtain. The roller table is at the same level as the upper sack level on the nearby pallet lifting table. An optional delivery is a vacuum gripper.

The operator controls the operation of the machine, and the mud mixing pumps and hoppers via an HMI screen connected to the Drilling Acquisition and Drilling Control system. This operator panel is also equipped with sturdy push buttons, for easy use when the operator needs gloves for starting and stopping feeding to the mixing hoppers.





To the left is shown the inside of the sieve drum, with rotating knife blades at its entry point. The dry chemical drops through the sieve to the dosing screw below, while the sack is tumbled around multiple times before it goes to the waste compactor.

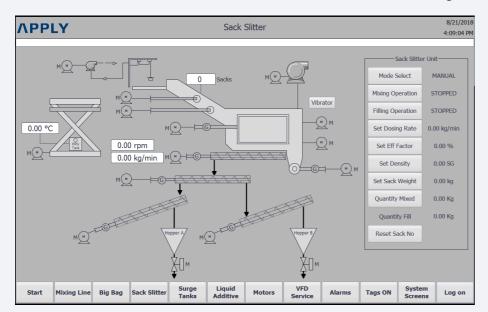
To the right is shown the waste compactor outlet, with empty sacks pushed by a screw into this hollow plastic tube, for further dust free disposal of the empty sacks.





To the left is shown the filter unit, having a fan on its top. The filter consists of many cartridges, creating a filter surface of more than 6m². The filter cartridges are regularly cleaned by jets of pressurized air, blowing in reverse direction such that collected dust is dropping down into the sieve drum and reservoir under the filter.

At the bottom is shown an HMI screen, used for status information and monitoring.





TECHNICAL SPECIFICATION

- Footprint: W=1100 mm x L=3500 mm
- Height: 4300 mm
- Weight dry incl fan & filter: 2400kg
- Unit built by stainless steel AISI 316 L, and supported by 4 legs
- Ambient temperature 0- 45 degrC
- Atex certified for use in hazardous zone 2, Exde 3 G IIB T3
- Electric supply 3-phase 400-690V/ 50-60Hz, max 14kVA (8 small motors)
- Powered equipment by electrical motors:
 Two vibrators, drum rotation, dosing screw, two saw blade motors, compactor motor, fan motor
- Instrumentation: Sack counter, two level switches
- Air supply DN25 or ANSI 1/2" #150, 20 litre/min, 6-10 bar for filter cleaning
- Declaration of Conformity according to CE Machinery Directive,
 2006/42/EC and Norsok S-005
 Working environment
- Noise 72dB(A) (1m) pressure level
- Electrical installations according to NEK 400 for low voltage plants, NEK 410 for maritime electrical installations, and NEK 420 for hazardous areas
- Delivered with PLC based controlled system (Siemens), and local operator panel, with communication link to Mud Control System, under the DCDA system
- Slitting capacity 600sacks/hour each 10-25kg (50kg on request)
- Sack reservoir 300litre corresponding with 20sacks each 25kg and SG 1.6
- User defined dosing rate and intervals, standard feed rate is 0.15-2.5m3/hr
- Ventilation 150 x 200mm duct size
- See separate flyers for Mud Additive System, Big Bag Slitter, Dual Liquid Additive Skid, Bulk System, and Hoppers