

# Gjesdal

# FIVE in ONE

## GRAIN CLEANERS

Simplifying the World of Grain Processing

## M100



### NEW FEATURES:

- Quick, removable hopper end plate for changing out the scalper.
- Gravity feed hopper vs auger flighting.
- Sectional adjustable flow retarder plates.
- Indent trough pick up side lowered for higher volume cleaning.
- Plastic four prong knobs on end plates for quick disassembly.
- Optional pre-scalper for removing roughage.

## A SEED CLEANING PLANT ALL IN ONE MACHINE\*



## NOTICE TO BUYERS

Thank you for your purchase of one of the finest grain cleaners on market. A working relationship is what we strive to achieve with each and every customer.

SilverLine Mfg. Ltd. shall limit the warrant of items sold to the amount of the purchase price. SilverLine Mfg. Ltd., our employees or representatives, make no other warranties; guarantees or conditions; expressed or implied with respect to this machine or it's performance.

By acceptance of this machine the original Purchaser acknowledges that this warranty and disclaimer herein before described are conditions of sale and that they constitute the entire agreement between the Vendor; SilverLine Mfg. Ltd. and the original Purchaser regarding warranty and/or any other liability or conditions.

The original Purchaser shall have 10 days after purchase date to accept this machine or advise SilverLine Mfg. Ltd., in writing, of any disagreement. No warranty will cover misuse or damage in any way and any machine may not be accepted for return which is not returned in factory original condition.

## ATTENTION

All warranties expressed or implied will be null and void if any other than SilverLine Mfg. Ltd. parts, components or accessories are used in Gjesdal or SilverLine grain cleaning units. SilverLine genuine parts, components and accessories are available by order, please call 1-306-856-4445.

SilverLine Mfg. Ltd., our employees or representatives of the corporation will not be held accountable, liable or responsible due to damage and/or poor performance

## FIVEinONE

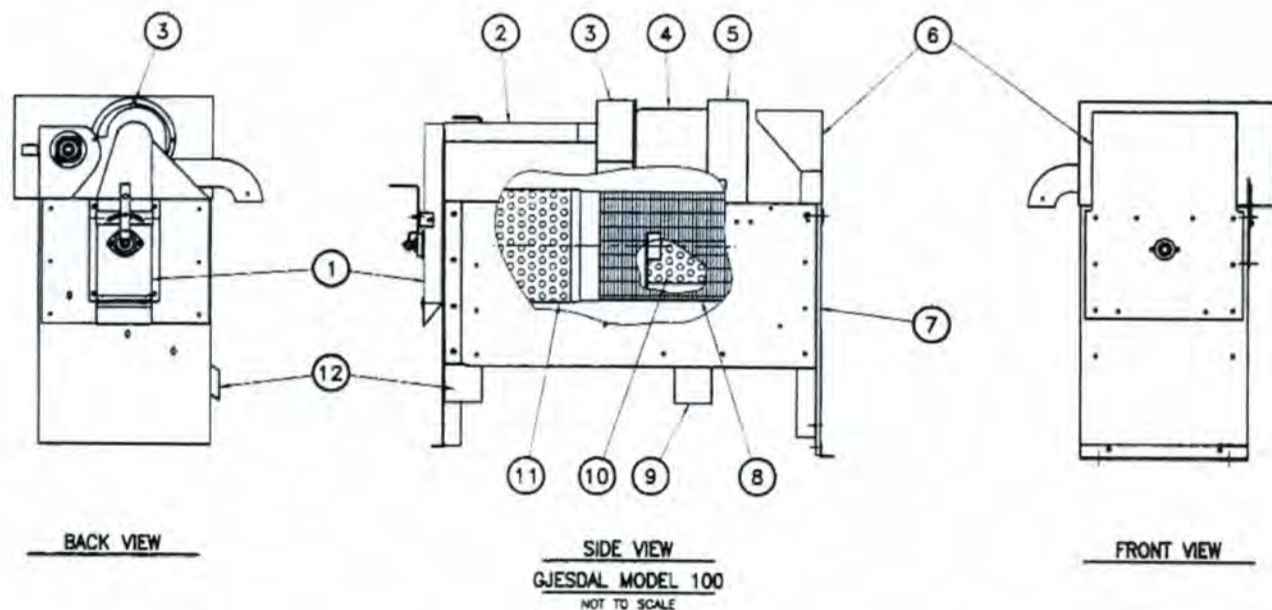
### Gjesdal M - 100 Grain Cleaner

#### Capacity Rating -

Bph 10. \*Based on cereal grains (HRSW) with properly sized processing components @ 6 percent dockage. Due to product conditions, Cleaning applications and crop kinds, capacities will vary.

#### Features:

- |                    |                                                                |
|--------------------|----------------------------------------------------------------|
| - Drive            | 1/2 Hp. single phase motor.                                    |
| - Rotary Drum      | 1 8" dia. Scalper, 1 12" Two section Grader, 1 12" dia. indent |
| - Feeding System   | Hopper with gravity feed through a butterfly feed gate.        |
| - Air System       | 7" dia. Wheel fan, 110 cfm. Final air only                     |
| - Indent retarder  | Fully adjustable and removable sectional plates                |
| - Cleaning Systems | Scalper - 3 - 1 3/8" rubber screen balls                       |
|                    | Grader - Brush system                                          |
|                    | Indent - Invert trough and remove one retarder plate.          |



#### SPECIFICATIONS:

MOTORS: FAN/INDENT DRIVE - 1/2HP/1750RPM, 120VAC  
WEIGHT: APPROX. 230 lbs  
CAPACITY: 10-15 BPH  
OVERALL DIMENSIONS (WXLXH): 26" X 48" X 30-1/2"

#### FEATURES:

1. CLEAN GRAIN SPOUT  
2. AIR PIPE  
3. BLOWER  
4. MOTOR  
5. DRIVE GUARD  
6. INTAKE HOPPER

7. FRAME  
8. GRADER  
9. SCREENINGS  
10. SCALPER  
11. INDENT SHELL  
12. OATS CHUTE

Parts and accessories are only a phone call away. We carry, in stock, most parts required for your unit with few having to be ordered. Most, if not all, drive parts can be purchased at any agriculture machine dealership which include bearings, pulleys, belts and gears. This prevents you having unnecessary downtime which means money out of your pocket.

At SilverLine Mfg. Ltd. we take pride in our workmanship. The grain cleaners are built and assembled on site near Outlook, in central Saskatchewan. Every unit goes through line testing and a run test to ensure that each unit meets our quality standards before leaving our shop. It's our reputation on the line and if you are not satisfied, we are not satisfied. Parts and accessories are only a phone call away.



OUTLOOK, SASK. CDN.  
Tel (306) 856-4445  
Fax (306) 856-4457

SilverLine

For more information contact your Grain Cleaning Specialist

### **START UP (this is a guide only to help in a start up)**

- Make sure that all guards are in place and secured.
- Turn machine over by hand by turning drive belts from the motors and see that all moving parts are turning free and clear.

**“ Make sure that your power supply is disconnected for this operation of start up”.**

- Once you see that all moving parts are rotating freely and the operator is free and clear of the unit connect your power supply.
- Do a visual and vocal verification that all personnel and unauthorized personnel are clear of the unit.
- Start your unit. Listen for any unusual sounds. If the sounds persist shut down unit immediately and locate the problem.
- Once unit is running your large pocket indent (the drum) is preset to approximately 60 RPM with the receiving trough at 20 towards the lift on the dial indicator. You may be required to adjust the speed of the indent, by decreasing it's rotational speed for smaller crop types. The unit must be shut down to perform this operation.

**“Disconnect all power supply and ensure that all moving parts are stopped before performing this operation.”**

- Make sure that your Hopper shut off gate is closed.
- Set your air suction 2/3 of the way open.
- Open your metering gate (approx. 3/8 inch on cereals) to allow only a small volume of product through the metering gate. This will give you a chance to preset the unit without a large volume of grain passing through.
- Introduce product to the unit's product hopper.
- Product will begin to flow into the unit.



- The **accept product** should be continuing through the unit and being discharged out the indent end of the unit. The screenings should be discharging out the side of the unit out the two screening chutes.

**“DANGER- Do not extend anything into the operating area of the rotating drum.”.**

**“DANGER- Do not extend anything into the operating area of the Indent .”**

Using a flashlight the accept product should be lifting into the receiving trough. If accept product is being thrown over the receiving trough reduce the rotation speed of the indent. If accept product is not being lifted enough either increase indent’s rotational speed or move receiving trough in the direction of the lifting product. Do not rotate trough past 40 on the dial indicator. At this point you must increase the rotational speed of the indent. The accept product should be dropping in the center of the receiving trough. Remember to set your flow retarder once you achieve the units cleaning volume of product. The unit must be shut down to perform this operation.

**“Disconnect all power supply and ensure that all moving parts are stopped before performing this operation.”**

In most cases the flow retarder plates will be set in the most inward position (full retardation).

- Once you are confident that the unit is close to being preset introduce more product through the metering gate by increasing the volume in small amounts each time and repeat the above steps. **GOOD LUCK.**

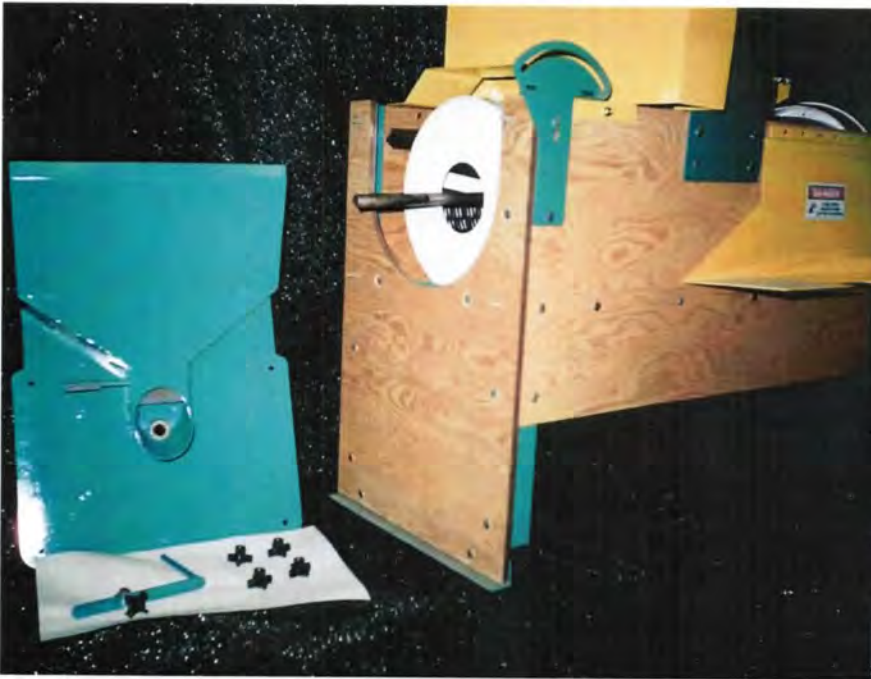
**HELP LINE** - 1-306-856-4445 during business hours.

## CHANGING THE SCALPER SHELL

From serial number SSM-100-1000 to SLM-100-1061 the complete drum assembly must be removed from the indent end of the unit to change the scalper shell.

From SLM-100-1062 up, the scalper shell can be removed from the feed end of the drum using the following procedures:

1. Remove the hand knob and feed gate control arm.
2. Remove the four hand knobs on the feed end plate of the unit.
3. Pull feed end plate by grabbing the two handles on the end plate. When pulling the end plate off the mounting bolts use a bit of an upward pull.
4. Once the end plate is removed, remove the three bolts holding the end cap of the drum.
5. Pull the end cap off, the scalper shell will now come out with a little tug. The three balls that are in the drum must go back in. They roll around between the scalper shell and the grader shell.
6. Insert the new grader shell. Be sure the cut outs on the scalper shell fit into the scalping hub in the center of the drum. The cut outs on the scalper shell must line up with the scalping hub's ejection chutes.
7. Reverse the above procedures for reassembly.



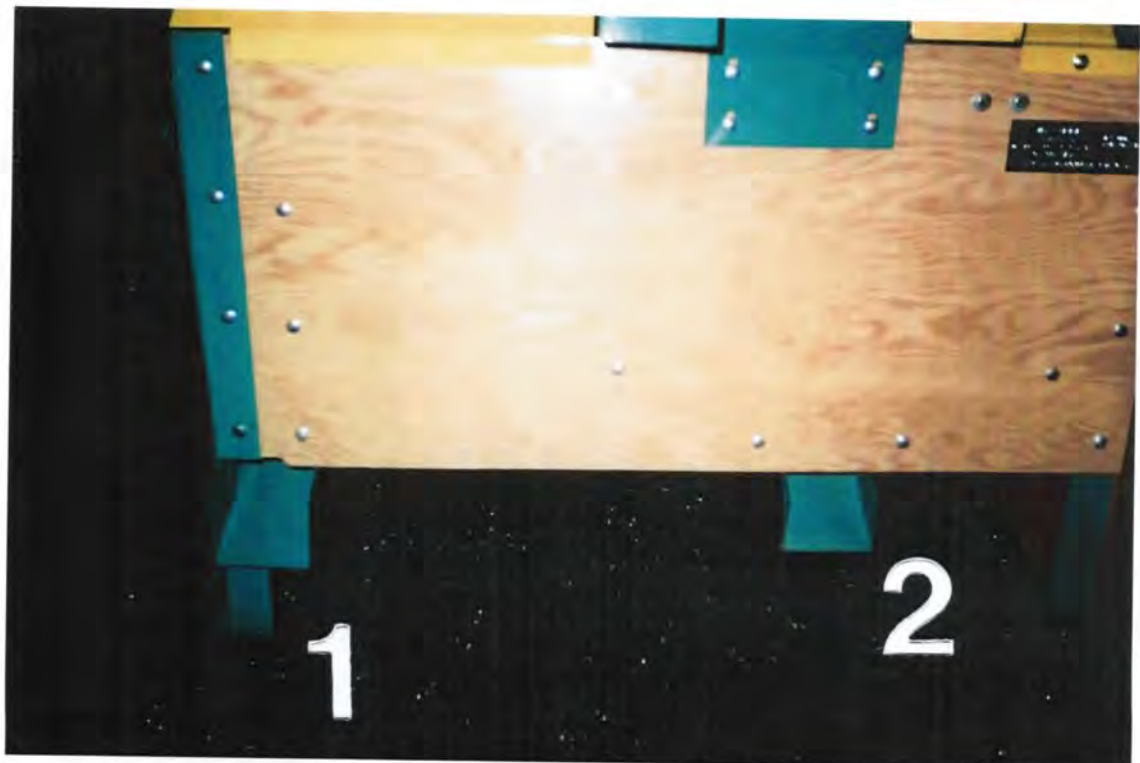
## SCREENING AND OATS CHUTES

The following picture shows the two screenings chutes on the side of the unit. The following is what discharges out each chute:

**Chute 1:** Large tailings from the indent (wild oats, heads, etc.) when cleaning medium size cereal grains and smaller grains.

Oats: When cleaning oats the oats will come out this chute. The indent will not pick up the oats unless you change the indent to a number 28 or 30. The standard number 20 or 22 indent will only pick up medium length cereal grains or smaller (wheat, barley, etc.). Therefore without changing the indent to a 28 or 30, this chute is where your clean oats will come out. The indent if it is a number 20 or 22 will be picking the smaller grains out of the oats and will be discharged on the indent end of the unit. This is commonly the clean grain discharge. Remember to have the flow retarder plates in the most outward position so not to hold back the flow of the oats.

**Chute 2:** Scalpings from the scalping shell (heads, pods, etc.) and siftings for the grader shell (small weed seeds, cracked and broken grain).





## AIR AND DRUM ADJUSTMENTS

In the first picture we see a small lever on a four inch tube pipe. This lever is located on the top side of the unit. This is the air damper control lever. When the lever is turned 90 degrees to the four inch pipe, the damper is in the closed position. When the lever is parallel with the four inch pipe, the damper is in the open position (maximum suction).

The second picture shows the drive components. To increase the speed of the drum you can either close the variable speed pulley on the motor or the variable speed pulley on the drive shaft at the indent end of the unit. To decrease the speed of the drum you will open up the variable speed pulleys. The unit should be set at 60 Rpm when you receive it.



The indent and grader shell must be changed from the indent end of the unit.

Changing the Indent:

1. "Disconnect all power supply and ensure that all moving parts are stopped before performing the operation."

2. On the indent end of the unit we must remove the end plate;

a) Loosen the drive belt that drives the indent by loosening off the bearing flange.

b) Loosen off the set screw on the indent adjustment lever location on the base of the lever that tightens to the center shaft. Remove the two bolts on either side of the clean grain chute that holds the indent trough adjustment levers guide. Remove the guide and the lever.

c) Loosen the set screw on the locking collar of the bearing on the center shaft and remove. Be sure to mark or take note the position of the bearing collar in respect to the outer (larger) center shaft. In most cases the bearing collar is flush with the outer (larger) center shaft.

d) Remove the four hand knob on the end plate. Also just under the clean grain discharge chute on the end plate, is a nut that has to be removed.

e) Remove the end plate by pulling it away from the unit. The 4 inch air tube should remain with the unit. In some cases you may have to give the end plate a tap with a hammer to loosen the 4 inch air tube on the top of the unit due to paint.

3. Remove the cleaning drum;

a) Grab onto the top of the drum from the indent end by placing one hand in the indent drive hub and lift upwards. With your other hand pull the drum outwards away from the unit on the indent end plate end. You will have to guide the drive belt along the drum, that we loosened off before, along as you pull the drum out of the unit.

b) Once you have the drum approximately half way out you can grab both ends and slowly lift the drum up and move it out the indent end of the unit. This procedure should be performed by two people.

4. Remove the indent:

a) Remove the indent end hub by removing the four nuts that hold the hub onto the indent.

b) Remove the three bolts out of the other end of the indent. Pull the indent off the center hub.

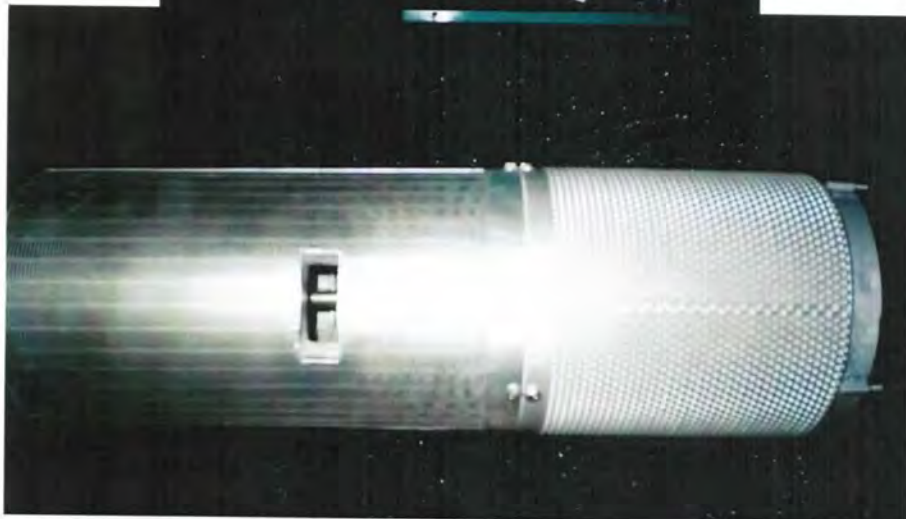
You do not have to change or remove anything on the center shaft; ie. the indent trough.

c) Place on your new indent.

5. Reverse the above procedures to reinstall. Remember, be sure to take note the position of the bearing collar in respect to the outer (larger) center shaft. In most cases the bearing collar is flush with the outer (larger) center shaft from procedure "2-c".



1. Follow procedures 1 through 3 from the previous page.
2. Remove the three bolts that hold the grader to the in-feed grader hub. Remove the three bolts in the center that hold the grader to the center hub. Pull the in-feed hub off the shaft. Watch that you do not loose the three balls that go between the grader and scalper shells.
3. Remove the scalper shell from inside the grader shell. Now pull the grader shell off from the center hub.
4. Install the new grader shell and bolt it to the center hub. Install the scalper shell, from page 3.
5. Install in-feed hub with the three bolts.
6. Reverse the procedures 1 to 3 in "Changing the Indent".



From Serial Number SSM-100-1000 to SLM100-1061, the flow retarder assembly is not adjustable. From SLM100-1062 and up, the flow retarder consists of four adjustable plates. These plates give the unit a true flow retarder with minimum grain loss.

In most cases the flow retarder plates will be set inward toward the center of the drum. The purpose of the flow retarder assembly is to hold back the product in the indent.

1. Allow significant time for the indent to pick the accept grain kernels out of the product flow.
2. To create an even product flow in the indent to create an even lifting pattern of accept kernels into the indent trough.
3. Allows the unit to have a higher volume through put.

If you are cleaning with the flow retarder plates positioned inward (full) and begin to get larger material in your clean grain sample you will have to move one or more of the plates outwards to allow the coarse material to pass out the end of the indent drum. If this does not help, then you probably have to change your indent to a smaller size. Another factor, the indent trough may be set too far into the lift of the grain in the indent.

If you are cleaning and you have too much accept kernels coming out with the coarse material and the flow retarder plates are at the full position (inward), the unit is probably over loaded (too much product) or the indent size is too small for the product that has to be lifted into the trough. Another factor, the indent trough may be set too far away from the lift of grain or the indent speed may be too slow. Refer to the screen sizing chart.





## GJESDAL CLEANER SHELL RECOMMENDATIONS FOR VARIOUS CROPS

Crop	Scalper Sieve	Grader Shell	Small Indent Shell	Large Indent Shell
Wheat- Red Spring	10/64" x 3/4" slot	5-3/4 /64 x 3/4" slot	No. 13	No. 20
Durum Wheat	10/64" x 3/4" slot 11-64" x 3/4" slot	6/64" x 3/4" slot	No. 13	No. 20 - 22
Barley	10/64" x 3/4" slot 11-64" x 3/4" slot	6/64" x 3/4" slot	No. 13 No. 19	No. 20 No. 24
Oats	10-64" x 3/4" slot	5 1/2" x 3/4" slot 5/64" x 3/4" slot	No. 13	No. 20 No. 22
Rye	10/64" x 3/4" slot	5/64" x 3/4" slot	No.13	No. 20
Flax	4 - 5/64" X 3/4" Slot	5-1/2" Round hole	No. 13 No. 10	No.16 - 20 No.13
Canola - Argentine	6/64" Round hole 7/64" Round hole	3-1/2" slot	No. 5	No. 10
- Polish	5-1/2" Round hole	3/64" Slot	No. 5	No. 10
Lentils**	11/64" x 3/4" slot 20 Round	13 Round 5-1/2" slot	No. 13	No. 20
Peas	20-24/64 Round	10-13/64 x 3/4" slot	N/A	N/A
Canary seed	9/64 Round	4-4 1/2" Round	No. 10	No. 13 - 16
Alfalfa & Sweet clover	3/64 x 5/16" slot	1/20" Round	No. 4	No. 10
Mustard	Similar to Canola			
Sanfoin	16/64 Round	5-1/2 slot	No. 19	No. 22
Tame Buckwheat	15/64 Round	10/64 slot	No. 13	No. 20
Fababeans	24/64" Round hole	12-14/64" slot	N/A	N/A
Kabuli	26 - 32/64 Round hole	12 - 16/64 slot	N/A	N/A

\* Specifications subject to change with crop varieties and without notices.

\*\* Special grader shells are available to separate wheat and barley from lentils. They are a special ribbed shell with 12/64" Round hole and funnel shells.