



Mid-Continent Industries Inc.

1801 SE 9th St. Newton, KS 67114
316-283-9648 * 800-279-6812 * Fax: 316-283-0745
www.midcontinentindustries.com

OPERATOR'S MANUAL

MCi KICKER

LABORATORY GRAIN CLEANER



THIS MANUAL INCLUDES:

- Set Up Instructions
- Start Up Instructions
- Suggestion of Operation
- Maintenance Instructions
- Fan Damper Information
- Screen Charts
- Warranty

**For Information or Parts Needs, Please Call or Fax
(800) 279-6812 Fax: (316) 283-0745**

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Revised 1/29/09 10/27/14

KICKER * AUTOKICKER * NEWTON GRAIN CLEANER * PLAZMA TABLE CUTTING * CUSTOM METAL FABRICATION

MCI KICKER OPERATIONS MANUAL

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THE MCI KICKER

Enclosed in this manual you will find suggested settings, screen size, and operations for your MCI Kicker laboratory grain cleaner. Also included are some ideas that might help you to explain to the grain producer why the MCI Kicker is being used.

First, here are some helpful ideas. It is necessary for the country elevator to check for grain volume and quality or the producer may find his favorite country elevator closed due to paying for “stuff” he is unable to sell. Remind the producer you are in the business to purchase and handle grain. Weeds, sticks, dirt, stocks, trash and excess broken grain force you to pay lower prices to everyone to compensate for the producers who bring you products which in return you are unable to sell.

Many elevators are not showing the price reduction on the checks or scale tickets. Instead, they are indicating what percentage of the load they are buying. Example: instead of a 1½-% reduction, pay 98.5% of the weight as grain.

THE MCI KICKER

SUGGESTION OF OPERATION

1. Weigh a sample of 250 to 1000 grams.
2. Set the grain selection guide as appropriate for the crop being tested.
 - ✓ Check for proper screen size
 - ✓ Check flow setting
 - ✓ Check air setting
3. Make sure all pans are in the proper place.
4. Turn the MCI Kicker ON.
5. Dump sample into feeder opening.
6. Wait until sample has run through the MCI Kicker, then turn it OFF.
7. Your MCI Kicker is designed to separate the light material through aspiration, and the large coarse material by scalping the clean grain, the shrunken or broken, and the fine or FM. All this will be done in one operation with the need for very little, if any, hand picking. Depending on the FM in the sample, some hand picking may be required to arrive at the same results as FGIS.

NOW YOU HAVE A CHOICE

8. Remove the clean grain pan from the MCI Kicker, weigh the clean grain, and then pay for clean grain. You might have to give a little to the producer, depending on the competition. Buying clean grain is more palatable to the producer than docking him.

ALSO

9. By removing only the clean grain pan and maybe adding back the SB, you can speed up the time between samples.

OR

10. Remove the bottom pan (dockage), the top pan (dockage), and the aspirated product out of the collector (dockage), co-mingle the product and then weigh it.
11. If you use clean grain as your factor and you do not have a dockage scale, simply divide the starting sample weight into the clean grain sample. This gives you the percentage of clean grain.
12. If you use dockage as your factor, then you simply divide the starting sample into the dockage co-mingled sample. This will give you the percentage of dockage.

SECTION I

SETUP INSTRUCTIONS: MECHANICAL AND ELECTRICAL

1. **INSPECT CARTON/CRATING. IF DAMAGED NOTIFY YOUR CARRIER IMMEDIATELY!**
2. Carefully open and remove carton/crating materials and inspect your new MCi Kicker.
3. Remove nails from shipping boards located at the bottom of the unit. Remove boards from each side of your new MCi Kicker.
4. Move or place your new MCi Kicker in the desired location. Flooring **MUST** be solid for proper operation of your new MCi Kicker. Position unit, being careful to maintain a minimum distance of 32” clearance in the front to allow for the changing of screens and test pan access. The left side of the unit must be exposed for access to controls and feeder/hopper.
5. Turn the (4) adjustable legs/feet to adjust unit to a level position, ensuring that the unit is stable and solid on the floor. Tighten lock nuts on the legs bolts.
6. Tip unit sideways and install the rubber cups (foot covers) on the bottom of the legs/feet.
7. Remove fan assembly from carton. Ensure that the “air damper” is attached per illustrated drawing.
8. Place rubber connector over the extension at the top of the collector.
9. Install fan assembly into the top of the rubber connector, positioning the discharge opening away from the unit and the operator.
10. Tighten fan clamp and rubber connector clamp (to the collector) in an alternating and even manner.
11. Install fan wires into the “pig tail” wires that are laying on top of the cabinet. Connect either wire to either connector.
12. Connect power cord receptacle with at least a fifteen-amp circuit.

CAUTION: “ON-OFF” Switch located in center of front panel must be in the “OFF” position prior to connecting to power source.

WARNING: If extension cord is used, it **MUST be a minimum of 14 gauge with ground, heavily insulated.**

Mechanical & Electrical Set up Instructions continued . . .

NOTE: Inspect fan discharge opening, feeder/hopper, collector discharge opening and all front access openings for any foreign or packing materials. Remove as necessary prior to turning “on” the unit.

NOTE: Check that screens are securely in place and holding clamps are keeping screens securely in place. **DO NOT OVER TIGHTEN.** On the four-screen Kicker, make sure the top fine-screen holding rod is securely in the notches and the swing pan bracket is latched properly.

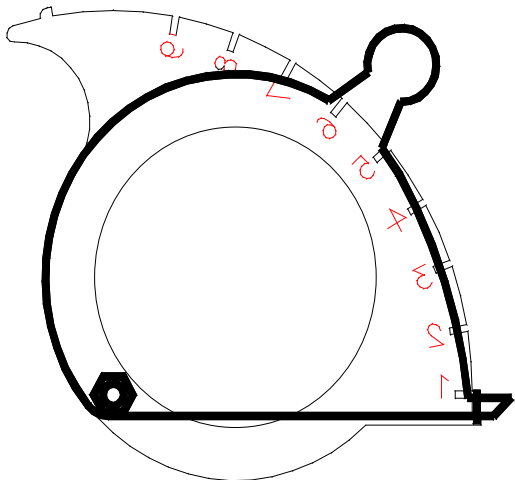
13. Set feeder control and position the fan air-damper to settings as suggested in the “Grain Selection Guide”. (See attached sheet.)
14. Turn unit “ON”. **CAUTION:** If unit fails to start within three (3) seconds, immediately turn “OFF” the unit and perform the following checks in sequence.
 - A. Check fuses or breaker power source. If defective, repair or replace as necessary. Proceed with step #14. If unit still fails to start, proceed with check B.
 - B. If extension cord is being used, it must be checked. If extension cord is too long, replace it with a heavier gauge wire with ground to allow sufficient current to operate unit. Proceed with step #14.
 - C. If the unit still refuses to start, consult the maintenance manual.

Proceed to Section II, Startup Instructions.

INSTALLATION AND SETTING OF THE AIR DAMPER ON THE REAR OF THE AIR TUBE

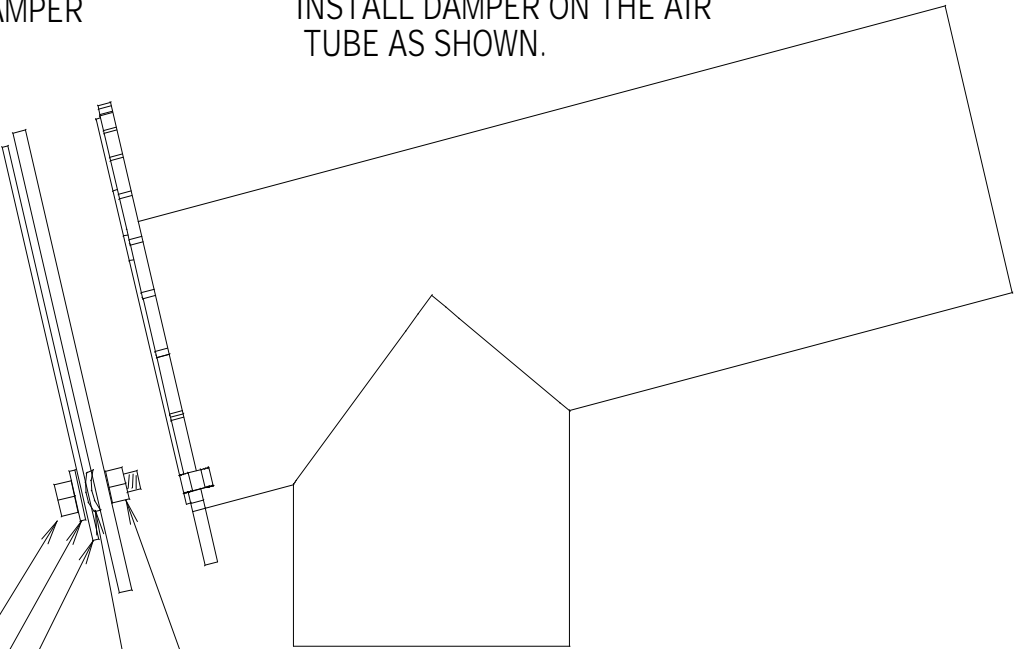
THE RECOMENDED SETTING FOR THE DAMPER
IS FOUND IN THE GRAIN SETUP PAGE.

INSTALL DAMPER ON THE AIR
TUBE AS SHOWN.



- 1/4 X 3/4 BOLT
- 1/4 FLAT WASHER
- DAMPER
- 8mm WAVE WASHER
- 1/4 TWO WAY LOCK NUT

TIGHTEN THE LOCK NUT JUST TIGHT ENOUGH TO HOLD DAMPER IN PLACE
DO NOT OVER TIGHTEN



SECTION II

STARTUP INSTRUCTIONS

1. Start unit. **Note: Any time machine fails to start refer to Section I-14, A, B, C.*
2. Place at least a 250-gram sample into hopper access located on top of unit.
3. Allow unit to operate for approximately 30 seconds **OR** until all grain has passed over screen position #2 (clean grain).
4. Repeat steps # 1 and # 2 five (5) times. This will allow the screens to “season” and the self-cleaning feature (pulsating rubber balls) to “seat” the pattern for consistent future use.

NOTE:

- **Under no circumstances should the unit be operated without all screens being in place.** This will cause the cleaning balls to be thrown from the trays located under the screens and be lost or otherwise damaged and defeat the self-cleaning feature.
- Light test weight grain(s) will require an air/feeder setting other than as suggested for you to achieve your desired results.

THE MCI KICKER

MAINTENANCE INSTRUCTIONS

Keep legs adjusted properly so the unit is firm on the floor.

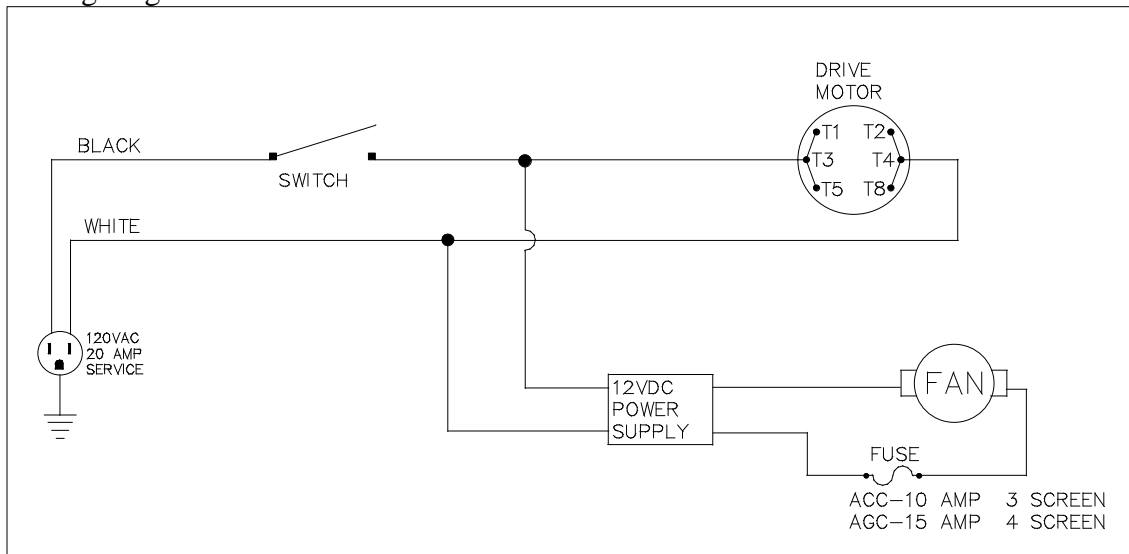
NOTE: All directions of the unit are given as if standing at the front. Pans insert in the front, the flow adjuster knob is on the left side, etc.

After 100 hours of operation, *check belt tension*. Belts should be adjusted to where they are just snug. Do not over tighten! Access to the belts is gained by removing the two screws that attach the flow control knob, and removing the left side and insulation panels. *Bearings do not require greasing* as are a sealed type. If the Kicker should “squeak during operation, a small amount of grease can be placed on the cam follower (#7 in the parts section).

Electrical connections may vibrate loose during shipment or operation. If this should happen, remove the right panel and insulation to gain access to the wiring circuits. Check for loose or broken connections.

Due to various local voltages, the unit may run off speed and will not work as intended. The MCI Kicker should bump at between 128 and 130 shakes per minute. If the unit is running too slow or too fast, refer to item 3 for access to the motor pulley. If the machine is running too fast, adjust the motor pulley wider to slow the unit down. If the machine is running too slow, adjust the motor pulley narrower to speed the unit up.

Wiring diagram as follows:



MCI KICKER MUST BE WIRED TO IT'S OWN 20 AMP BREAKER.
USE NO LESS THAN A 12GA. CONDUCTER.

4903

MCi Kicker and MCi Auto Kicker Operators Manual
“Maintenance Addendum”

This addendum is to remove the possible “squeaking” problem on some units. While said squeak does not affect the operation of the Kicker, the following procedure will cure the annoyance.

The simple fix is to apply a small portion of high quality grease, such as wheel bearing grease, to the Cam mechanism that causes the top sieve to “bump”. This Cam is located towards the middle of the upper 1” dia. horizontal shaft (see illustration below).

Instructions are as follows:

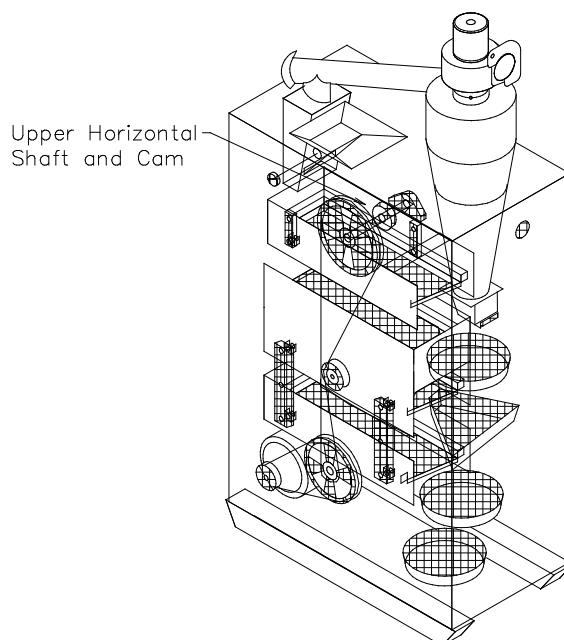
****** DISCONNECT ALL ELECTRICAL POWER TO THE UNIT FIRST ******

Using a flashlight, or other adequate light source, locate the upper shaft and cam by reaching through the front of the Kicker. Using the pulley on your left, turn the shaft until the set screw hole is on top.

Apply the grease until the set screw hole is filled. Then add a small amount of grease (size of a Soybean) on the surface of the cam. Do not be concerned with coating the entire surface. The grease will spread evenly during the operation of the Kicker. You need to take care when applying the grease. If too much is applied, there is a possibility that the grease will fall on the top sieve. Monitor the top sieve for “drippings,” and wipe off excess of if this occurs.

Reconnect the electrical power, and run the Kicker for approximately 1 minute, to allow the grease to coat the cam evenly.

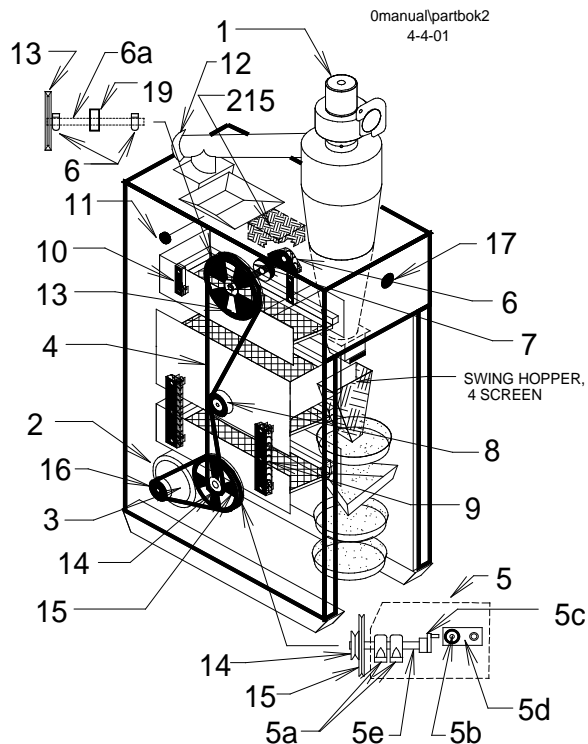
NOTE: This procedure may need to be performed once every year, depending on whether or not the squeak develops again. If you are doing a routine maintenance check, (refer to the maintenance section in the Operators Manual), this would be the best and easiest time to perform the above procedure.



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MCI KICKER PARTS LIST

ITEM	DESCRIPTION	PART NUMBER
1	Aspirator Fan 4inch	41-5142
2	Drive Motor	41-5135
3	Drive Belt/Shaker & Motor	41-5275
4	Drive Belt/Scalp	41-5270
5a	Shaker Mount Bearing (2 required)	41-5240
5b	Pitman Bearing (1 required)	41-5245
5c	Pitman Crank Assy	41-4805
5d	Pitman Drive Bar (UHMW 1/2" thick)	41-4809
5e	Shaker Drive Shaft	41-4804
6	Scalp Drive Bearing (2)	41-5240
6a	Scalp Drive Shaft	41-4815
7	Cam Roller for Scalp Shoe	41-5235
8	Idler Pulley	41-5340
9	Shaker Pivot Bar (UHMW includes bushings)	41-4820
10	Scalp Pivot Bar (UHMW)	41-4819
11	Feeder Adjusting Knob	41-5145
12	Air Damper, Rear Mount	41-4032A
13	Pulley/Scalp Shaft Driven	41-5255
14	Pulley/Scalp Lower Drive	41-5250
15	Pulley/Shaker Lower Shaft Driven	41-5260
16	Pulley/Drive Motor	41-5265
17	Switch On/Off	41-5320
18	Door & Screen Clamp	50-7295
19	Scalp Cam and Shaft Assy (without bearings)	41-5335
215	Power Supply for Aspirator Fan	50-7126J
300 (Not shown)	Balls/Cleaning (54 for 4-Screen, 36 for 3-Screen)	41-5195



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MCi KICKER

***** LIMITED WARRANTY *****

Mid-Continent Industries, Inc., hereafter known as MCi, does warrant to the original purchaser, the MCi Kicker, against defective materials and workmanship, from the date of delivery, with the exception of the following components and chassis.

Five Year Coverage

- FRAME: ALL PARTS AND LABOR
- MATERIAL PARTS ONLY

Two Year Coverage

- ALL ELECTRICAL WIRING AND SWITCHES

NOTE: Motor(s) and fan(s) are specifically covered under specific manufacturer warranties, and are available upon request.

MCi will, at its option, repair or replace the defective part(s). All warranty claims **MUST** be made directly to MCi and any warranty parts must be returned to MCi for credit.

MCi will **not** be held liable for any field modifications not expressly furnished and authorized by in writing by the engineering department of MCi. Any unauthorized modifications immediately render this warranty null and void.

MCi will not be liable for any consequential damages, nor for commercial consequential damages resulting from any breach of this warranty, or any other warranty. All of which are expressly disclaimed for any delays in performance of this warranty due to causes beyond the direct control of the manufacturer.

MCi neither assumes nor authorizes any person to create nor assume for MCi, any obligation(s) or liability(ies) in connection with MCi products, nor to undertake any responsibilities beyond those set forth in this instrument.

This warranty disclaims any liability whatsoever due to: loss of time, use of the product, anticipated profits, increased expenses or loss of operations by reason of plant shutdowns, inconveniences or any other matter(s) not specifically included in this warranty.

These warranties are in lieu of any other warranties, expressed or implied, including the extent that any such limitation will be limited by any state or federal law, then such portions of the limitation will be deemed null and void.

Any dispute concerning this warranty will be governed by the laws of the State of Kansas and venue will reside in the State of Kansas.

SCREEN SELECTION

The Following Sections Include

Screen Selection Charts

for both

3-Screen and 4-Screen Machines

Follow the instructions on cover sheets of each section for charts that do not apply to your machine.

3-SCREEN KICKER

SCREEN SELECTION CHARTS

The following pages are for 3-screen machines.

If you own a 4-screen machine, they may be discarded.

MCI KICKER THREE SCREEN CHART

SCREEN SIZES, LOCATION, FEED, AND AIR SETTING(S) – REAR DAMPER

SCREEN LOCATION →	SCALP	SECOND	THIRD	FEED	AIR ⊙
Barley	9 x 3/4	4.5 x 1/2	6 RD	2	5
*1		5 x 3/4			
Corn	32 RD	12 RD	8 RD	3 1/2	1
*2	36 RD	14 RD	6 RD		
Millet	12 RD	9 RD	.067 RD	1	6
*3	6 x 3/4	4 x 1/2			
Oats	9 x 3/4	4 x 1/2	10 TRI	2 1/2	6
*4					
Sorghum	12 RD	4 x 1/2	5 RD	2	5
*5	9 x 3/4	10 TRI	2.5 RD		
Soybeans	24 RD	10 x 3/4	8rd	3 1/2	1
*6	26 RD	9 x 3/4			
Wheat	JGS	4 x 1/2	5 RD	2	5
*7	12 RD	10 TRI	4 x 1/2		
Flower “O”	18 RD	12 RD	8 RD	2 1/2	6
*8	20 RD	5 x 3/4	10 TRI, 5 RD		
Flower “C”	24 RD	22 RD	20 RD	3 1/2	6
*9	28 RD	20 RD	12 RD		
Canola	#000 Riddle	.064 x 3/8	3/64 x 3/8	1	6
Flax	#000 Riddle	.064 x 3/8	4.5 RD	1 1/2	6
*	JGS	4 x 1/2	5 RD		
Safflower	15 RD	6 x 3/4	10 TRI	2	5

* Optional screen sizes are on the second row.

⊙ The **AIR** setting is only a guide. Depending on the test weight of the grain, it may need to be opened more or less.

⊙ To increase the air takeout, **CLOSE** the damper more.

NOTICE: Recommendation for screens used in the MCI KICKER are based upon extensive lab work and verification of users. The suggested screens allow the fastest and most accurate method to achieve the fairest results. *According to FGIS, almost any method may be used by “commercial” grain handlers to achieve Results Comparable to Official Standards.*

You should check the results of your machine with your local official testing station, then adjust the feed, screen sizes, and the air setting to obtain results comparable. Multiple machines in the same company should be checked with one another for consistent results across the local area. Mid-Continent Industries, Inc. will not be held liable for the results obtained from any grain grading process. Operators, installation locations, firmness of the floor it is placed on, etc., will affect results.

*1 Dockage is the total fractions of air, scalpings, and through 6 RD. FM is anything else left in the sample after process.

*2 BC is everything through the 12 RD & over an 8 or 6 RD. FM is thru the 8 or 6 RD and everything other than Corn.

*3 Dockage is everything other than Millet.

*4 FM is through 5 RD and everything other than Oats.

*5 Only for competitor comparison, and should not be necessary.

*6 Splits can be checked with a 9 or 10 x 3/4 slotted. See diagram for more options.

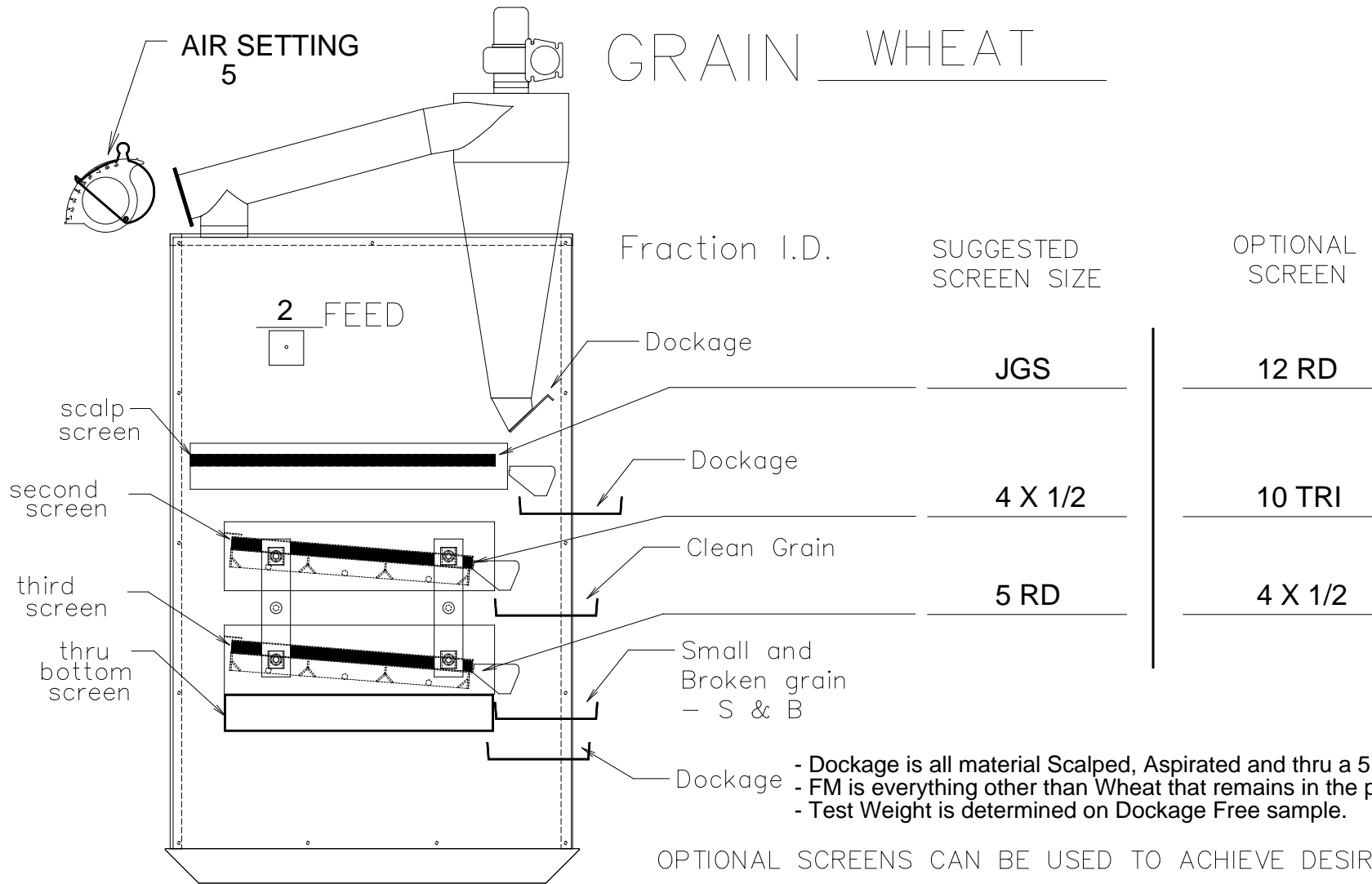
*6 10 x 3/4 is used the most. FM is everything through the 8 RD and everything other than Soybeans.

*7 Dockage is the total fractions of air, scalpings, and through the 5 RD. SB is through the 4 x 1/2. FM is anything else left in the sample after process.

*8 10 TRI or 5 RD will take out less. 8 RD is used the most.

*9 Confectionary Sunflowers
Can be sized as well as other grains.

THREE SCREEN MCI KICKER



- Dockage is all material Scalped, Aspirated and thru a 5 RD combined.
- FM is everything other than Wheat that remains in the processed sample.
- Test Weight is determined on Dockage Free sample.

OPTIONAL SCREENS CAN BE USED TO ACHIEVE DESIRED RESULTS

The optional screens suggested are used by some operators.

The options are shown in the locations suggested.

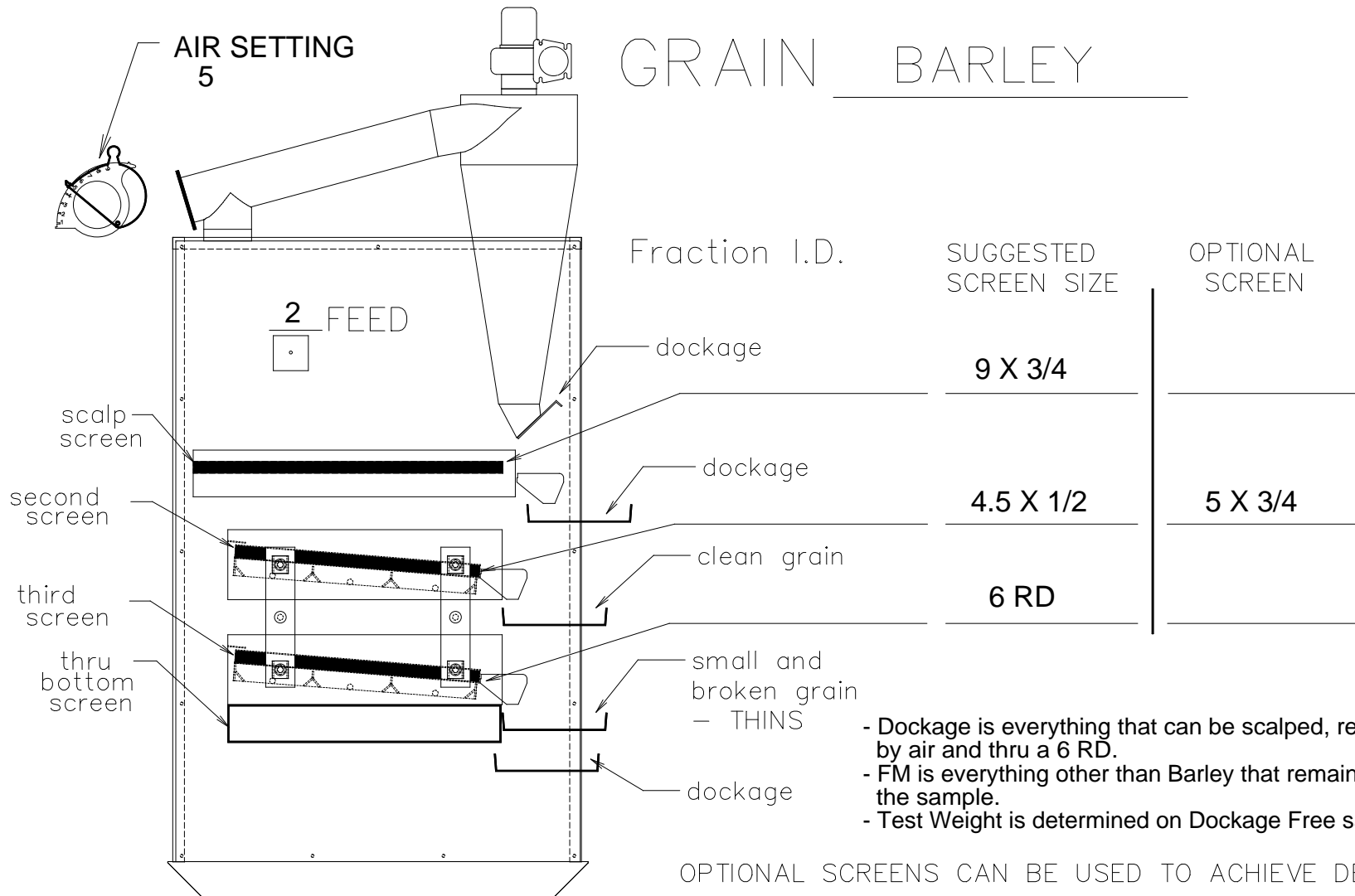
Depending on the crop, AIR SETTING and/or FEED setting may need adjusting to achieve desired results.

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THREE SCREEN MCI KICKER

GRAIN BARLEY



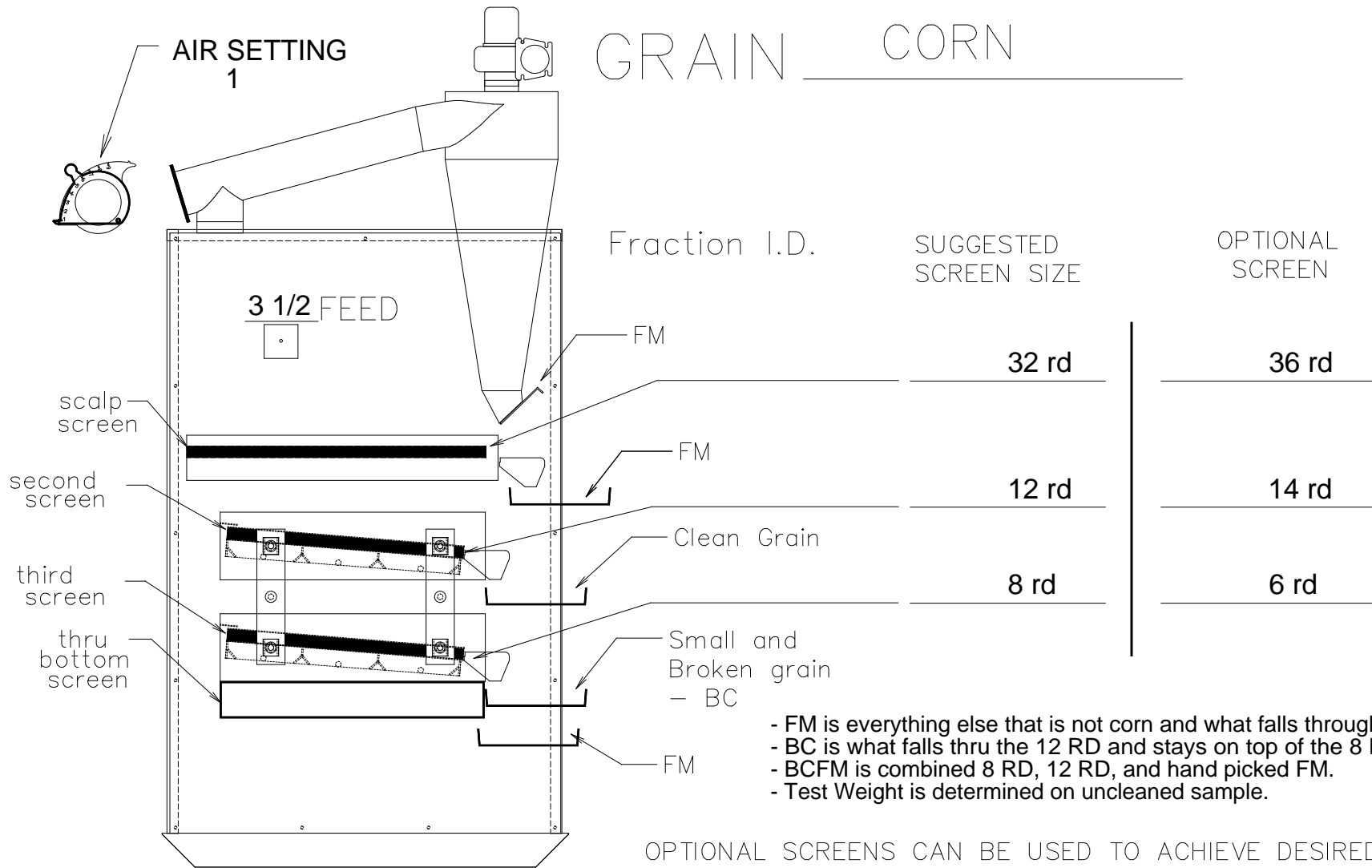
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THREE SCREEN MCI KICKER

GRAIN _____ CORN _____



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OPTIONAL SCREENS CAN BE USED TO ACHIEVE DESIRED RESULTS

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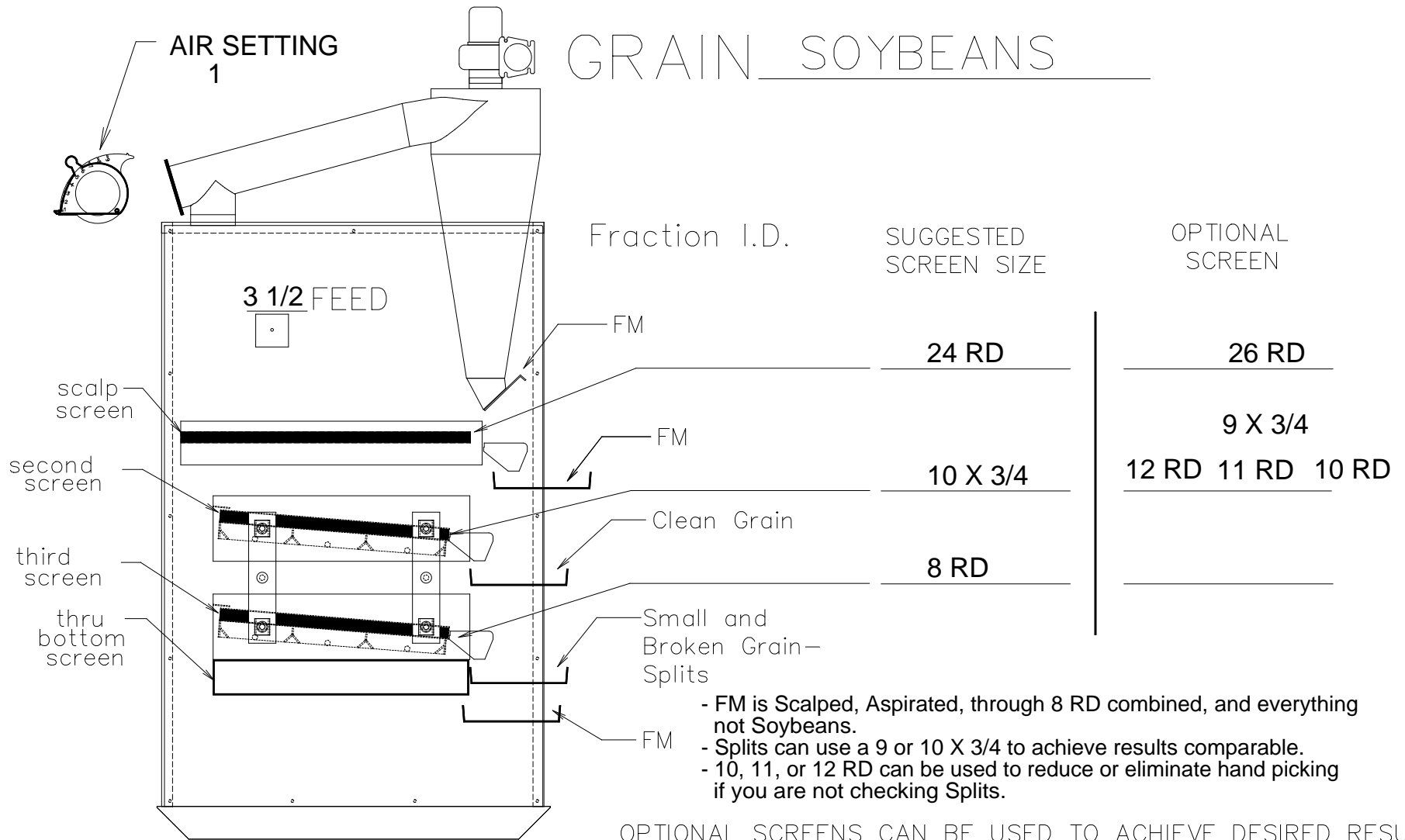
The options are shown in the locations suggested.

Depending on the crop, AIR SETTING and/or FEED setting

may need adjusting to achieve desired results

THREE SCREEN MCI KICKER

GRAIN SOYBEANS



- FM is Scalped, Aspirated, through 8 RD combined, and everything not Soybeans.
- Splits can use a 9 or 10 X 3/4 to achieve results comparable.
- 10, 11, or 12 RD can be used to reduce or eliminate hand picking if you are not checking Splits.

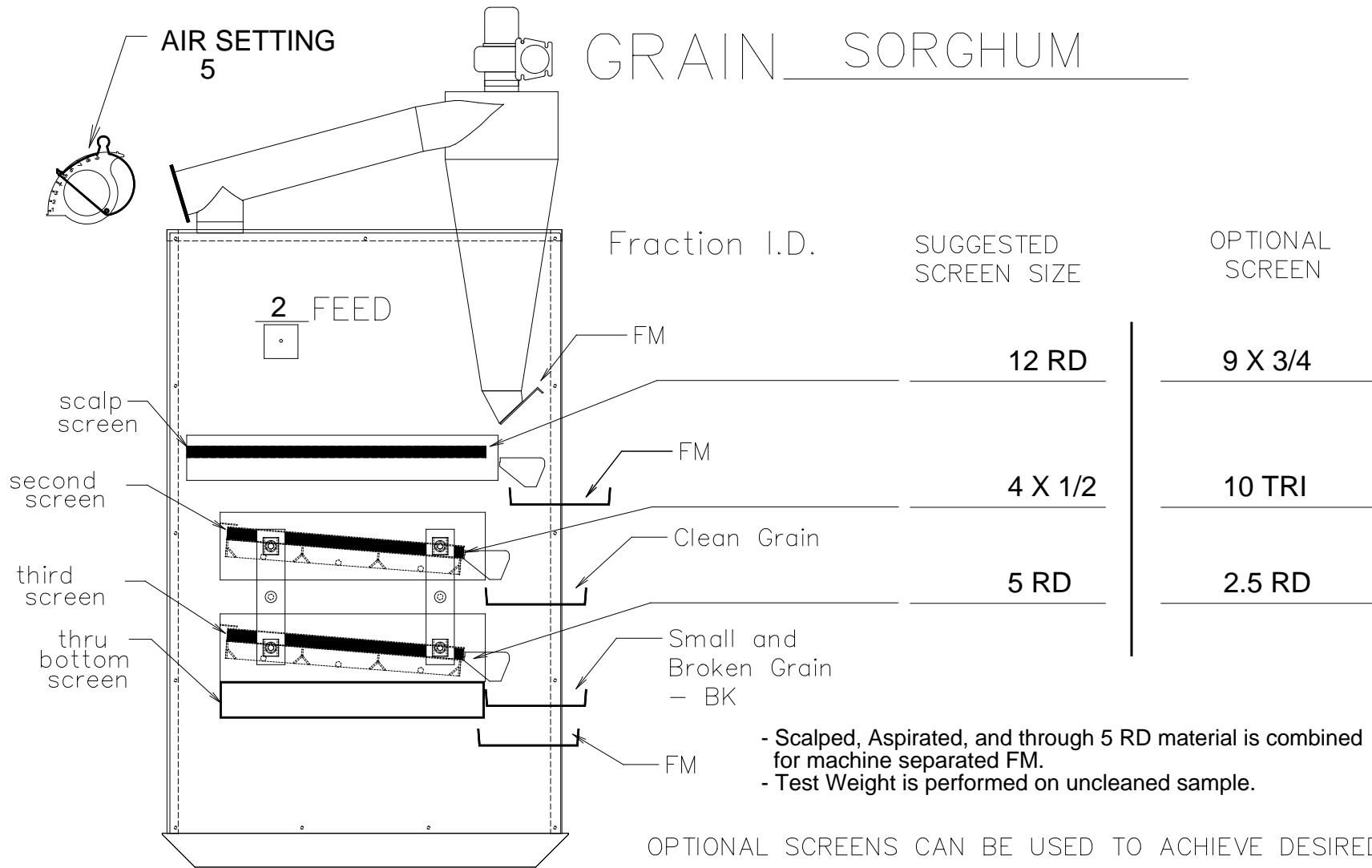
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THREE SCREEN MCI KICKER

GRAIN SORGHUM



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OPTIONAL SCREENS CAN BE USED TO ACHIEVE DESIRED RESULTS

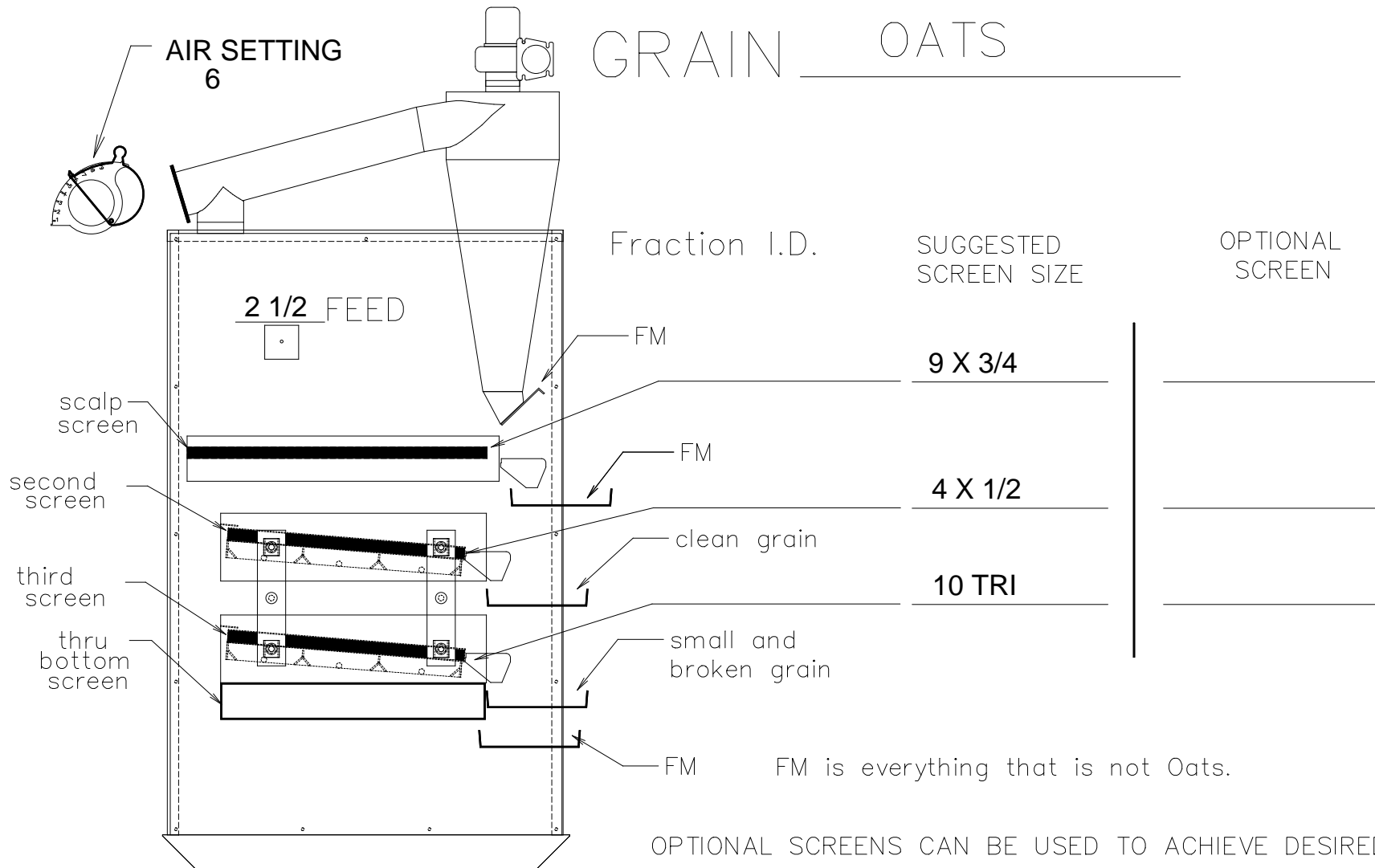
The optional screens suggested are used by some operators.

The options are shown in the locations suggested.

Depending on the crop, AIR SETTING and/or FEED setting may need adjusting to achieve desired results

THREE SCREEN MCI KICKER

GRAIN _____ OATS _____



FM is everything that is not Oats.

OPTIONAL SCREENS CAN BE USED TO ACHIEVE DESIRED RESULTS

The optional screens suggested are used by some operators.

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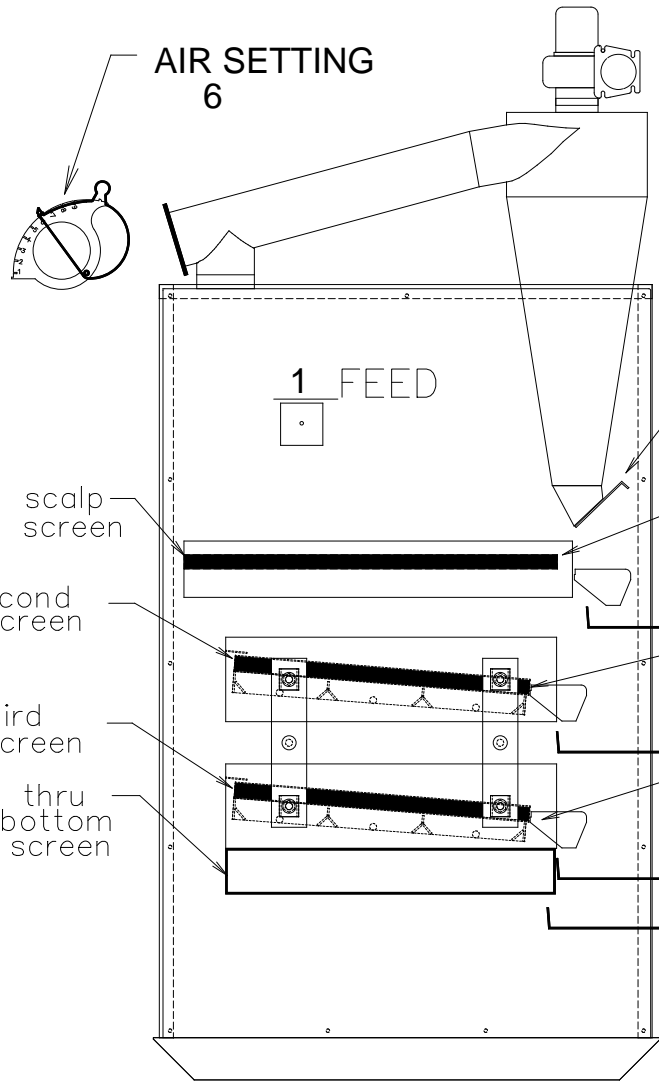
Depending on the crop, AIR SETTING and/or FEED setting may need adjusting to achieve desired results

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THREE SCREEN MCI KICKER

GRAIN _____ MILLET



Fraction I.D.

SUGGESTED
SCREEN SIZE

OPTIONAL
SCREEN

12 RD

6 X 3/4

9 RD

4 X 1/2

.067 RD

- FM is everything Scalped, Aspirated, through the .067 RD and not Millet.
- Test Weight is determined on uncleaned sample.

OPTIONAL SCREENS CAN BE USED TO ACHIEVE DESIRED RESULTS

The optional screens suggested are used by some operators.

The options are shown in the locations suggested.

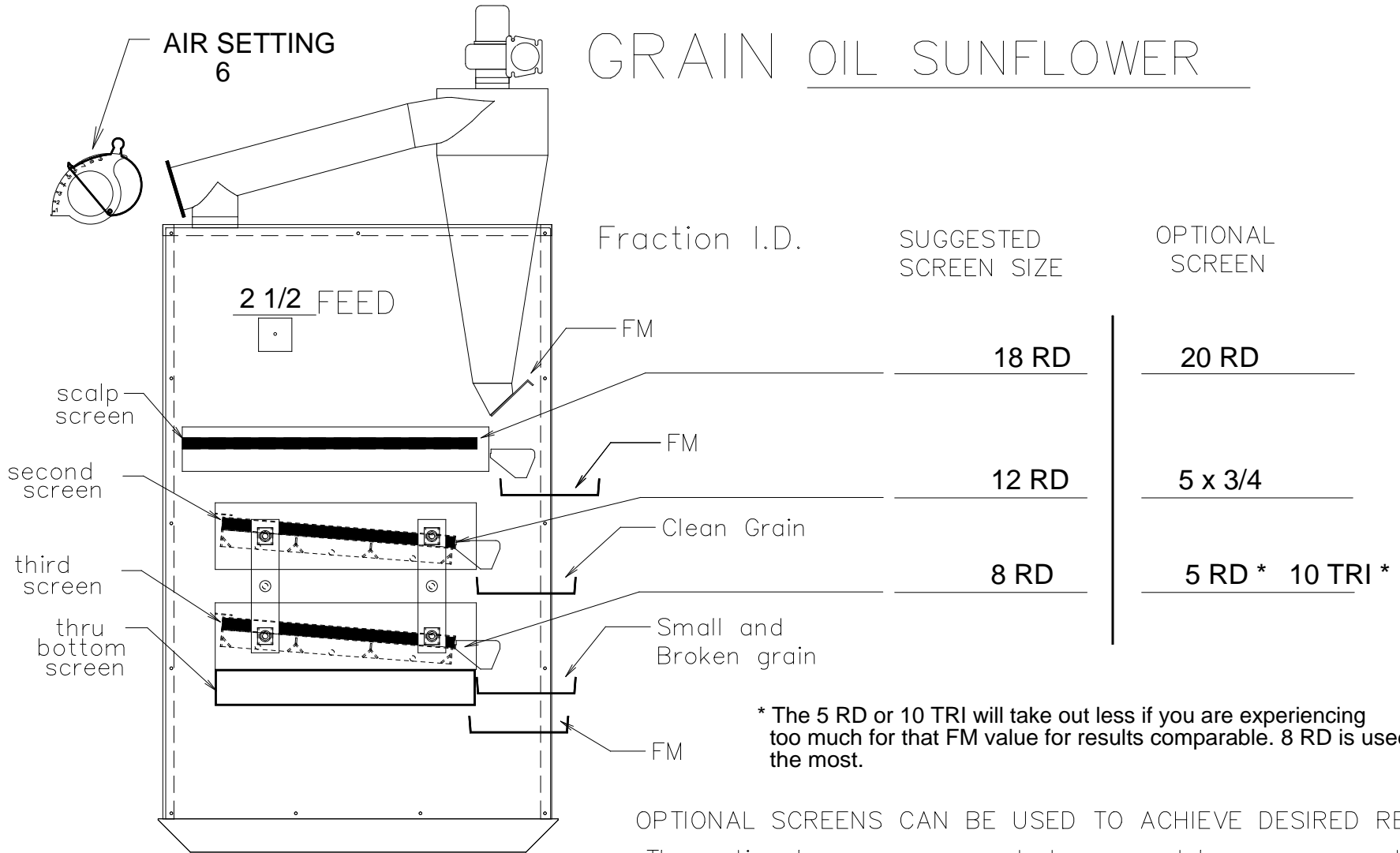
Depending on the crop, AIR SETTING and/or FEED setting may need adjusting to achieve desired results

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THREE SCREEN MCI KICKER

GRAIN OIL SUNFLOWER

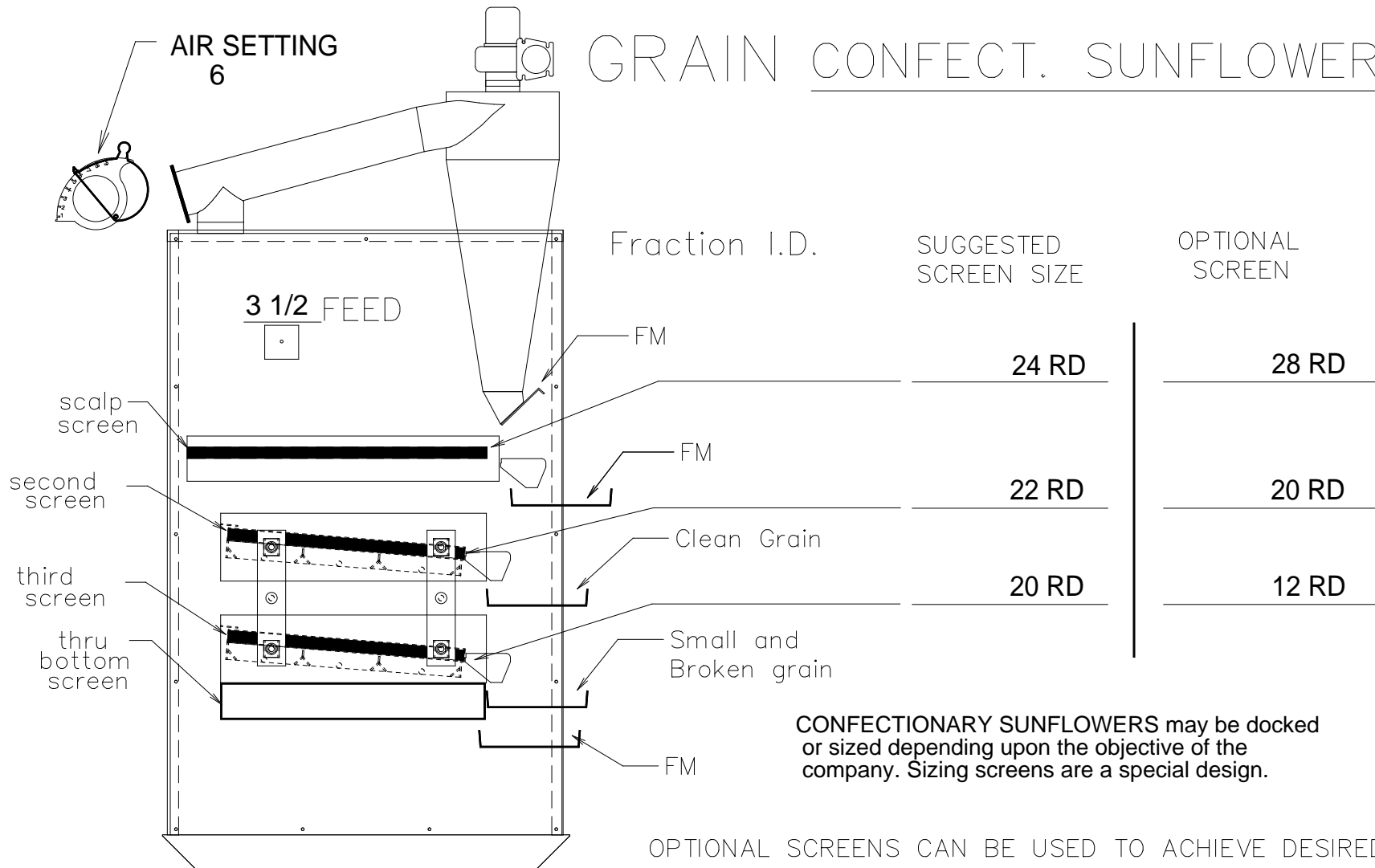


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OPTIONAL SCREENS CAN BE USED TO ACHIEVE DESIRED RESULTS
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 The options are shown in the locations suggested.
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 may need adjusting to achieve desired results

THREE SCREEN MCI KICKER

GRAIN CONFECT. SUNFLOWER



CONFECTIONARY SUNFLOWERS may be docked or sized depending upon the objective of the company. Sizing screens are a special design.

OPTIONAL SCREENS CAN BE USED TO ACHIEVE DESIRED RESULTS

The optional screens suggested are used by some operators.

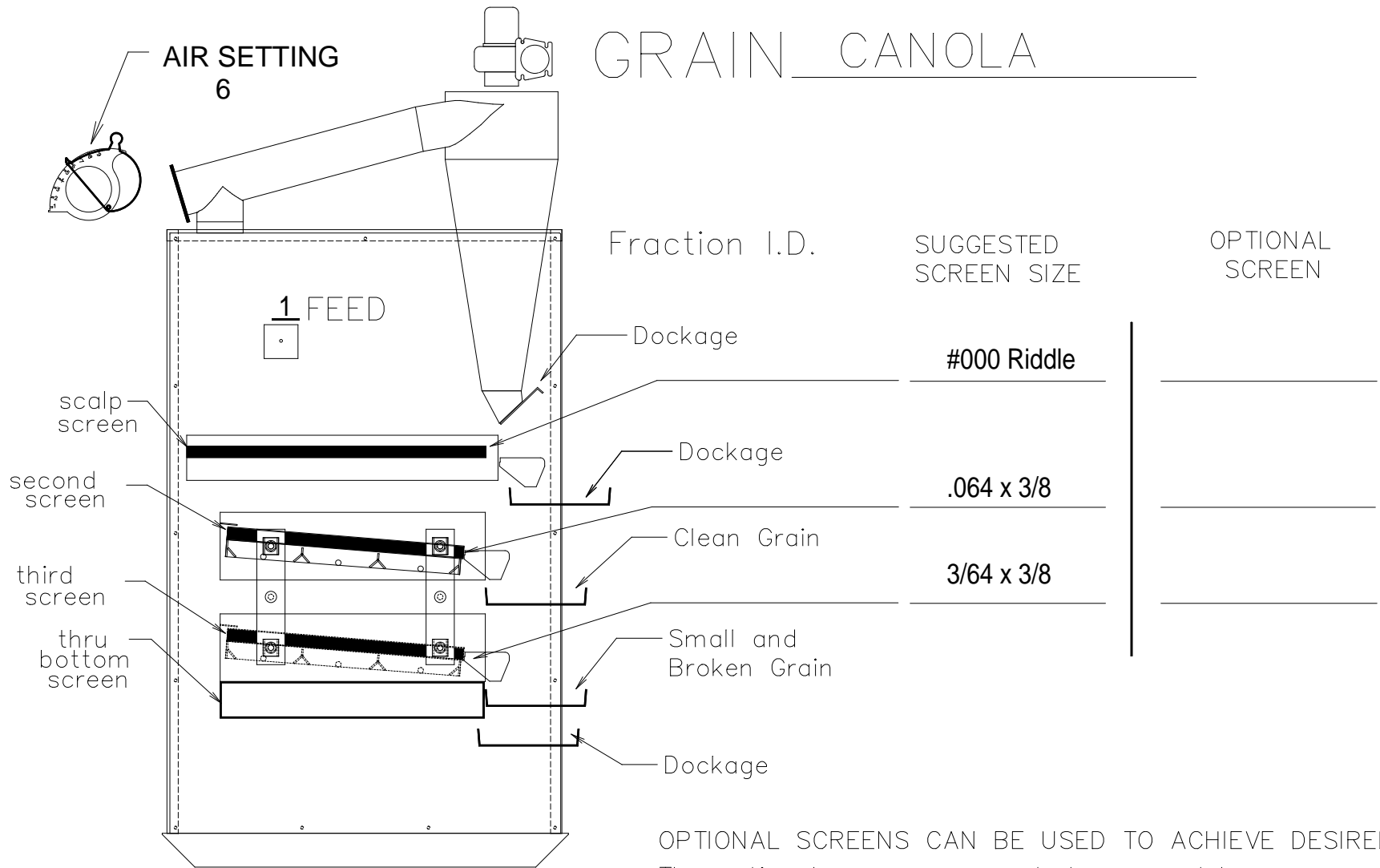
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Depending on the crop, AIR SETTING and/or FEED setting may need adjusting to achieve desired results

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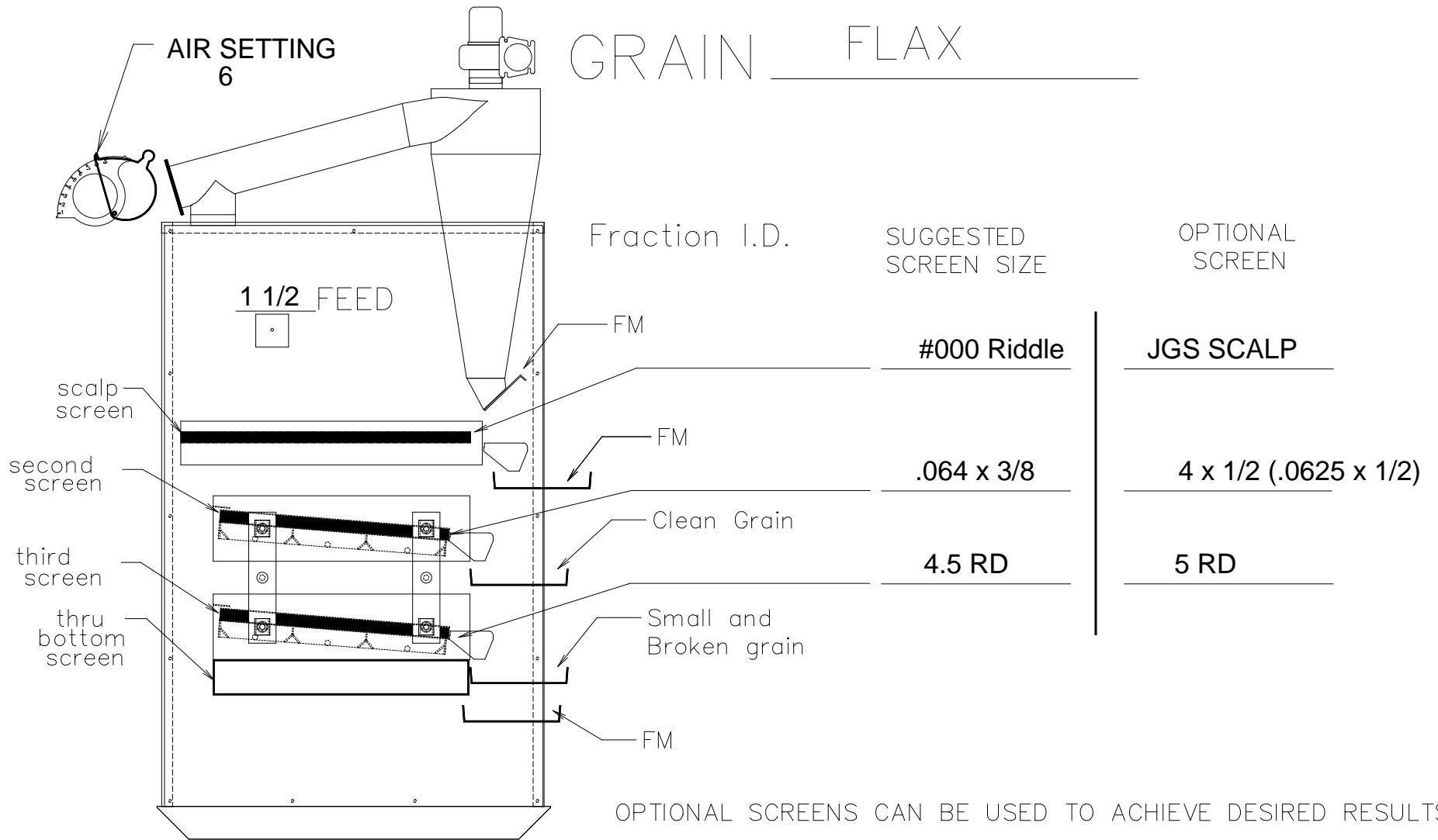
THREE SCREEN MCI KICKER



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OPTIONAL SCREENS CAN BE USED TO ACHIEVE DESIRED RESULTS
 The optional screens suggested are used by some operators.
 Depending on the crop, AIR SETTING and/or FEED setting
 may need adjusting to achieve desired results.

THREE SCREEN MCI KICKER

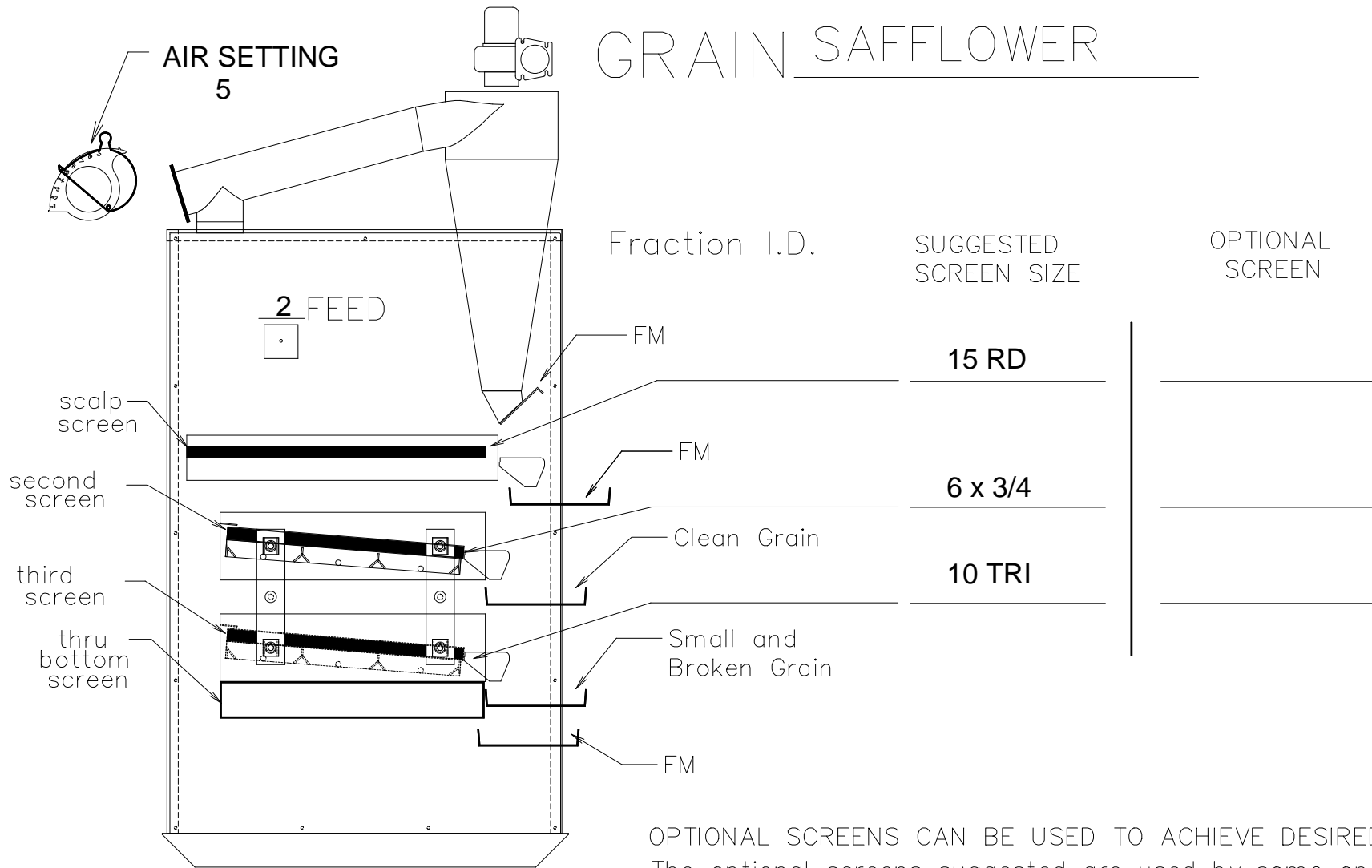


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THREE SCREEN MCI KICKER

GRAIN SAFFLOWER



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4-SCREEN KICKER

SCREEN SELECTION CHARTS

The following pages are for 4-screen machines.

If you own a 3-screen machine, they may be discarded.

MCi KICKER/AUTOKICKER FOUR SCREEN CHART
SCREEN SIZES, LOCATION, FEED, AND AIR SETTING(S) – REAR DAMPER

SCREEN LOCATION →	SCALP	SECOND	THIRD	FOURTH	FEED	AIR ©
Wheat	JGS	Blank NH	4 x 1/2	5 RD	2	5
*7	12 RD	5 RD NH	10 TRI	4 x 1/2		
Barley (Feed)	9 x 3/4	6 RD NH	4.5 x 1/2	10 TRI	2	5
*1		9 TRI NH	5 x 3/4	6 RD		
Corn	32 RD	Blank NH	12 RD	8 RD	3 1/2	1
*2	36 RD	8 RD NH	14 RD	Blank or 6 RD		
Soybeans	24 RD	8 RD NH	10 x 3/4	12 RD	3 1/2	1
*6	26 RD	Blank NH	9 x 3/4	8,10 or 11 RD, Blank		
Corn/Soy Combo	32 RD	8 RD NH	24 RD	12 RD	3 1/2	1
* for Splits separation			10 or 9 x 3/4	10 or 11 RD		
Sorghum	12 RD	Blank NH	4 x 1/2	5 RD	2	5
*5	9 x 3/4	5 RD NH	10 TRI	2.5 RD		
Oats	9 x 3/4	5 RD NH	4 x 1/2	10 TRI	2 1/2	6
*4	10 x 3/4	10 TRI NH		5 RD		
Millet	12 RD	Blank NH	9 RD	.067 RD	1	6
*3	6 x 3/4	10 TRI NH	4 x 1/2			
Flower “O”	18 RD	Blank NH	12 RD	8 RD	2 1/2	6
*8	20 RD		5 x 3/4	10 TRI, 5 RD		
Flower “C”	24 RD	12 RD NH	22 RD	20 RD	3 1/2	6
*9	28 RD	14 RD NH	20 RD	18 RD		
Canola	#000 Riddle	Blank NH	.064 x 3/8	3/64 x 3/8	1	6
Flax	#000 Riddle	Blank NH	.064 x 3/8	4.5 RD	1 1/2	6
*	JGS	5 RD NH	4 x 1/2 (.0625)	5 RD		
Safflower	15 RD	Blank NH	6 x 3/4	10 TRI	2	5

MCi Auto Kicker for Fuel Grains

Corn	32 RD	12 RD NH	Blank	Any	3 1/2	1
Soybeans	24 RD	8 RD NH	10 x 3/4	Blank	3 1/2	1
Sorghum	12 RD	5 RD NH	4 x 1/2	Blank	2	5
Corn/Sorg Combo	12 RD	5 RD NH	Blank	Any	3	4
*			4 x 1/2	Blank		

*Optional screen sizes are on the second row below the grain name. Optional 3rd & 4th screens can be placed in **SECOND** slot, if handle is removed, to obtain desired results. NH stands for NO HANDLE.

© The **AIR** setting is only a guide. Depending on the test weight of the grain, it may need to be opened more or less.

© To increase the air takeout, CLOSE the damper more.

NOTICE: Recommendation for screens used in the MCi KICKER are based upon extensive lab work and verification of users. The suggested screens allow the fastest and most accurate method to achieve the fairest results. *According to FGIS, almost any method may be used by “commercial” grain handlers to achieve Results Comparable to Official Standards. MCi AUTOKICKER screen selections may not be the same as the MCi KICKER, due to its inability of hand picking.*

You should check the results of your machine with your local official testing station, then adjust the feed, screen sizes, and the air setting to obtain results comparable. Multiple machines in the same company should be checked with one another for consistent results across the local area. Mid-Continent Industries, Inc. will not be held liable for the results obtained from any grain grading process. Operators, installation locations, firmness of the floor it is placed on, etc., will affect results.

*1 Dockage is the total fractions of air, scalplings, and through 6 RD. FM is anything else left in the sample after process.

*2 BC is everything through the 12 RD & over an 8 or 6 RD. FM is thru the 8 or 6 RD and everything other than Corn.

*3 Dockage is everything other than Millet.

*4 FM is through 5 RD and everything other than Oats.

*5 Only for competitor comparison, and should not be necessary.

*6 Splits can be checked with a 9 or 10 x 3/4 slotted.

*6 10 x 3/4 is used the most. FM is everything through the 8 RD and everything other than Soybeans. NOTE: Refer to the diagram page for more information.

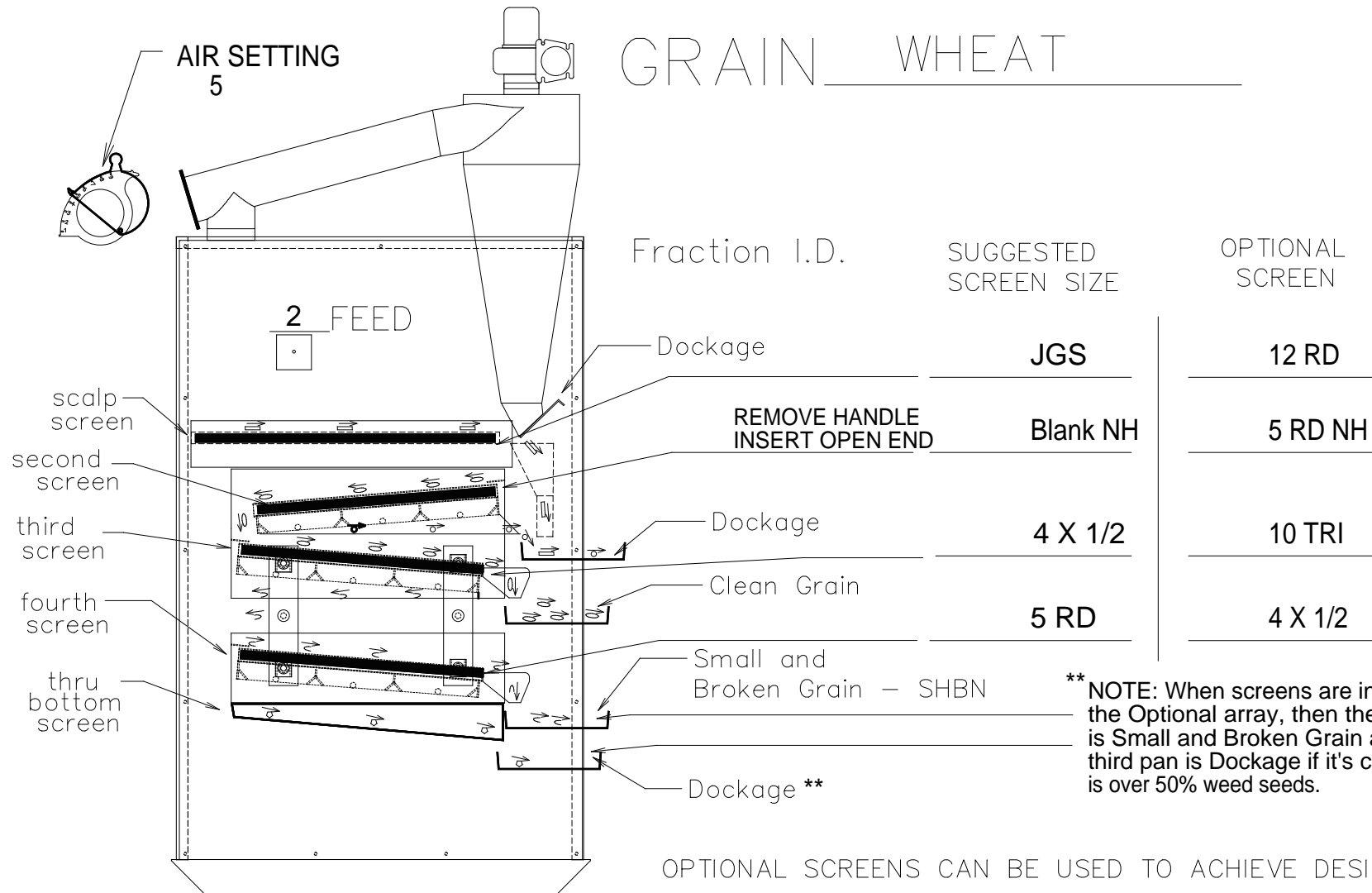
*7 Dockage is the total fractions of air, scalplings, and through the 5 RD. SB is through the 4 x 1/2. FM is anything else left in the sample after process.

*8 10 TRI or 5 RD will take out less. 8 RD is used the most.

*9 Confectionary Sunflowers can be sized as well as other grains.

FOUR SCREEN MCI KICKER/AUTOKICKER

GRAIN WHEAT



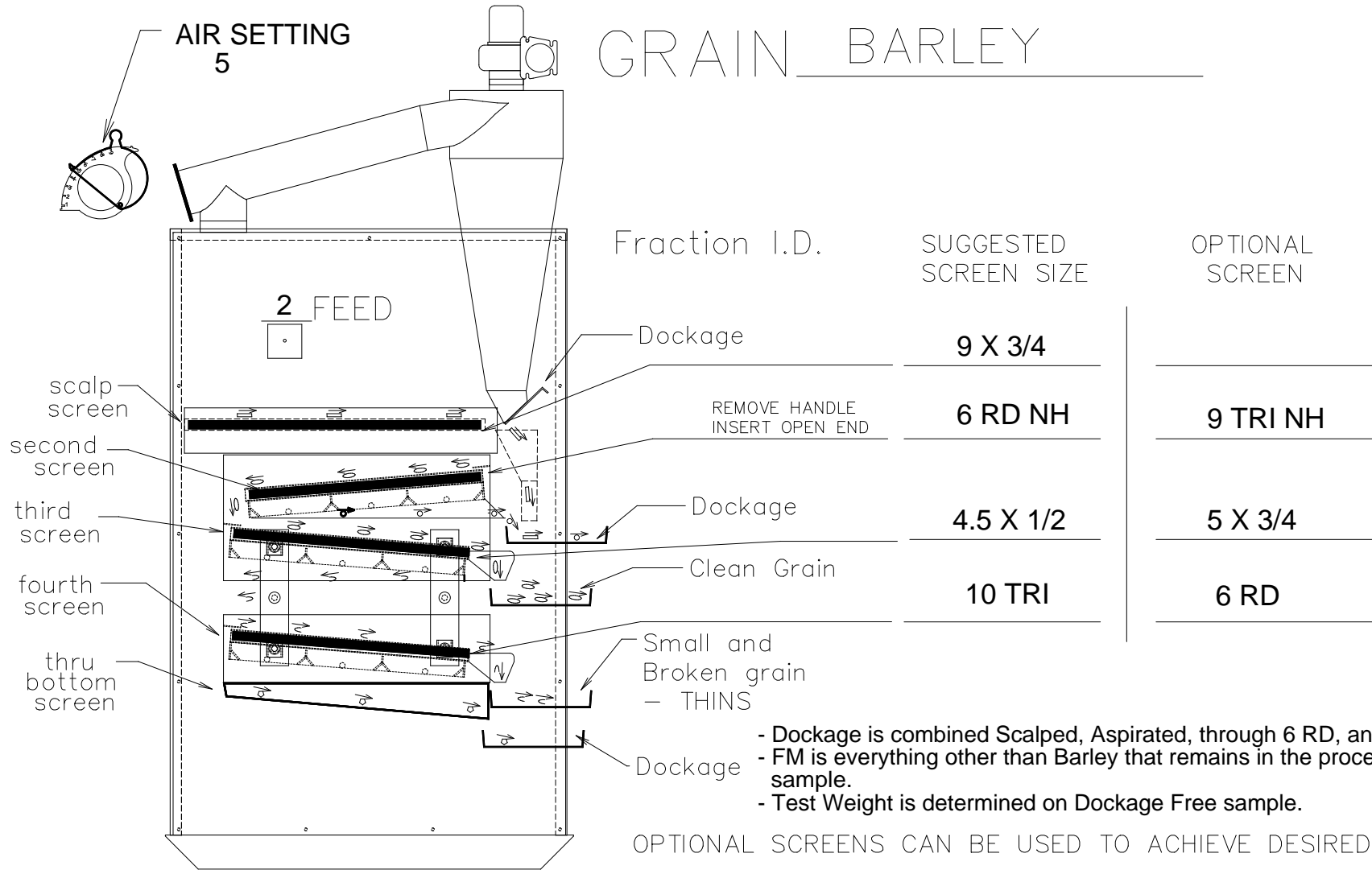
** NOTE: When screens are in the Optional array, then the bottom pan is Small and Broken Grain and the third pan is Dockage if it's contents is over 50% weed seeds.

OPTIONAL SCREENS CAN BE USED TO ACHIEVE DESIRED RESULTS
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FOUR SCREEN MCI KICKER/AUTOKICKER

GRAIN BARLEY



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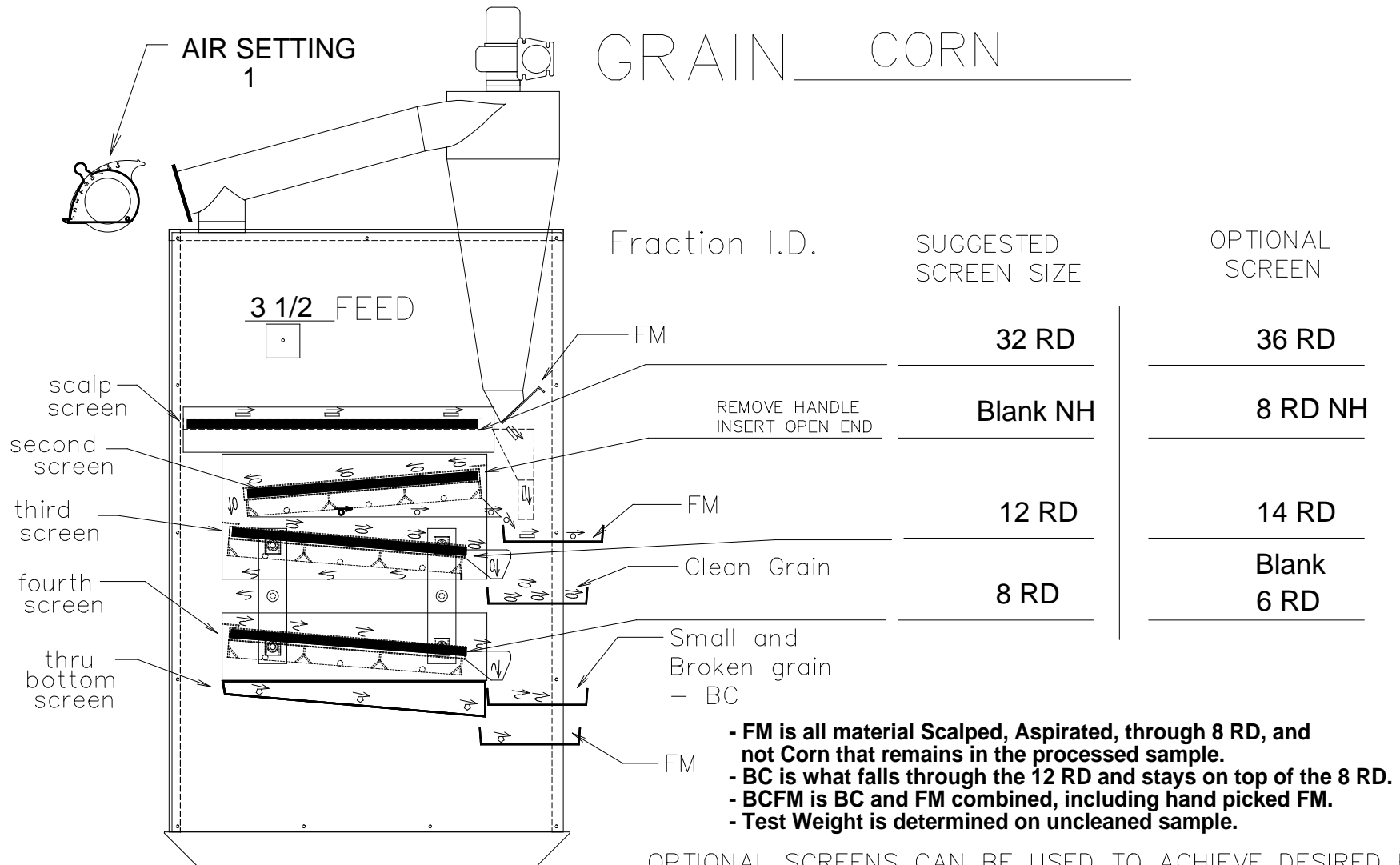
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FOUR SCREEN MCI KICKER/AUTOKICKER



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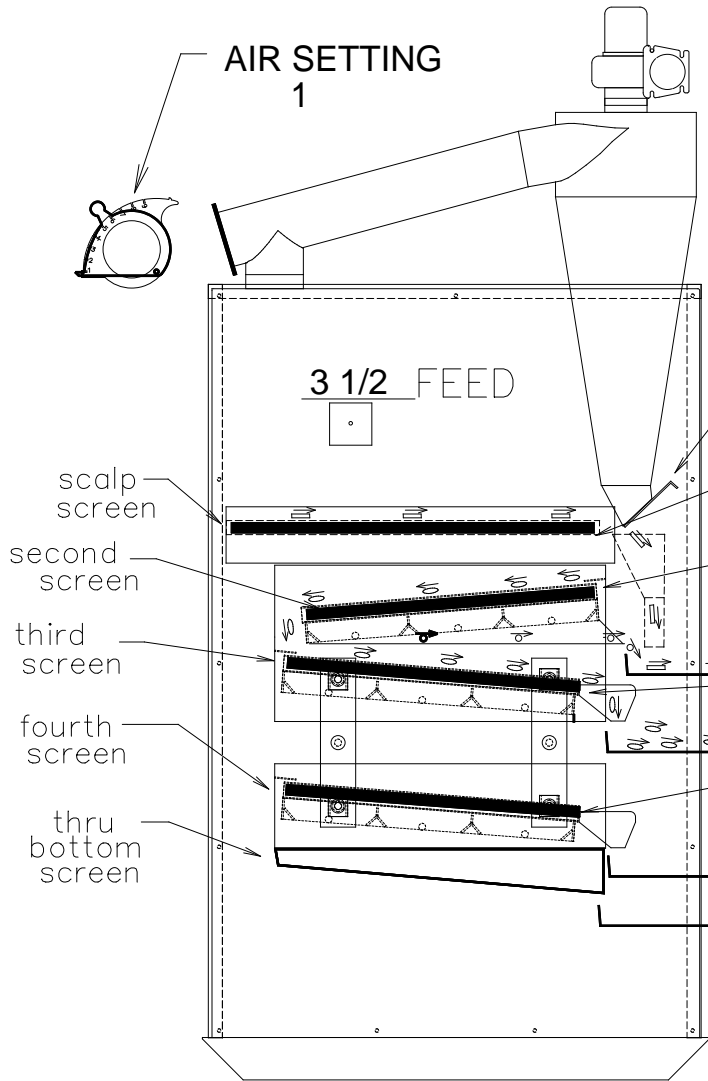
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FOUR SCREEN MCI KICKER/AUTOKICKER

GRAIN CORN_Fuel Grain

This is for Order 4 in the MCI AutoKicker, which DOES NOT dump the 2 bottom hoppers thus decreasing the sample process time. The 8 RD is only to keep the sieve cleaning balls in place. This setup could also be used on a regular MCI Kicker if the 8 RD FM separation was not necessary.



Fraction I.D.	SUGGESTED SCREEN SIZE	OPTIONAL SCREEN
FM	32 RD	36 RD
REMOVE HANDLE INSERT OPEN END	12 RD NH	14 RD NH
BCFM	Blank	
Clean Grain	8 RD	Any
Nothing		
Nothing		

- FM is everything other than Corn.
- BCFM is material that falls through the 12 RD.
- Test Weight is determined on uncleaned sample.

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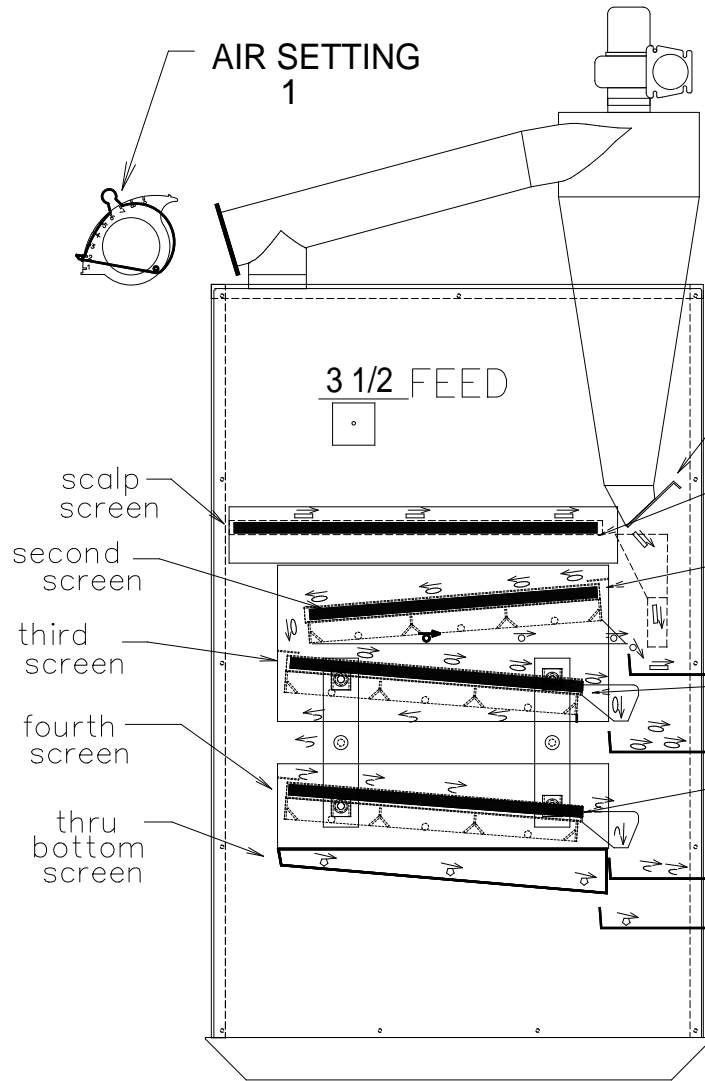
FOUR SCREEN MCI KICKER

GRAIN SOYBEANS

AIR SETTING
1

NOTE: NOT RECOMMENDED FOR USE IN THE MCI AUTOKICKER!!

- FM is anything thru an 8 RD and everything other than Soybeans.
- Splits may use either a 9 or 10 x 3/4 to achieve comparable results.
- Either a 10, 11, or 12 RD can be used to eliminate or reduce hand picking.
- To match the 3-Screen Kicker, you may need to put a Blank where indicated and an 8 RD in the fourth position. As always, grading education should be followed.



Fraction I.D.	SUGGESTED SCREEN SIZE	OPTIONAL SCREEN
FM	24 RD	26 RD
REMOVE HANDLE INSERT OPEN END	8 RD NH	Blank NH
FM	10 X 3/4	9 X 3/4
Clean Grain	12 RD	10 RD 11 RD Blank 8 RD
Small and Broken Grain		

NOTE: With the 12 RD in the bottom, this pan may have small beans mixed with FM. Hand pick the FM and combine with other FM separations to make for TOTAL FM. This setup is to help reduce hand picking time.

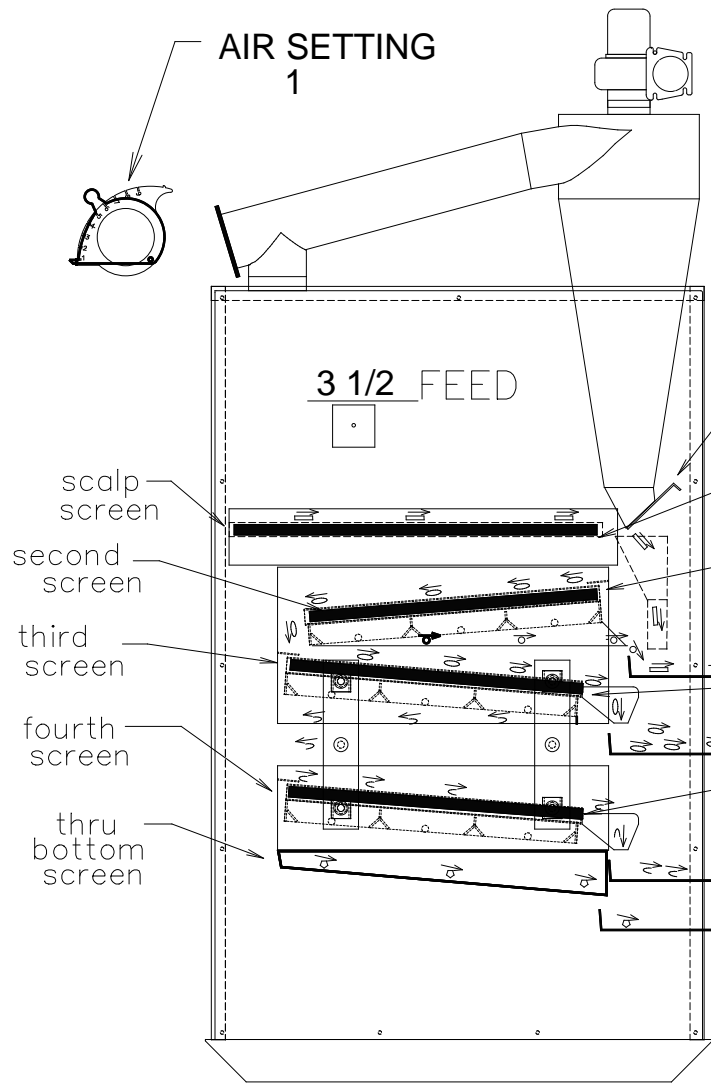
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FOUR SCREEN MCI KICKER

GRAIN COMBO CORN/SOYBEANS
without Splits

NOTE: NOT RECOMMENDED FOR USE IN THE MCI AUTOKICKER!!



Fraction I.D.	SUGGESTED SCREEN SIZE	OPTIONAL SCREEN
FM – Both Grains	32 RD	
REMOVE HANDLE INSERT OPEN END	8 RD NH	
FM – Both Grains	24 RD	
CORN – Clean Corn SOYBEANS – Scalplings	12 RD	10 RD 11 RD
CORN – Clean Corn SOYBEANS – Clean Soybeans		

CORN: = BC
SOYBEANS: = Material may include small beans, so DO NOT combine the entire pan amount with TOTAL FM. Hand pick the FM from this pan, adding that FM to the top pan and scale for TOTAL FM.
 This process is to reduce the amount of hand picking for Soybeans.

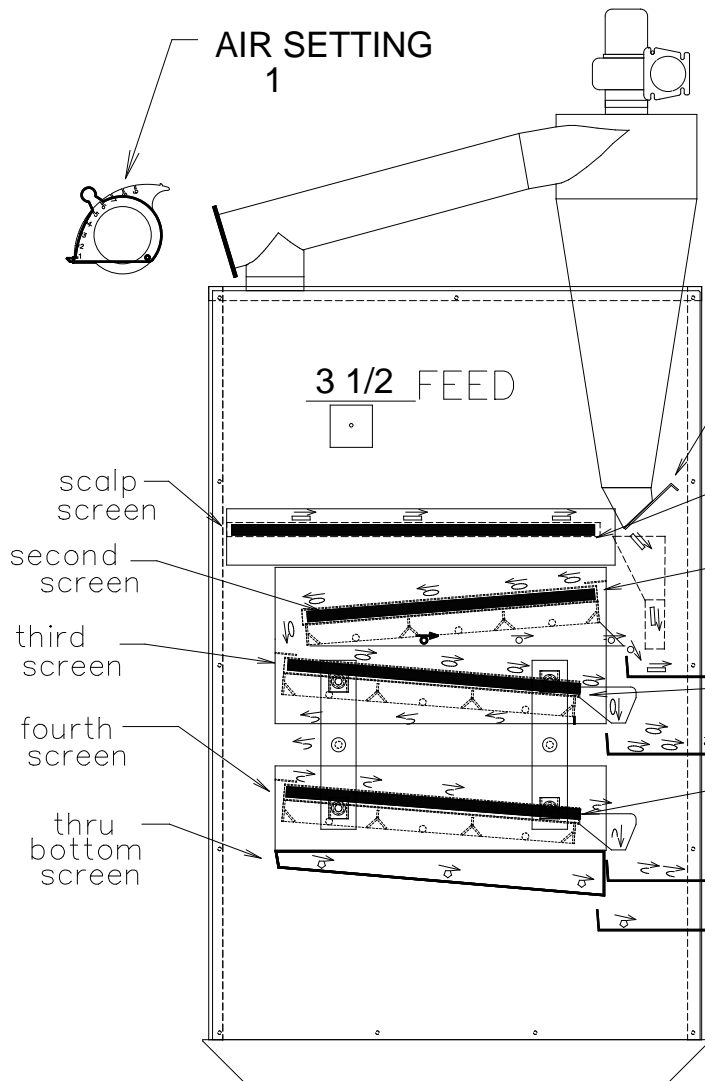
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FOUR SCREEN MCI KICKER

GRAIN COMBO CORN/SOYBEANS with Splits

NOTE: NOT RECOMMENDED FOR USE IN THE MCI AUTOKICKER!!



Fraction I.D.	SUGGESTED SCREEN SIZE	OPTIONAL SCREEN
FM – Both Grains	32 RD	24 RD - can be switched for Soybeans Scalping
REMOVE HANDLE INSERT OPEN END	8 RD NH	
FM – Both Grains	10 X 3/4	9 X 3/4
Clean Grain – Both Grains	12 RD	11 RD 10 RD

CORN = Clean
SOYBEANS = Splits

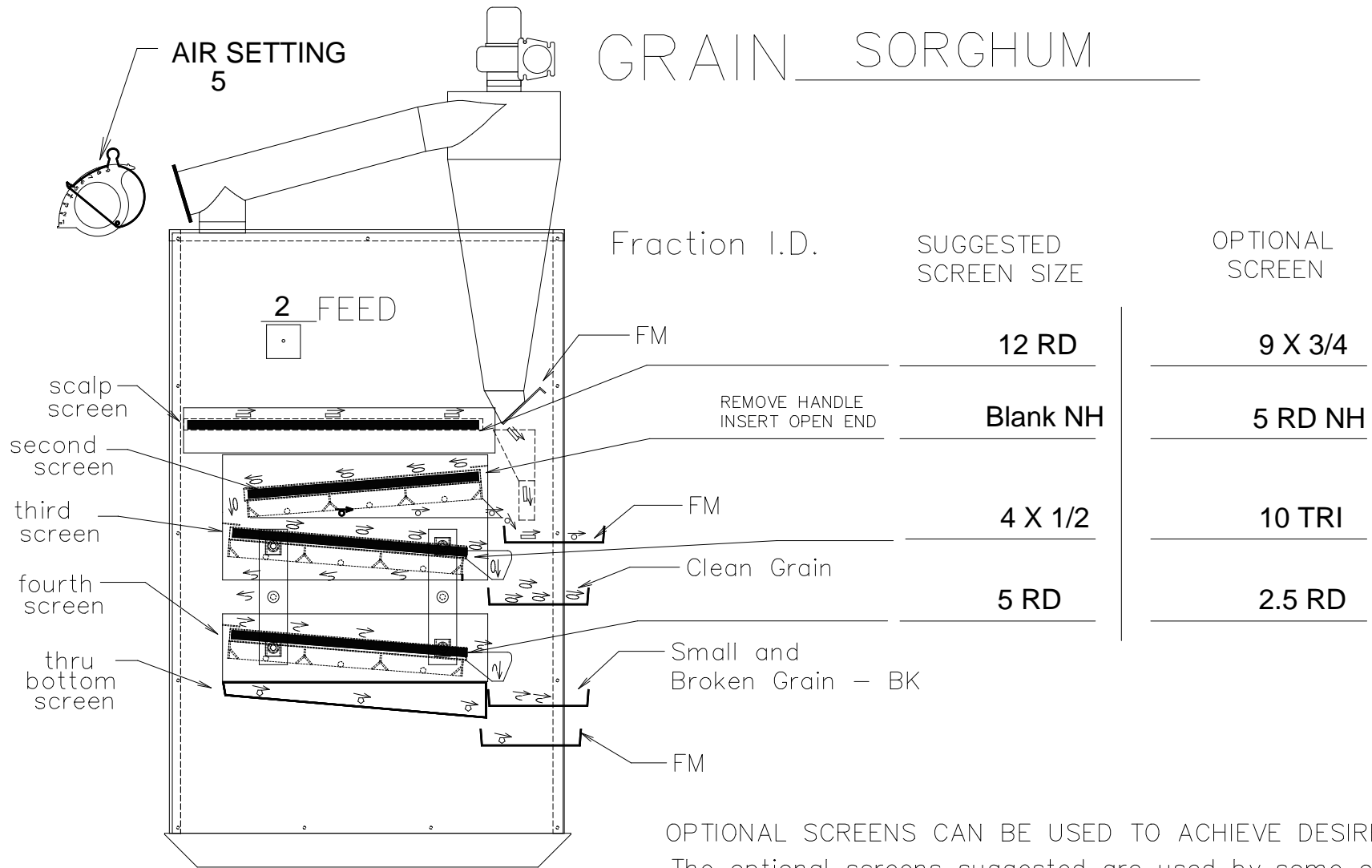
CORN: = FM
SOYBEANS: = Material may include small beans, so DO NOT combine the entire pan amount with TOTAL FM.
Hand pick the FM from this pan, adding that FM to the top pan for TOTAL FM.
This process is to reduce the amount of hand picking for Soybeans.

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FOUR SCREEN MCI KICKER/AUTOKICKER



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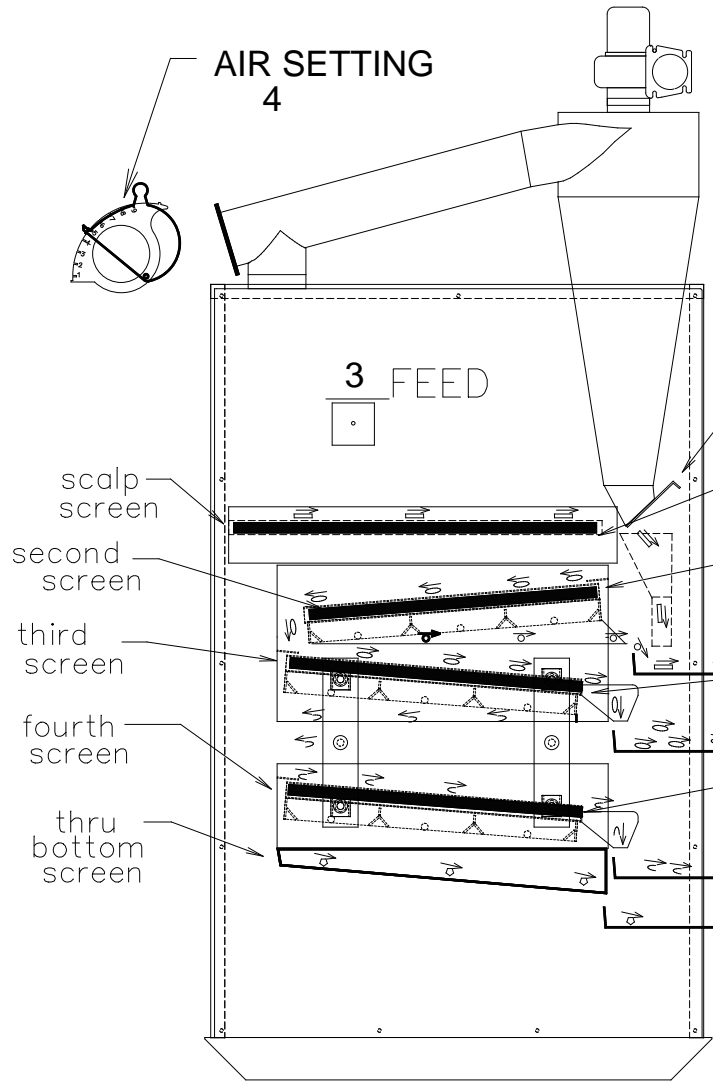
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FOUR SCREEN MCI KICKER

GRAIN_COMBO SORGHUM/CORN

NOTE: AUTOKICKER CONFIGURATION IS SIMILAR TO THE OPTIONAL SCREEN LOCATIONS. REFER TO THE AUTOKICKER CHART FOR BETTER DIAGRAM.



Fraction I.D.	SUGGESTED SCREEN SIZE	OPTIONAL SCREEN
Both Grains=FM	32 RD	12 RD=Clean Corn/Sorghum=FM
REMOVE HANDLE INSERT OPEN END	5 RD NH	5 RD NH = FM/Both Grains
Both Grains=FM	12 RD	* 4 X 1/2 Corn=FM/Sorghum=Clean
Corn=Clean Grain Sorghum=FM	4 X 1/2	* Blank - Corn=FM/Sorghum=BK
Sorghum=Clean Grain Corn=Broken Corn/BC		
Sorghum=Broken Kernels/BK Corn=Broken Corn/BC *Optional Blank=Empty		

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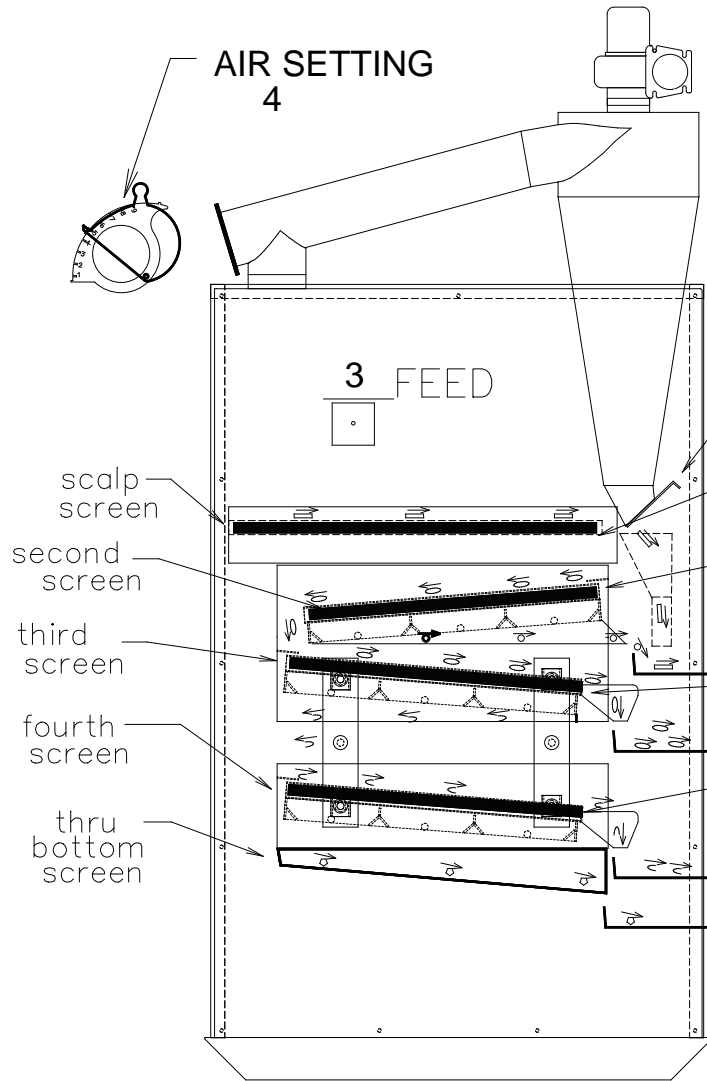
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FOUR SCREEN MCI AUTOKICKER ONLY

GRAIN COMBO SORGHUM/CORN – FUEL

NOTE: THIS AUTOKICKER CONFIGURATION IS USED FOR FUEL GRAINS. REFER TO THE STANDARD KICKER CHART FOR THAT DIAGRAM.



Fraction I.D.

SUGGESTED
SCREEN SIZE

OPTIONAL OR AUTOKICKER
SUGGESTED SCREEN SIZE
FOR FUEL GRAINS

FM – Both Grains

12 RD

Corn=Clean/Sorghum=FM

REMOVE HANDLE
INSERT OPEN END

5 RD NH

FM - Both Grains

* Sorghum=FM
* Corn=Clean
Aspirated is FM

Blank

*4 X 1/2 -Corn=FM/Sorghum=Clean

* Corn=FM
* Sorghum=Clean

Any

* Blank-Corn=FM/Sorghum=BK

* Sorghum=Small
and Broken-BK
* Corn=FM

EMPTY

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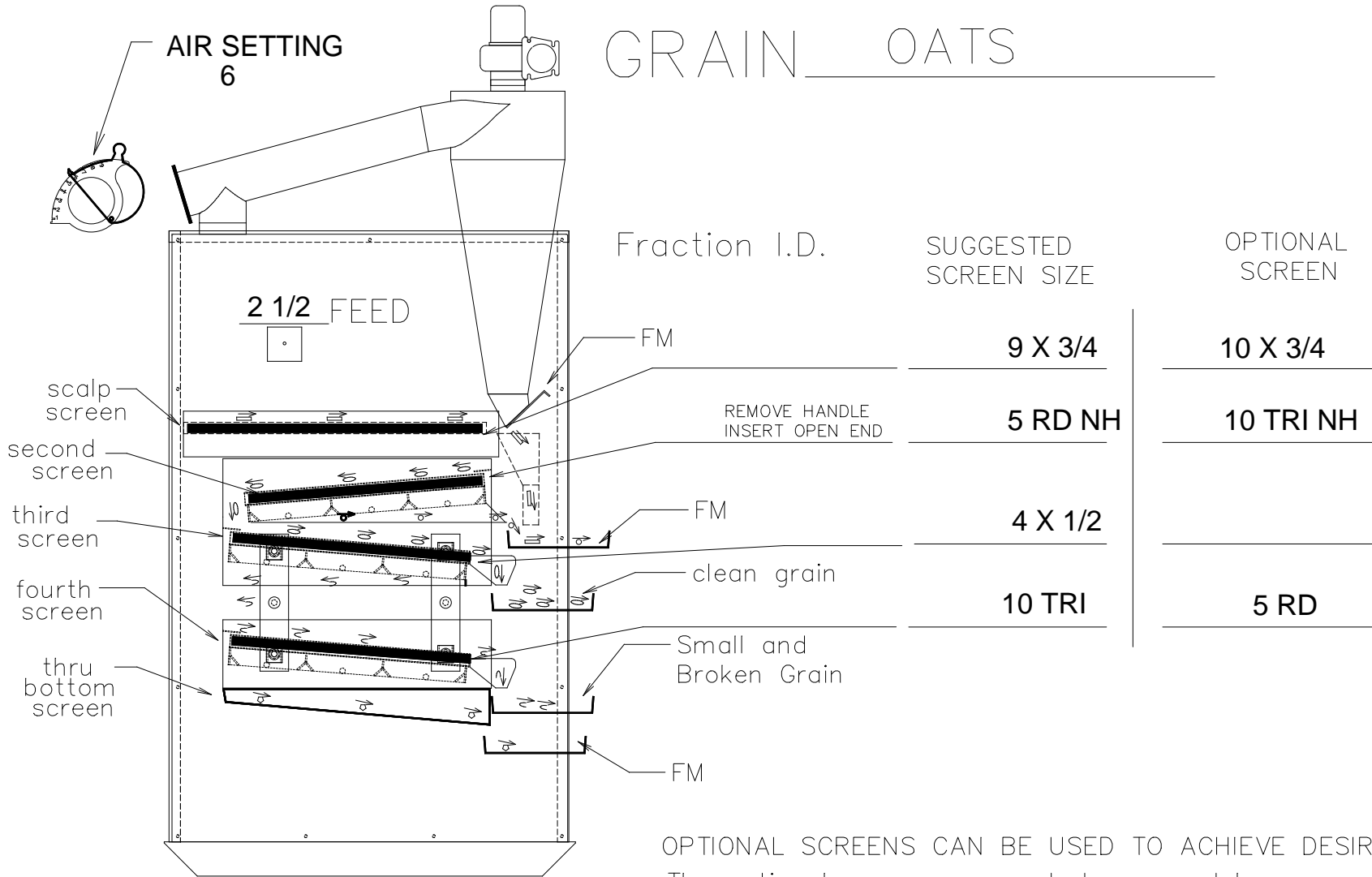
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GRAIN OATS



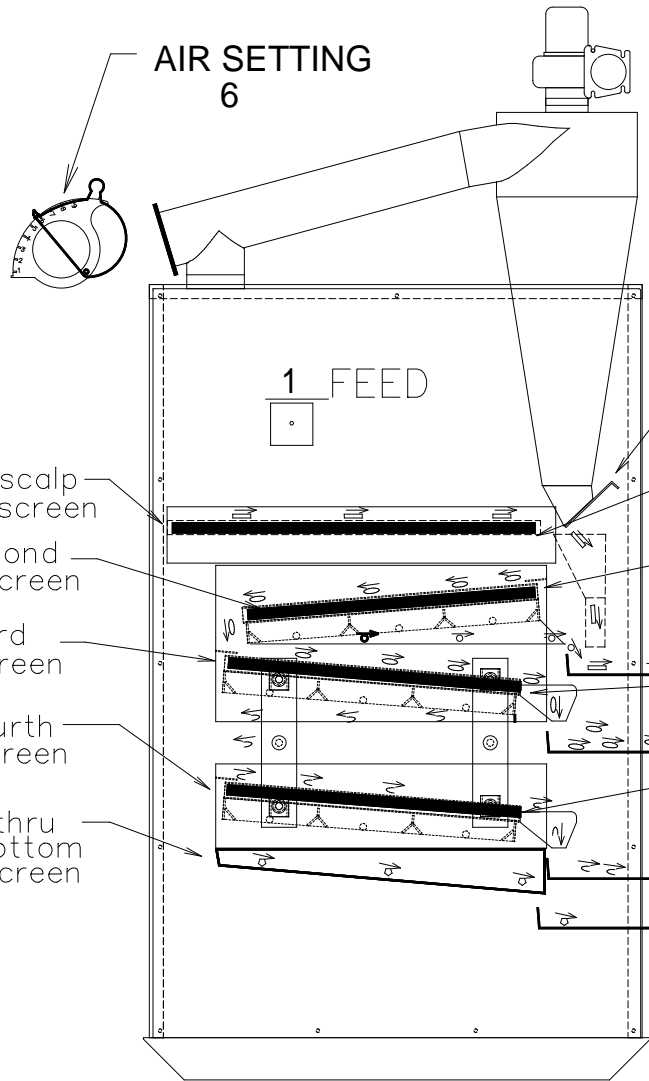
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GRAIN MILLET



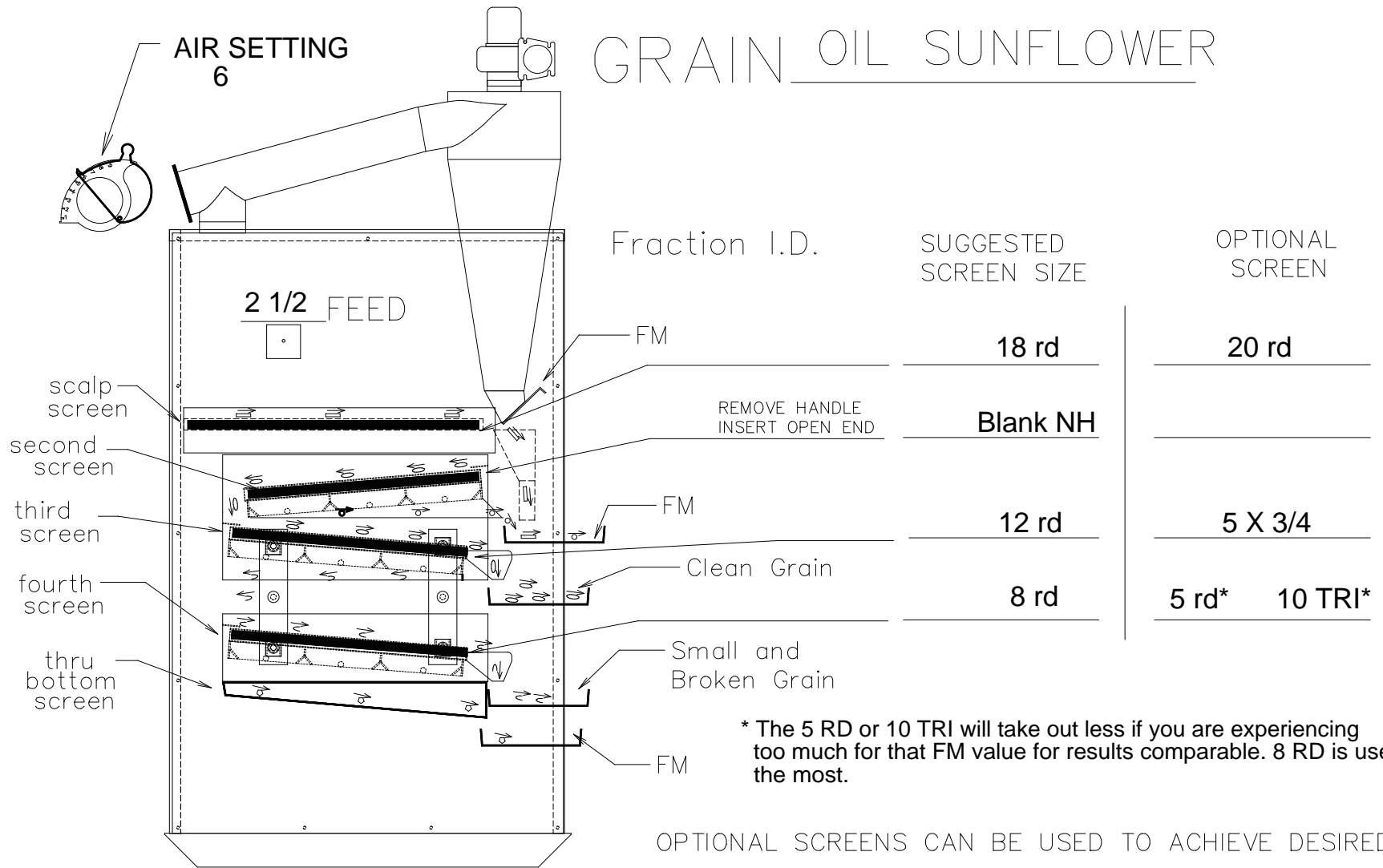
Fraction I.D.	SUGGESTED SCREEN SIZE	OPTIONAL SCREEN
Dockage	12 RD	6 X 3/4
REMOVE HANDLE INSERT OPEN END	Blank NH	10 TRI NH
Dockage	9 RD	4 X 1/2
Scalpings and Large Grain	.067 RD	
Clean Grain		
Dockage		

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FOUR SCREEN MCI KICKER/AUTOKICKER

GRAIN OIL SUNFLOWER



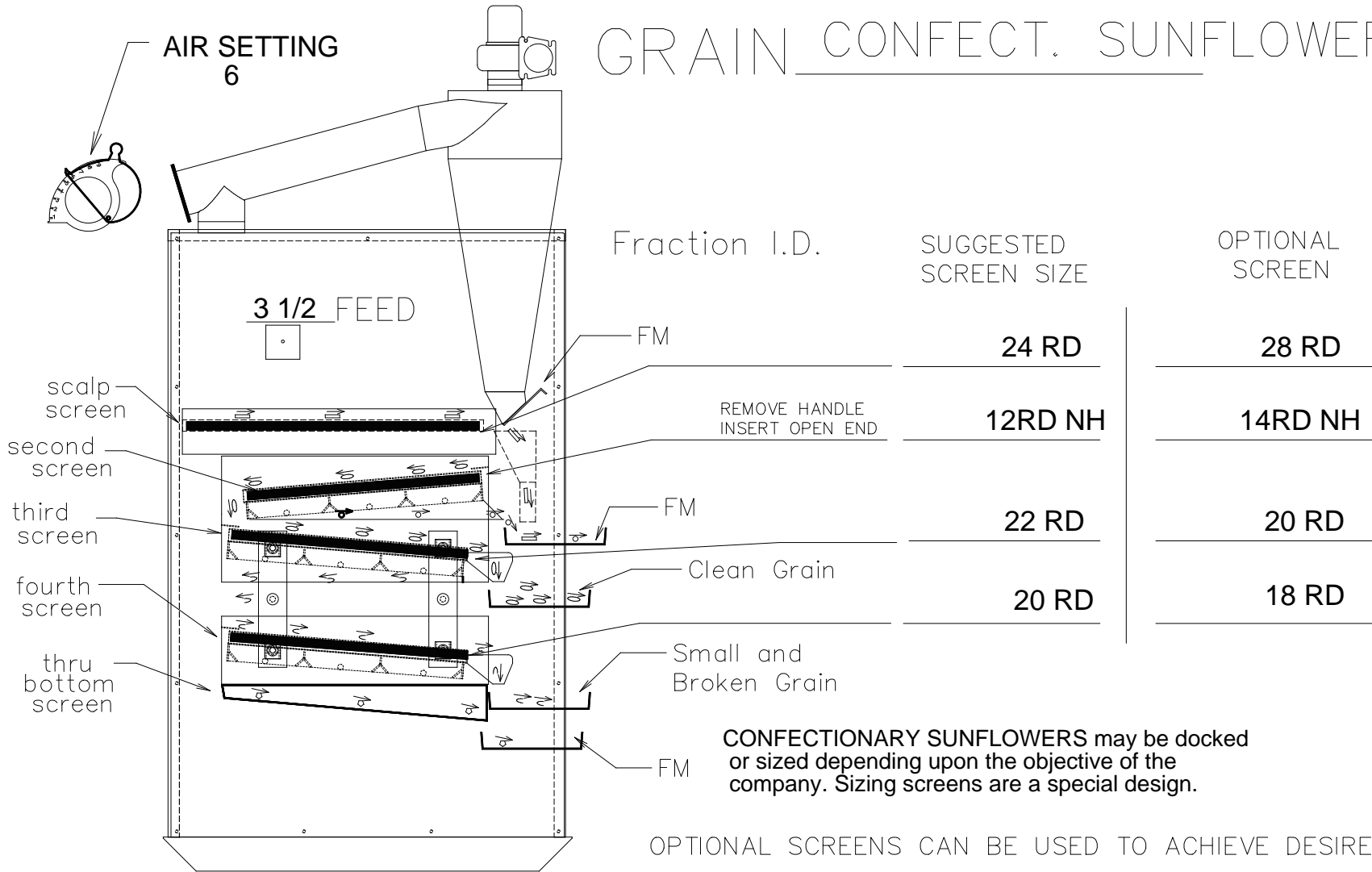
* The 5 RD or 10 TRI will take out less if you are experiencing too much for that FM value for results comparable. 8 RD is used the most.

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FOUR SCREEN MCI KICKER/AUTOKICKER

GRAIN CONFECT. SUNFLOWER



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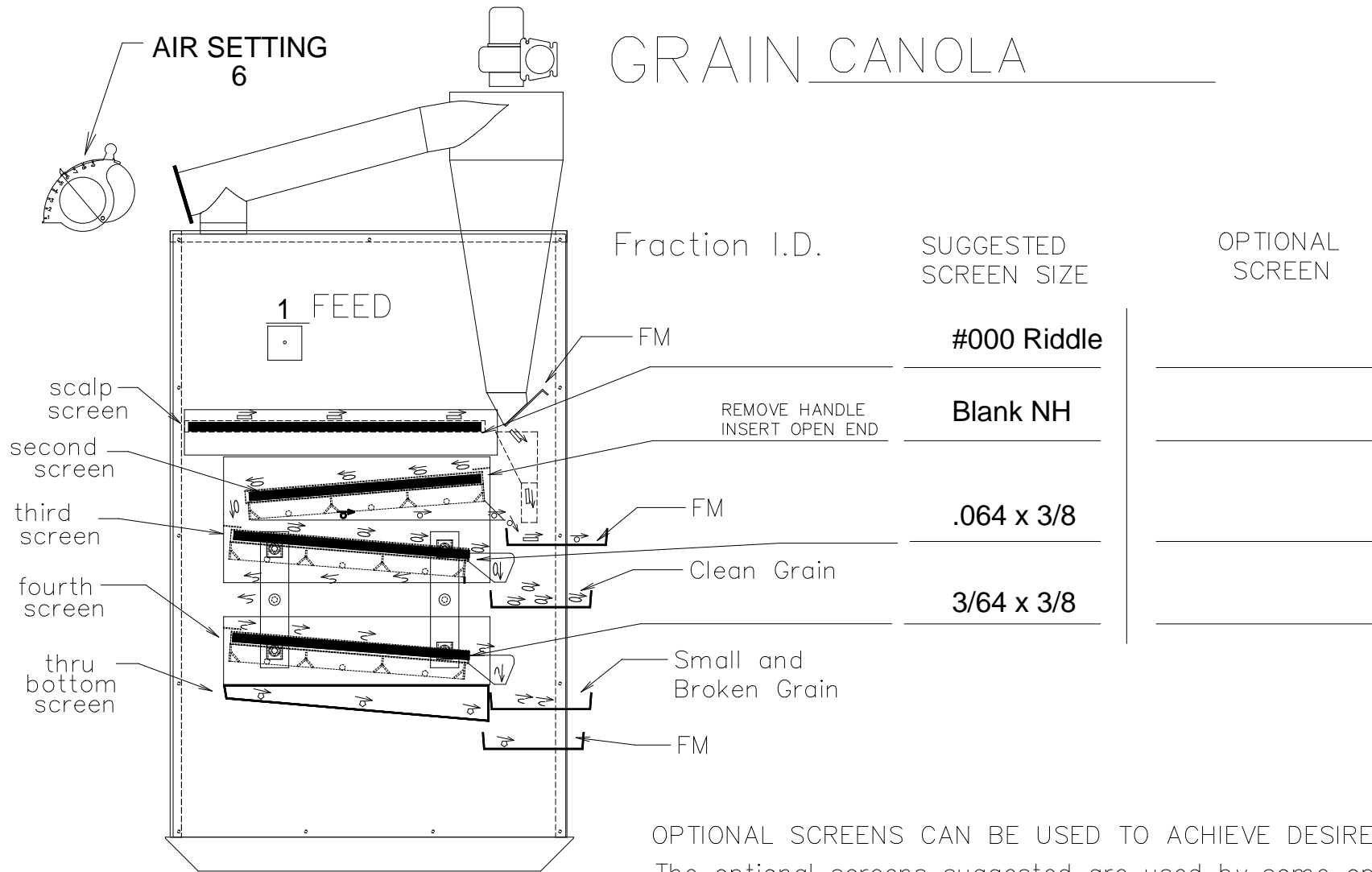
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FOUR SCREEN MCI KICKER/AUTOKICKER

GRAIN CANOLA



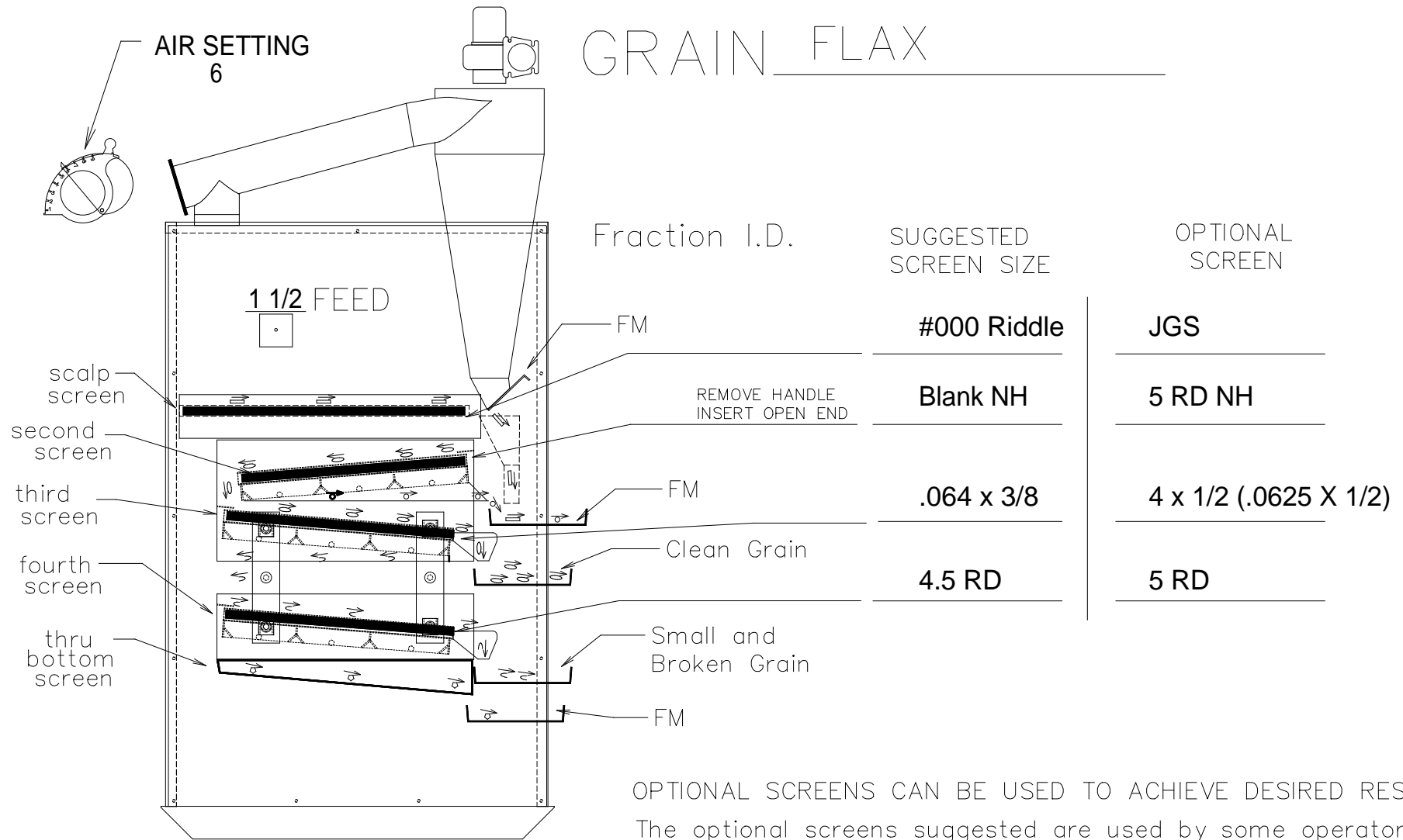
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FOUR SCREEN MCI KICKER/AUTOKICKER

GRAIN FLAX

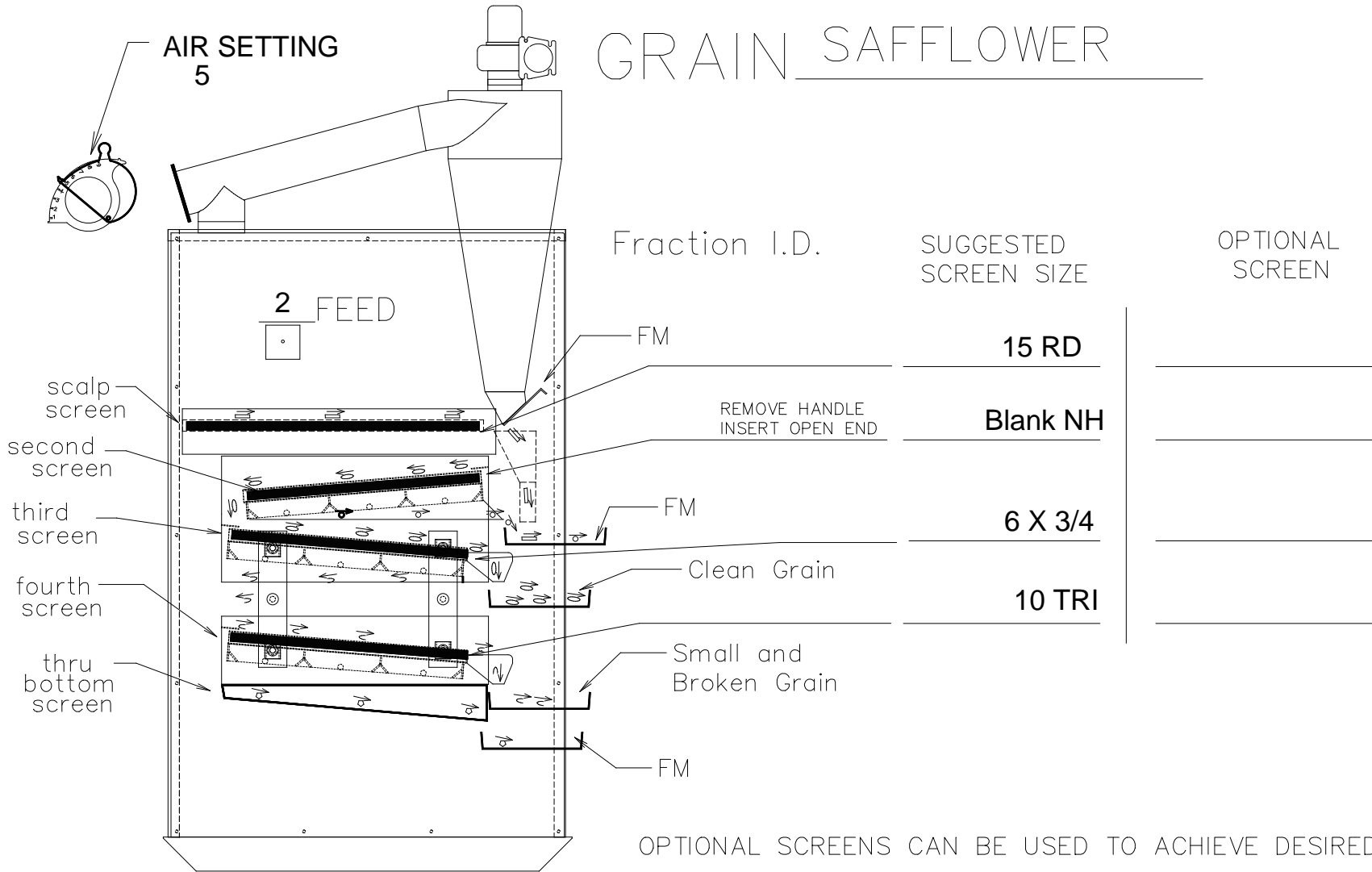


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FOUR SCREEN MCI KICKER/AUTOKICKER

GRAIN SAFFLOWER



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Mid-Continent Industries, Inc.
1801 SE 9th St., PO Box 563
Newton, Ks 67114
1-800-279-6812

We Are More Than Just Kickers!

To better serve you with detailed information on any of the listed products or services, please complete and mail or fax this sheet to (316) 283-0745.

- MCI's KICKER GRAIN TESTER provides a fast, accurate and consistent method for obtaining dockage efficiently, accurately and quietly.
- MCI's AUTO KICKER provides fully automated grain testing available for inbound or outbound facilities. Includes features such as machine separated dockage, FM, broken grain, test weight, moisture, temperature, and optional features are also available to manage starch, oil, fiber and protein testing. Computer interface allows for linking results to your system automatically, which virtually eliminates operator error or costly mistakes.
- MCI's NEWTON GRAIN CLEANER provides complete grain cleaning capabilities in various Bu/hr. Both portable and stationary units available are capable of separating and screening various grain types and improving insect control.
- SEVERAL BRANDS OF GRAM SCALES that automatically calculate dockage and test weight percentages, recommended for use in any grain laboratory setting.
- CUSTOM METAL FABRICATION including CNC Plazma table and shape cutting designed to fit your needs; shearing, braking and welding for most industry needs.

MCI continually strives to research and develop new products and seeks ways to improve our current products. If you have any special needs for the above products, please call and speak with one of our representatives. We will do our best to fill your request.

For more information on any products above, please check your interests and return this form.

Tell us about yourself:

Name: _____

Title: _____

Company: _____

Phone: _____

Address: _____

City, State, Zip: _____