ROTARY AIRLOCK FEEDER VALVE APPLICATION DATA SHEET

Company _____ Date _____

Contact _____ Salesperson _____

Phone # _____ Fax # _____

293-A-008 Job Reference

FUNCTION OF VALVE

[ ] AIRLOCK ONLY: MINIMIZES SYSTEM AIR LOSS WHILE ALLOWING THE TRANSFER OF MATERIAL BETWEEN VESSELS WITH DIFFERING PRESSURE

[ ] FEEDER ONLY: REGULATES THE CONTINUOUS FLOW OF MATERIAL BETWEEN VESSELS SHARING THE SAME PRESSURE

[ ] AIRLOCK-FEEDER: MINIMIZES SYSTEM AIR LOSS WHILE REGULATING THE FLOW OF MATERIAL BETWEEN VESSELS WITH DIFFERING PRESSURE

CONDITIONS ABOVE VALVE

VALVE IS INSTALLED BENEATH:

[ ] HOPPER [ ] SILO [ ] BAGHOUSE

[ ] CYCLONE [ ] FILTER RECEIVER [ ] SCREW

[ ] SHREDDER [ ] DRYER [ ] MIXER

[ ] OTHER:_____

PRESSURE ABOVE VALVE IS:

[ ] POSITIVE [ ] NEGATIVE [ ] ATMOSPHERIC

_____PSI _____"Hg _____"H_2O

TEMPERATURE ABOVE VALVE IS:_____°F

IS VALVE CHOKE-FED? [ ] YES [ ] NO

HUMIDITY IS: [ ] HIGH [ ] AVERAGE [ ] LOW

CONDITIONS BELOW VALVE

VALVE IS INSTALLED ABOVE:

[ ] HOPPER [ ] SCREW [ ] AIRSLIDE

[ ] BELT [ ] CHUTE [ ] MIXER

[ ] TANK [ ] VACUUM LINE [ ] PRES. LINE

[ ] OTHER:_____

PRESSURE BENEATH VALVE IS:

[ ] POSITIVE [ ] NEGATIVE [ ] ATMOSPHERIC

_____PSI _____"Hg _____"H_2O

TEMPERATURE BENEATH VALVE IS: _____°F

DIAMETER OF CONVEYING LINE IS: _____

HUMIDITY IS: [ ] HIGH [ ] AVERAGE [ ] LOW

WHAT IS THE AMBIENT TEMPERATURE: _____°F

MATERIAL CHARACTERISTICS

COMMON NAME:_____

CHEMICAL FORMULA:_____

BULK DENSITY, AERATED:_____Lbs./Cu.Ft.

BULK DENSITY, SETTLED: _____Lbs./Cu.Ft.

MAXIMUM PARTICLE SIZE: _____

PARTICLE TYPE/SHAPE IS:

[ ] PELLET [ ] POWDER [ ] CHIP [ ] LUMP

[ ] GRANULAR [ ] FLAKE [ ] CURL [ ] FIBROUS

MESH SIZE-ANGLE OF REPOSE IS: _____°

____%THRU $^1/_2$" ____%THRU $^1/_4$" ____%THRU $^1/_8$"

____%THRU $^1/_{16}$" ____%THRU 25 ____%THRU 50

____%THRU 100 ____%THRU 200 ____%THRU 400

FLOWABILITY: [ ] EXTREME [ ] MODERATE [ ] SLUGGISH

MOISTURE CONTENT OF MATERIAL IS: _____%

TEMPERATURE OF MATERIAL IS: _____°F

SPECIAL CHARACTERISTICS:

[ ] HYGROSCOPIC [ ] CORROSIVE-REACTIVE

[ ] EXPLOSIVE [ ] TOXIC-EMITS FUMES

[ ] STICKY-SMEARS [ ] HEAT SENSITIVE

[ ] AERATES-DUSTY [ ] TENDS TO PACK

[ ] OTHER:_____

ABRASIVENESS: [ ] EXTREME [ ] MODERATE [ ] MILD

ALLOWABLE MATERIAL DEGRADATION IS: _____%

COMMENTS: _____

_____

_____

OPERATING CONDITIONS

CONSTANT RATE OF FLOW PER HOUR:

_____ Tons _____ Lbs. _____ Cu.Ft.

VARIABLE FEED RATE (IF REQUIRED)

MAX: _____ AVG: _____ MIN: _____

DUTY CYCLE: [ ] CONTINUOUS [ ] INTERMITTENT

COMMENTS: _____

_____

SIZE AND SPEED SELECTION GUIDE

CAPACITIES (CFR)		
SIZE	6V	8V
4X4	.02	—
6X6	.07	.065
8X8	.18	.17
9X9	.29	.27
10X10	.36	.34
12X12	.64	.61
12X21	1.08	1.03
14X14	1.12	1.05
16X16	1.62	1.55
18X18	2.29	2.20
22X22	4.34	4.20
26X26	7.30	7.00
30X30	11.30	11.12
36X36	21.00	20.0

1) $\frac{(\quad)}{60}$ Lbs./Hour = ( ) Lbs./Minute

2) $\frac{(\quad) \text{ Lbs./Minute}}{(\quad) \text{ Lbs./Cu. Ft.}}$ = ( ) CFM

3) $\frac{(\quad) \text{ CFM}}{(\quad) \text{ CFR}}$ = ( ) RPM_1

4) $\frac{(\quad) \ RPM_1}{(\quad) \ *FF}$ = ( ) RPM_2

*FILL FACTOR

RECOMMENDATION:_____

_____

_____

_____

_____

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