

# TRIPLE/S DYNAMICS TEST REPORT

Test Date(s): [REDACTED]

Test File No.: 85-003

Product: Pea and Pinto beans mixed with rocks

Customer: [REDACTED]

Equipment: S-22 Stoner and V-135 Gravity Separator, Vari-speed surge bin

Purpose: Remove stones/rocks from pea & pinto beans by means of fluidized-bed separation.

PROCEDURE: Samples of pea, pinto (whole and split beans) and rocks were received from the customer. Each of the samples were run on the S-22 Stoner to remove a pre-weighed sample of the customer supplied rocks. In addition, the pinto splits were run on the Sutton Model V-135 Gravity Separator for further removal of rocks.

RESULTS: 1st Test - S-22 Stoner Separation - Pea Beans with Rocks

Weight (in)	Weight (out)	Efficiency	% by Weight
Rocks .09 lbs.	-	-	-
Beans 49.0 lbs	-	-	-

The first test was unsuccessful due to the density difference between the rocks and the beans being too small. (Bulk density rocks-53.1 lb/ft<sup>3</sup>, beans 50.9 lb/ft<sup>3</sup>)

2nd Test - S-22 Stoner Separation - Pinto beans with rocks

Weight (in)	Weight (out)	Efficiency	% by Weight
Rocks 1.6 lbs.	1.1 lbs.	82.8%	2.4
Beans 54.0 lbs.	45.0 lbs.	-	97.6

Due to a different sample of rocks this test was successful. (Bulk density rocks-80.3 lb/ft<sup>3</sup>)

3rd Test - S-22 Stoner Separation - Pinto splits with rocks

Weight (in)	Weight (out)	Efficiency	% by Weight
Rocks 1.3 lbs.	1.3 lbs.	100.0%	2.8
Splits 45.0 lbs.	40.0 lbs.	-	97.2

Bulk density rocks - 81.3 lb/ft<sup>3</sup> Feed Rate: 1,260 lb/hr

# TRIPLE/S DYNAMICS TEST REPORT

4th Test -V-135 Separation light discharge from previous test

Spout #	Weight	% by Weight
1 (Heavy)	0.9 lbs.	6.1
2 (Mids)	12.0 lbs.	81.1
3 (Light)	1.9 lbs.	12.8

5th Test - S-22 Stoner Separation - Pinto splits and wholes with rocks

Weight (in)	Weight (out)	Efficiency	% by Weight
Rocks 1.1 lbs.	0.7 lbs.	73.1	1.9
Splits 20.0 lbs.		-	
Whole 20.0 lbs.	37.0 lbs.	-	98.1

The Pinto splits and wholes reported to the light discharge, rocks being heavy.  
Bulk density rocks - 70.7 lb/ft<sup>3</sup>