

TRIPLE/S DYNAMICS  
PROCESS EVALUATION

BY: [REDACTED]

LAB SAMPLE NUMBER: 80-129

SALES REPRESENTATIVE: [REDACTED]

SUBJECT: Screening of Sawdust on a Texas Shaker for [REDACTED]  
[REDACTED]

BACKGROUND: Four barrels of sawdust were received from [REDACTED]. The objective of the test is to screen the sawdust into three fractions. The screens selected for the separation are 8 mesh (.093" c.o. .032" wire diameter) and 20 mesh (.0328" c.o.) screens. The screening specifications required by [REDACTED] are:

<u>Sieve Size</u> <u>(U.S.)</u>	<u>% Passing</u>
4 mesh	100.00
7 mesh	98.00
35 mesh	1.50
50 mesh	1.00
80 mesh	1.00

SUMMARY: It is possible to achieve a sawdust fraction that meets the specifications required by [REDACTED]  
[REDACTED]

PROCEDURE: A sieve analysis was run on the head sample of sawdust. The sample was then screened on an 8 mesh screen on the Texas Shaker. The Shaker had a blank plate for the first four feet, then 8 feet of screen. The product was fed at a feed rate of approximately 3000 lbs/hr. It should be noted that the product bridged in the vibratory feeder and had to be pushed down by hand. The product was being fed as fast as it could under these circumstances.

The -8 mesh fraction was then run over a 20 mesh

screen. Again the first four feet of screening was a blank plate, with eight feet of 20 mesh screen. The overs and throughs were collected and weighed. A sieve analysis was then run on the -8 mesh +20 mesh fraction.

RESULTS AND

DISCUSSION: The results of the sieve analysis run on the head sample are presented below:

<u>Sieve Size (Tyler)</u>	<u>Sieve Size (U.S.)</u>	<u>Percent</u>	<u>Cum. Percent</u>
+ 4 mesh	4 mesh	5.06	5.06
+6 mesh	6 mesh	6.10	11.16
+8 mesh	8 mesh	10.41	21.57
+10 mesh	12 mesh	16.45	38.02
+14 mesh	16 mesh	22.27	60.29
+20 mesh	20 mesh	18.08	78.37
-20 mesh		21.63	100.00

The results of the screening are as follows:

<u>Fraction</u>	<u>Weight</u>	<u>Percent</u>
+8 mesh	102 lbs	41.13%
-8 mesh +20 mesh	100 lbs	40.32%
-20 mesh	46 lbs	18.55%

A sieve analysis was run on the middle fraction (-8 +20 mesh) giving these results:

<u>Sieve Size (Tyler)</u>	<u>Sieve Size (U.S.)</u>	<u>Percent</u>	<u>Cum. Percent</u>
+8 mesh	8 mesh	--	--
+10 mesh	12 mesh	13.67	13.67
+14 mesh	16 mesh	40.28	53.95
+20 mesh	20 mesh	32.14	86.09
+35 mesh	40 mesh	12.98	99.07
+48 mesh	50 mesh	0.42	99.49
-48 mesh		0.51	100.00

[REDACTED]  
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The samples were labeled and returned to [REDACTED]  
[REDACTED] for further evaluation.

[REDACTED]