

# Aggregate Optimization Chart

MIX ID'S: DDD0K7E7 and DDD0K7E9

Production Gradation Report

**PLANT #:** **P-103**

Sample Date: 2/6/17

Concrete Grade: **DM**

Contractor: \_\_\_\_\_

Dates Test Represents: 2/6/2017 to 2/12/2017

MDOT No.: \_\_\_\_\_

Agg. Class	Pit #	Source	Weight (SSD)	ft <sup>3</sup>	Specific Gravity	% Contribution
6AA	58-003	Stoneco	1350	8.04	2.69	45.2
26A	58-003	Stoneco	420	2.50	2.69	14.0
2NS	81-93	Burmeister	1220	7.41	2.64	40.8
<b>Total Wt</b>			<b>2990</b>	<b>17.95</b>		<b>100.0</b>

<----- Verify this number is 100%

Sieve	6AA	26A	2NS	Cumulative % Passing	% Retained	Cumulative % Retained
2"	100.0	100.0	100.0	100.0	0.0	0.0
1.5"	100.0	100.0	100.0	100.0	0.0	0.0
1"	100.0	100.0	100.0	100.0	0.0	0.0
3/4"	80.3	100.0	100.0	91.1	8.9	8.9
1/2"	38.6	99.2	100.0	72.2	18.9	27.8
3/8"	15.3	88.7	100.0	60.2	12.0	39.8
#4	2.0	5.7	99.5	42.3	17.9	57.7
#8	1.1	2.1	87.1	36.3	6.0	63.7
#16	0.8	1.9	73.1	30.5	5.9	69.5
#30	0.8	1.8	54.5	22.9	7.6	77.1
#50	0.7	1.7	22.3	9.7	13.2	90.3
#100	0.7	1.6	3.1	1.8	7.8	98.2
LBW	0.5	1.3	0.8	0.7	1.1	99.3

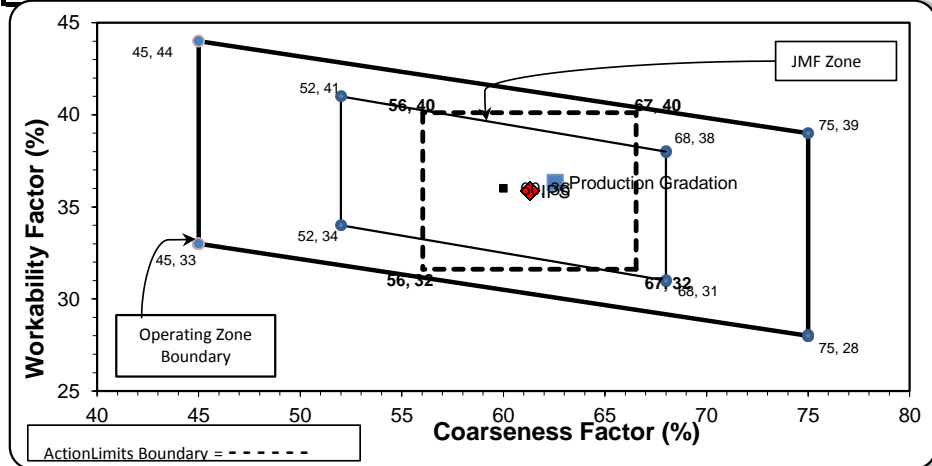
\*Maximum % Retained must be above the 3/8" sieve.  
 \*Any two adjacent sieves must equal 10% except max., nom. max., #100 and #200 sieves.  
 \*% Retained must be at least 4% for each sieve except max., nom. max., #100 and #200 sieves.  
 \*% Retained must be at least 8% for the 1" sieve when a 2" max. size (nom. Max. 1.5") aggregate is used.



**Superior Materials, LLC**  
 30701 W. 10 Mile Rd.  
 Suite 500  
 Farmington Hills, MI 48336

Production Gradation  Batch Plant Gradations  Aggregate Supplier Gradations

**Coarseness Factor: 63**      **Workability Factor: 36**



Initial Production Sample (IPS)

Sieve	Cumulative % Passing	% Retained	Cumulative % Retained
2"	100.0	0.0	0.0
1.5"	100.0	0.0	0.0
1"	99.3	0.7	0.7
3/4"	89.2	10.1	10.8
1/2"	70.7	18.5	29.3
3/8"	60.7	10.0	39.3
#4	44.4	16.3	55.6
#8	35.9	8.5	64.1
#16	27.3	8.6	72.7
#30	19.1	8.2	80.9
#50	7.4	11.7	92.6
#100	1.9	5.6	98.1
LBW	0.7	1.2	99.3

PREPARED BY:  
 SM, LLC Technical Service

Approved BY:

# Aggregate Optimization Chart

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3/4"	80.3	100.0	100.0	91.1	8.9	8.9
1/2"	38.6	99.2	100.0	72.2	18.9	27.8
3/8"	15.3	88.7	100.0	60.2	12.0	39.8
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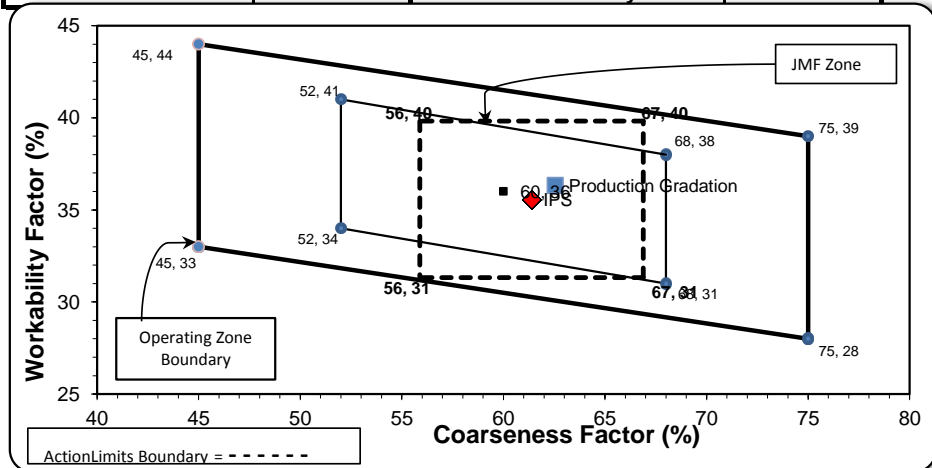


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Coarseness Factor: 61		Workability Factor: 36	
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#8	35.6	8.5	64.4
#16	27.7	7.9	72.3
#30	20.6	7.1	79.4
#50	8.7	11.8	91.3
#100	1.6	7.1	98.4
LBW	1.1	0.6	98.9

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