

Aggregate Optimization Chart

MIX ID'S: DDD0K7E7 and DDD0K7E9

Production Gradation Report

PLANT #: **P-103**

Sample Date: 10/16/17

Concrete Grade: **DM**

Contractor: _____

Dates Test Represents: 10/16/2017 to 10/22/2017

MDOT No.: _____

Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution
6AA	58-003	Stoneco	1600	9.53	2.69	53.5
26A	58-003	Stoneco	150	0.89	2.69	5.0
2NS	81-93	Burmeister	1240	7.53	2.64	41.5
Total Wt			2990	17.95		100.0

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



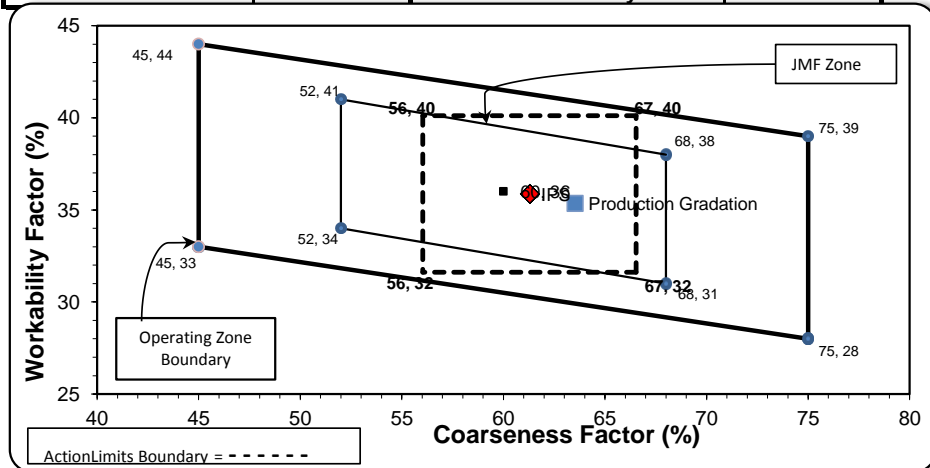
Superior Materials, LLC
 30701 W. 10 Mile Rd.
 Suite 500
 Farmington Hills, MI 48336

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"	99.2	100.0	100.0	99.6	0.4	0.4
3/4"	83.3	100.0	100.0	91.1	8.5	8.9
1/2"	46.1	99.6	100.0	71.1	19.9	28.9
3/8"	24.3	88.6	100.0	58.9	12.2	41.1
#4	3.0	22.7	96.0	42.6	16.4	57.4
#8	1.1	6.6	83.0	35.3	7.2	64.7
#16	0.9	2.7	68.3	28.9	6.4	71.1
#30	0.8	1.8	48.7	20.7	8.2	79.3
#50	0.7	1.5	20.6	9.0	11.7	91.0
#100	0.6	1.4	4.1	2.1	6.9	97.9
LBW	0.6	1.1	1.1	0.8	1.3	99.2

*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.

Production Gradation Batch Plant Gradations Aggregate Supplier Gradations

Coarseness Factor:	64	Workability Factor:	35
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Initial Production Sample (IPS)

Coarseness Factor:	61		
Workability Factor:	36		
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

MIX ID'S: DDD0K7E7 and DDD0K7E9

Production Gradation Report

PLANT #: **P-38**

Sample Date: 10/16/17

Concrete Grade: **DM**

Contractor: _____

Dates Test Represents: 10/16/2017 to 10/22/2017

MDOT No.: _____

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#50	0.7	1.5	20.6	9.0	11.7	91.0
#100	0.6	1.4	4.1	2.1	6.9	97.9
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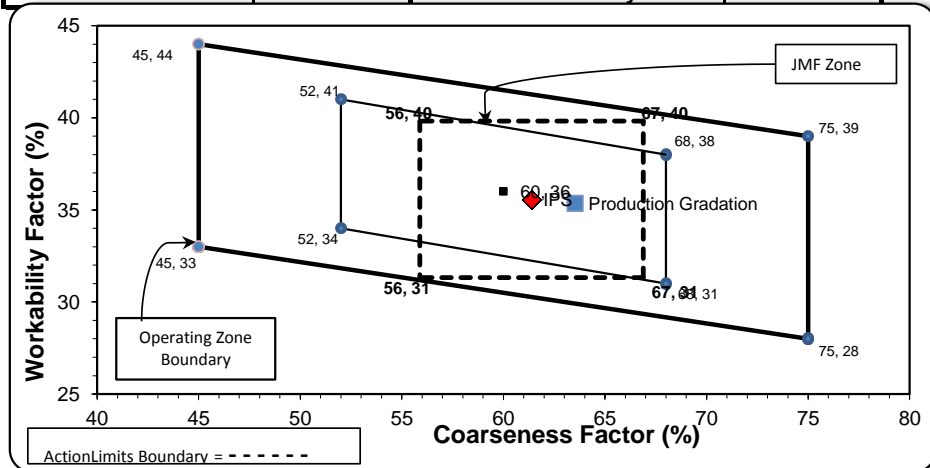


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#50	8.7	11.8	91.3
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LBW	1.1	0.6	98.9

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