

Aggregate Optimization Chart

MIX ID'S: DDS257E7 and DDS257E8

Production Gradation Report

PLANT #: **P-103**

Sample Date: 2/27/17

Concrete Grade: **S2M**

Contractor: _____

Dates Test Represents: 2/27/2017 to 3/5/2017

MDOT No.: _____

Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution
6AA	58-003	Stoneco	1415	8.43	2.69	44.8
26A	58-003	Stoneco	450	2.68	2.69	14.3
2NS	81-93	Burmeister	1290	7.83	2.64	40.9
Total Wt			3155	18.94		100.0

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



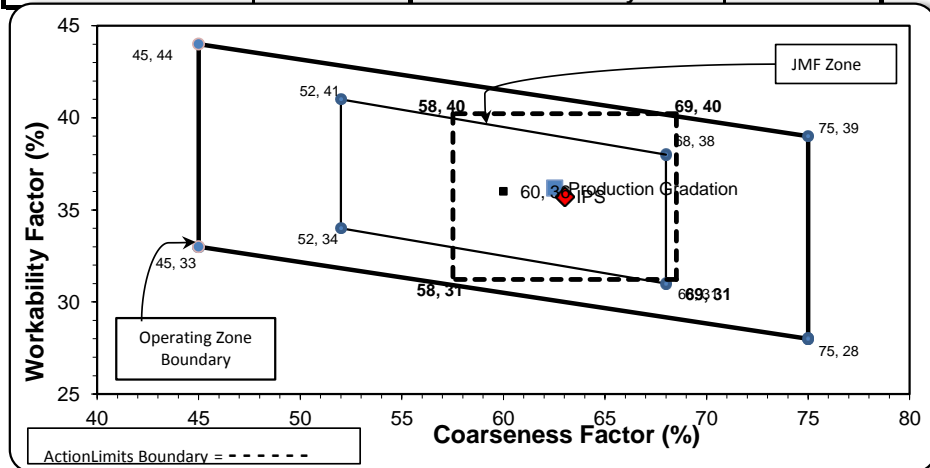
Superior Materials, LLC
 30701 W. 10 Mile Rd.
 Suite 500
 Farmington Hills, MI 48336

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"	99.4	100.0	100.0	99.7	0.3	0.3
3/4"	80.7	100.0	100.0	91.3	8.4	8.7
1/2"	35.2	100.0	100.0	70.9	20.4	29.1
3/8"	15.3	86.5	100.0	60.1	10.9	39.9
#4	2.9	16.7	99.0	44.2	15.9	55.8
#8	2.2	3.9	84.7	36.2	8.0	63.8
#16	2.1	2.0	67.9	29.0	7.2	71.0
#30	1.9	1.7	47.9	20.7	8.3	79.3
#50	1.7	1.5	16.5	7.7	13.0	92.3
#100	1.6	1.5	2.8	2.1	5.6	97.9
LBW	1.4	1.3	1.0	1.2	0.9	98.8

*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:	63	Workability Factor:	36
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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"	99.2	0.8	0.8
3/4"	90.9	8.3	9.1
1/2"	71.3	19.6	28.7
3/8"	59.5	11.8	40.5
#4	43.8	15.7	56.2
#8	35.7	8.1	64.3
#16	27.0	8.7	73.0
#30	18.6	8.4	81.4
#50	6.8	11.8	93.2
#100	1.4	5.4	98.6
LBW	0.6	0.8	99.4

PREPARED BY:
 SM, LLC Technical Service

Approved BY:

Aggregate Optimization Chart

MIX ID'S: DDS257E7 and DDS257E8

Production Gradation Report

PLANT #: **P-38**

Sample Date: 2/27/17

Concrete Grade: **S2M**

Contractor: _____

Dates Test Represents: 2/27/2017 to 3/5/2017

MDOT No.: _____

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1.5"	100.0	100.0	100.0	100.0	0.0	0.0
1"	99.4	100.0	100.0	99.7	0.3	0.3
3/4"	80.7	100.0	100.0	91.3	8.4	8.7
1/2"	35.2	100.0	100.0	70.9	20.4	29.1
3/8"	15.3	86.5	100.0	60.1	10.9	39.9
#4	2.9	16.7	99.0	44.2	15.9	55.8
#8	2.2	3.9	84.7	36.2	8.0	63.8
#16	2.1	2.0	67.9	29.0	7.2	71.0
#30	1.9	1.7	47.9	20.7	8.3	79.3
#50	1.7	1.5	16.5	7.7	13.0	92.3
#100	1.6	1.5	2.8	2.1	5.6	97.9
LBW	1.4	1.3	1.0	1.2	0.9	98.8

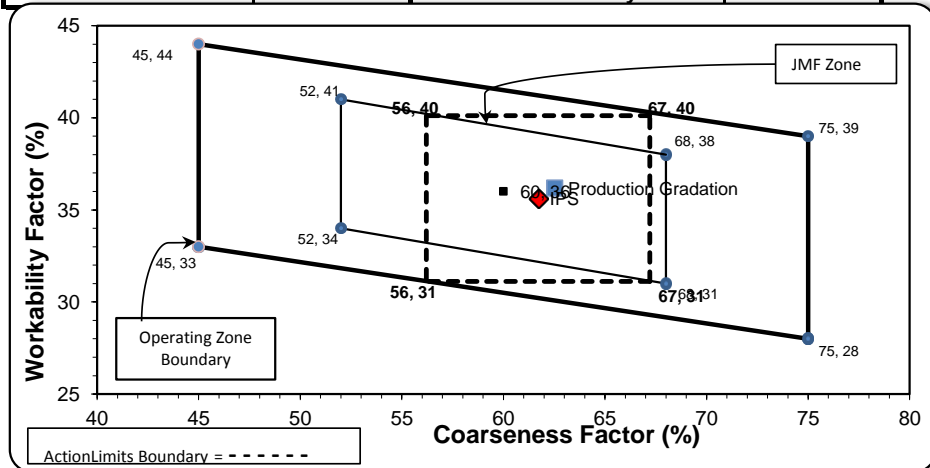


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Production Gradation Batch Plant Gradations Aggregate Supplier Gradations

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



Initial Production Sample (IPS)

Coarseness Factor: **62**
Workability Factor: **36**

Sieve	Cumulative % Passing	% Retained	Cumulative % Retained
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1.5"	100.0	0.0	0.0
1"	99.2	0.8	0.8
3/4"	91.1	8.1	8.9
1/2"	72.0	19.1	28.0
3/8"	60.3	11.7	39.7
#4	43.4	16.9	56.6
#8	35.6	7.8	64.4
#16	28.4	7.2	71.6
#30	21.8	6.7	78.2
#50	9.1	12.6	90.9
#100	1.7	7.4	98.3
LBW	1.1	0.6	98.9

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 SM, LLC Technical Service

Approved By: