

Aggregate Optimization Chart

MIX ID'S: DDS257E7 and DDS257E8

Production Gradation Report

PLANT #: **P-103**

Sample Date: 2/20/17

Concrete Grade: **S2M**

Contractor: _____

Dates Test Represents: 2/20/2017 to 2/26/2017

MDOT No.: _____

Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution
6AA	58-003	Stoneco	1465	8.73	2.69	46.4
26A	58-003	Stoneco	400	2.38	2.69	12.7
2NS	81-93	Burmeister	1290	7.83	2.64	40.9
Total Wt			3155	18.94		100.0

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



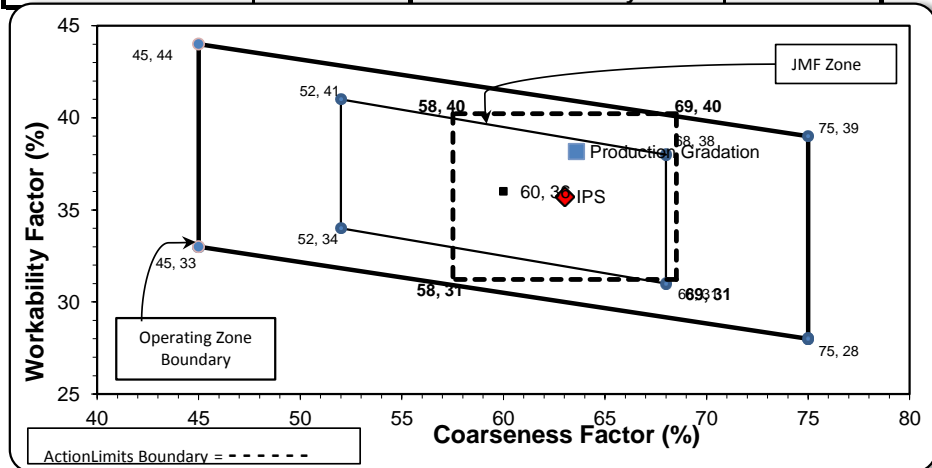
Superior Materials, LLC
 30701 W. 10 Mile Rd.
 Suite 500
 Farmington Hills, MI 48336

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"	99.5	100.0	100.0	99.8	0.2	0.2
3/4"	80.5	100.0	100.0	90.9	8.8	9.1
1/2"	37.6	99.7	100.0	71.0	20.0	29.0
3/8"	18.7	87.6	100.0	60.7	10.3	39.3
#4	4.0	21.2	99.6	45.3	15.4	54.7
#8	2.7	4.8	88.8	38.2	7.1	61.8
#16	2.1	2.1	66.2	28.3	9.9	71.7
#30	1.9	1.7	47.6	20.6	7.7	79.4
#50	1.8	1.5	24.5	11.0	9.5	89.0
#100	1.8	1.4	4.8	3.0	8.1	97.0
LBW	1.4	1.3	1.9	1.6	1.4	98.4

*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: 38**



Initial Production Sample (IPS)

Coarseness Factor: 63		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"	99.2	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:

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Concrete Grade: **S2M**

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MDOT No.: _____

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1.5"	100.0	100.0	100.0	100.0	0.0	0.0
1"	99.5	100.0	100.0	99.8	0.2	0.2
3/4"	80.5	100.0	100.0	90.9	8.8	9.1
1/2"	37.6	99.7	100.0	71.0	20.0	29.0
3/8"	18.7	87.6	100.0	60.7	10.3	39.3
#4	4.0	21.2	99.6	45.3	15.4	54.7
#8	2.7	4.8	88.8	38.2	7.1	61.8
#16	2.1	2.1	66.2	28.3	9.9	71.7
#30	1.9	1.7	47.6	20.6	7.7	79.4
#50	1.8	1.5	24.5	11.0	9.5	89.0
#100	1.8	1.4	4.8	3.0	8.1	97.0
LBW	1.4	1.3	1.9	1.6	1.4	98.4

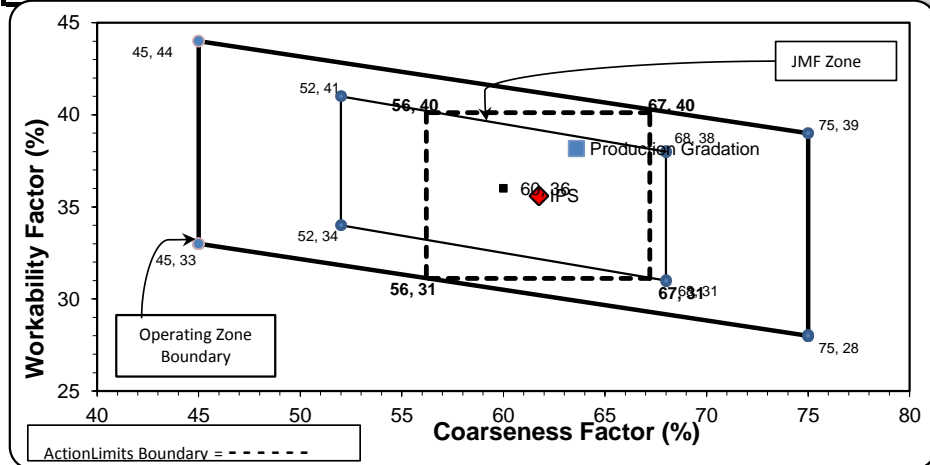


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Production Gradation Batch Plant Gradations Aggregate Supplier Gradations

Coarseness Factor: **64** Workability Factor: **38**



Initial Production Sample (IPS)

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

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LBW	1.1	0.6	98.9

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