

Aggregate Optimization Chart

MIX ID'S: DDD0K7E7, DDD0K7E8 and DDD0K7E9

Production Gradation Report

PLANT #: **P-102**

Sample Date: 5/7/18

Concrete Grade: **DM**

Contractor: _____

Dates Test Represents: 5/7/2018 to 5/14/2018

MDOT No.: _____

Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution
6AA	58-003	Stoneco	1450	8.64	2.69	48.4
26A	58-003	Stoneco	345	2.06	2.69	11.5
2NS	38-046	Chelsea	1200	7.26	2.65	40.1
Total Wt			2995	17.95		100.0

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



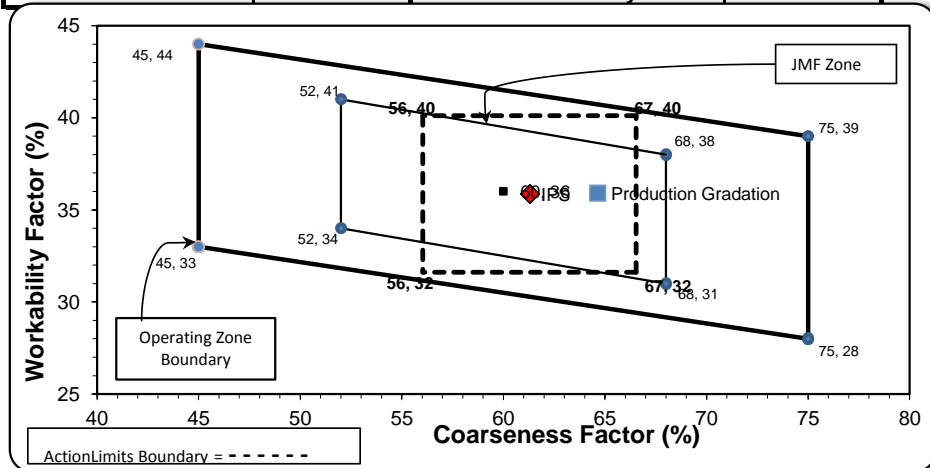
Superior Materials, LLC
 30701 W. 10 Mile Rd.
 Suite 500
 Farmington Hills, MI 48336

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"	99.5	100.0	100.0	99.8	0.2	0.2
3/4"	81.7	100.0	100.0	91.1	8.6	8.9
1/2"	39.6	99.8	100.0	70.7	20.4	29.3
3/8"	18.3	83.7	100.0	58.6	12.2	41.4
#4	2.4	21.6	100.0	43.7	14.9	56.3
#8	1.0	4.9	87.0	35.9	7.8	64.1
#16	1.0	2.1	66.0	27.2	8.7	72.8
#30	0.9	1.5	45.0	18.6	8.5	81.4
#50	0.8	1.4	22.0	9.4	9.3	90.6
#100	0.7	1.3	4.0	2.1	7.3	97.9
LBW	0.5	1.0	1.0	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:	65	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"	99.3	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:

Approved By:

Aggregate Optimization Chart

MIX ID'S: DDD0K7E7, DDD0K7E8 and DDD0K7E9

Production Gradation Report

PLANT #: **P-103**

Sample Date: 5/7/18

Concrete Grade: **DM**

Contractor: _____

Dates Test Represents: 5/7/2018 to 5/14/2018

MDOT No.: _____

Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution
6AA	58-003	Stoneco	1450	8.64	2.69	48.4
26A	58-003	Stoneco	345	2.06	2.69	11.5
2NS	38-046	Chelsea	1200	7.26	2.65	40.1
Total Wt			2995	17.95		100.0

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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"	81.7	100.0	100.0	91.1	8.6	8.9
1/2"	39.6	99.8	100.0	70.7	20.4	29.3
3/8"	18.3	83.7	100.0	58.6	12.2	41.4
#4	2.4	21.6	100.0	43.7	14.9	56.3
#8	1.0	4.9	87.0	35.9	7.8	64.1
#16	1.0	2.1	66.0	27.2	8.7	72.8
#30	0.9	1.5	45.0	18.6	8.5	81.4
#50	0.8	1.4	22.0	9.4	9.3	90.6
#100	0.7	1.3	4.0	2.1	7.3	97.9
LBW	0.5	1.0	1.0	0.8	1.3	99.2

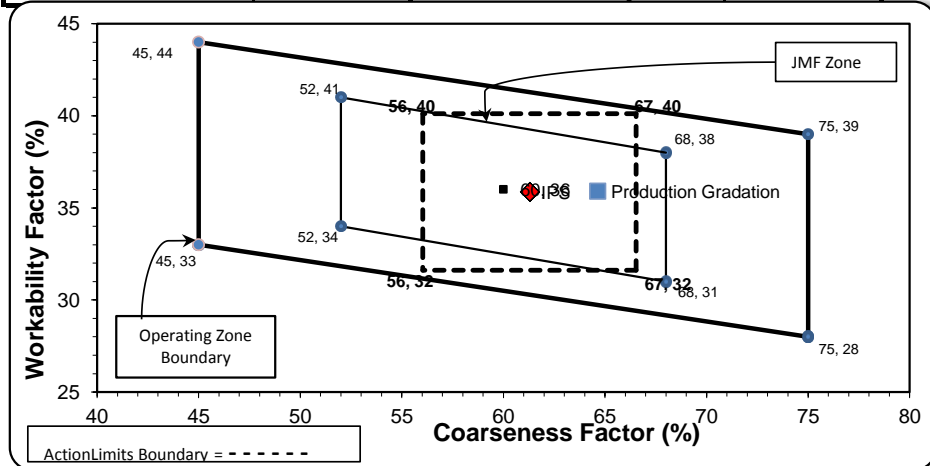


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Production Gradation Batch Plant Gradations Aggregate Supplier Gradations

Coarseness Factor: **65** Workability Factor: **36**



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: