

Aggregate Optimization Chart

MIX ID'S: DDD0K7E7, DDD0K7E8 and DDD0K7E9

Production Gradation Report

PLANT #: **P-102**

Sample Date: 5/21/18

Concrete Grade: DM

Contractor: _____

Dates Test Represents: 5/22/2018 to 5/28/2018

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%

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"	99.3	100.0	100.0	99.7	0.3	0.3
3/4"	81.3	100.0	100.0	90.9	8.7	9.1
1/2"	42.2	99.5	100.0	72.0	19.0	28.0
3/8"	20.1	86.3	100.0	59.7	12.2	40.3
#4	2.2	12.6	100.0	42.6	17.2	57.4
#8	1.1	3.0	87.0	35.7	6.8	64.3
#16	1.2	1.4	64.0	26.4	9.4	73.6
#30	1.0	1.1	42.0	17.4	8.9	82.6
#50	0.8	0.9	20.0	8.5	8.9	91.5
#100	0.8	0.9	3.0	1.7	6.8	98.3
LBW	0.5	0.7	0.5	0.5	1.2	99.5

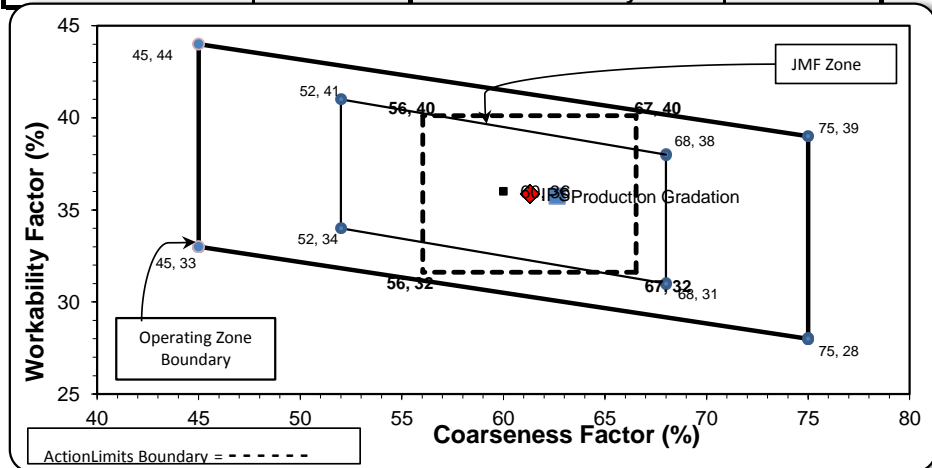


Superior Materials, LLC
 30701 W. 10 Mile Rd.
 Suite 500
 Farmington Hills, MI 48336

*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**



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: 5/21/18

Concrete Grade: DM

Contractor: _____

Dates Test Represents: 5/22/2018 to 5/28/2018

MDOT No.: _____

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#50	0.8	0.9	20.0	8.5	8.9	91.5
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LBW	0.5	0.7	0.5	0.5	1.2	99.5

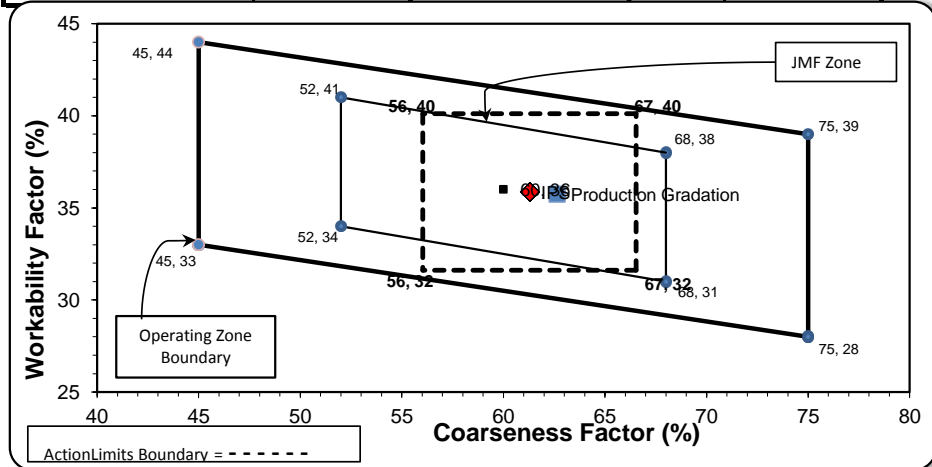


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Production Gradation Batch Plant Gradations Aggregate Supplier Gradations

Coarseness Factor: **63** 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
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LBW	0.7	1.2	99.3

PREPARED BY:
 SM, LLC Technical Service

Approved BY: