

Aggregate Optimization Chart

MIX ID'S: DDS257E7 and DDS257E8

Production Gradation Report

PLANT #: **P-32**

Sample Date: 11/27/17

Concrete Grade: **S2M**

Contractor: _____

Dates Test Represents: 11/27/2017 to 12/3/2017

MDOT No.: _____

Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution
6AA	71-47	Presque Isle	1530	9.36	2.62	49.2
26A	71-47	Presque Isle	355	2.17	2.62	11.4
2NS	95-13	Smelter Bay	1225	7.41	2.65	39.4
Total Wt			3110	18.94		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"	100.0	100.0	100.0	100.0	0.0	0.0
3/4"	88.2	100.0	100.0	94.2	5.8	5.8
1/2"	42.7	97.8	100.0	71.6	22.6	28.4
3/8"	18.9	87.3	100.0	58.7	12.9	41.3
#4	2.3	24.6	96.3	41.9	16.8	58.1
#8	1.6	6.4	85.7	35.3	6.6	64.7
#16	1.4	2.9	70.6	28.8	6.4	71.2
#30	1.4	2.1	49.8	20.5	8.3	79.5
#50	1.3	1.9	23.0	9.9	10.6	90.1
#100	1.3	1.8	7.7	3.9	6.0	96.1
LBW	1.2	1.5	2.5	1.7	2.1	98.3

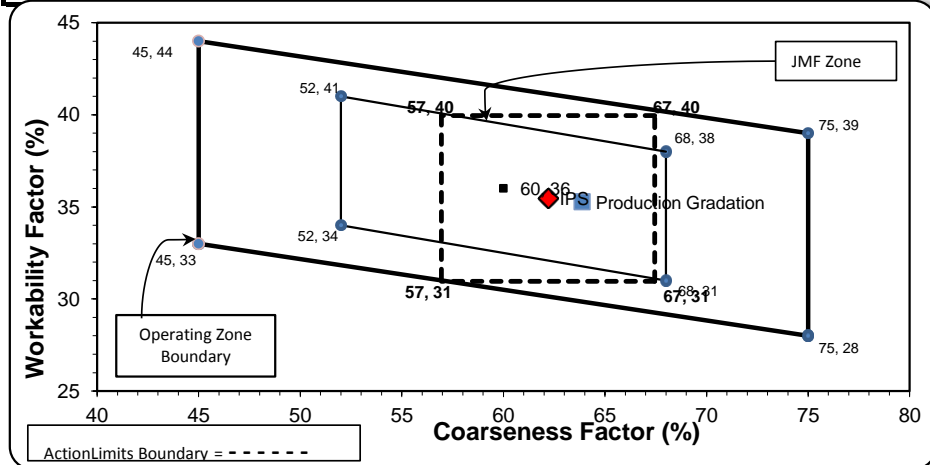


Superior Materials, LLC
 30701 W. 10 Mile Rd.
 Suite 500
 Farmington Hills, MI 48336

*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: 64 **Workability Factor: 35**



Initial Production Sample (IPS)

Coarseness Factor: 62		Workability Factor: 35	
Sieve	Cumulative % Passing	% Retained	Cumulative % Retained
2"	100.0	0.0	0.0
1.5"	100.0	0.0	0.0
1"	100.0	0.0	0.0
3/4"	94.0	6.0	6.0
1/2"	70.2	23.7	29.8
3/8"	59.9	10.4	40.1
#4	42.7	17.2	57.3
#8	35.5	7.2	64.5
#16	28.4	7.0	71.6
#30	19.2	9.2	80.8
#50	8.9	10.3	91.1
#100	3.1	5.9	96.9
LBW	1.4	1.7	98.6

PREPARED BY:
 SM, LLC Technical Service

Approved By: