

Note Horiba can only measure Powders in solution - cannot measure H<sub>2</sub>O because it is HYDROPHILIC and the Properties change while in solution.

# HORIBA LA-910

LA-910 system for Windows

for Windows(TM) [ WET(LA-910) ] Ver.3.72

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Filename : FeCrLi Powder\_B *Note - There is no correlation*  
 ID# : 201012231053039 *or conversion chart to*  
 ISO 9276-1 Format : OFF *measure Horiba with other instruments*  
 Sample Name : FeCrLi Powder  
 Material : FeCrLi  
 Source : RJ Lee

Circulation Speed : 5  
 Ultra sonic : OFF  
 Agitation Speed : OFF  
 Laser T% : 91.9(%)  
 Lamp T% : 93.1(%)  
 Calc. Level : 10  
 R.R.Index : FE  
 Variance : 3853.3(μm<sup>2</sup>)  
 S.D. : 62.0746(μm)  
 CV : 50.4470  
 Geo. Mean : 104.0881(μm) D-50  
 Chi-2 : 0.030544

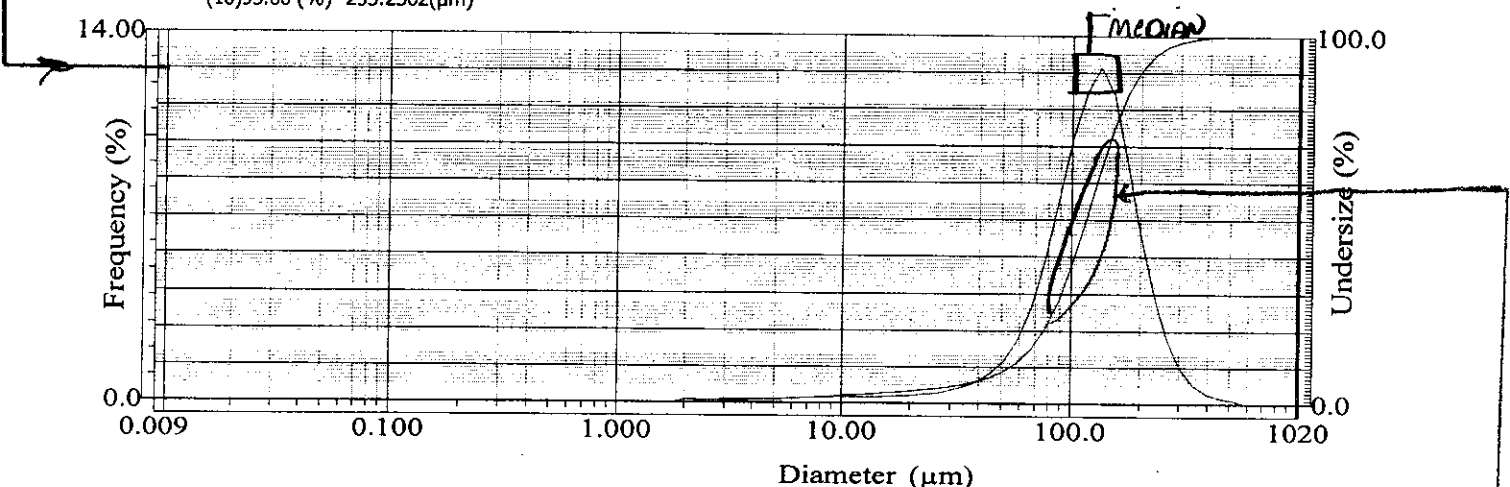
S.P. Area : 925.31(cm<sup>2</sup>/cm<sup>3</sup>) Span : 1.2373  
 Median : 115.9908(μm)  
 Mean : 123.0491(μm)  
 Mode : 124.3178(μm)

- Diameter on % : (1)5.000 (%) - 32.4418(μm)
- (2)10.00 (%) - 54.7631(μm)
- (3)20.00 (%) - 76.5107(μm)
- (4)30.00 (%) - 90.7479(μm)
- (5)40.00 (%) - 103.4153(μm)
- (6)60.00 (%) - 128.9893(μm)
- (7)70.00 (%) - 144.3819(μm)
- (8)80.00 (%) - 164.8102(μm)
- (9)90.00 (%) - 198.2767(μm)
- (10)95.00 (%) - 233.2502(μm)

*D-10 = 10% means 10% are Finer and 90% are Coarser*

*SPDN = D-10 MINUS D-90*  
D-50

*D-90 = 90% means 10% are Coarser and 90% are Finer*



| No. | Diameter | Freq. % | Under % | No. | Diameter | Freq. % | Under % | No. | Diameter | Freq. % | Under % | No. | Diameter | Freq. % | Under % |
|-----|----------|---------|---------|-----|----------|---------|---------|-----|----------|---------|---------|-----|----------|---------|---------|
| 1   | 0.022    | 0.000   | 0.000   | 23  | 0.445    | 0.000   | 0.000   | 45  | 8.816    | 0.222   | 1.854   | 67  | 174.616  | 9.216   | 83.924  |
| 2   | 0.026    | 0.000   | 0.000   | 24  | 0.510    | 0.000   | 0.000   | 46  | 10.097   | 0.227   | 2.081   | 68  | 200.000  | 6.490   | 90.414  |
| 3   | 0.029    | 0.000   | 0.000   | 25  | 0.584    | 0.000   | 0.000   | 47  | 11.565   | 0.231   | 2.312   | 69  | 229.075  | 4.250   | 94.663  |
| 4   | 0.034    | 0.000   | 0.000   | 26  | 0.669    | 0.000   | 0.000   | 48  | 13.246   | 0.237   | 2.549   | 70  | 262.376  | 2.529   | 97.192  |
| 5   | 0.039    | 0.000   | 0.000   | 27  | 0.766    | 0.000   | 0.000   | 49  | 15.172   | 0.249   | 2.798   | 71  | 300.518  | 1.369   | 98.561  |
| 6   | 0.044    | 0.000   | 0.000   | 28  | 0.877    | 0.000   | 0.000   | 50  | 17.377   | 0.268   | 3.066   | 72  | 344.206  | 0.707   | 99.268  |
| 7   | 0.051    | 0.000   | 0.000   | 29  | 1.005    | 0.000   | 0.000   | 51  | 19.904   | 0.299   | 3.365   | 73  | 394.244  | 0.393   | 99.661  |
| 8   | 0.058    | 0.000   | 0.000   | 30  | 1.151    | 0.000   | 0.000   | 52  | 22.797   | 0.343   | 3.708   | 74  | 451.556  | 0.218   | 99.879  |
| 9   | 0.067    | 0.000   | 0.000   | 31  | 1.318    | 0.000   | 0.000   | 53  | 26.111   | 0.408   | 4.116   | 75  | 517.200  | 0.121   | 100.000 |
| 10  | 0.076    | 0.000   | 0.000   | 32  | 1.510    | 0.000   | 0.000   | 54  | 29.907   | 0.502   | 4.618   | 76  | 592.387  | 0.000   | 100.000 |
| 11  | 0.087    | 0.000   | 0.000   | 33  | 1.729    | 0.000   | 0.000   | 55  | 34.255   | 0.637   | 5.255   | 77  | 678.504  | 0.000   | 100.000 |
| 12  | 0.100    | 0.000   | 0.000   | 34  | 1.981    | 0.102   | 0.102   | 56  | 39.234   | 0.840   | 6.096   | 78  | 777.141  | 0.000   | 100.000 |
| 13  | 0.115    | 0.000   | 0.000   | 35  | 2.269    | 0.108   | 0.210   | 57  | 44.938   | 1.152   | 7.248   | 79  | 890.116  | 0.000   | 100.000 |
| 14  | 0.131    | 0.000   | 0.000   | 36  | 2.599    | 0.114   | 0.324   | 58  | 51.471   | 1.643   | 8.891   | 80  | 1019.515 | 0.000   | 100.000 |
| 15  | 0.150    | 0.000   | 0.000   | 37  | 2.976    | 0.122   | 0.445   | 59  | 58.953   | 2.427   | 11.318  | 81  | 1020.000 | 0.000   | 100.000 |
| 16  | 0.172    | 0.000   | 0.000   | 38  | 3.409    | 0.130   | 0.576   | 60  | 67.523   | 3.658   | 14.976  |     |          |         |         |
| 17  | 0.197    | 0.000   | 0.000   | 39  | 3.905    | 0.140   | 0.716   | 61  | 77.339   | 5.457   | 20.433  |     |          |         |         |
| 18  | 0.226    | 0.000   | 0.000   | 40  | 4.472    | 0.152   | 0.869   | 62  | 88.583   | 7.762   | 28.196  |     |          |         |         |
| 19  | 0.259    | 0.000   | 0.000   | 41  | 5.122    | 0.167   | 1.036   | 63  | 101.460  | 10.141  | 38.337  |     |          |         |         |
| 20  | 0.296    | 0.000   | 0.000   | 42  | 5.867    | 0.183   | 1.219   | 64  | 116.210  | 11.828  | 50.164  |     |          |         |         |
| 21  | 0.339    | 0.000   | 0.000   | 43  | 6.720    | 0.200   | 1.419   | 65  | 133.103  | 12.796  | 62.960  |     |          |         |         |
| 22  | 0.389    | 0.000   | 0.000   | 44  | 7.697    | 0.213   | 1.632   | 66  | 152.453  | 11.748  | 74.708  |     |          |         |         |

*D-90 = 90.414%*

*D-50 = 50.164%*

The steeper the 'curve' the tighter the particle size distribution. In this example the curve is very long at both ends indicating a lot of small & a lot of large particles