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Engr 101 C

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Spreadsheet Lab#3

Concrete Compressive Strength Table and Graph

Table 1 - Strength, Force, and Water/Cement Ratio for Concrete Test Cylinders

|  |  |  |  |
| --- | --- | --- | --- |
| **Water/Cement Ratio** | **%Air** | **Compressive Force (lbs.)** | **Compressive Strength (psi)** |
| 0.42 | 3.0% | 73,000 | 5,809 |
| 0.43 | 3.0% | 76,500 | 6,088 |
| 0.43 | 3.0% | 82,000 | 6,525 |
| 0.45 | 2.2% | 67,500 | 5,371 |
| 0.45 | 2.2% | 72,000 | 5,730 |
| 0.45 | 2.8% | 71,500 | 5,690 |
| 0.46 | 2.4% | 75,000 | 5,968 |
| 0.46 | 2.3% | 74,900 | 5,960 |
| 0.46 | 2.3% | 72,500 | 5,769 |
| 0.48 | 3.2% | 71,000 | 5,650 |
| 0.49 | 4.0% | 68,500 | 5,451 |
| 0.50 | 2.8% | 70,500 | 5,610 |
| 0.50 | 2.8% | 71,500 | 5,690 |
| 0.51 | 2.8% | 69,000 | 5,491 |
| 0.51 | 2.8% | 62,500 | 4,974 |
| 0.52 | 2.8% | 68,000 | 5,411 |
| 0.52 | 2.8% | 65,500 | 5,212 |
| 0.52 | 2.1% | 62,500 | 4,974 |
| 0.53 | 2.8% | 67,000 | 5,332 |
| 0.54 | 2.4% | 56,000 | 4,456 |
| 0.55 | 2.9% | 68,000 | 5,411 |
| 0.55 | 2.9% | 67,000 | 5,332 |
| 0.56 | 2.9% | 69,000 | 5,491 |
| 0.57 | 3.0% | 53,000 | 4,218 |
| 0.58 | 3.0% | 45,000 | 3,581 |
| 0.58 | 3.0% | 43,000 | 3,422 |
| 0.58 | 1.6% | 51,500 | 4,098 |
| 0.59 | 1.6% | 52,500 | 4,178 |

Figure 1- Graph Relating Compressive Strength of Test Cylinder to Water/Cement Ratio