



Datum Alloys Six Sigma Data as at Nov 2011 (FM)

| Mulbury Six Sigma | | The calculator Six Sigma Calculator | | Freeware X |
|-------------------|---|---|--|--|
| | | | | January 2003 ? |
| Front Cover | Six Sigma Calculator V3.0 (August 2002) | | | |
| Sigma metric | Number of items in <u>sample</u> | <input type="text" value="15044"/> | <small>should be at least 30 for a sample or 10 for a census</small> | |
| Calculator | Total <u>population</u> from which sample taken | <input type="text" value="15044"/> | | |
| Process shift | <u>Period</u> of sample | <input type="text" value="460"/> | <input type="text" value="working days mon-fri"/> | |
| Sample sizes | Total number of <u>defects</u> found | <input type="text" value="2"/> | <small>this method is an approximation when the defect count is less than 5</small> | |
| Sigma table | Number of <u>opportunities</u> for defects per item | <input type="text" value="4"/> | | |
| Other metrics | <u>Cost</u> per defect (optional) | <input type="text" value="40"/> | | |
| | Anticipated long term <u>shift</u> | <input type="text" value="1.5"/> | <small>worst case short-long term process shift</small> | <input type="text" value="1.5"/> <small>shift factor</small> |
| | <u>Data collected</u> over the | <input type="text" value="very long term"/> | | |
| | | <input type="button" value="Calculate"/> | <input type="button" value="Reset Form"/> | |
| Results | Current Situation | | 90% Defect Reduction | |
| | Total opportunities | <input type="text" value="60176"/> | <small>reducing defects by nine-tenths is often close to a general one-sigma improvement</small> | |
| | Total defects | <input type="text" value="2"/> | <input type="text" value="0"/> | |
| | Defects Per Million Opportunities | <input type="text" value="33"/> | <input type="text" value="3"/> | |
| | Sigma Value - <u>long term</u> (performance) | <input type="text" value="3.99"/> | <small>applied LT shift</small> <input type="text" value="0"/> | <input type="text" value="4.53"/> |
| | Sigma Value - <u>short term</u> (capability) | <input type="text" value="5.49"/> | <small>applied ST shift</small> <input type="text" value="1.5"/> | <input type="text" value="6.03"/> |
| | Defects per year | <input type="text" value="1"/> | <input type="text" value="0"/> | |
| | Cost of defects per year | <input type="text" value="40"/> | <input type="text" value="4"/> | |
| | Annual defect cost saving | | <input type="text" value="36"/> | |