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| --- | --- | --- |
| Rating | Description | Definition |
| 10 | Absolute uncertainty | The product is not inspected or the defect caused by failure is not detectable |
| 9 | Very remote | Product is sampled, inspected, and released based on Acceptable Quality Level (AQL) sampling plans |
| 8 | Remote | Product is accepted based on no defectives in a sample |
| 7 | Very low | Product is 100% manually inspected in the process |
| 6 | Low | Product is 100% manually inspected using go/no-go or other mistake-proofing gauges |
| 5 | Moderate | Some Statistical Process Control (SPC) is used in process and product has a final inspection off-line |
| 4 | Moderately high | SPC is used and there is an immediate reaction to out-of-control conditions |
| 3 | High | An effective SPC program is in place with process capabilities (Cpk) greater than 1.33 |
| 2 | Very high | All product is 100% automatically inspected |
| 1 | Almost certain | The defect is obvious or there is 100% automatic inspection with regular calibration and preventive maintenance of the inspection equipment |

**Detection Rating Scale**

(Should be tailored to meet the needs of your company)

**Occurrence Rating Scale**

(Should be tailored to meet the needs of your company)

|  |  |  |
| --- | --- | --- |
| Rating | Description | Potential Failure Rate |
| 10 | **Very high:** Failure is almost  inevitable | More than one occurrence per day or a probability of more than three occurrences in 10 events (Cpk < 0.33) |
| 9 | **High:** Failures occur almost as often as not | One occurrence every three to four days or a probability of three occurrences in 10 events (Cpk ≈ 0.33) |
| 8 | **High**: Repeated failures | One occurrence per week or a probability of 5 occurrences in 100 events (Cpk ≈ 0.67) |
| 7 | **High**: Failures occur often | One occurrence every month or one occurrence in 100 events (Cpk ≈ 0.83) |
| 6 | **Moderately high:** Frequent failures | One occurrence every three months or three occurrences in 1,000 events (Cpk ≈ 1.00) |
| 5 | **Moderate:** Occasional failures | One occurrence every six months to one year or five occurrences in 10,000 events (Cpk ≈ 1.17) |
| 4 | **Moderately low**: Infrequent failures | One occurrence per year or six occurrences in 100,000 events (Cpk ≈ 1.33) |
| 3 | **Low:** Relatively few failures | One occurrence every one to three years or six occurrences in ten million events (Cpk ≈ 1.67) |
| 2 | **Low:** Failures are few and far between | One occurrence every three to five years or 2 occurrences in one billion events (Cpk ≈ 2.00) |
| 1 | **Remote:** Failure is unlikely | One occurrence in greater than five years or less than two occurrences in one billion events (Cpk > 2.00) |

**Severity Rating Scale**

(Should be tailored to meet the needs of your company)

|  |  |  |
| --- | --- | --- |
| Rating | Description | Definition (Severity of Effect) |
| 10 | Dangerously high | Failure could injure the customer or an employee |
| 9 | Extremely high | Failure would create noncompliance with government regulations |
| 8 | Very high | Failure renders the unit inoperable or unfit for use |
| 7 | High | Failure causes a high degree of customer dissatisfaction |
| 6 | Moderate | Failure results in a subsystem or partial malfunction of the product |
| 5 | Low | Failure creates enough of a performance loss to cause the customer to complain |
| 4 | Very Low | Failure can be overcome with modifications to the customer’s process or product, but there is minor performance loss |
| 3 | Minor | Failure would create a minor nuisance to the customer, but the customer can overcome it without performance loss |
| 2 | Very Minor | Failure may not be readily apparent to the customer, but would have minor effects on the customer’s process or product |
| 1 | None | Failure would not be noticeable to the customer and would not affect the customers process or product |