

**Chip Corrosion**

Test Report

**Standard Test Method for Iron Chip Corrosion for**

**Water–Miscible Metalworking Fluids**

Summary of Test Method

Cast iron chips are placed in a pitri dish containing a filter paper and diluted metalworking fluid. The dish is covered and allowed to stand overnight. The amount of rust stain on the filter paper is an indication of the corrosion control provided by the fluid.

Significance and Use

The results obtained by this test are a useful guideline in determining the ability of water-miscible metalworking fluids to prevent or minimize rust under specific conditions. There is usually a relationship between the results of this test and a similar ability of the subject coolant to prevent rust on nested parts or in drilled holes containing chips, etc. It must be understood, however, that conditions, metal types, etc. found in practice will not correlate quantitatively with these controlled laboratory conditions. The procedure may not be able to differentiate between two products with poor rust control due to the wide spacing between test dilutions.

Rating System

1: One to three defects, none larger than 1mm diameter

2: Greater than three defects, less than one percent total coverage

3: Greater than one percent, but less than five percent total coverage

4: Greater than five percent, but less than ten percent total coverage

5: Greater than ten percent total coverage

Testing Conducted For:

{{ customerName }}

Testing Completed By:

{{ operator }}

Testing Completed On:

{{ date }}

Comments:

{{ comments }}

Results:

|  |  |  |  |
| --- | --- | --- | --- |
| **Formulation** | **Percent Defect** | **Model Rating** | **User Rating** |

{% for item in data %}

|  |  |  |  |
| --- | --- | --- | --- |
| {{ item.formulation }} | {{ item.percent }} | {{ item.model\_rating }} | {{item.user\_rating}} |

{% endfor %}