**Variation of wear rate and co-efficient of friction with different load and sliding speed is shown in table 1-8.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Sr. No. | Initial Weight of disc(g) | Final Weight of disc(g) | Weight loss (g) | Load (N) | Speed (rpm) |
| 1 | 72.241 | 72.2395 | .0019 | 30 | 500 |
| 2 | 75.008 | 75.0043 | .004 | 40 | 500 |

Table 1.Wear rate of anodising coating with tungsten carbide pin at various loading and sliding conditions

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Sr. No. | Initial Weight (g) | Final Weight (g) | Weight loss (g) | Load (N) | Speed (rpm) |
| 1 | 72.24 | 72.2344 | .0029 | 30 | 500 |
| 2 | 75.011 | 75.0083 | .0023 | 40 | 500 |

Table 2.Wear rate of anodizing coating with mild steel pin at various loads and sliding conditions

Table 3.Wear rate of tin coating with tungsten carbide pin at various loading and sliding

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Sr. No. | Initial Weight of disc(g) | Final Weight of disc(g) | Weight loss (g) | Load (N) | Speed (rpm) |
| 1 | 102.75 | 102.5722 | .1764 | 30 | 500 |
| 2 | 88.228 | 88.133 | .0949 | 40 | 500 |

Table 4.Wear rate of tin coating with high carbon steel pin at various loading and sliding conditions

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Sr. No. | Initial Weight of disc(g) | Final Weight of disc(g) | Weight loss (g) | Load (N) | Speed (rpm) |
| 1 | 88.133 | 87.8825 | .2505 | 30 | 500 |
| 2 | 103.12 | 102.1486 | .9673 | 40 | 500 |

Table 5.Wear rate of tin coating with mild steel steel pin at various loading and sliding conditions

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Sr. No. | Initial Weight of disc(g) | Final Weight of disc(g) | Weight loss (g) | Load (N) | Speed (rpm) |
| 1 | 103.16 | 103.1159 | .0419 | 30 | 500 |
| 2 | 88.355 | 88.2279 | .1273 | 40 | 500 |

Table 6.Wear rate of soft material with mild steel pin at various loading and sliding conditions

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Sr. No. | Initial Weight of disc(g) | Final Weight of disc(g) | Weight loss (g) | Load (N) | Speed (rpm) |
| 1 | 82.176 | 82.0992 | .0768 | 30 | 500 |
| 2 | 91.5638 | 91.4405 | .1233 | 40 | 500 |

Table 7.Wear rate of soft material with high carbon steel pin at various loading and sliding conditions

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Sr. No. | Initial Weight of disc(g) | Final Weight of disc(g) | Weight loss (g) | Load (N) | Speed (rpm) |
| 1 | 82.099 | 81.9928 | .1064 | 30 | 500 |
| 2 | 91.687 | 91.5638 | .1234 | 40 | 500 |

Table 8.Wear rate of soft material with tungsten carbide pin at various loading and sliding conditions

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Sr. No. | Initial Weight of disc(g) | Final Weight of disc(g) | Weight loss (g) | Load (N) | Speed (rpm) |
| 1 | 82.237 | 82.176 | .0611 | 30 | 500 |
| 2 | 91.441 | 91.2827 | .1578 | 40 | 500 |