Table 1: Chemical composition, wt%, of the 52100 steel used.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| C | Cr | Mn | Mo | Si | Ni | Al | P | S | Cu | Co | Ca | Ti |
| 0.98 | 1.38 | 0.28 | 0.06 | 0.28 | 0.18 | 0.04 | 0.01 | 0.017 | 0.21 | 0.015 | 0.001 | <0.001 |