Table 4: Volume fraction of austenite (Vγ) for control, SC, and MPC samples in the top part of the table, and austenite (Vγ) and cementite (Vθ) only for the control sample in the bottom half, which is the only sample with primary cementite particles.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Analysis method |  | Volume fraction of retained austenite | | | |
| Treatment | Control | Surface cracked | Martensite cracked | |
|  |  | SC | MPC | |
| Tetragonality deduced from  020*α’* and 121*α’* , only non-  overlapping peaks used to determine *γ* content | Q | 0.05 | 0.14 | 0.15 | |
| Q-T | 0.04 | 0.12 | 0.12 | |
| Q-T-RCF | 0.04 | 0.10 | 0.11 | |
| Tetragonality deduced from  020*α’* and 121*α’* , all peaks  (including those that overlap) used to determine *γ* content | Q | 0.06 | 0.16 | 0.14 | |
| Q-T | 0.05 | 0.12 | 0.12 | |
| Q-T-RCF | 0.05 | 0.08 | 0.11 | |
|  |  | Control sample only | | |  |
|  |  | *Vγ* | *Vθ* |  | |
| Tetragonality deduced from  020*α’* and 121*α’*, all peaks  (including those that overlap) used to find volume fractions | Q | 0.05 | 0.09 |  | |
| Q-T | 0.04 | 0.05 |  | |
| Q-T-RCF | 0.05 | 0.05 |  | |