

| Concentration<br>(wt%)                  |         | $Z_i$ | $A_i$ | $F_i$ | $[ZAF]_i$ | $k_i$   |
|-----------------------------------------|---------|-------|-------|-------|-----------|---------|
| (a) $\Psi = 52.5^\circ$ , $E_0 = 15$ kV | 0.82 C  | 0.872 | 3.13  | 1.0   | 2.73      | 0.0030  |
|                                         | 6.11 W  | 1.407 | 1.014 | 1.0   | 1.428     | 0.00428 |
|                                         | 4.95 Mo | 1.12  | 1.14  | 0.996 | 1.277     | 0.00388 |
|                                         | 4.18 Cr | 0.972 | 1.012 | 0.836 | 0.823     | 0.0051  |
|                                         | 1.88 V  | 0.988 | 1.019 | 0.888 | 0.894     | 0.021   |
|                                         | 0.26 Mn | 0.995 | 1.009 | 0.998 | 1.002     | 0.0026  |
|                                         | 81.8 Fe | 0.981 | 1.009 | 0.997 | 0.987     | 0.829   |
|                                         |         |       |       |       |           |         |
| (b) $\Psi = 15.5^\circ$ , $E_0 = 15$ kV | 0.82 C  | 0.872 | 5.2   | 1.0   | 4.53      | 0.0018  |
|                                         | 6.11 W  | 1.407 | 1.041 | 1.0   | 1.465     | 0.0417  |
|                                         | 4.95 Mo | 1.12  | 1.349 | 0.998 | 1.508     | 0.0328  |
|                                         | 4.18 Cr | 0.972 | 1.034 | 0.883 | 0.889     | 0.0470  |
|                                         | 1.88 V  | 0.988 | 1.053 | 0.924 | 0.962     | 0.0195  |
|                                         | 0.26 Mn | 0.995 | 1.024 | 0.998 | 1.017     | 0.00256 |
|                                         | 81.8 Fe | 0.981 | 1.023 | 0.998 | 1.002     | 0.816   |
|                                         |         |       |       |       |           |         |
| (c) $\Psi = 52.5^\circ$ , $E_0 = 30$ kV | 0.82 C  | 0.907 | 5.32  | 1.0   | 4.83      | 0.0017  |
|                                         | 6.11 W  | 1.258 | 1.074 | 1.0   | 1.351     | 0.0452  |
|                                         | 4.95 Mo | 1.085 | 1.374 | 0.993 | 1.482     | 0.0334  |
|                                         | 4.18 Cr | 0.983 | 1.043 | 0.786 | 0.807     | 0.0518  |
|                                         | 1.88 V  | 1.001 | 1.065 | 0.843 | 0.899     | 0.0209  |
|                                         | 0.26 Mn | 1.002 | 1.030 | 0.996 | 1.029     | 0.00253 |
|                                         | 81.8 Fe | 0.986 | 1.032 | 0.994 | 1.012     | 0.808   |
|                                         |         |       |       |       |           |         |
| (d) $\Psi = 15.5^\circ$ , $E_0 = 30$ kV | 0.82 C  | 0.907 | 7.62  | 1.0   | 6.91      | 0.0012  |
|                                         | 6.11 W  | 1.258 | 1.196 | 1.0   | 1.505     | 0.0406  |
|                                         | 4.95 Mo | 1.085 | 1.77  | 0.995 | 1.912     | 0.0259  |
|                                         | 4.18 Cr | 0.983 | 1.116 | 0.839 | 0.921     | 0.0454  |
|                                         | 1.88 V  | 1.001 | 1.173 | 0.885 | 1.041     | 0.0181  |
|                                         | 0.26 Mn | 1.002 | 1.084 | 0.996 | 1.083     | 0.0024  |
|                                         | 81.8 Fe | 0.986 | 1.088 | 0.995 | 1.068     | 0.766   |
|                                         |         |       |       |       |           |         |

Tabell 5.5. ZAF-verdier til verktøystål som funksjon av akselerasjonsspenning og uttaksvinkel.