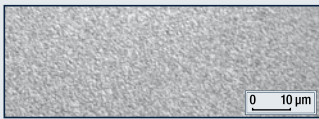




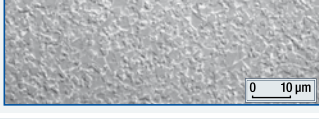
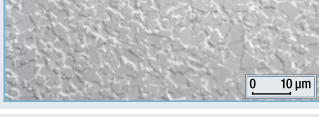




- EN TIGRA carbide grades – Technical Data
 DE TIGRA Hartmetallsorten – Technische Daten
 FR Nuances carbure TIGRA – Caractéristiques techniques
 IT I tipi di metallo duro TIGRA – Dati tecnici
 ES Calidades de metal duro TIGRA – Datos técnicos

| EN DE FR IT ES | TIGRA grade TIGRA - Sorte Nuance TIGRA Tipo TIGRA Calidad TIGRA | Binder Binder Liant Legante Composicion | Hardness Härte Dureté Durezza Durezza | | Bending strength Biegebruchfestigkeit Résistance à la flexion Resistenza flessionale Resistencia a la flexión | | Toughness Zähigkeit Ténacité Tenacità Tenacidad |
|----------------------------|---|---|---|--------|---|-------------------|---|
| | | | % | HV 10 | HRA | N/mm ² | |
| | T02MG-CR ISO: K01 USA: C4 +++ | 2.0 | > 2.400 | > 95.5 | 2300 | 334.000 | 7.0 |
| | T02SMG ISO: K01 USA: C4 +++ | 2.5 | 2350 | 95.3 | 2300 | 334.000 | 7.7 |
| | T03SMG ISO: K01 USA: C4 ++ | 3.5 | 2100 | 94.6 | 2600 | 377.000 | 7.5 |
| | T03MG-CR ISO: K01 USA: C4 ++ | 3.0 | 2050 | 94.5 | 2500 | 363.000 | 7.5 |
| | T03F-CR ISO: K01 USA: C4 + | 3.0 | 1950 | 94.1 | 2300 | 334.000 | 8.0 |
| | T04MG-CR ISO: K01 USA: C4 + | 4.3 | 1900 | 93.8 | 2350 | 341.000 | 8.6 |
| | T04F-CR ISO: K05 USA: C4 | 4.2 | 1800 | 93.3 | 2350 | 341.000 | 9.0 |
| | T05UMG ISO: K01-K10 USA: C3 ++ | 5.0 | 2050 | 94.5 | 2450 | 355.000 | 7.8 |
| | T06MG ISO: K01-K20 USA: C3 ++ | 6.0 | 1800 | 93.3 | 2700 | 392.000 | 8.4 |
| | T06F-CR ISO: K10 USA: C3 | 6.0 | 1740 | 92.9 | 2350 | 341.000 | 8.9 |
| | T06MF ISO: K20 USA: C3 | 6.5 | 1600 | 92.0 | 2500 | 363.000 | 9.4 |
| | T07MF-CR ISO: K20-K30 USA: C2-C3 | 7.5 | 1580 | 91.8 | 2600 | 377.000 | 10.1 |
| | T08MF ISO: K30 USA: C2 | 8.5 | 1510 | 91.3 | 2700 | 392.000 | 10.4 |
| | T10MG-E ISO: K10-K40 USA: C3 + | 10.0 | 1600 | 92.0 | 3600 | 522.000 | 9.8 |
| | T10MG ISO: K10-K40 USA: C3 + | 10.0 | 1650 | 92.3 | 3700 | 537.000 | 10.0 |
| | T12SMG USA: C1 ++ | 12.0 | 1700 | 92.7 | 4000 | 580.000 | 9.5 |
| | T12M ISO: > K40 USA: C1 | 12.0 | 1250 | 88.8 | 2800 | 406.000 | 14.0 |
| | T12M-CR ISO: > K40 USA: C1 | 12.0 | 1200 | 88.3 | 2700 | 392.000 | 13.9 |
| | T15C ISO: > K40 USA: Nail Cut | 15.0 | 890 | 84.5 | 3000 | 435.000 | > 20 |
| | TL15* ISO: K10-K40 USA: C3 + | 13.5 | 1450 | 90.8 | 3800 | 551.000 | 10.8 |
| | TL20* ISO: K10-K40 USA: C2 + | 20.0 | 1350 | 89.8 | 3800 | 551.000 | > 20 |

CR = Co + Ni + CR = corrosion resistant - korrosionsbeständig - anti-corrosif - inossidabile - anticorrosivo
 * Special binder - Spezialbinder - Liant spécial - Legante speciale - Composición especial

- EN TIGRA carbide grades – Grain sizes and binder content
 DE TIGRA Hartmetallsorten – Korngrößen und Bindergehalt
 FR Nuances carbure TIGRA – Grosseur du grain et contingent de liant
 IT I tipi di metallo duro TIGRA – Grossezza del grano e quota di legante
 ES Calidades de metal duro TIGRA – Tamaño del grano y cuota de la composición

| EN | Shortform | Explanation | Grain size | |
|----|---------------|--------------------------|---------------------|---|
| DE | Abkürzung | Erklärung | Korngröße | |
| FR | Abréviation | Explication | Grosseur du grain | |
| IT | Abbreviazione | Spiegazione | Grossezza del grano | |
| ES | Abreviatura | Explicación | Tamaño del grano | |
| | | | (μm) | |
| | NG | Nano Grain | 0.2 |  |
| | UMG | Ultra Micro Grain | 0.2 - 0.5 |  |
| | SMG | Sub Micro Grain | 0.5 - 0.7 |  |
| | MG | Micro Grain | 0.7 - 1.0 |  |
| | F | Fine Grain | 1.0 - 1.4 |  |
| | MF | Medium Fine Grain | 1.4 - 2.5 |  |
| | M | Medium Grain | 2.5 - 4.0 |  |
| | C | Coarse Grain | 4.0 - 10.0 |  |
| | EC | Extra Coarse | > 10 |  |

- EN Detailed application recommendations can be found in the individual chapters.
 DE Detaillierte Anwendungsempfehlungen finden Sie in den einzelnen Kapiteln.
 FR Pour les recommandations d'application détaillées, veuillez voir aux chapitres suivants.
 IT Suggestimenti di impiego dettagliati si trovano nei singoli capitoli.
 ES Recomendaciones de aplicación detalladas, se encuentran en los capítulos individuales.