

# Tru-Core<sup>®</sup> CORED WELDING WIRES

## TYPICAL WELD METAL COMPOSITION (as required per AWS)

|             |                            | C                  | Mn                 | Si                 | P                   | S                   | Cu                 | Ni                 | Cr                 | Mo                 | V                  |
|-------------|----------------------------|--------------------|--------------------|--------------------|---------------------|---------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| FC 70T      | 100% CO <sub>2</sub>       | 0.06               | 1.6                | 0.67               | 0.013               | 0.01                | 0.09               | 0.35               | 0.05               | 0.01               | 0.012              |
|             | <b>AWS/ASME</b>            | <b>0.12 (max.)</b> | <b>1.75 (max.)</b> | <b>0.90 (max.)</b> | <b>0.03 (max.)</b>  | <b>0.03 (max.)</b>  | <b>0.35 (max.)</b> | <b>0.50 (max.)</b> | <b>0.20 (max.)</b> | <b>0.30 (max.)</b> | <b>0.08 (max.)</b> |
| FC 71T      | 100% CO <sub>2</sub>       | 0.04               | 1.54               | 0.41               | 0.01                | 0.008               | 0.06               | 0.02               | 0.06               | 0.01               | 0.016              |
|             | 75% Ar/25% CO <sub>2</sub> | 0.05               | 1.41               | 0.45               | 0.009               | 0.01                | 0.06               | 0.02               | 0.03               | 0.002              | 0.017              |
|             | <b>AWS/ASME</b>            | <b>0.12 (max.)</b> | <b>1.75 (max.)</b> | <b>0.90 (max.)</b> | <b>0.03 (max.)</b>  | <b>0.03 (max.)</b>  | <b>0.35 (max.)</b> | <b>0.50 (max.)</b> | <b>0.20 (max.)</b> | <b>0.30 (max.)</b> | <b>0.08 (max.)</b> |
| FC 71T-12C  | 100% CO <sub>2</sub>       | 0.04               | 1.36               | 0.36               | 0.007               | 0.009               | 0.06               | 0.42               | 0.04               | 0.001              | 0.02               |
|             | <b>AWS/ASME</b>            | <b>0.12 (max.)</b> | <b>1.6 (max.)</b>  | <b>0.9 (max.)</b>  | <b>0.03 (max.)</b>  | <b>0.03 (max.)</b>  | <b>0.35 (max.)</b> | <b>0.5 (max.)</b>  | <b>0.2 (max.)</b>  | <b>0.3 (max.)</b>  | <b>0.08 (max.)</b> |
| FC 71T-12C  | 75% Ar/25% CO <sub>2</sub> | 0.05               | 1.35               | 0.32               | 0.011               | 0.007               | 0.06               | 0.39               | 0.05               | 0.01               | 0.019              |
|             | <b>AWS/ASME</b>            | <b>0.12 (max.)</b> | <b>1.6 (max.)</b>  | <b>0.9 (max.)</b>  | <b>0.03 (max.)</b>  | <b>0.03 (max.)</b>  | <b>0.35 (max.)</b> | <b>0.5 (max.)</b>  | <b>0.2 (max.)</b>  | <b>0.3 (max.)</b>  | <b>0.08 (max.)</b> |
| FC 71T-AG   | 75% Ar/25% CO <sub>2</sub> | 0.04               | 1.38               | 0.43               | 0.009               | 0.007               | 0.06               | 0.02               | 0.06               | 0.01               | 0.016              |
|             | <b>AWS/ASME</b>            | <b>0.12 (max.)</b> | <b>1.75 (max.)</b> | <b>0.90 (max.)</b> | <b>0.03 (max.)</b>  | <b>0.03 (max.)</b>  | <b>0.35 (max.)</b> | <b>0.50 (max.)</b> | <b>0.20 (max.)</b> | <b>0.30 (max.)</b> | <b>0.08 (max.)</b> |
| FC 71T-CG   | 100% CO <sub>2</sub>       | 0.05               | 1.38               | 0.35               | 0.01                | 0.007               | 0.06               | 0.48               | 0.05               | 0                  | 0.014              |
|             | <b>AWS/ASME</b>            | <b>0.12 (max.)</b> | <b>1.75 (max.)</b> | <b>0.90 (max.)</b> | <b>0.03 (max.)</b>  | <b>0.03 (max.)</b>  | <b>0.35 (max.)</b> | <b>0.50 (max.)</b> | <b>0.20 (max.)</b> | <b>0.30 (max.)</b> | <b>0.08 (max.)</b> |
| FC 81T-Ni1  | 100% CO <sub>2</sub>       | 0.04               | 1.23               | 0.45               | 0.006               | 0.007               |                    | 0.99               | 0.05               | 0.001              | 0.02               |
|             | <b>AWS/ASME</b>            | <b>0.12 (max.)</b> | <b>1.50 (max.)</b> | <b>0.80 (max.)</b> | <b>0.030 (max.)</b> | <b>0.030 (max.)</b> |                    | <b>0.80 – 1.10</b> | <b>0.15 (max.)</b> | <b>0.35 (max.)</b> | <b>0.05 (max.)</b> |
| FC 81T-Ni1M | 75% Ar/25% CO <sub>2</sub> | 0.04               | 1.38               | 0.54               | 0.009               | 0.009               |                    | 0.97               | 0.03               | 0                  | 0.05               |
|             | <b>AWS/ASME</b>            | <b>0.12 (max.)</b> | <b>1.50 (max.)</b> | <b>0.80 (max.)</b> | <b>0.030 (max.)</b> | <b>0.030 (max.)</b> |                    | <b>0.80 – 1.10</b> | <b>0.15 (max.)</b> | <b>0.35 (max.)</b> | <b>0.05 (max.)</b> |
| MC 70C      | 75% Ar/25% CO <sub>2</sub> | 0.04               | 1.6                | 0.82               | 0.009               | 0.01                | 0.06               | 0.02               | 0.05               | 0.01               | 0                  |
|             | 90% Ar/10% CO <sub>2</sub> | 0.04               | 1.61               | 0.85               | 0.006               | 0.009               | 0.05               | 0.02               | 0.04               | 0.001              | <0.001             |
|             | <b>AWS/ASME</b>            | <b>0.12 (max.)</b> | <b>1.75 (max.)</b> | <b>0.90 (max.)</b> | <b>0.03 (max.)</b>  | <b>0.03 (max.)</b>  | <b>0.50 (max.)</b> | <b>0.50 (max.)</b> | <b>0.20 (max.)</b> | <b>0.30 (max.)</b> | <b>0.08 (max.)</b> |
| MC 80C-Ni1  | 95% Ar /5% O <sub>2</sub>  | 0.04               | 1.48               | 0.43               | 0.008               | 0.009               | 0.05               | 0.9                |                    | 0.14               | 0                  |
|             | 75% Ar/25% CO <sub>2</sub> | 0.04               | 1.41               | 0.4                | 0.008               | 0.009               | 0.05               | 0.94               |                    | 0.14               | 0                  |
|             | <b>AWS/ASME</b>            | <b>0.12 (max.)</b> | <b>1.50 (max.)</b> | <b>0.90 (max.)</b> | <b>0.025 (max.)</b> | <b>0.030 (max.)</b> | <b>0.35 (max.)</b> | <b>0.80-1.10</b>   |                    | <b>0.30 (max.)</b> | <b>0.03 (max.)</b> |
| MC 110C-K4  | 95% Ar /5% O <sub>2</sub>  | 0.04               | 1.67               | 0.43               | 0.008               | 0.01                | 0.04               | 2.21               | 0.34               | 0.46               | 0                  |
|             | <b>AWS/ASME</b>            | <b>0.15 (max.)</b> | <b>0.75 – 2.25</b> | <b>0.80 (max.)</b> | <b>0.025 (max.)</b> | <b>0.025 (max.)</b> | <b>0.35 (max.)</b> | <b>0.50 – 2.50</b> | <b>0.15-0.65</b>   | <b>0.25 – 0.65</b> | <b>0.03 (max.)</b> |