

| Classifications | | | | | | | | | | | | | | | | |
|--|----------------|------------------------------|---------------|------|-----|---------|-----------|-------------|----------------------|----------------|----------------------|----------------|-----------------|----------------|------------------------------|----------------|
| EN 14700 | DIN 8555 | | Material-No. | | | | | | | | | | | | | |
| S Fe8 | MSG 3-GZ-55-ST | | Special alloy | | | | | | | | | | | | | |
| Characteristics and field of use | | | | | | | | | | | | | | | | |
| <p>UTP A 73 G 2 is used for highly wear resistant buildups on machine parts and tools, subject to heavy abrasion and compression combined with moderate impact at elevated temperatures, such as forging tools, roll mandrils, hot trimming knives, mangle and axial rolls as well as for the production of high-quality working surfaces by cladding non- or low-alloy base material.</p> <p>Machinable by grinding or with tungstene carbide tools</p> <p>Hardness of the pure weld deposit :</p> <table> <tr> <td>untreated</td> <td>53 – 58 HRC</td> </tr> <tr> <td>soft-annealed 820° C</td> <td>approx. 200 HB</td> </tr> <tr> <td>hardened 1050° C/oil</td> <td>approx. 58 HRC</td> </tr> <tr> <td>tempered 600° C</td> <td>approx. 53 HRC</td> </tr> <tr> <td>1 layer on non-alloyed steel</td> <td>approx. 45 HRC</td> </tr> </table> | | | | | | | untreated | 53 – 58 HRC | soft-annealed 820° C | approx. 200 HB | hardened 1050° C/oil | approx. 58 HRC | tempered 600° C | approx. 53 HRC | 1 layer on non-alloyed steel | approx. 45 HRC |
| untreated | 53 – 58 HRC | | | | | | | | | | | | | | | |
| soft-annealed 820° C | approx. 200 HB | | | | | | | | | | | | | | | |
| hardened 1050° C/oil | approx. 58 HRC | | | | | | | | | | | | | | | |
| tempered 600° C | approx. 53 HRC | | | | | | | | | | | | | | | |
| 1 layer on non-alloyed steel | approx. 45 HRC | | | | | | | | | | | | | | | |
| Typical analysis in % | | | | | | | | | | | | | | | | |
| C | Si | Mn | Cr | Mo | Ti | Fe | | | | | | | | | | |
| 0.35 | 0.3 | 1.2 | 7.0 | 2.0 | 0.3 | balance | | | | | | | | | | |
| Welding instruction | | | | | | | | | | | | | | | | |
| <p>Clean welding area to metallic bright. Cracks in the base material have to be gouged out completely. Preheating temperature of 400 °C on tools should be maintained. Stress relief/annealing is recommended at 550 °C.</p> | | | | | | | | | | | | | | | | |
| Wire diameter [mm] | Current type | Shielding gas (EN ISO 14175) | | | | | | | | | | | | | | |
| 0.8* | DC (+) | M 12 | M 13 | M 21 | C 1 | | | | | | | | | | | |
| 1.0 | DC (+) | M 12 | M 13 | M 21 | C 1 | | | | | | | | | | | |
| 1.2 | DC (+) | M 12 | M 13 | M 21 | C 1 | | | | | | | | | | | |
| 1.6 | DC (+) | M 12 | M 13 | M 21 | C 1 | | | | | | | | | | | |
| *available on request | | | | | | | | | | | | | | | | |