

Fe-1.5 % Cu carbonitrided; iron: water atomised WPL 150

Material:

copper:

| | sintering: 11 | 120 °C, 30 mi | n, 70 % N _z + | 30 % H ₂ | | | | | |
|---|---|--------------------------------------|--------------------------|---------------------|-------------------|---|-----------------------------------|-----------------------|---------------|
| | heat treatment: 920 °C, 3.5 h, endogas with 0.17 % CO ₂ + NH ₃ ; oil 60 | | | | | | | | |
| | no tempering mentioned; case depth: through | | | | | | | | |
| | density: 6.8 ± 0.05 g/cm ³ | | | | | | | | |
| | mech. properties: H = 537 HV10; R _{p0.2} = -; R _m = 625 MPa | | | | | | | | |
| Specimen: | smooth, K _t = 1.0; ISO 3928; surface as sintered | | | | | | | | |
| Loading mode: | axial, R = 0; 25 Hz | | | | | | | | |
| Limiting no. of cycle | 2 - 106 | | | | | | | | |
| Limiting no. of cycle | | | | | | | | | |
| | 148 MPa (de | ecided) | | | | | | | |
| Endurance limit: Reference: | 148 MPa (de | | stigkeit vo | n verschied | enen Sinte | rstählen und | | | |
| Endurance limit: | 148 MPa (de C.M. Sonsine | o: Schwingfe | _ | | | rstählen und No. FB-170; F | | nstitut | |
| Endurance limit: | 148 MPa (de C.M. Sonsine | o: Schwingfe | _ | | | | | nstitut 251 | MPa |
| Endurance limit: Reference: | 148 MPa (de C.M. Sonsine Bemessung | o: Schwingfe skriterien fü | irgesintert | e Bauteile; | LBF-Report | No. FB-170; F | raunhofer-I | | MPa · 1000 |
| Endurance limit: Reference: Stress amplitude: | 148 MPa (de C.M. Sonsino Bemessung 140 | o: Schwingfe skriterien fü 145 | ir gesintert 149 | e Bauteile; 154 | LBF-Report 169 | No. FB-170; F | raunhofer-I 219 | 251 | |
| Endurance limit: Reference: Stress amplitude: | 148 MPa (de C.M. Sonsino Bemessung 140 | o: Schwingfe skriterien fü 145 | ir gesintert 149 | e Bauteile; 154 | LBF-Report 169 | No. FB-170; F 184 147,901 | 219 27,988 | 251 6,067 | |
| Endurance limit: Reference: Stress amplitude: | 148 MPa (de C.M. Sonsino Bemessung 140 | o: Schwingfe skriterien fü 145 | ir gesintert 149 | e Bauteile; 154 | LBF-Report 169 | No. FB-170; F 184 147,901 188,786 | 219 27,988 31,693 | 251 6,067 9,099 | |
| Endurance limit: Reference: Stress amplitude: | 148 MPa (de C.M. Sonsino Bemessung 140 | o: Schwingfe skriterien fü 145 | ir gesintert 149 | e Bauteile; 154 | LBF-Report 169 | No. FB-170; F 184 147,901 188,786 199,054 | 219 27,988 31,693 41,493 | 251 6,067 9,099 | |