

| Material:                             | Fe-2 %Cu-0.8 %C; sponge iron   |              |                      |              |                      |                 |  |
|---------------------------------------|--|--------------|----------------------|--------------|----------------------|-----------------|--|
|                                       | sintering: 1130°C, 30 min, dissociated ammonia   |              |                      |              |                      |                 |  |
|                                       | heat treatment: -  |              |                      |              |                      |                 |  |
|                                       | density: 6.29 g/cm <sup>3</sup>  |              |                      |              |                      |                 |  |
|                                       | mech. properties: H=43 HRB; R <sub>50.2</sub> =-; R <sub>m</sub> =267 MPa  |              |                      |              |                      |                 |  |
| Specimen:                             | smooth, K <sub>t</sub> = 1.0; surface as sintered  |              |                      |              |                      |                 |  |
| Loading mode:                         | plane bendi  |              |                      |              |                      |                 |  |
| Limiting no. of cycles:               | 107  |              |                      |              |                      |                 |  |
| Endurance limit:                      | 98 MPa   |              |                      |              |                      |                 |  |
| Reference:                            | M. Onoda: Fatigue Strength of Sintered Structural Component Materials<br>Japan Powder Metallurgical Association, Tokyo, 1983 (in Japanese) |              |                      |              |                      |                 |  |
|                                       | Japan Powd   | er Metallurg | gical Associa        | ation, Tokyo | , 1983 (in Ja        | ipanese)        |  |
| Stress amplitude:                     | Japan Powd   | er Metallurg | gical Associa<br>157 | ation, Tokyo | , 1983 (in Ja<br>236 | ipanese)<br>MPa |  |
| Stress amplitude:<br>Oydesto failure: |  | 118          |                      |              | ,                    |                 |  |