**Very high cycle fatigue properties of high strength steel**

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**ACKNOWLEDGEMENTS**

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1. Sakai T. et al., In: Zimmermann M. and Christ H.-J.*,* eds. *Seventh International Conference on Very High Cycle Fatigue*, DVM, Dresden, 2017; 57–62.
2. Yoshinaka F. et al., *Fatigue Fract Eng Mater Struct*. 2019; 42: 2093–2105.
3. Oguma H. and Nakamura T., *Int J Fatigue.* 2013; 50: 89‒93.
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Table 1 Mechanical properties of high strength steel.

|  |  |  |  |
| --- | --- | --- | --- |
| 0.2% proof stress [MPa] | Tensile strength[MPa] | Elongation[%] | Reduction of area[%] |
| 1400 | 2140 | 11 | 44 |



Fig. 1 *S-N* plots of the material used.



Fig. 2 Subsurface fracture surface.