

ISO/TR 10771-2:2008-12 (E)

Hydraulic fluid power - Fatigue pressure testing of metal pressure-containing envelopes - Part 2: Rating methods

Contents	Page
Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	2
4 Selection of material factors	2
5 Determination of cyclic test pressure	2
6 Conduct of fatigue test	3
7 Rating by similarity	4
8 Rating declaration	4
9 Identification statement (reference to this part of ISO 10771)	4
Annex A (informative) Material factor database	5
A.1 Values of coefficient of variation, k_o , for commonly used metals	5
A.2 Procedures used to establish values of coefficient of variation, k_o , for the metals listed in Table A.1	5
Annex B (normative) Calculation of variability factor KV	13
B.1 General	13
B.2 Method	13
Annex C (informative) Proposal for an acceleration factor	15
C.1 General	15
C.2 Extrapolating data to 107 cycles	15
C.3 Examples	19
Annex D (informative) Basis of fatigue pressure rating [9]	21
D.1 Basis of pressure rating	21
D.2 Statistical analysis theory	22
D.3 Fatigue distribution data	28
D.4 Data calculation example	33
D.5 Raw data points for sample problem	39
Bibliography	40