



International
Standard

ISO 11782-2

Corrosion of metals and alloys —
Corrosion fatigue testing —

Part 2:

Crack propagation testing using
precracked specimens

AMENDMENT 1

Corrosion des métaux et alliages — Essais de fatigue-corrosion —

Partie 2: Essais d'amorce de rupture sur des éprouvettes

pré-fissurées

AMENDEMENT 1

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AMENDMENT 1

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This document was prepared by Technical Committee ISO/TC 156, *Corrosion of metals and alloys*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 262, *Metallic and other inorganic coatings, including for corrosion protection and corrosion testing of metals and alloys*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

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Corrosion of metals and alloys — Corrosion fatigue testing —

Part 2: Crack propagation testing using precracked specimens

AMENDMENT 1

4.2.2

Move Table 1 at the end of last paragraph, as follows:

Specimen geometries which are frequently used for corrosion fatigue crack growth rate testing include the following:

- three-point single edge notch bend (SENB3);
- four-point single edge notch bend (SENB4);
- compact tension (CT);
- centre-cracked tension (CCT).

Details of standard specimen designs for each of these types of specimen are given in Figures 3 to 6 and permitted notch geometries are given in Figure 7. Suitable machining tolerances are given in Table 1.

Table 1 — Dimensions of specimens with tolerances

Dimension	Tolerances	Surface finish, squareness and parallelism
L G H F_1	$\pm 0,01 W$	Surfaces shall be perpendicular and parallel as applicable to within $0,002 W$ (Total indicator reading) Surface finish of faces perpendicular to the line of the notch root to be $Ra 0,8 \mu m$
F	$\pm 0,004 W$	Notch to be equidistant about centre-line to within $0,01 W$
D	$+ 0,004 W$ 0	Holes to be square to faces within $\pm 0,007 5 W$ and parallel within $\pm 0,000 5 W$ Surface finish $Ra 0,4 \mu m$

4.2.3

Move Table 2 to Table 5 at the end of last paragraph, as follows:

The values of Y appropriate to the four specimen geometries discussed above are given in Tables 2 to 5.

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Table 2 — Stress intensity factor function values for SENB3 specimens

a/W	0,000	0,001	0,002	0,003	0,004	0,005	0,006	0,007	0,008	0,009
0,10	3,39	3,40	3,42	3,43	3,45	3,46	3,48	3,49	3,50	3,52
0,11	3,53	3,55	3,56	3,58	3,59	3,60	3,62	3,63	3,64	3,66
0,12	3,67	3,69	3,70	3,71	3,73	3,74	3,75	3,77	3,78	3,79
0,13	3,81	3,82	3,83	3,85	3,86	3,87	3,89	3,90	3,91	3,93
0,14	3,94	3,95	3,96	3,98	3,99	4,00	4,02	4,03	4,04	4,05
0,15	4,07	4,08	4,09	4,11	4,12	4,13	4,14	4,16	4,17	4,18
0,16	4,19	4,21	4,22	4,23	4,25	4,26	4,27	4,28	4,30	4,31
0,17	4,32	4,33	4,35	4,36	4,37	4,38	4,40	4,41	4,42	4,43
0,18	4,45	4,46	4,47	4,48	4,50	4,51	4,52	4,54	4,55	4,56
0,19	4,57	4,59	4,60	4,61	4,62	4,64	4,65	4,66	4,67	4,69
0,20	4,70	4,71	4,72	4,74	4,75	4,76	4,78	4,79	4,80	4,81
0,21	4,83	4,84	4,85	4,87	4,88	4,89	4,90	4,92	4,93	4,94
0,22	4,96	4,97	4,98	5,00	5,01	5,02	5,03	5,05	5,06	5,07
0,23	5,09	5,10	5,11	5,13	5,14	5,15	5,17	5,18	5,19	5,21
0,24	5,22	5,23	5,25	5,26	5,27	5,29	5,30	5,32	5,33	5,34
0,25	5,36	5,37	5,38	5,40	5,41	5,43	5,44	5,45	5,47	5,48
0,26	5,49	5,51	5,52	5,54	5,55	5,57	5,58	5,59	5,61	5,62
0,27	5,64	5,65	5,67	5,68	5,69	5,71	5,72	5,74	5,75	5,77
0,28	5,78	5,80	5,81	5,83	5,84	5,86	5,87	5,89	5,90	5,92
0,29	5,93	5,95	5,96	5,98	5,99	6,01	6,02	6,04	6,05	6,07
0,30	6,08	6,10	6,12	6,13	6,15	6,16	6,18	6,20	6,21	6,23
0,31	6,24	6,26	6,28	6,29	6,31	6,32	6,34	6,36	6,37	6,39
0,32	6,41	6,42	6,44	6,46	6,47	6,49	6,51	6,52	6,54	6,56
0,33	6,57	6,59	6,61	6,63	6,64	6,66	6,68	6,69	6,71	6,73
0,34	6,75	6,77	6,78	6,80	6,82	6,84	6,85	6,87	6,89	6,91
0,35	6,93	6,95	6,96	6,98	7,00	7,02	7,04	7,06	7,08	7,09
0,36	7,11	7,13	7,15	7,17	7,19	7,21	7,23	7,25	7,27	7,29
0,37	7,31	7,33	7,34	7,36	7,38	7,40	7,42	7,44	7,46	7,48
0,38	7,51	7,53	7,55	7,57	7,59	7,61	7,63	7,65	7,67	7,69
0,39	7,71	7,73	7,75	7,78	7,80	7,82	7,84	7,86	7,88	7,91
0,40	7,93	7,95	7,97	7,99	8,02	8,04	8,06	8,08	8,11	8,13
0,41	8,15	8,17	8,20	8,22	8,24	8,27	8,29	8,31	8,34	8,36
0,42	8,38	8,41	8,43	8,46	8,48	8,50	8,53	8,55	8,58	8,60
0,43	8,63	8,65	8,68	8,70	8,73	8,75	8,78	8,80	8,83	8,85
0,44	8,88	8,90	8,93	8,96	8,98	9,01	9,04	9,06	9,09	9,12
0,45	9,14	9,17	9,20	9,22	9,25	9,28	9,31	9,33	9,36	9,39
0,46	9,42	9,45	9,47	9,50	9,53	9,56	9,59	9,62	9,65	9,68
0,47	9,70	9,73	9,76	9,79	9,82	9,85	9,88	9,91	9,94	9,97
0,48	10,01	10,04	10,07	10,10	10,13	10,16	10,19	10,22	10,26	10,29
0,49	10,32	10,35	10,38	10,42	10,45	10,48	10,52	10,55	10,58	10,62
0,50	10,65	10,68	10,72	10,75	10,79	10,82	10,86	10,89	10,93	10,96
0,51	11,00	11,03	11,07	11,10	11,14	11,18	11,21	11,25	11,29	11,32
0,52	11,36	11,40	11,43	11,47	11,51	11,55	11,59	11,63	11,68	11,70
0,53	11,74	11,78	11,82	11,86	11,90	11,94	11,98	12,02	12,06	12,10