

DIN EN 15664-1:2026-06 (E)

Influence of metallic materials on water intended for human consumption - Dynamic rig test for assessment of metal release - Part 1: Design and operation

Contents		Page
European foreword		4
Introduction		5
1	Scope	6
2	Normative references	6
3	Terms and definitions	7
4	Principle	9
5	Test rig	9
5.1	General	9
5.2	Test rig arrangement	10
5.3	Control line	10
5.4	Test lines	10
5.4.1	General	10
5.4.2	Materials in the form of pipes	10
5.4.3	Materials in the form of test pieces	10
6	Operating conditions	11
6.1	General	11
6.2	Conditioning	11
6.3	Fractional Sampling	11
6.3.1	General	11
6.3.2	Calculation and expression of results for fractional sampling	11
6.3.3	Requirements for the hydraulic function of the test rig	13
6.3.4	Determination of sampling volumes	13
6.4	Normal operation of the test rig	14
7	Test water	14
7.1	Composition	14
7.2	Check of test water	14
8	Sampling	15
8.1	General	15
8.2	Test water sampling	15
8.3	Sampling to determine metal release	15
8.4	Sampling volumes	16
8.4.1	General	16
8.4.2	Test lines with test pieces	16
8.4.3	Test pipes	16
9	Analysis	16
10	Expression of results	16
10.1	Metal concentrations after fixed stagnation time	16
10.2	Equivalent pipe concentration	16
10.3	Mean concentration after a given operating time	17
10.4	Presentation of the test results	17

11	Test report	18
	Annex A (normative) Test rig components and assembly	20
A.1	Test rig	20
A.2	Test piece	23
A.3	Connecting piece	23
	Annex B (normative) Test rig flow regime	25
B.1	Test rig flow regime and sampling plan (24 h cycle)	25
B.2	Test rig flow regime and sampling plan for 16 h stagnation time	26
	Annex C (normative) Test water monitoring and analysis - Data on test water composition	27
	Annex D (informative) Example of graphs for expression of results	29