

# 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

---

<b>Contents</b>		<b>Page</b>
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

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