

vgbe-Standard

Feed Water, Boiler Water and Steam Quality for Power Plants/Industrial Plants

VGBE-010-00-2023-08-EN
(formerly VGB-S-010-T-00;2011-12.EN)



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Preface

vgbe energy e.V. hereby presents a revised version of the VGB-Standard VGB-S-010 for Feed Water, Boiler Water and Steam Quality for Power Plants/Industrial Plants.

This revised vgbe-Standard replaces the former edition 2011.

The present vgbe-Standard summarises the latest and updated experiences gained within water-steam chemistry worldwide and is the work of an international task group organized by the vgbe Technical Committee “Chemistry and Emission Control” (CEC).

This task group identified and agreed on more than 80 single topics to be revised, or to be re-written for further precision or also to be integrated as new/additional information in order to deliver the most actual information, state of the art and recent technical developments.

As a significant amount of detailed background information and explanations are given here, this standard is certainly much more what is commonly expected or understood from a typical standard. Therefore, we encourage to read this standard very detailed and carefully as this will also help to gain the necessary deeper and better understanding of this complex topic called “water steam cycle chemistry”. Reducing this standard to a set of simple tables with limit values and action levels only, is neither possible, nor appropriate.

It needs to be emphasized again, that this standard is also valid and applicable for any kind of industrial power plants with process steam production for all pressure ranges.

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They and everybody else who has actively taken part in the revision of this standard are thanked sincerely for their effort. The vgbe office will be happy to receive comments, further information and proposals for improvement for the next version of this vgbe-Standard.

The reader should be aware, that this standard covers all pressure ranges applied to boilers generating heat, steam and/or electricity. In general, the standard covers steady state/full load operation of those boilers as well as start-up and flexible/cycling operation mode. This concept allows a quite flexible approach to combine requirements of the materials used throughout the water-steam cycle with economical needs of the plant operator.

It should be pointed out that this standard does not deliver absolute limiting values of chemical parameters but prefers to demonstrate reasonable areas of permissible operation ranges in respect to a minimal corrosion within the water-steam cycle to reach an optimised lifetime of the plant. Plant specific agreements on various parameters may supplement these guidelines.

Essen, August 2023

vgbe energy e.V.*

* vgbe energy e.V. has been the new name of VGB PowerTech since April 2022.

Table of contents

1	Scope	13
1.1	Goal and purpose of power plant chemistry	13
2	Definitions and abbreviations	16
2.1	Definitions	16
2.2	Abbreviations	18
3	Water-steam cycle system	19
3.1	Feed water / feed water system.....	20
3.2	Steam generator / boiler water system	21
3.3	Turbine/steam system	23
3.3.1	Backpressure turbines	24
3.4	Condensate / condensing system.....	24
3.4.1	Secondary condensates	24
3.4.2	Process condensate return.....	24
3.4.3	Desalination / MSF	25
4	Steam generator types, materials and water chemistry	26
4.1	Steam generator types	26
4.1.1	Water-tube boiler	26
4.1.1.1	Once-through boilers	26
4.1.1.2	Drum boiler	27
4.1.1.3	Heat recovery steam generator	27
4.1.2	Auxiliary boilers.....	29
4.1.3	Industrial steam generators for process steam in the manufacturing industry (pulp & paper, chemistry, refineries, etc.).....	29
4.1.3.1	Special steam generators in chemical industry.....	30
4.1.3.2	Steam generators in the food industry	31
4.1.4	Electrical boilers.....	32
4.1.4.1	Immersion element type (hot water jug/kettle)	32
4.1.4.2	Electrode type, high voltage	32
4.2	Materials	33
4.2.1	Steel materials	34
4.2.2	Non-ferrous metals	34
4.2.2.1	Copper alloy	34
4.2.2.2	Aluminium alloy.....	35
4.2.2.3	Titanium.....	35
4.2.2.4	Special alloys and other new materials.....	35
4.3	Physicochemical processes.....	36
4.3.1	Basics of material protection.....	37
4.3.2	Deposition.....	38

4.3.2.1	Deposition from water.....	38
4.3.2.2	Deposition from steam.....	39
4.3.3	Corrosion in the water-steam cycle.....	41
4.3.4	Power plants with ultra-supercritical steam parameters.....	42
4.4	Physicochemical processes at the components	43
4.4.1	Steam generator	43
4.4.1.1	Erosion corrosion / stress corrosion cracking in exit ends of boiler tubes	43
4.4.1.2	Hide-out / negative hide-out.....	43
4.4.1.3	Volatile alkalis agents/distribution equilibrium	44
4.4.1.4	Water separation for drum boilers.....	44
4.4.1.5	Spray-water for temperature control	45
4.4.1.6	Superheaters	46
4.4.2	Steam turbine	46
4.4.2.1	Turbine inlet valves.....	47
4.4.2.2	Control stage	47
4.4.2.3	Turbine rotor blades in the first condensate zone	47
4.4.2.4	Basis of rotor blades in low pressure turbines	48
4.4.2.5	Basis of stator blades in low pressure turbines.....	48
4.4.2.6	Steam lines for exhaust steam	48
4.4.3	Turbine condensers	48
4.4.3.1	Surface condensers (steam side tubing)	48
4.4.3.2	Air-cooled condensers (ACC).....	49
4.4.4	Condensate polishing plant (CPP).....	50
4.4.5	Steam side of low- and high-pressure pre-heaters	52
4.4.6	Feedwater tank.....	52
5	Treatment of water-steam cycles	54
5.1	Purification	54
5.1.1	Make-up water treatment.....	54
5.1.2	Condensate polishing	54
5.1.3	Controlling the concentration of salts.....	55
5.1.3.1	Blow down from drum and shell boilers	55
5.1.3.2	Blow down from once-through boilers.....	55
5.1.3.3	Heaters	55
5.2	Deaeration and oxygen scavenging.....	56
5.2.1	Deaeration	56
5.2.2	Oxygen scavenging	56
5.3	Conditioning.....	57
5.3.1	Feed water conditioning.....	58
5.3.1.1	Alkalis agents (AVT)	58
5.3.1.2	Only oxidising agents.....	59
5.3.1.3	Alkalis and oxidising agents (OT).....	59

5.3.2	Boiler water conditioning.....	61
5.3.2.1	Caustic or phosphate treatment (solid alkalisng)	63
5.3.2.2	All volatile treatment	65
5.3.3	Organic conditioning agents	67
5.3.3.1	Alkalisng amines	69
5.3.3.2	Film forming amines (FFA).	70
5.3.3.3	Reducing agents (oxygen scavengers).....	71
5.3.3.4	Other chemicals.....	71
6	Chemical specification.....	72
6.1	Action level control system	72
6.2	Operation with demineralised feed water.....	76
6.2.1	Requirements on feed water for once-through boilers	76
6.2.2	Requirements on feed water for drum boilers	78
6.2.3	Requirements on boiler water for drum boilers	80
6.2.4	Requirements on steam for condensing turbines	86
6.3	Operation with non-demineralised feed water	87
6.3.1	General.....	87
6.3.2	Limit values and control parameters	88
6.3.3	Process steam-condensate return	88
6.3.4	Condensate percentage return	88
7	Explanation of chemical specifications	95
7.1	pH value, alkalinity	95
7.1.1	pH value	95
7.1.2	Alkalinity	96
7.2	Conductivity	96
7.3	Oxygen	99
7.4	Hardness	99
7.5	Phosphate	99
7.6	Silica	100
7.7	Iron and copper.....	100
7.8	Sodium	101
7.9	Carbon dioxide.....	101
7.10	Organic substances	102
7.10.1	General.....	102
7.10.2	Organic substances from raw water (natural organic matter)	103
7.10.3	Organic substances from condensate returns	104
7.10.4	Organic substances from dosing chemicals	104
8	Analytical control of operation	105
8.1	Sampling of water and steam	105
8.2	Sampling points and parameters	105

8.3	Quality control of measurements	112
8.4	Monitoring and reporting	117
9	Annex.....	119
9.1	Internal cleaning and preservation	119
9.1.1	Internal cleaning	119
9.1.2	Preservation	119
9.2	Operation above Action level 3	120
9.3	Warning examples	121
9.4	Statistical procedures	124
9.4.1	Determining the N-limit	126
9.4.2	The “box-and-whiskers” plot	128
9.4.3	Modelling of observed data	129
9.4.4	Test of two estimated distributions.....	130
9.5	Analytical procedures for the water-steam cycle.....	134
9.5.1	pH measurement	136
9.5.2	Silica acid	136
9.5.3	Total iron.....	136
9.5.4	Sampling, enrichment via membrane filter and digestion unsolved iron bonds.....	137
9.5.5	Iron determination.....	137
9.5.6	Total copper.....	137
9.5.7	Ammonium	137
9.5.8	Hydrazine	137
9.5.9	Aluminium.....	137
9.5.10	Phosphate determination with molybdate	138
9.5.11	Condensate return from process steam.....	141
10	Bibliography.....	142
10.1	vgbe/VGB-Standards and guidelines in force	142
10.2	International Association for the Properties of Water and Steam (IAPWS) Technical Guidance Documents (TGD) in force	143
10.3	European Standards in force	143
10.4	Literature	144



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