

# DIN EN 12952-8:2022-12 (Engl isch)

## Water-tube boilers and auxiliary installations - Part 8: Requirements for firing systems for liquid and gaseous fuels for the boiler

---

<b>Contents</b>		<b>Page</b>
European foreword .....		4
<b>1</b>	<b>Scope .....</b>	<b>6</b>
1.1	Firing systems .....	6
1.2	Fuels .....	6
<b>2</b>	<b>Normative references .....</b>	<b>6</b>
<b>3</b>	<b>Terms and definitions .....</b>	<b>7</b>
<b>4</b>	<b>Fuel supply .....</b>	<b>11</b>
4.1	General .....	11
4.2	Fuel transfer and preparation .....	11
4.3	Fuel lines .....	12
4.4	Safety shut-off devices (Safety trip valves) .....	13
<b>5</b>	<b>General .....</b>	<b>15</b>
5.1	Air supply .....	15
5.2	Air/fuel ratio .....	16
5.3	Flue gas discharge .....	16
<b>6</b>	<b>Firing system .....</b>	<b>17</b>
6.1	Burners .....	17
6.2	Flue gas recirculation .....	18
6.3	Control and monitoring .....	18
6.4	Electrical equipment .....	19
6.5	Safety precautions .....	19
6.6	Common stack for several firing systems .....	20
<b>7</b>	<b>Operating manual .....</b>	<b>20</b>
<b>8</b>	<b>Particular requirements for firing systems burning gaseous fuels with high relative density .....</b>	<b>20</b>
8.1	Main firing systems .....	20
8.2	Ignition burner systems .....	21
<b>Annex A (normative) Chemical recovery boiler (black liquor boiler) .....</b>		<b>22</b>
A.1	General .....	22
A.2	Additional requirements for the firing system for black liquor in the chemical recovery boiler .....	22
A.3	Special requirements for oil- or gas firing for chemical recovery boilers .....	23
<b>Annex B (normative) Gas turbines in combination with heat recovery steam generators .....</b>		<b>25</b>
B.1	General .....	25
B.2	Additional requirements for gas turbines in combination with heat recovery steam generators .....	25
<b>Annex C (informative) Operational requirements for permanent supervised firing systems for liquid and gaseous fuels .....</b>		<b>27</b>

C.1	General .....	27
C.2	Operation .....	27
C.3	Fuel preparation .....	27
C.4	Safety shutoff devices .....	27
C.5	Air/fuel ratio .....	27
C.6	Modification of firing, burner or air/fuel ratio setting .....	27
C.7	Control and monitoring .....	28
C.8	Emergency operation .....	28
C.9	Operating and maintenance instructions .....	28
C.10	Firing systems burning gaseous fuels with high relative density .....	28
Annex D (informative) Significant technical changes between this document and the previous edition .....		30
Annex ZA (informative) Relationship between this European Standard and the essential requirements of Directive 2014/68/EU aimed to be covered .....		31
Bibliography .....		33