

# DIN EN 13423:2021-09 (E)

## Natural gas vehicles - Requirements for NGV workshops and the management of compressed natural gas (CNG) vehicles

---

<b>Contents</b>		<b>Page</b>
European foreword .....		4
Introduction .....		5
1	Scope .....	6
2	Normative references .....	6
3	Terms and definitions .....	7
4	General provisions .....	10
5	NGV workshop activities .....	11
6	NGV workshop risk management .....	11
6.1	Procedure .....	11
6.2	Risk context .....	11
6.3	Risk assessment .....	12
6.4	Risk treatment .....	12
6.5	Risk monitoring and review .....	12
6.6	Risk documentation .....	12
7	NGV workshop planning .....	12
7.1	Tools and equipment .....	12
7.2	Security measures .....	13
7.3	Emergency planning .....	13
8	NGV workshop occupants .....	13
8.1	General safety .....	13
8.2	NGV workshop mechanics/technicians .....	13
8.3	Training .....	13
8.4	Qualification .....	14
9	NGV workshop layout .....	14
9.1	Designated areas .....	14
9.2	Marking of areas .....	14
9.3	Hazardous areas .....	14
9.4	Warning signs and notices .....	14
9.5	General atmosphere .....	14
9.6	Increased hazards .....	15
10	NGV workshop systems .....	15
10.1	Air compressor system .....	15
10.2	Fire protection system .....	15
10.3	Gas detection system .....	16
10.4	Heat and lighting system .....	16
10.5	Measurement system .....	16
10.6	Mechanical ventilation system .....	16
11	NGV workshop operations .....	16
11.1	Documentation .....	16

<b>11.2</b>	<b>Gas leak management .....</b>	<b>17</b>
	<b>Annex A (normative) Management of NGVs .....</b>	<b>18</b>
	<b>Annex B (normative) Management of cylinders .....</b>	<b>22</b>
	<b>Annex C (informative) Natural gas characteristics .....</b>	<b>26</b>
	<b>Annex D (informative) NGV workshop tools and equipment .....</b>	<b>28</b>
	<b>Bibliography .....</b>	<b>30</b>