

DIN CEN/TR 15339-6:2020-11 (E)

Thermal spraying - Safety requirements for thermal spraying equipment - Part 6: Spray booth, Handling system , Dust collection, Exhaust system, Filter

Contents	Page
European foreword	4
1 Scope	5
2 Normative references	5
3 Function of thermal spraying equipment for thermal spraying	5
3.1 General	5
3.2 Function and construction of a spray cabin	5
3.2.1 General requirements	5
3.2.2 Features of a spray cabin	6
3.2.3 Layout for a spray cabin or a thermal spraying equipment in the workshop	6
3.2.4 Ventilation and exhausting for the spray cabin	6
3.3 Equipment in the spray cabin	8
3.3.1 General	8
3.3.2 Function and description of the manipulating systems	8
3.3.3 Electrical equipment and installation	8
3.4 Extraction and filtering equipment	9
3.4.1 General	9
3.4.2 Dry extraction	9
4 Potential hazards	10
4.1 General	10
4.2 Mechanical hazards	10
4.3 Electrical hazards	10
4.4 Thermal hazards	10
4.5 Fire and explosion	10
4.6 Hazards generated by noise	10
4.7 Hazards generated by radiation	11
4.8 Hazards generated by spray materials and substances	11
4.9 Hazards generated by neglecting ergonomic principles	11
4.10 Human error, human behaviour	11
4.11 Hazard of asphyxiation	11
5 Safety requirements - protection measures	11
5.1 General	11
5.2 Protection measures from mechanical hazards	12
5.3 Protection measures from electrical shock or other injury from the energy supply	12
5.4 Protection measures from thermal attack	13
5.5 Protection measures from fire and explosion	13
5.6 Protection measures from noise outside the spray cabin in the workshop	13
5.7 Protection measures from radiation	14
5.8 Protection measures from attack by spray materials and substances	14
5.8.1 General	14
5.8.2 Control of the emission into the environment	15
5.8.3 Pressure supervising of the filter system	15
5.8.4 Precautionary measures for air recovery back into the spray cabin or workshop	15
5.8.5 Cleaning the cabin	15
5.8.6 Disposal of spray dust	16
5.9 Protection measures from neglecting ergonomic principles	16
5.10 Protection measures in the case of human error and human behaviour	16

5.11	Protection measures when entering the spray cabin	16
5.12	Safety related maintenance	16
6	Requirements for manufacture, supply, operation, and maintenance	17
6.1	Requirements for the manufacturer	17
6.2	Requirements for the integrator	17
6.3	Requirements for the user	17
7	National rules	18
	Bibliography	19