

**REGULATION**

as of 415/2012,

**on the permitted level of pollution and its ascertainment and on the implementation of  
some further provisions of the Act on the protection of air**

**PART SEVEN**

**OTHER STATIONARY SOURCES**

**Article 24**

**Specific emission limits and technical conditions of operation**

Specific emission limits and technical conditions for the operation of stationary sources not mentioned in parts three, five, and six (hereinafter “other stationary sources”) are mentioned in Annex 8 to this Regulation.

## CONDITIONS FOR OPERATION OF OTHER STATIONARY SOURCES

### Part I

#### General provisions, technical conditions for operation

##### 1. General provisions

Related conditions A for the emission limit – concentration of the respective substance during normal state conditions in dry gas, sometimes with the indication of the reference content of some substance in the waste gas, usually oxygen,

Related conditions B for the emission limit – concentration of the respective substance during normal state conditions in wet gas, sometimes with the indication of the reference content of some substance in the waste gas, usually oxygen,

Related conditions C for the emission limit – concentration of the respective substance in waste gas under normal operating conditions.

Direct process heating is heating for which polluting materials produced by the combustion of fuel are collected together with the polluting materials escaped into the air by the technological process.

##### 2. Technical condition for operation

###### Flares

Flare equipment is equipment for reducing the level of pollution operating as an emergency outlet of gas into the open air during the connection of technological space to the outside air or during permanent and poorly processed excess of gases.

All technological equipment including emergency equipment for the liquidation of waste gases is constructed so that during the combustion of waste gases the optimal running of the combustion regime is ensured and the reduction in the level of pollution.

Such equipment is evaluated individually with respect to its construction, localisation, and combustion gas medium. During the evaluation, preference should be given to assisted fire flares, i.e. flares which are designed to influence the volume of supplied air and temperature of combustion.

### Part II

#### Specific emission limits and technical conditions of operation

#### 4. PRODUCTION AND PROCESSING OF METALS AND PLASTICS

##### 4.1. Burning or sintering of metal ore, including sulphide ore

###### 4.1.1. Preparation of batches (Code 4.1.1. Annex 2 to the Act)

Emission limit [mg/m <sup>3</sup> ]	Related conditions
TSP	
50	A

**4.1.2. Sintering belts for agglomeration (Code 4.1.2. Annex 2 to the Act)**

Emission limits [mg/m <sup>3</sup> ]					Related conditions
TSP	SO <sub>2</sub>	NO <sub>x</sub>	PCDD/F	gas compounds of mercury	
50	400	400	0,4 ng-l-TEQ/Nm <sup>3</sup>	0,05	A

**4.1.3. Manipulation with sinter as cooling, crushing, milling, sorting (Code 4.1.3. Annex 2 to the Act)**

Emission limit [mg/m <sup>3</sup> ]	Related conditions
TSP	
30	A

**4.1.4. Pelletising operating units (crushing, drying, pelletising) (Code 4.1.4. Annex. 2 to the Act)**

Emission limits [mg/m <sup>3</sup> ]		Related conditions
TSP	SO <sub>2</sub>	
<b>Crushing, drying</b>		
20	-	A
<b>Hardening belt</b>		
15	50	A

**4.2. Production of iron**

Emission limits [mg/m <sup>3</sup> ]				O <sub>2R</sub> [%]	Related conditions
TSP	SO <sub>2</sub>	NO <sub>x</sub>	CO		
<b>4.2.1. Transport and manipulation with blast furnace batch (Code 4.2.1. Annex 2 to the Act)</b>					
20	-	-	-	-	A
<b>4.2.2. Casting (blast furnace) (Code 4.2.2. Annex 2 to the Act)</b>					
15	-	-	-	-	A
<b>4.2.3. Wind heaters (Code 4.2.3. Annex 2 to the Act)</b>					

	200	100	5 000	3	A
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Technical conditions of the operation valid from 1 January 2016:

Blast furnace gas must be collected, de-dusted, and used; the concentration of the remaining dust in cleaned blast furnace gas must not exceed 10 mg/m<sup>3</sup> in dry gas under normal conditions.

### 4.3. Production of steel

#### 4.3.1. Transport and manipulation with blast furnace batch (Code 4.3.1. Annex 2 to the Act)

Emission limits [mg/m <sup>3</sup> ]	Related conditions
TSP	
20 <sup>1)</sup>	A

Note: 1) Also valid for milling and sorting of clinker

Technical conditions for operation:

Definition of the method of exhaustion and separation of polluting materials during the separation of heavy metal waste by cutting oxygen.

#### 4.3.2. Hearth furnaces with intensification by oxygen (Code 4.3.2. Annex 2 to the act)

Emission limits [mg/m <sup>3</sup> ]			Related conditions
TSP	SO <sub>2</sub>	NO <sub>x</sub>	
50	400	400	B

#### 4.3.3. Oxygen converters (Code 4.3.3. Annex 2 to the Act)

Emission limits [mg/m <sup>3</sup> ]	Related conditions
TSP	
50 20 <sup>1)</sup>	A

Note: 1) Valid for secondary de-dusting

Technical conditions for operation:

- The convertor gas must be collected to the extent of the possibilities of the process and being able to use it.
- The hall of the steel plant must be de-dusted with an efficiency of 90 %. This condition is valid from 1 January 2020.

**4.3.4. – 4.3.6.** (Codes 4.3.4.–4.3.6. Annex 2 to the Act)

Emission limits [mg/m <sup>3</sup> ]						Related conditions
TSP	SO <sub>2</sub>	NO <sub>x</sub>	CO			
<b>4.3.4. Electric arc furnaces</b> (code 4.3.4. Appendix No. 2 to the Act)						
20	-	-	-			A
<b>4.3.5. Pot furnaces</b> (Code 4.3.5. Annex 2 to the Act)						
20	400	400	1 000		-	A
<b>4.3.6. Electrical induction furnaces with projected output above 2.5 t/hour</b> (Code 4.3.6. Annex 2 to the Act)						
50	-	-	-		-	A

**4.4. Processing of ferrous metals in rolling mills and forge shops**

The above-mentioned emission limits are valid for furnaces with direct process heating or when using a special protective atmosphere.

**4.4.1. Hot and cold rolling mills, including heating furnaces and furnaces for thermal processing** (Code 4.4. Annex 2 to the Act)

Emission limits [mg/m <sup>3</sup> ]			Related conditions
SO <sub>2</sub>	NO <sub>x</sub>	CO	
400	400	800	A

**4.4.2. Forge shops – heating furnaces and furnaces for thermal processing with projected heat output from 1 MW, inclusive** (Code 4.5. Annex 2 to the Act)

Emission limits [mg/m <sup>3</sup> ]			Related conditions
SO <sub>2</sub>	NO <sub>x</sub>	CO	
400	400	800	A

**4.5. Foundries of ferrous metals (iron casts)**

**4.5.1. Transport and handling of batches or products** (Code 4.6.1. Annex 2 to the Act)

Including the other technological nodes, such as treatment facilities, production of moulds and cores, casting, cleaning of cast pieces, finishing operations.

Emission limits [mg/m <sup>3</sup> ]	Related conditions
TSP	

100 20 <sup>1)</sup>	A
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Note: 1) Valid from 1 January 2020 for foundries of ferrous metals with production capacity greater than 20 t per day.

Technical condition for operation:

Restriction of VOC emissions produced in the production of moulds and cores by commonly accessible means, e.g. minimising the consumption of binders, substitution of alcohol-based coats with water-based coats, the use of solvents for the cold-box production of cores, which are based on aromatic hydrocarbons.

#### 4.5.2. Annealing and drying furnaces (Code 4.6.2. Annex 2 to the Act)

Emission limits <sup>1)</sup> [mg/m <sup>3</sup> ]			Related conditions
SO <sub>2</sub>	NO <sub>x</sub>	CO	
400 <sup>2)</sup>	400	800	A

Notes:

- 1) Valid for units with nominal heating power from 0.3 MW inclusive
- 2) Not valid for furnaces using natural gas as fuel.

#### 4.5.3. – 4.5.7. (Codes 4.6.3.–4.6.7. according to Annex 2 of the Act)

Emission limits [mg/m <sup>3</sup> ]					Related conditions
TSP	SO <sub>2</sub>	NO <sub>x</sub>	CO	TOC	
<b>4.5.3. Smelting in electric arc furnaces (Code 4.6.3. according to Annex 2 of the Act)</b>					
20	-	-	-	-	A
<b>4.5.4. Smelting in electric induction arc furnace (Code 4.6.4. according to Annex 2 of the Act)</b>					
20	-	-	-	-	A
<b>4.5.5. Cupola furnaces (Code 4.6.5. according to Annex 2 of the Act)</b>					
20	400	400	1 000 <sup>1)</sup>	50 <sup>2)</sup>	A
<b>4.5.6. Melting in other arc furnaces – liquid fuel (Code 4.6.6. according to Annex 2 of the Act)</b>					
20		400	200	-	A

**4.5.7. Melting in other arc furnaces – gas fuel (Code 4.6.7. according to Annex 2 of the Act)**

20		400	200	-	A
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Notes:

- 1) Valid in the chimney after the recuperator in hot-wind cupola furnaces.
- 2) Valid for cold-wind cupola furnaces.

Technical conditions for operation:

For cold-wind cupola furnaces, the restriction of CO emissions by available means, e.g. improvement of the heat efficiency of the cupola furnaces, control of the quality of coke, additional combustion, use of biofilters.

**4.6. Metallurgy of ferrous metals**

**4.6.1. Treatment of non-ferrous metals (Code 4.7. according to Annex 2 of Act)**

Emission limits [mg/m <sup>3</sup> ]		Related conditions
TSP		
50	10 <sup>1)</sup>	A

Note: 1) **During the processing** of ores for collecting lead.

**4.7. Production of smelting of non-ferrous metals, including foundry of alloys and drawing of products, refining, and production of casts**

**4.7.1. Transport and manipulation with batch or the product (Code 4.8.1. Annex 2 to the Act)**

Including the other technological nodes, such as treatment facilities, production of moulds and cores, casting, cleaning of cast pieces, finishing operations, etc.

Emission limits [mg/m <sup>3</sup> ]				Related conditions
TSP	SO <sub>2</sub> <sup>1)</sup>	NO <sub>x</sub> <sup>1)</sup>	CO <sup>1)</sup>	
50 20 <sup>2)</sup>	400 <sup>3)</sup>	400	800	A

Note:

- 1) During the combustion processing
- 2) Valid from 1 January 2016 for the operation of foundries of non-ferrous metals with capacity of smelting greater than 4 t per day.
- 3) Exclude natural gas consumption

Technical conditions for operation:

Restriction of VOC emissions originating in the production of moulds and cores e.g. minimising the consumption of binders, substitution of alcohol-based coats water-based coats, the use of solvents for the cold-box production of cores, which are not based on aromatic hydrocarbons.

**4.7.2. Furnace aggregates for the production of non-ferrous metals** (Code 4.8.2. according to Annex 2 of the Act)

Emission limits [mg/m <sup>3</sup> ]			Related conditions
TSP	NO <sub>x</sub>	TOC	
10 <sup>1)</sup> 20 <sup>2)</sup> 30 <sup>3)</sup>	400	50	A

Notes:

- 1) Valid during the production of lead
- 2) Valid during the production of copper and zinc, including Imperial Smelting furnaces.
- 3) Valid for other productions from 1 January 2016.

**4.7.3. Electrolytic production of aluminium** (Code 4.9. according to Annex 2 of the act)

Emission limits [mg/m <sup>3</sup> ]		Related conditions
TSP	HF	
20	2	A
<b>Emission limits [kg/t of aluminium] determined from daily averages</b>		
TSP	HF	
5	0,5	

**4.7.4. Smelting and casting of non-ferrous metals and their alloys** (Code 4.10. according to Annex 2 of the Act)

Technical conditions for operation:

During the smelting of aluminium, organic compounds containing chlorine must not be used.

Emission limits [mg/m <sup>3</sup> ] <sup>1)</sup>			Related conditions
TSP	NO <sub>x</sub>	Zn	
20	400 <sup>2)</sup>	10 <sup>3)</sup>	A



Notes:

- 1) Valid for melting and casting of capacity higher than 200 kg/day
- 2) Exclude electric heating
- 2) Valid for melting and casting of zinc and its alloys.

#### 4.8. Surface treatment of metals and plastic and other non-metal items

##### 4.8.1. Surface treatment of metals and plastics and other non-metal items and their processing with the volume of the bath up to 30 m<sup>3</sup> inclusive (with the exception of flushing), processes without the use of bath (Code 4.12. according to Annex 2 of the Act)

Valid for metal coating and non-ferrous items but does not apply to the application of coating materials. Valid for processes of pickling, galvanic coating, phosphatising and polishing with the use of electrolytic or chemical procedures and also enamelling, blasting, metal plating and related operations.

Emission limits [mg/m <sup>3</sup> ]			Related conditions
TSP	NO <sub>x</sub> <sup>1)</sup>	HCl <sup>1)</sup>	
50 <sup>2)</sup>	1500 <sup>3)</sup>	10 <sup>4)</sup>	C

Notes:

- 1) Emission limits valid for bath with volume from 3 m<sup>3</sup> to 30 m<sup>3</sup> inclusive, with the exception of flushing.
- 2) Not valid for processes with the use of a bath in an aqueous environment.
- 3) Valid for the use of nitric acid in continuously working equipment.
- 4) Valid during the use of HCl for surface treatment.

Technical conditions for the operation valid for surface treatment by blasting.

The space of the blasting is secured against emission of solid polluting materials, e.g. by sealing by under-pressure, etc.

##### 4.8.2. Surface treatment of metals and plastics and other non-metal items and their processing with the volume of bath above 30 m<sup>3</sup> (with the exception of flushing) (Code 4.12. according to Annex 2 of the Act)

Emission limits [mg/m <sup>3</sup> ]						Related conditions
	SO <sub>2</sub>	NO <sub>x</sub>	H <sub>2</sub> SO <sub>4</sub>	HCl	HF	
Measurement by means of HCl						
	-	-	-	10	-	B
Pickling by means of H <sub>2</sub> SO <sub>4</sub>						
-	20	-	2	-	-	B
Pickling by means of HNO <sub>3</sub> +HF acid						
	-	650	-	-	5	B

##### 4.8.3. Metal tools (grinding shops and tooling shops) and plastics with total electric input power higher than 1000 kW (Code 4.13. according to Annex 2 of the act)

Emission limit [mg/m <sup>3</sup> ]	Related conditions
TSP	
50 <sup>1)</sup>	C

Note: 1) The emission limit is valid only for dry tooling.

**4.8.4. Welding of metal materials with total electric input power equal or higher than 1 000 kW** (Code 4.14. according to Annex 2 of the act)

Emission limit [mg/m <sup>3</sup> ]	Related conditions
TSP	
50 <sup>1)</sup>	C

Note: 1) Not valid for resistance welding.

**4.8.5. Application of protective coats from melted metals with projected output smaller than 1 tonnes of the metal-plated steel per hour, inclusive** (Code 4.15. according to Annex 2 of the Act)

The above-mentioned emission limits are valid for furnaces with direct process heating or when using a special protective atmosphere.

**Technological heating of process baths**

Emission limits [mg/m <sup>3</sup> ]		Related conditions
TSP	NO <sub>2</sub>	
50	400	A

**4.8.6. Application of protective coats from melted metals – processed baths with projected output smaller than 1 tonnes of the metal-plated steel per hour** (Code 4.16. according to Annex 2 of the Act)

The above-mentioned emission limits are valid for furnaces with direct process heating or when using a special protective atmosphere.

**Technological heating of process baths**

Emission limits [mg/m <sup>3</sup> ]		Related conditions
TSP	NO <sub>2</sub>	
20	400	A

Note: 1) Valid from 1 January 2016.

**4.8.7. Hot-dip galvanising** (Code 4.16. according to Annex 2 of the Act)

Emission limits [mg/m <sup>3</sup> ]	Related conditions
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<b>TSP</b>	<b>zinc</b>	
10 <sup>1)</sup>	5	A

Note: 1) Valid from 1 January 2016