StrikoWestofen Group

Customer
Furnace type MH II-T 6000/3000 G-eg
Bath temperature 760°C

04.02.2020

Fume quantities

Fuel		Natural gas		
Calorific value	kWh / m³ STP	10		
	kJ / m³ STP	36.000		
λ-value (air surplus)	-	1,1		
		Holding burner	**Melting burner**	**Total**
Number of burners		1	3	
Power of each burner	kW	600	600	
Totally installed power	kW	600	1.800	2.400
Gas-consumption	m³/h STP	60	180	240
Min. air need	m³/m³	9,61	9,61	9,61
Min fume quantity (λ=1,0)	m³/m³ wet	10,68	10,68	10,68
Fume quantity (λ=see above)	m³/h STP wet	**698**	**2.095**	**2.794**
		Holding mode	**Melting mode**	**Max.Power**
Activation period of holding burners	%	22	80	100
Activation period of melting burners	%	0	90	100
Fume quantity in stack				**Total**
λ-value (air surplus) in stack	-			3,5
Fume quantity	m³/h STP, wet			**8.793**
Mean fume temperature	°C			300
Fume quantity under operating condition	m³/h wet			**18.456**

Emissions as a result of combustion, at the stack (approx. 16% O2)

		Concentration	Load at max. power	
		[mg/m³] STP dry	[kg / h]	
Carbon monoxid (from combustion)	CO	50	0,42	(*1)
Nitrogen oxide (as NO2)	NOx	50	0,42	
Sulfur oxide (as SO2)	SOx	1	0,01	
Carbon dioxid	CO2 [Vol.% STP wet]	3,4%	594	
Water (vapour)	H2O [Vol.% STP wet]	5,0%	350	

λ=1,1 corresponds to approx. 3 % O2 STP: 101,3 kPa, 0°C
*1) please also read the textual emission prognosis section 2.2

Erstellt: RHL