

## Pump data sheet

Purpose of the pump			Making vacuum in the system		
Pump type (vertical, horizontal, submersible pump, etc.)			Vacuum ( liquid-packed ring) pump or a gas compressor/blower/vacuum system		
Process type (continuous, periodic)			Continuous		
Capacity	m <sup>3</sup> /h	18000 m <sup>3</sup> /h	Head	m	Gas outlet to the atmosphere through a 15 m pipe
Suction pressure		-1200 mm H2O	Discharge pressure	bar	1,6
Gas inlet temperature	30 °C				
<b>Medium data</b>					
Name of pumped over liquid			SO <sub>2</sub> , CO <sub>2</sub> , N.		
Chemical composition					
Propensity to crystallization, precipitation			No		
<b>The characteristic of firm inclusions</b>					
Amount of the weighed firm particles			g/l	No	
Additional information con. pumped medium			Known from experience: necessary to apply titan alloys		
<b>Installation</b>					
Type of installation (indoor/under cover/outdoor)			Indoor		
Temperature	°C	Min	10 °C	Max	40 °C
<b>Design features, complete set</b>					
Material			Titan		
Driver			Electric drive n=3000 rpm		
Necessity of an adjustable drive (the frequency converter)			no		
Voltage/power/phase			V/kW	380/130/3ph	
explosion protection requirement			Explosion proof and Fire proof The area is gassy, but not highly explosive.  The motor to be proofed, sealed		
Quantity of pumps			pieces	1	
<b>Cooling liquid available</b>			<b>30 °C H2O</b>		
Notes			<p>During Na and Ca disulfites preparation a gas is being generated There is a turbo compressor in the production string. Capacity is 18000 m<sup>3</sup>/h, pressure - -1200 mm H2O</p> <p>The existing equipment is a turbo gas blower (gas turbocompressor) TG-300 (Uzbekkhimmash). Capacity is 10000 m<sup>3</sup>/h.</p> <p>Replacement purpose is power expansion.</p> <p>The options to be considered: liquid ring pump, gas turbocompressor</p>		

### Gas content:

SO <sub>2</sub>	0,2%
N	78%
CO <sub>2</sub>	21%
SO <sub>2</sub> , S <sub>2</sub> O <sub>4</sub> , O <sub>2</sub> trace	0,8%