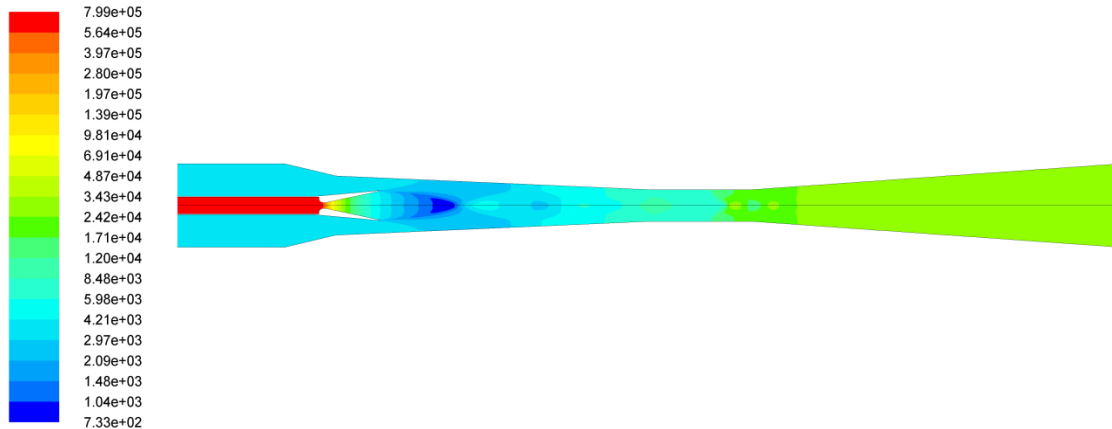


Steam Jet Ejectors

Steam Jet Ejectors are pumping devices used in general to evacuate fluids from one process step and deliver them to another. The theory behind the Steam Jet Ejectors involves converting high-pressure motive steam into a high velocity jet in a nozzle. This causes a decrease in pressure and an increase in velocity so the suction fluid enters the ejector and its pressure increases by means of converging-diverging diffuser.



<u>General Usage</u>	<u>Typical Applications in Industries</u>
They can handle large vacuum volumes or to be applied as compressors to increase the suction pressure from a low value to a medium pressure level.	<ul style="list-style-type: none"> ❖ Pre-evacuation of condensers and other kinds of vessels in <u>chemical and power plants</u> ❖ <u>chemical reactors</u> working under vacuum ❖ Drying under vacuum in chemical process industries like <u>food, pharmaceutical, agricultural, textile, paper & pulp</u> ❖ Vacuum distillation in <u>oil refining</u> ❖ Crystallization in <u>chemical, food and pharmaceutical industry</u> ❖ Deodorization in <u>edible oil industry</u> ❖ Degassing and deaeration in <u>food industry, plastic extrusion, high quality steel alloy production,, oil and beverage production</u> ❖ Evaporating in <u>desalination, food and beverage industry, pharmaceutical industry, sulfate process</u> ❖ Thermocompressor for <u>autoclave steam recovery</u> ❖ Cooling where <u>a suitable steam supply already exists for other purposes</u>

<u>Advantages</u>	<ul style="list-style-type: none"> ❖ No moving parts ❖ Low maintenance cost ❖ Simple and compact ❖ working with all types of fluids ❖ Long lifetime ❖ Safe and reliable operation ❖ Manufactured from various materials
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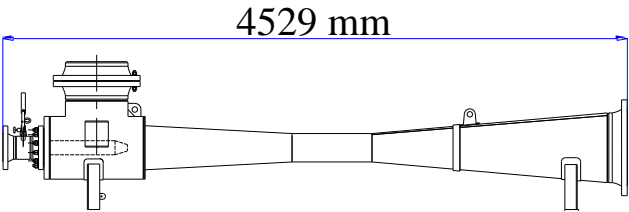
<u>Applicable Materials</u>	<ul style="list-style-type: none"> ❖ Stainless Steel ❖ Carbon Steel ❖ PTFE
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❖ Hastelloy

<u>Design Codes/ Standards</u>	<u>Quality Assurance</u>
<ul style="list-style-type: none"> ❖ HEI Standard for Steam Jet Vacuum Systems ❖ ASME Sec.VIII ❖ ASME B.31.1 ❖ ASME B.31.3 	

<u>Kara Steam Jet Ejectors Advantages:</u>	<ul style="list-style-type: none"> ❖ Custom design ❖ Performance Test at shop ❖ Ability to produce the ejector with different types of materials proportional to corrosive/erosive medium or environment
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Specifications of one Type

Item	Hogging Ejector		
Project	Behbahan Combined Cycle Power Plant Vacuum Package		
Purchaser	MAPNA Group		
Suction Flow Rate	Kg/hr	3500	
Suction Pressure	kPa	20	
Suction Connection	in	18	



Previous Projects

Equipment photos / Operation photos / Applications photos