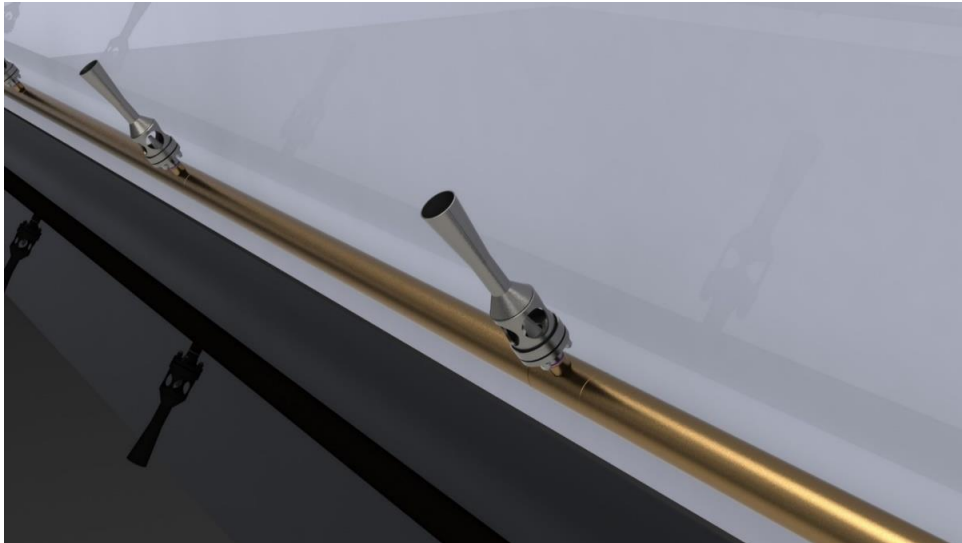


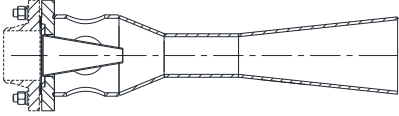
Tank jet mixer

Jet mixers are used to mix and circulate liquids in tanks. Similar to jet pumps, motive nozzle converts pressure energy to kinetic energy. Increasing the velocity of motive stream at nozzle generates low pressure where the surrounding fluid is sucked in. Finally the mixture leaves the jet mixer and mixes more with fluid in the tank. The viscosity of the circulation fluid must not be too high.



<u>General Usage</u>	<u>Typical Applications in Industries</u>
Jet nozzle entrains a large volume of liquid, using a small amount of pumped fluid and produces high mixing rates and strong movement using small amount of energy.	<ul style="list-style-type: none"> ❖ Mainly used in <u>vessels, storage tanks and neutralization basins</u> ❖ A wide variety of waste-water applications ❖ Neutralisation mixing duties using Phosphoric, Hydrochloric and Sulphuric acids on <u>Water treatment</u> ❖ Blending of Lube oils on <u>Petroleum plant</u> ❖ Homogenisation of epoxy liquid in <u>Paint production, Mixing of Food products</u> ❖ Blending effluent containing Glycol <u>on Pharmaceutical process</u>
<u>Advantages</u>	<ul style="list-style-type: none"> ❖ No moving parts ❖ Low maintenance cost ❖ Simple, safe and reliable operation ❖ Quickly and easily put into operation ❖ Hardly subject to any wear ❖ Long lifetime
<u>Applicable Materials</u>	<ul style="list-style-type: none"> ❖ Stainless Steel ❖ Carbon Steel ❖ Hastelloy ❖ Polypropylene
<u>Design Codes/ Standards</u>	
<ul style="list-style-type: none"> ❖ ASME SEC. VIII, DIV. 1 ❖ ASME B31.1 ❖ ASME B31.3 ❖ ASME B16.5 	
<u>Kara Tank jet mixer Advantages</u>	<ul style="list-style-type: none"> ❖ Custom design ❖ Manufactured from various materials proportional to corrosive medium or environment

Specifications of one type

Item	Mixing Sparger (Qty.:10)		
Project	SABALAN PETROCHEMICAL INDUSTRIES CO.		
Purchaser	PIDEC		
Fluid name	-	Sulphuric Acid / Caustic Soda / Neutralized Water	
Motive Pressure	barg	4.5	
Motive Flow Rate (per every jet mixer)	m3/hr	15	
Working Volume	m3	220	
Mixing time	Min.	10	

