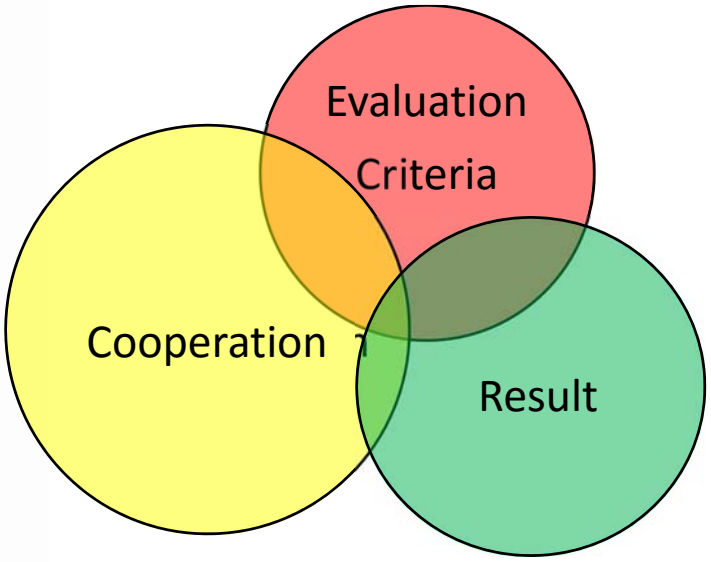
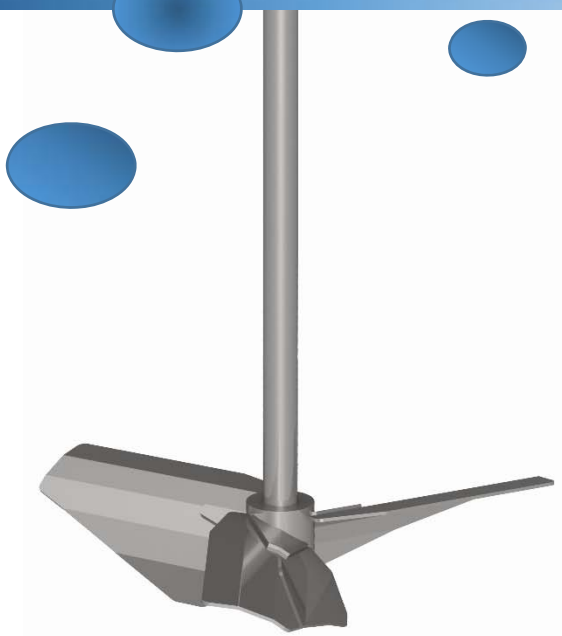


ArkMix Agitators

Flexible and Efficient

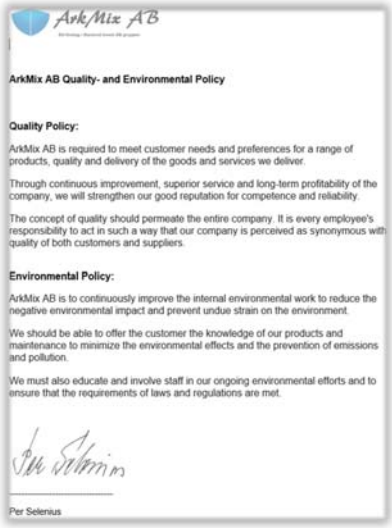


ArkMix AB

a member of Staxered Invest Group

ArkMix Agitators

Flexible and efficient performance
When mixing is essential for an industrial or municipal process, ArkMix deliver outstanding flexible and cost-effective performance for applications that involve all types of fluids, including high dry solid sludge. These ArkMix agitators combine dry-installed drives with robust bearing housing, shafts and impellers for reliability, energy efficiency, hygienic handling and ease of installation and service.



ArkMix AB

ArkMix AB Quality- and Environmental Policy

Quality Policy:

ArkMix AB is required to meet customer needs and preferences for a range of products, quality and delivery of the goods and services we deliver.

Through continuous improvement, superior service and long-term profitability of the company, we will strengthen our good reputation for competence and reliability.

The concept of quality should permeate the entire company. It is every employee's responsibility to act in such a way that our company is perceived as synonymous with quality of both customers and suppliers.

Environmental Policy:

ArkMix AB is to continuously improve the internal environmental work to reduce the negative environmental impact and prevent undue strain on the environment.

We should be able to offer the customer the knowledge of our products and maintenance to minimize the environmental effects and the prevention of emissions and pollution.

We must also educate and involve staff in our ongoing environmental efforts and to ensure that the requirements of laws and regulations are met.

Per Selenius

Our quality policy and environmental policy….

…complies with ISO 9001 and ISO 14001 and its associated criteria. Our holistic approach to quality and the environment based on quality management, environment and information security, it makes it easier to have a holistic view of the business and there also add aspects of morality and ethics, as required.

ATEX approval

ArkMix agitators are classified according to EU machine directive 2016/34/EU
Ex II 2G EEx IIB ck T4

ArkMix AB

ArkMix AB

EU declaration of conformity

Manufacturer:
ArkMix AB
SWEDEN +46-33- 208800

Representative:

Hereby certify that:

Machine: A(T/L)020 - A(T/L)180 II 2G EEx IIB ck T4

Managing Director Magnus Johnsson
ArkMix AB
2016-03-01

Complete and wide agitator range

ArkMix provides a complete range of dry installed agitators for every need and preference. Agitators for versatile and high efficiency mixing, top entry agitators for deep or narrow tanks and side entry applications. All agitators are available as complete mixing functions with suitable installation equipment.

The agitation process

- Agitation occurs in different functions in municipal- and industrial plants. The process demands vary from low- to high-viscosity liquids, suspensions and dispersing of different materials and liquids.
- The most specific need of agitation has" mass transfer" characteristic from preparation, to final tuning of products. From very mild to violent need of mixing.
- Consequently, it is necessary to understand these characteristic and the nature of the agitation process before an optimum agitator can be calculated and chosen.
- In agitation it is important to understand the flow pattern of the fluid flow and the means to achieve the desired agitation.
- The mass transfer and the turbulence accomplish the agitation and the mixture.

Easy-to-serve standard agitators with all service points above the liquid level

ATEX 2016/34/EU
II 2G EEx IIB ck T4

Parallel shaft geared motor with high service factor, insignificant service need for continuous duty ensures maximum of uptime

Robust spherical roller bearing with over 100.000 hours of calculated life time continuous duty ensures maximum of uptime

Monitored Water Trap for ATEX requirements, can be filled with water or oil

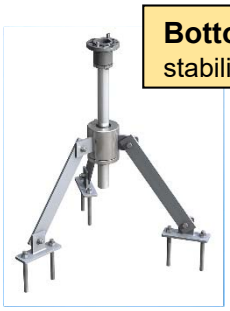
2 or 4 bladed high flow impellers for high pumping capacity and low power need with diameters up to 6000mm

All wetted parts made of high alloy steel

Volumes up to 40.000m^3
Thrust up to 60.000N

Free flying shaft up to 25 meters

For municipal-, bio-digesters and other large vessels and rectors



Bottom bearing (option) to stabilize the shaft if needed

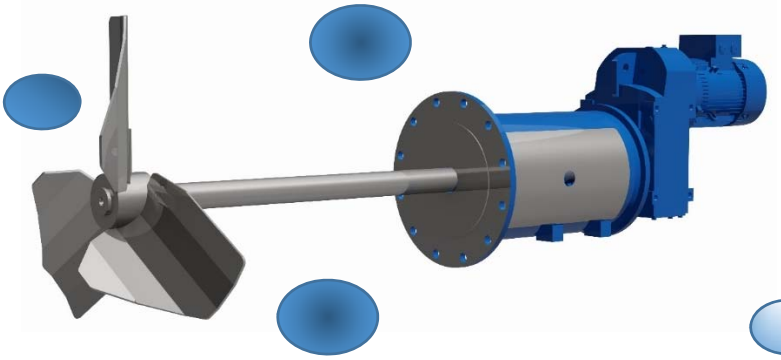
Standardized Side-entry Agitators for Paper Pulp and Sludge Storage

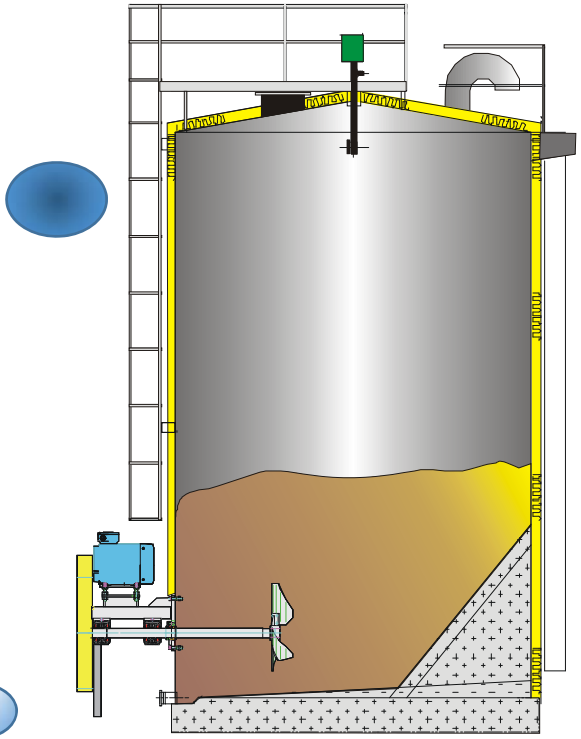
Pulley drive or Geared Motor drive

Agitator type	Power kW	Shaft rpm	Motor rpm	Prop dia. mm	Shaft dia. mm	Shaft length mm	cons power kW	pump m3/min (water)	Axial force N	Torque Nm	Bend moment Nm
AS060	**2,2**	**210**	**1000**	**550**	**60**	**650**	**1,2**	**24,5**	**1179**	**100**	**236**
AS060	3	210	1000	600	60	650	1,8	31,8	1474	137	296
AS060	4	210	1000	650	60	650	2,7	40,4	1815	182	364
AS060	5,5	210	1000	700	60	650	4,0	50,4	2317	250	465
AS060	7,5	210	1000	750	60	650	5,6	62,0	2949	341	591
AS060	11	213	1000	800	60	650	8,1	76,3	3997	493	801
AS060	15	213	1000	850	60	650	10,9	91,6	5130	673	1029
AS060	18,5	248	1000	800	60	650	12,7	88,9	5774	713	1158
AS060	22	248	1000	850	60	650	17,2	106,6	6462	848	1296
AS080	**15**	**213**	**1000**	**850**	**80**	**850**	**10,9**	**91,6**	**5130**	**673**	**1345**
AS080	18,5	215	1000	900	80	850	14,9	109,7	5920	822	1552
AS080	22	215	1000	950	80	850	19,6	129,0	6670	978	1749
AS080	30	215	1000	1000	80	850	25,3	150,5	8640	1333	2265
AS080	37	218	1000	1050	80	850	33,7	176,7	10009	1622	2624
AS080	45	219	1000	1100	80	850	43,1	204,0	11567	1963	3033
AS100	**30**	**165**	**1000**	**1150**	**100**	**1000**	**23,0**	**175,7**	**9790**	**1737**	**3020**
AS100	37	165	1000	1200	100	1000	28,5	199,6	11571	2143	3569
AS100	45	165	1000	1250	100	1000	34,9	225,6	13510	2606	4167
AS100	55	165	1000	1300	100	1000	42,5	253,8	15877	3185	4897
AS100	75	177	1000	1300	100	1000	52,4	272,2	20183	4049	6226

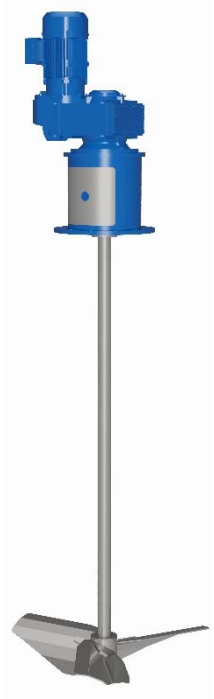
Functional Parameters

Substrate… Paper Pulp, Sludge
Consistency (DS%)
Processing types… machine chest, bleached, sludge storage
Temperature (<90°C)
Density (kg/m3)
Retention Time (d/h/m)
Geometry… shape of the tank
Working volume (m3)
Process Requirements… process result to be obtained

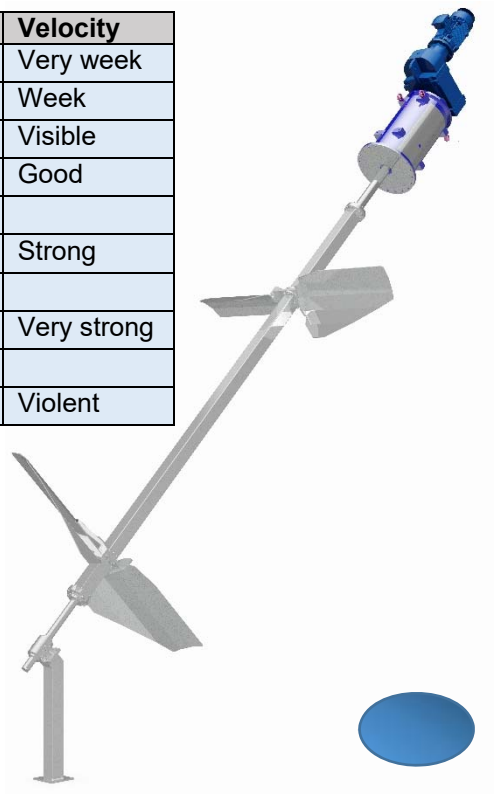




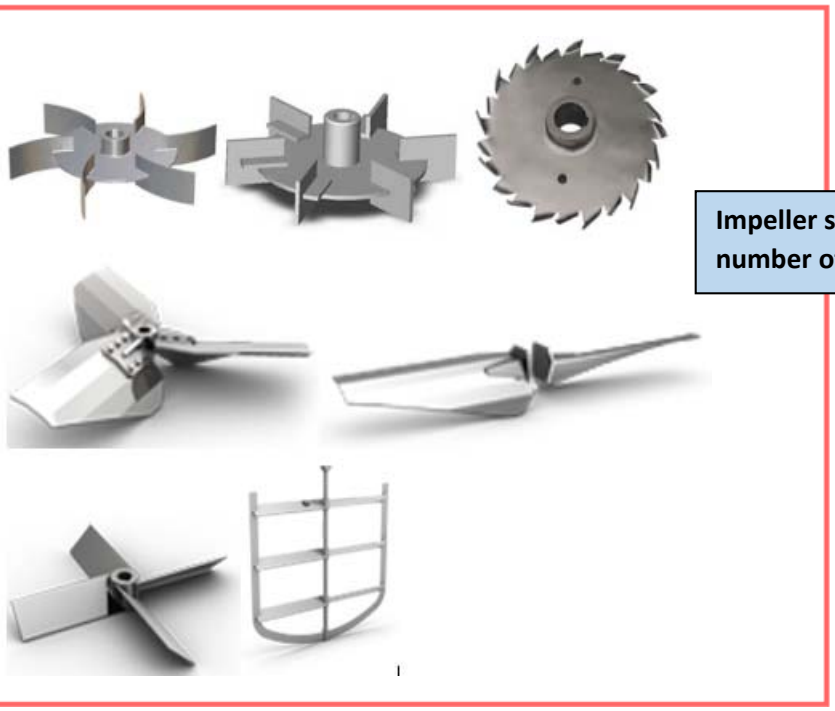
Agitation Scale AT(L)030 - AT(L)100



AS	Description	Process	Velocity
1	Very mild	Flocculation	Very week
2	Mild	Homogenization	Week
3	Medium	Blending	Visible
4	Good	Blending, solving	Good
5			
6	Strong	Suspension	Strong
7			
8	Very strong	Solid suspension	Very strong
9			
10	Violent	Solid suspension	Violent



AT020	Direct driven
Power	0,55 – 1,5 Kw
Shaft dia.	20mm
Impeller	3-bladed
Shaft length	<1800mm
Speed	900-1500 rpm

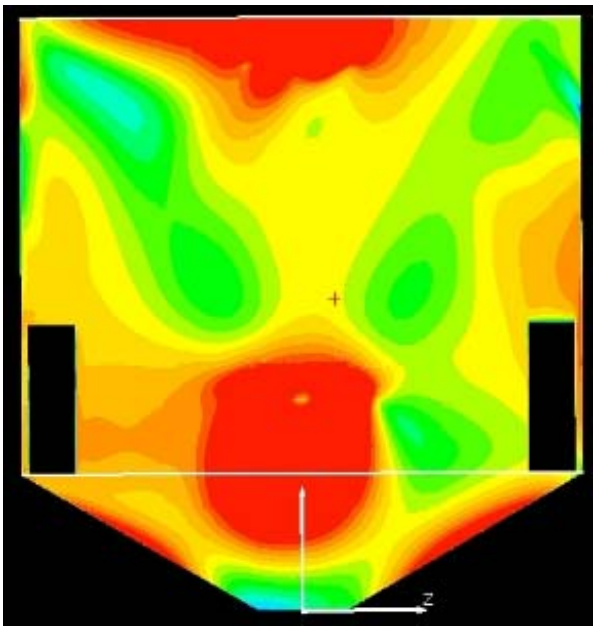


Impeller selection for a large number of agitation processes

ArkMix Agitator Engineering Expertise provides perfect Support and Service

CFD

Flow Analysis



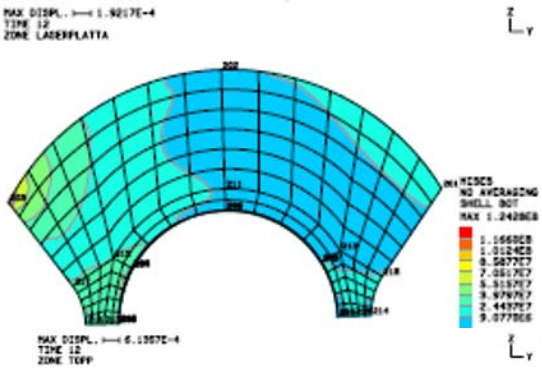
With the development of computer-processing capacity, the use of CFD has become an increasingly powerful tool in all disciplines of fluid dynamics. This is also true for the development of mixing know-how.

The overall flow pattern in a tank, generated by an Agitator, can be modeled. Parameters such as shear stress distribution and average velocity distribution can be obtained and processed in various ways.

Our own testing facilities as well as field testing and measurement of actual performance onsite provide ArkMix engineers with keen insight into what works. Using this knowledge and expertise, we help you maintain your mixing installation in top operating condition.

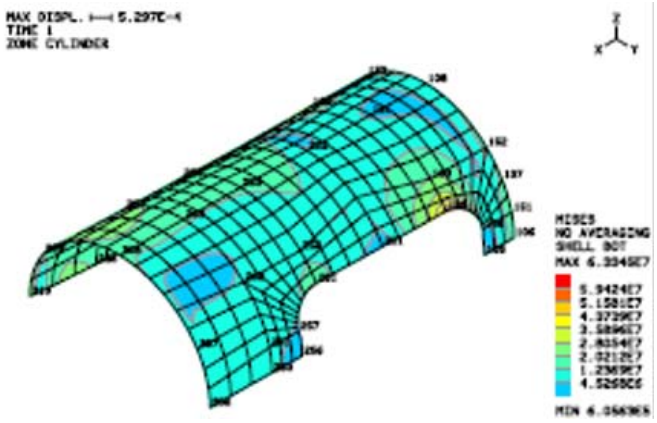
FEM

Finite Element Analysis



The Finite Element Analysis as a numerical method is used to carry out process optimization and design variation simulations without the necessity to produce expensive prototypes.

Increasing computational power permits the simulation of complex model designs of various geometries. The Finite Element Analysis as a numerical method is used to carry out process optimization and to simulate design variations to minimize the need for expensive prototypes. Increasing computational power permits the simulation of complex model designs of various geometries.



STAXERED
INVEST GROUP

Staxered Invest Group divisions are ready to serve you

Ark Bygg

We do new construction, renovations, roofing work, earthworks, excavation, drainage of buildings, from private homes to industrial buildings. We also perform sheet metal work, flooring etc. We are turnkey contractor you missed.

Ark Produktion

We have a Boring Machine Tos WH 10 CNC vertical milling Mazak VTC 20, 3m CNC bed milling Correa. Moreover, we have a carousel turn VTC-12/16 dia. 1200mm height 1600mm maximum of about 3000 kg. Measuring machine ZEISS Acura 10, manual lathe 3 and 7 meters and much more.

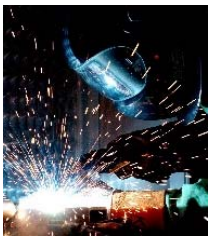
ArkMek consulting

We rationalize your production by using the latest Cam preparation for processing machines, if you need help with the construction work of existing / new product or building of special applications such as special machines for the packaging and production as we design in Inventor 3D.

Ark Wind

Our customers are mainly the electricity consumers in a weak grid or without grid so-called stand-alone, most of our wind turbines are in Russia.
Our wind turbine is 2-bladed with 14-meter diameter turbine mounted on a direct drive generator and produces between 50,000 to 100,000 kWh / year, depending on wind conditions.

Marks Mekaniska



Industrial services such as repairs of worn parts, stock replacement and general maintenance tasks, we offer on-call contracts with customers. Welding work done both on and off the workshop.
In welding, we are certified according to EN 1090, manufacturing Containers / Tanks, Bridges / ladders and ironwork. We have large stock of industrial supplies bearings, flanges, pipe bends in stainless steel.

What can ArkMix AB do for you?

State-of-art Agitators are offered by ArkMix AB. We provide a complete range of Top-Entry, Side-Entry and Leaning Agitators for a large number of industry branches and related services. ArkMix, headquartered in Sweden, with own plant in Kinna. The company is a member of The Staxered Invest Group, supplier of products and services to the industry, municipalities and private sectors.

For more information, how ArkMix can help you go to www.arkmix.com

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CEO Magnus Johnsson