

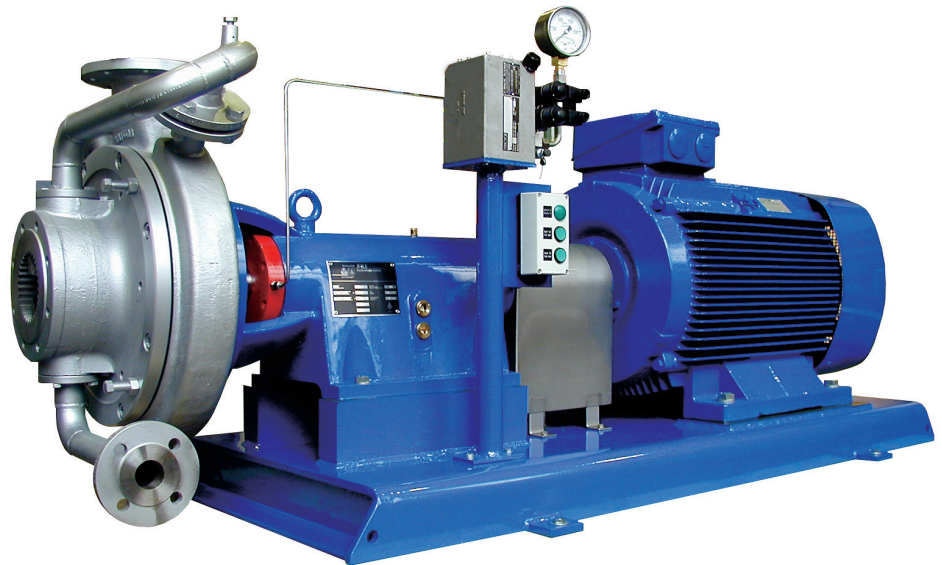


SUPRATOR® BITUMEN HOMOGENISERS

Suprator® Bitumen Homogenisers are designed for the production of polymer modified bitumen and have been successfully in use for more than 25 years. Due to their special design the processing of polymers in bitumen is very efficient, especially in the form of pellets. The machines have successfully been employed for many decades and are based on a three-stage rotor/stator tool.

The features of the Suprator® Bitumen Homogenisers 349-5.03, 449-5.03 and 549-5.03 are unique:

- ▶ Special tool geometry for different sorts of bitumen, particularly advantageous in single pass processes with high polymer concentration
- ▶ Three-stage rotor/stator tool for the intrusion, shearing/ grinding and dispersion especially of polymers in the form of pellets and similar substances
- ▶ Adjustment of the gap for energy-saving starts by hydraulic and axial shaft movements
- ▶ The standard adjustment open/ close for start, shut down and pump over can be completed with a step-less hydraulic setting
- ▶ The strong pumping effect of the machine supports the supply pump and mostly supersedes it
- ▶ High stability due to selection of appropriate tool material



Operating principle

▶ Step 1:

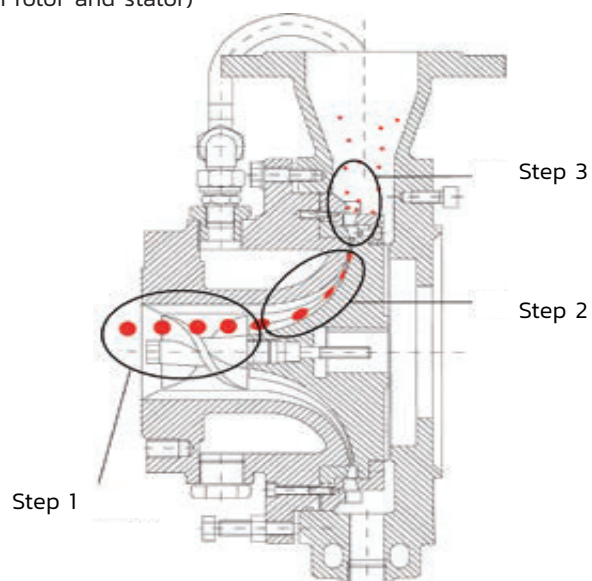
The drawing-in of high viscous bitumen-polymer premix is supported by the helical rotor attachment

▶ Step 2:

Disintegrating of polymer granules by grinding and squeezing along the progressively curved shearing gap (between rotor and stator)

▶ Step 3:

The required fine dispersing performance and homogeneity of bitumen is provided by the gear ring rotors – commonly in single pass operation





Technical Data				
Type		349-5.03	449-5.03	549-5.03
Tool Set		Progressively-turned, wedge-shaped shear gap and toothed ring rotor-stator system		
Materials	DIN	1.4408, 1.2288, 1.4112		
Bearing		Splash lubrication		
Speed	min ⁻¹	4.800	3.000	2.000
Drive	kW	45-75	90-160	160-300
Throughput rate	m ³ /h	≤ 15	≤ 30	≤ 60
Polymer Content	%	3-20 mass		
Heating Jacket		Heatable up to 240 °C		
Working Gap		Hydraulically-actuated axial shaft movement		
Gap Setting		Standard: open-closed, Optional: stepless hydraulic setting available		