



# APV Homogenizers For Industrial Applications

The APV homogenizer is well suited for processing a myriad of chemicals and industrial products.

## Features:

APV Homogenizers will improve your product by:

- Creating a smaller particle size for improved penetration and absorption
- Provide better viscosity control
- Enhance the colour
- Improve the stability
- Disperse solids evenly allowing for less settling

## Operating Range:

- Twenty-three (23) homogenizer models to choose from accommodating flow rates from 11 litres/hour (3 gallons/hour) to 50,000 litres/hour (16,000 gallons/hour)
- Operating pressures to 2,000 bar (29,000 psig)

## Materials of Construction:

- Gaulin Models
  - 15-5 pH / 1.4405S
- Rannie Models
  - 1.4462 / 2505SS
  - Titanium (high pressure)

## Typical Applications Include:

- Silicone and wax emulsions
- Latex
- Cellulose gum dispersions
- Grease
- Viscosity index improvers
- Insecticides
- Lubricants
- Pigment dispersions
- Specialty paints and coatings
- Resins
- Inks
- Water based release coatings
- Alkyd emulsions



## Homogenizer Technical Data:

The homogenizer, consisting of a positive displacement pump and a homogenizing valve, can pump at very low flow rates (a few gallons per hour for laboratory size machines) to very high flow rates (50,000 litres per hour or more for production machines.) Along with this range of flows, the homogenizer can generate pressures as high as 2,000 bar, depending on the model. The homogenizer can be constructed of materials suitable for a variety of chemical agents.

## Benefits of Using the APV Homogenizing Valve:

With the combination of pressure range and flow capability, the homogenizer can be used to process many different products. The customer can select a homogenizer that has the right combination of pressure, flow and special design options to accommodate his particular product characteristics. The homogenizing valve can be supplied in special materials to handle abrasive products. Along with special materials of construction, the homogenizing valve is optimised in geometry to deliver the best efficiency for various industrial products. With the combination of the customer's proven manufacturing protocol and the APV Homogenizer, a superior product can be supplied to the customer's clients. The APV Homogenizer will be an integral part of the production of this competitive industrial product.

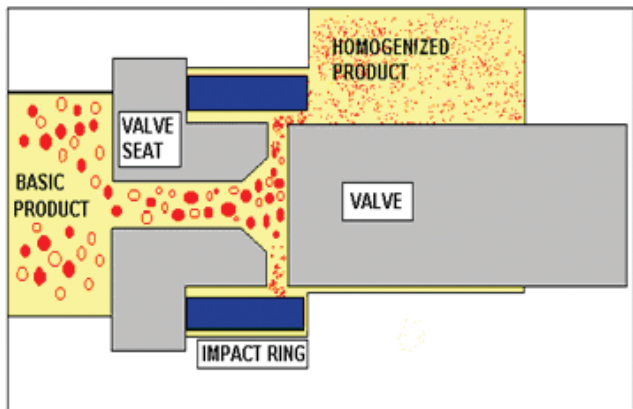


Figure 1: How a homogenizing valve works

## Always Test Before You Invest:

Many physical and chemical properties of a product can be enhanced by homogenization. As the recognized pioneer in homogenization technology, SPX maintains well-equipped, professionally staffed test laboratories in Albertslund and Silkeborg. Our labs have helped develop new and improve existing products, while streamlining processes to boost productivity and profitability. Product stability, colour, viscosity, taste, appearance and consistency can be monitored throughout the homogenization process.

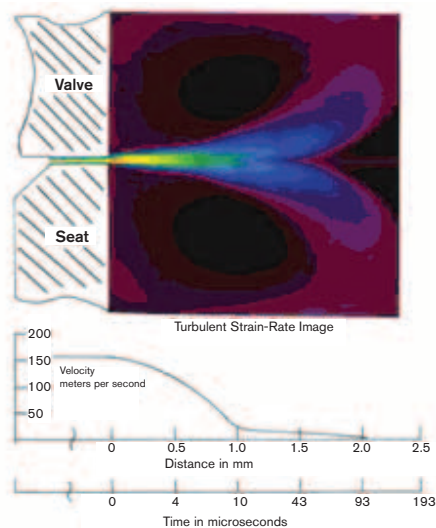


Figure 2: Turbulent flow profile in an APV Homogenizer

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