### Chemical

- High shear homogenisation of intermediate products
- Emulsification of waxes, creams, polishes, plastics etc.
- Dispersion/Desagglomeration of abrasive solids or pigments
- Dispersion and homogenisation of polymer melts
- Liquid-gas reactions
- Homogenisation of lined and multi-component adhesives
- · Saponification and neutralization reactions
- Preparation of metallo-organic compounds

### **Bitumen**

- Production of polymer modified bitumen
- Production of bitumen emulsions
- Production of crumb rubber modified bitumen (CRMB)

#### Food/Bio-derivative

- · Processing of fruit and vegetables
- · Homogenisation of creams and fillers
- High shear homogenisation of coffee extract with an insoluble gas
- Homogenisation and dispersion of wheat dough
- · Wet grinding and dispersion of corn slurry

# **Paper**

- Grinding and disintegration of rejects
- Deflaking, coating slip preparation

#### Mineral Oil

· Homogenisation of oil and grease products

## **Working Principle & Processing**

Supraton machines are dynamic Rotor–Stator Homogenisers with a multistage tool set. The pumpable product passing through the homogeniser is subject to several physical processes:

- · Multistage hydrodynamic high shear
- · High-frequency oscillating forces
- · Intensive micro-volume mixing
- · Pressure increase

These effects enable processes with highest demands like:

- Homogenising
- Dispersing
- Disintegration
- Emulsifying
- Dissolving
- Reacting
- · Wet grinding

## **Buckau-Wolf GMBH**

Nordstraße 41 41515 Grevenbroich Phone: +49 2181 602-400 Fax: +49 2181 602-342

Germany

www.buckau-wolf.com supraton@buckau-wolf.com













# **Supraton S-Series**

- Product viscosity up to 200,000 cP
- Temperature up to 240 °C
- Pressure up to 20 bar
- · Pressure head up to 12 bar
- Circumferential speed up to 57 m/s
- Step less adjustable grinding gap
- Symmetrical tool design
- · Stator injection

# **Supraton Sanitary Series**

- Corresponds to the requirements of Hygienic design (QHD, GMP)
- Gapless multistage rotor and stator tools
- Capable CIP process
- · Product contacted parts stainless steel
- O-ring compliant with FDA regulations

## **Supraton Bitumen Homogeniser**

- Patented Supraton high shear Inline Homogeniser for polymer modified bitumen production
- Progressive turned, wedge-shaped shear gap followed by a toothed rotor-stator system
- Tool material carbon steel cast, hardened for long lifetime
- Working gap set by hydraulic axial shaft adjustment
- Polymer portion up to 20 %
- Capacity up to 70 m3/h
- Single pass or circulation process

