



Pastillation

THE METHOD OF CHOICE FOR CHEMICAL MANUFACTURERS!

*P*astillation provides an efficient, cost effective process for the continuous converting of molten products into uniform, round and dust free granules ideal for bagging, transporting and bulk material handling systems.

The pastillation process has the flexibility to produce pastille sizes ranging from 1-25 mm in diameter and with viscosities ranging from 5 – 30,000 mPas (cP), based upon processing conditions and need.

With 5 pastillating systems available our group can provide a system designed specifically for your application and process.

From pastillator heads to complete turnkey units, up and down stream equipment, our group consisting of: SBS Steel Belt Systems, Italy, Berndorf Belt Systems USA and Kaiser Steel Belt Systems, Germany is unique in offering the perfect solution for all of your pastillating requirements.



berndorf

Belt Systems USA

AccuDrop®

The AccuDrop® pastillation system, developed by Berndorf Belt Systems USA, is a rotary depositor operating through a stationary distribution system consisting of a stator and a rotating outer shell. The stator and seal bar system provide a tight seal against the

rotating shell and even product distribution along the shell. The shell has a patented raised pyramid design eliminating product buildup between the holes and further allows the AccuDrop® to operate without a re-feed bar.

The holes in the seal bar are

aligned with the holes in the outer shell of the AccuDrop® and product drops are dispersed onto the cooling belt forming pastilles.

Pastille size is determined by the diameter of the holes in the AccuDrop® shell, the product flow and speed of rotation.



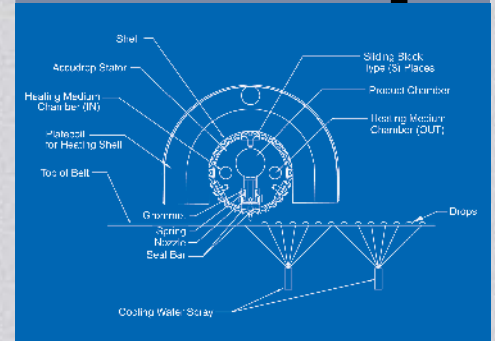
BENEFITS:

- High production rates
- Specially designed for low viscosity products
- Consistent product quality
- Low maintenance

TYPICAL PRODUCTS:

Antioxidants, Calcium chloride,
Fatty alcohols, Hotmelts,
Hydrocarbon resins, Magnesium
chloride, Sulphur, Sulphur
bentonite, Waxes, Wax blends,
etc.

AccuDrop®



Rollomat®

The Rollomat® pastillation system, initially developed in 1989 by KAISER SBS Germany, covers the widest viscosity range of all rotating pastillators. The Rollomat® rotary depositor has an operating principle similar to a gear pump.

The heart of this system is an

inner-gearred, hollow cylinder with nozzles positioned between the teeth. Along the lower portion of the hollow cylinder a pressing roll engages with the teeth of the hollow cylinder and the product is fed at the designated rate through the plug in lance. From where it flows onto the rotating

pressing roll and becomes sandwiched between the outer cylinder and inner pressing roll. Each time the teeth of the hollow cylinder engage with the teeth of the pressing roll product is forced through the nozzles and onto the cooling belt.



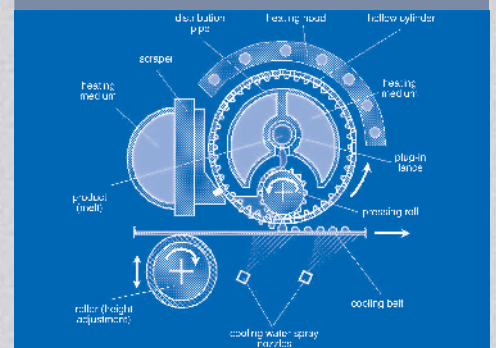
BENEFITS:

- Ideal for running products with higher melting points
- Suited for products containing solid particles
- Accommodates super-cooled and pre-crystallized melts
- Lower operating temperatures
- Wide range of product applications

TYPICAL PRODUCTS:

Aluminium sulphate, Bitumen, Caprolactam, Castor oil, Chocolate, Chromic acid, Epoxy resins, Fertilizers, Hotmelt adhesives, Ketonic resins, Modified stearic acid, Modified waxes, Petroleum resins, Phenolic resins, Polyamide resins, Polyester resins, Polyethylene waxes, PVC additives, Rosin resins, etc.

Rollomat®

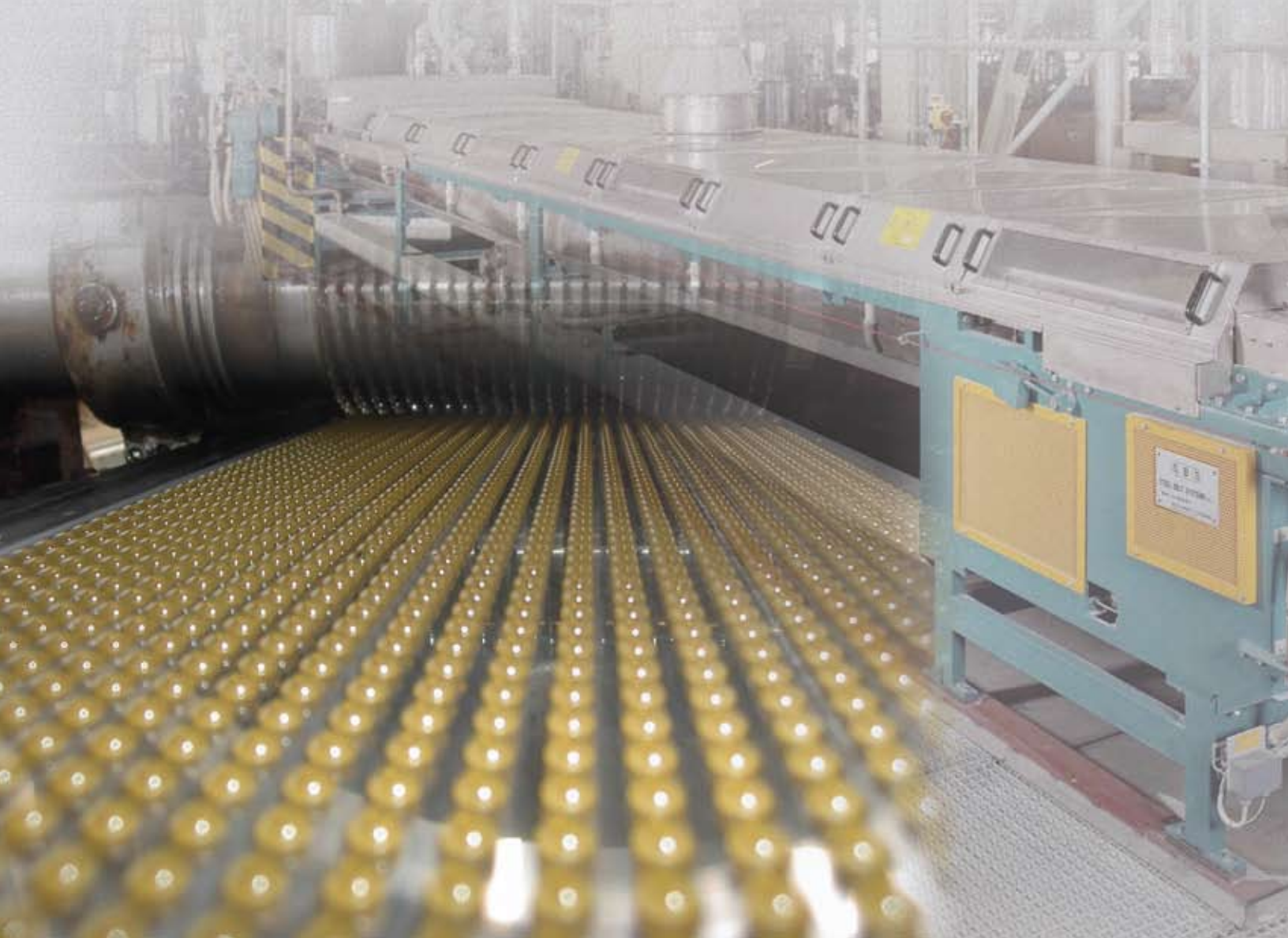


RollDrop®

The RollDrop® pastillation system, developed by SBS Steel Belt Systems Italy, was first introduced in 1996. The RollDrop® is the only rotating pastillator not requiring disassembly for cleaning nor maintenance as it does not have inner parts carrying product. A further advantage when compared to other rotating pastillators is the ability to

measure and control melt levels allowing for a controlled feed rate. The RollDrop® consists of a product reservoir that is attached to a rotor equipped with rows of teeth. Product is picked up by the teeth and deposited by a combination of gravitational and centrifugal forces onto the cooling belt, forming pastilles. The pastille size is determined by

the shape and width of the teeth. Without internal piping, the RollDrop® allows for easy cleaning and maintenance. Due to the pivoting product reservoir, cleaning can be performed in place. By pivoting the reservoir one has complete access to the rotor which can be cleaned with a metal brush.



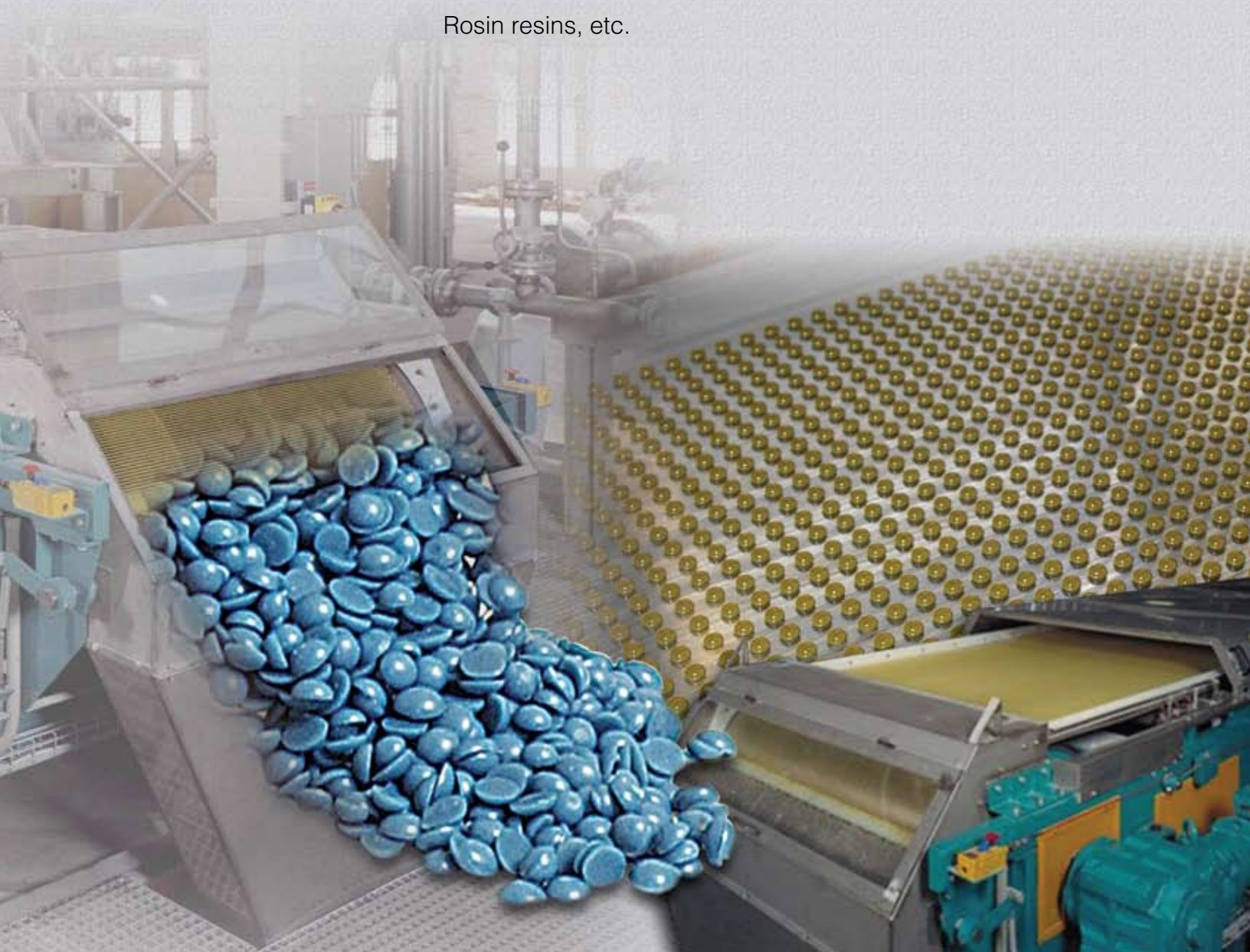
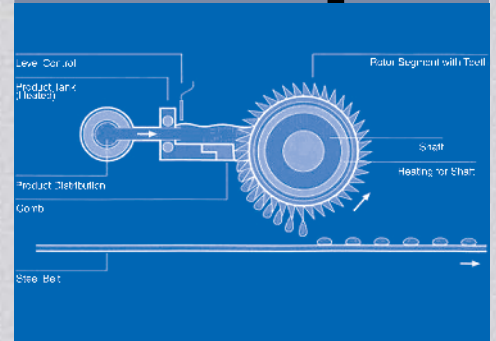
BENEFITS:

- Ideal for low and medium viscosity products
- Suitable for products containing solid particles
- Easy to operate
- Contains no inner product carrying parts
- Optimum pastille shape

TYPICAL PRODUCTS:

Aluminium sulphate,
Caprolactam, Castor oil,
Chocolate, Chromic acid,
Epoxy resins, Fatty acid
products, Fertilizers, Ketonic
resins, Modified stearic acid,
Modified waxes, Phenolic resins,
Polyamide resins, Polyester
resins, Polyethylene waxes,
Rosin resins, etc.

Rolldrop®



The ZN pastillation system, predecessor the "DN," from KAISER SBS Germany originated in 1953 making it the first pastillation process invented.

The ZN system operates on a drop forming principle achieved through the up-and-down motion of the needle inside the nozzle.

The pastille size is primarily determined by the diameter of the needle and nozzle, the liquid level inside the tub and the number of needle strokes.

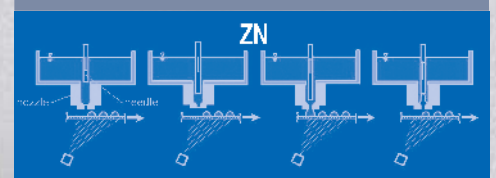
BENEFITS:

- Low cost solution for low to medium capacities
- Processing of extremely low viscosity products
- Electrical heating capabilities
- Gastight housing available
- Feeding temperatures up to 400° C (752° F)

TYPICAL PRODUCTS:

Acetanilide, Bisphenol A, Caustic soda, Disodiumtetrasulfide, Fatty acids, Fatty alcohols, Laurinlactam, Maleic anhydride, Monoglyceride, Neopentylglycole, Paraffins, Pet food, Potassium soda, Succinic anhydride, TMA, TNT, TPP, Waxes, etc.

ZN



The GS pastillation system, originally developed in the 60's by KAISER SBS Germany, is designed for medium to high viscosity products. Contrary to the ZN system, the needles are replaced by a cylinder and piston arrangement. The up-and-down motion of the cylinder and piston allows the molten product to be deposited onto the belt creating uniform pastilles.

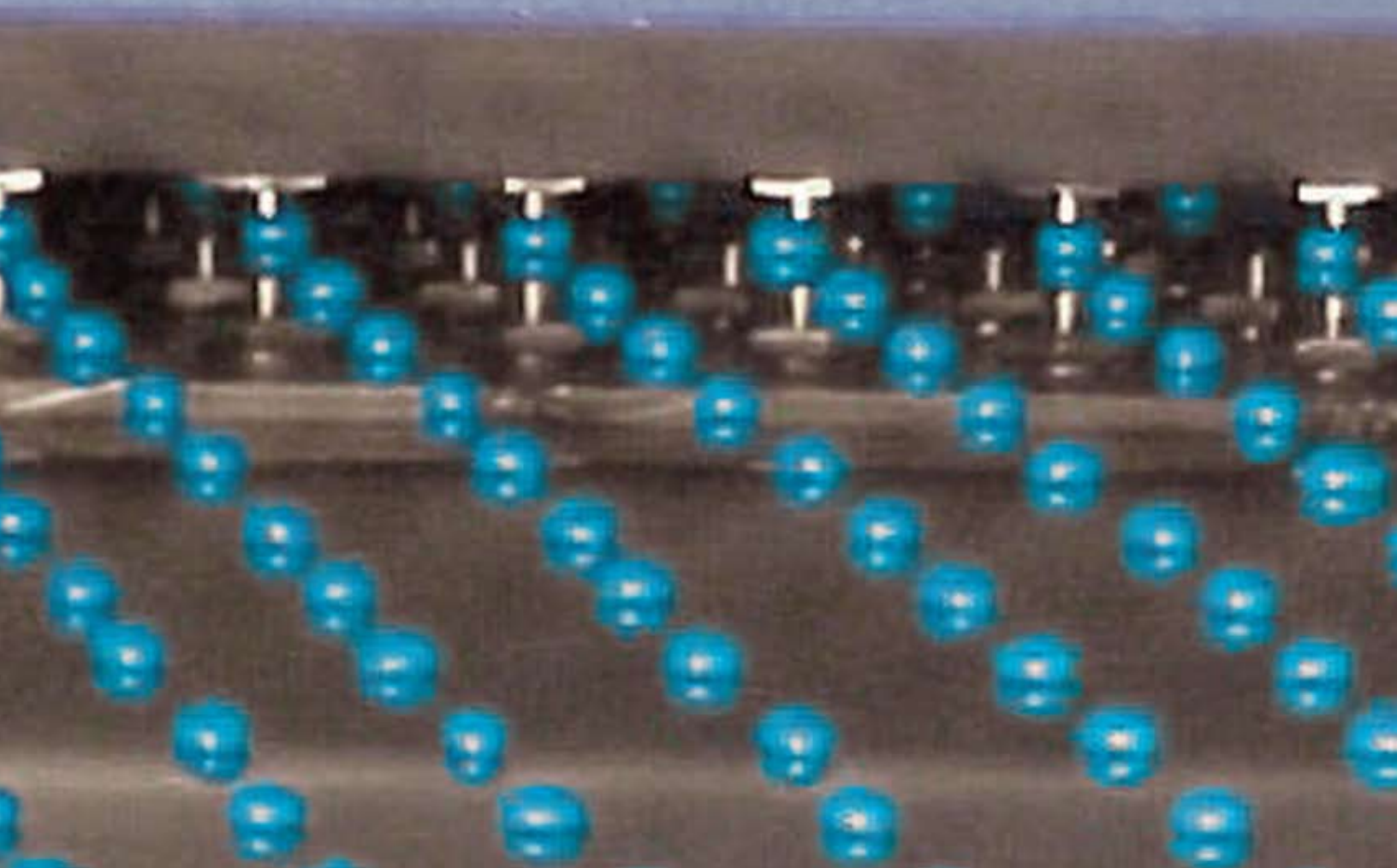
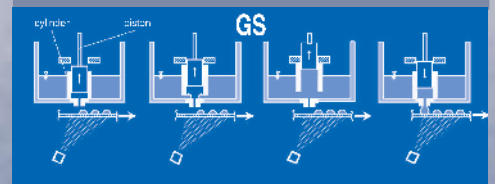
BENEFITS:

- Low cost solution for medium viscosity products
- Only solution for products with a temperature over 350° C (662° F)

TYPICAL PRODUCTS:

Antioxidants, Atactic polypropylene, Bitumen, Coal tar pitch, Depilatory wax, Gelantine, Hotmelts, Hydrocarbon resins, IC-resin, Novolac resins, Phenolic resins, Polyethylene wax, Sodium-alkylsulfonate, Softeners, TMQ, etc.

GS



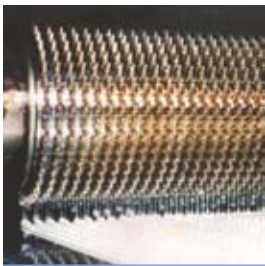
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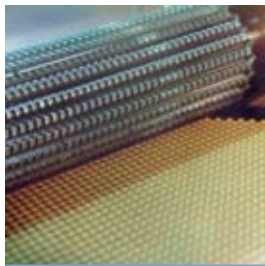


Pastillation

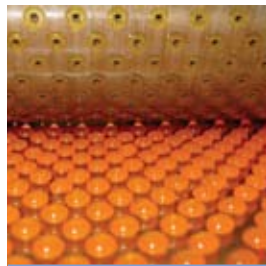
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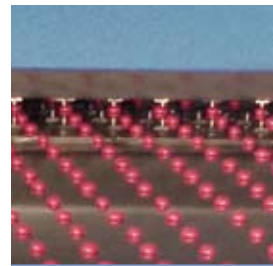
Rolldrop®



AccuDrop®



Rollomat®



ZN/GS

Visit one of our state-of-the-art test centers today and explore the possibilities!



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