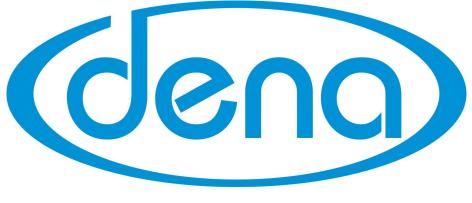
DENA NANO LTD

DENA NANO PAINT SYSTEM





our nanotech future

OUR TECHNOLOGY

Dena Nanometric processing Systems are designed to utilise several different functions within each production System; de-agglomeration, particle size reduction and homogenising to process the particles suspended in paint & coating down to Nanometric scale.

Nano metrics is the process of reducing particle size to Nano scale; our machine can reduce particle size upto 50 Nanometers. We have demonstrated time to time that our technology improves quality, consistency, coverage, economics and thereby the profitability for our clients.

Dena systems are far more advance compared to conventional mixing and homogenising methods. The system now performs the processes of

Mixing

Milling/reducing

Reaction

- Blending
- Homogenising
- Dispersing

Emulsifying

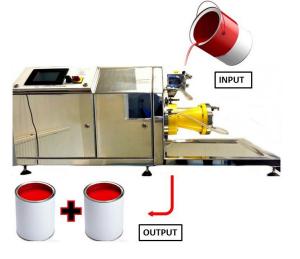
De-agglomerating

Shearing

- Polishing
- Shattering

Finishing/shaping particles

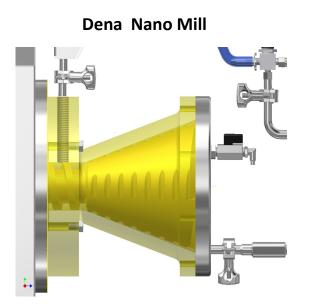
Dena system is capable of carrying out all these processes in one single continuous process line Vs conventional method, which requires several pieces of equipment



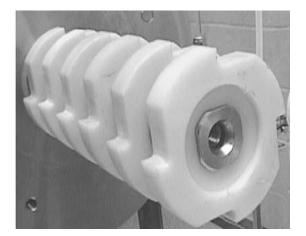
DESIGN BENEFITS

<u>Revolutionary design, unlike any other</u>

Our patented machine is a unique design, which is difficult to find any where else. There are several beads mill in the market, however none of them is as efficient and advanced as our technology. Many of our competitors are still using same old cylindrical design, which has few downsides. Where as our machine design is based on progressive conical design. It has several pockets where beads resides ands produces hammer and grinding effect on the particles. This design element helps our machine achieve particle size down to 50 Nano.



Common Beads Mill



<u>Continuous and batch processing</u>

Our machine is capable of both continuous and batch processing. If required it can work in parallel or in series pattern

<u>Scalable</u>

All our machines are scalable, we have machines small enough for lab experiments and big enough to support industrial scale production.

<u>Minimum footprint</u>

Dena machines are compact in nature, our smallest machine measures only 500 mm x 400mm x 400mm.

Highest quality material used

We use only the highest quality material to build our machine, the body is made from carbon steel and the chamber is made form space grade nylon.



DESIGN BENEFITS

Less wear and tear

Processing chamber is made from space grade nylon, which handles zirconium beads better than steel. This results in longevity of our machine and less replacement of moveable parts

- Built in homogenizer and deagglomerator
- Energy efficient
- Easy to clean
- Fully automatic and PLC controlled
- Light weight
- Inbuilt cooling and heat exchanger

PROCESSING BENEFITS

- Achieve desired particle size upto 50 nm
- Increased homogeneity means better quality
- Increased quantity after processing. Get upto 30% extra paint just by processing
- Increased Gloss after processing
- The paint has a longer shelf life
- Better protection and less waste
- Better coverage/hiding power
- Minimum or no contamination



BENEFITS OF OUR MACHINE

- Contamination Free Production
- Reduced Operation Costs
- Reduced Energy Costs
- Quality Improvement
- Improved Operator Safety
- Less processing time

DENA SYSTEM CAN PERFORM

- Mixing, Blending and Homogenising
- Shattering and De-agglomerating
- Shearing and Dispersing
- Milling and Polishing
- Emulsifying

USED FOR SIZE REDUCTION OF

- Industrial and Standard Paints
- Creation of Nano Particles
- Coatings and Dyes
- Chemical Suspensions
- Nanometric Inks
- Pigments

