

Cleaning & Finishing News

NEWS BULLETIN ON DEBURRING, FINISHING, WASHING & CLEANING



January 2021 | Volume 33

No.1 Surface Engineering Solution Provider with over 5000 Installations

www.galagroup.com

Automated Vibro Spiral Finishing System



VS800 Vibratory System
with Hot Air Dryer

We at Gala Precision believe in meeting the challenging needs of productivity and automation as per customer- specific requirements.

Customer Requirements

- Deburring, Polishing and Drying in continuous process
- Productivity - 400 kg per Batch size with cycle time 90 min.

Advantages

- Automatic Finishing and drying system resulting in manpower reduction by 50%.
- Hot air dryer for dust-free and efficient drying
- Reduction in processing time cost by 25% - 30% as compared to round vibratory machine.
- Separation time can be as low as 6-10 Min.

Features

- Reliable proven design for Vibro spiral and hot air dryer equipment
- PLC based Control Panel and VFD
- Automatic separation of parts from the Vibratory system and Hot air dryer
- Reliable Vibratory motor manufactured in-house.

VS800 System Applications

- Bearing Rollers (Small size)
- Drive Chain Parts
- Bearing Cages
- Electrical Parts
- Small machined and Aluminium Die- cast parts

CASE STUDIES

1

Descaling and Edge-radiusing for Chain Pins

Objective : Descaling and Edge-radiusing of pins

Component : Chain Pins

OD 4.52 mm L 16.68 mm Wt 18 gm

Material : 15B25

Present Method : Tumbling Barrel

Challenges : Very high Process time in tumbling machine

Finishing Solution

Machine : Centrifugal Barrel Finishing Machine

Process : Descaling and Edge radiusing

Result : Edge radius and outside diameter achieved as per specification

Advantages : Reduced process time, Increase in productivity & consistent finish



2

Deburring & polishing of Brake Plate

Objective : Deburring and polishing of Brake Plate

Component : Brake Back Plate

L 130 mm W 45 & 66 mm Th 6 mm Wt 245 gm

Material : Alloy Steel

Present Method : Standalone Vibratory Machine

Problem faced : Rust Formation after Vibro

Finishing Solution

Machine : Inline Vibro Finishing, Vibro trolley With RP Spray Unit & Vibratory Dryer

Process : Deburring and Rust Protection

Result : Burr removed and rust free components

Advantages : Increase in Productivity and Incorporation Rust prevention process in VB process



CASE STUDIES

3 Deburring and Polishing of Sprockets

Objective : To Remove Burr and achieve a consistent finish

Component : Sprocket

OD 119 mm

ID 22 mm

Ht 26 mm

Wt 698 gm

Material : Mild Steel

Present Method : New Development

Problem Faced: Establish suitable deburring process

Finishing Solution

Machine : Vibro Finishing

Process : Deburring

Result : Burr removed from the surface and achieved the bright finish

Advantages: High productivity & consistent finish achieved.



4 Deburring and Polishing for Impellers

Objective : Remove Burr and achieve bright finish

Component : Impeller

OD 119 mm

Wt 110 kg

Material : Aluminum

Present Method : Manual

Problems Faced: Inconsistent finish, Dent & damages on surface.

Finishing Solution

Machine : Vibratory Finishing Machine (Segmented)

Process : Deburring & Polishing

Result : Burr removed, bright finish and surface roughness value achieved as per specification

Advantages : Consistent finish and free from dents



Cleaning & Finishing News

NEWS BULLETIN ON DEBURRING, FINISHING, WASHING & CLEANING



January 2021 | Volume 33

No.1 Surface Engineering Solution Provider with over 5000 Installations

www.galagroup.com

Mechanical Zinc Plating (MZIP)



Features

- Range - 25 Lit and 50 Liter
- Barrel Tilting - Pneumatically Operated
- Process Cycle time - 60 min to 120 min.
- VFD for Variable Speed
- Compact size

Advantages

- Suitable for smaller batch size.
- No risk of Hydrogen Embrittlement
- Uniform Coating thickness up to 50 micron
- Less consumption of water
- Process at room temperature

Applications



Belleville Washer



Disc Spring



Fastners



Rivets



Hose Clamps



Spring Washers



Gala Precision Engineering Private Limited

A-59, Road No.10, Wagle Industrial Estate, Thane - 400 604, INDIA.
Tel.: 0091-22-4141 0470 / 2582 1232 / 2580 0252 / 9967 014 844
Fax: 0091-22-2582 0771, E-mail: massfinishing@galagroup.com