Cleaning & Finishing News

News bulletin on Deburring, Finishing, Washing & Cleaning

GALA Precision Engineering
Surface Engineering Solutions

July 2019 I Volume 30

No.1 Surface Engineering Solution Provider with over 5000 Installations

www.galagroup.com

Front Loading Rotary Table Spray Washing Machine

Versatile Design I Multiple Cleaning Processes I Higher Throughput

Features

- Cleaning pressure 12-14 Bar
- Adjustable Nozzles
- Swiveling Manifold for Washing
- Conveyorised Sludge Scrapper Arrangement
- On-line Coalescer type Oil / Grease Separation Mechanism

Standard Models

Model	Turntable Diameter	Maximum Part Height	Load Carrying Capacity
LCF 1	900 mm	600 mm	500 kg
LCF 2	1200 mm	800 mm	800 kg
LCF 3	1500 mm	1000 mm	1200 kg

Advantages

- Suitable for cleaning high level of grease and other sticky contaminants from large / bulky parts
- Multiple processes used: Spray washing, spray rinsing-cum-rust inhibition, and hot air blow-off
- High load carrying capacity of turntable
- Ease of operation for loading and unloading

Applications

Cylinder Heads

Gears

Motor Housing

Gear Trains

Crank Cases

Cleaning & Finishing News
NEWS BULLETIN ON DEBURRING, FINISHING, WASHING & CLEANING
GALA PRECISION ENGINEERING Surface Engineering Solutions
July 2019 I Volume 30
No.1 Surface Engineering Solution Provider with over 5000 Installations
www.galagroup.com

CASE STUDIES

1 Rotary Table Spray Washing Machine

Objective : To remove heavy grease contaminants in used roller bearings

Component : Bearings for overhauling

Input Contamination : Grease, Oil, Dirt

Expected Results : Free from oil, grease and dirt

Present Method : Manual

Disadvantages : Time Consuming, Manual labor, Inconsistent results

Solution Provided By Gala :

Machine : Rotary table high pressure spray washing machine

Processes :

High pressure washing with alkaline chemical
High pressure rinsing with rust preventive chemical
Hot air drying

Advantages : Increased productivity, Reduced labor, Consistent results

2 Single Piece Flow Conveyrised Spray Washing Machine

Objective : To remove machining oil and loose burr

Component : Traction Sheaves

Input Contamination : Machining Oil and Loose Burr

Expected Results : Gluing Area free from Oil and Burr

Present Method : Manual

Disadvantages : Off-line process

Solution provided by GALA

Machine : Single Piece Flow, Conveyrised Spray Washing Machine

Processes :

Spray washing with alkaline chemical
Spray rinsing with rust preventive chemical
Compressed Air Blow-off

Advantages : Inline Cleaning Machine

Cleaning & Finishing News
NEWS BULLETIN ON DEBURRING, FINISHING, WASHING & CLEANING
GALA PRECISION ENGINEERING Surface Engineering Solutions
July 2019 I Volume 30
No.1 Surface Engineering Solution Provider with over 5000 Installations
www.galagroup.com

CASE STUDIES

3 Multi-Chamber, Multi-process Ultrasonic Cleaning Machine

Objective : To remove oil, grease and dirt

Component : Aluminium Housing

Input Contamination : Machining Oil and Burr

Expected Results : Free from oil & burr

Present Method : Manual

Disadvantages : Less productivity, Manual labor, Inconsistent results

Solution Provided By Gala :

Machine : Multi-chamber, Multi-process Ultrasonic Cleaning Machine

Processes :

Ultrasonic Cleaning and Immersed Flood Cleaning
Immersed Flood Rinsing
Hot air drying

Advantages : Improved consistent cleaning, Reduction in manpower

4 Vibratory Finishing Machine

Objective : Deburring and Polishing

Component : Manifold

Present Method : Manual

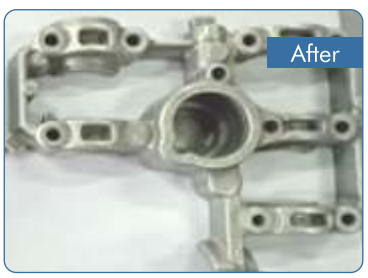
Disadvantages : Inconsistent finish, Low productivity

Solution provided by GALA

Machine : Vibratory Finishing Machine

Processes : Deburring & polishing

Advantages : Consistent finish, Improved productivity



Cleaning & Finishing News
NEWS BULLETIN ON DEBURRING, FINISHING, WASHING & CLEANING
GALA PRECISION ENGINEERING
Surface Engineering Solutions
July 2019 I Volume 30
No.1 Surface Engineering Solution Provider with over 5000 Installations
www.galagroup.com

Automatic Pre-treatment and Passivation Plants

Phosphating is the process of converting a steel surface to iron phosphate. This is mostly used as a pretreatment method in conjunction with another method of corrosion protection. A layer of phosphate coating typically includes iron, zinc or manganese crystals.

Phosphating is a chemical process for treating the surface of steel, where barely soluble metal-phosphate layers are formed on the base material. The layers created are porous, absorbent and suitable as a conversion layer for subsequent powder coating without further treatment.

The main applications of phosphating are:

- Corrosion protection in conjunction with organic coatings, such as paints and polymer films
- Facilitation of cold-forming processes, such as wire drawing and tube drawing, or deep drawing
- Corrosion protection in conjunction with oils and waxes
- Corrosion protection with no subsequent treatment
- Improving anti-friction properties, such as break-in, wear resistance, anti-galling and coefficient of friction
- Providing strong adhesion bonding for subsequent painting or other organic coating

GALA PRECISION ENGINEERING
Surface Engineering Solutions

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