

Surface Engineering Solutions For Defence

Deburring
Degreasing
Descaling
Passivation
Drying
Washing
Cleaning
Systems



Cylindrical Rotary Screw
Spray Cleaning



Multistage Ultrasonic
Cleaning



Special Purpose
Polishing



Vibratory Finishing
and Spray Washing

About Gala

Gala Precision Engineering is a vibrant organization with a young team. We follow principles of Entrepreneurial Professionalism and serve Global markets.

The Company is a leader in Disc Springs, Assemblies and Surface Engineering Solutions in India.

The Company designs and manufactures Integrated Systems for Mass Finishing, Washing & Cleaning for a wide variety of applications in Automotive, Defense & General Engineering Segments.



For
Deburring, Finishing,
Washing and Cleaning

Experience of more than **25** years

Over **5000** systems working satisfactorily in
India and abroad

Database of **10,000+** applications

40% repeat orders

Clientele

Ammunition Factory, Pune

Bharat Heavy Electricals Ltd - Haridwar,
Hyderabad

Bharat Electronics Limited, Bangalore

Bharat Dynamics Ltd, Hyderabad

Bhabha Atomic Research Centre, Mysore

Hindustan Aeronautics Ltd - Bangalore, Koraput

Howell Munitions & Technology Inc, USA

Ordnance Factory - Kanpur, Kolkata, Varangaon

Royal Metal Industries LLC, USA

Small Arm Factory, Kanpur

Defense Applications

Ammunition - Small Arms



Ammunition - Light Weapons and Tanks



Machined Parts of Small Arms



Precision Machined Parts



Engine and Transmissions Parts



Surface Engineering Solutions for Ammunition – Small Arms



Vibratory Finishing System

Features

- Fully automatic process
- Auto loading, unloading
- Compact design

System Configuration

- Component loading
- Auto dosing
- Vibratory finishing
- Hot air drying
- Effluent treatment



Degreasing, Pickling and Passivation



Before

After

Media used



Water based Alkaline, Neutral and
Acidic compounds





Cylindrical Rotary Screw Spray Cleaning

Spray Type

Features

- Cleaning & rinsing - Spray type
- In-line continuous cleaning
- High production rate upto 1250 kg/hr
- Multiprocess cleaning zones
- Suitable for ferrous and non-ferrous parts
- Hot air drying
- All wet parts in stainless steel 304 or 316



System Configuration

- Automatic loading and unloading
- Vapour extraction unit
- Oil skimmer
- Inbuilt filtration and recirculation
- PLC based control panel

Degreasing and Drying



Before



After

Water based Alkaline, Neutral and Acidic compounds



Surface Engineering Solutions for Ammunition – Light Weapons



Degreasing and Drying



Before



After

MultiStage Ultrasonic Cleaning

Features

- Multiwash, rinse, drying & passivation
- PLC based control
- Simultaneous treatment of parts in various chambers
- Flexibility in washing programmes

System Configuration

- Immersion, spray, flood wash cycles
- Automatic material handling system
- Basket rotation and dunking
- Water filtration and recirculation
- Oil skimmer
- Hot air drying

Water based Alkaline, Neutral and Acidic compounds





Cylindrical Screw Feed Degreasing / Pickling

Immersion Type

Features

- High production rate upto 1250 kg/hr
- Fully automatic continuous process
- All wet parts in stainless steel SS 304 or 316

System Configuration

- Rotary screw conveyor
- Separate stages for washing, rinsing and drying
- Scrubber system for pickler



Degreasing, Pickling and Drying



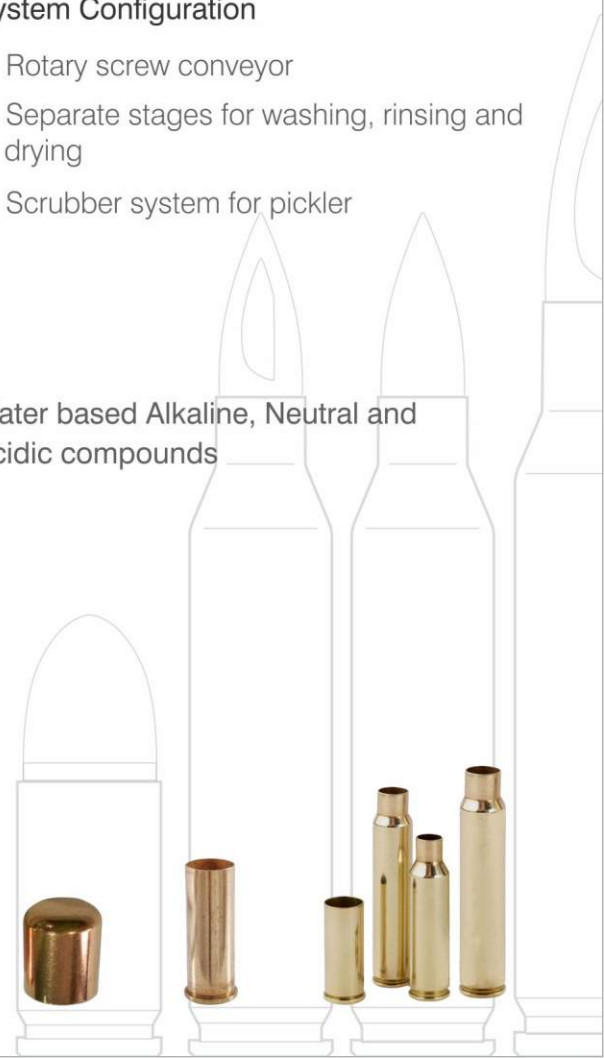
Before



After



Water based Alkaline, Neutral and Acidic compounds





Surface Engineering Solutions for Ammunition - Tanks

Conveyorised Spray Washing

Features

- Separate zone for washing and rinsing
- All wet parts in stainless steel SS 304 or 316
- Hot air drying

System Configuration

- In-line continuous cleaning with separate wash/ rinse/dry zones
- Option of separate entry, exit and return conveyors
- Mist collection
- Inbuilt filtration and recirculation



Degreasing and Drying



Before



After

Water based Alkaline, Neutral and Acidic compounds





Indexing Type Rotary Spray Washing

Features

- Separate zone for washing, rinsing and drying
- Auto indexing mechanism
- All wet parts in stainless steel SS 304 or 316
- Fully automatic process

System Configuration

- Rotary indexing work station
- Inbuilt filtration and recirculation
- Mist collector



Degreasing and Drying



Before



After

Water based Alkaline, Neutral and Acidic compounds



Surface Engineering Solutions for Ammunition - Tanks



Special Purpose Polishing System

Features

- Auto feeding of components
- Fully automatic process
- Dust collection arrangement

System Configuration

- Indexing mechanism for loading and unloading polishing stages
- Separate head for inside and outside polishing

Grinding and Polishing



Before



After

Buffing Wheel used



Surface Treatment of Machined Parts

Phosphating Plant

Features

- Suitable for manganese, zinc and iron phosphating
- Fully automatic process
- PLC based control panel

System configuration

- Automatic material handling system
- Inbuilt filtration and recirculation



Phosphating



Before



After



Duburring and Finishing of Machined Parts



Vibratory Finishing Machine

Application

- Deburring
- Descaling
- Polishing

Batch Size : 50 to 400 Kg

Machine Volume : 50 to 1500 Ltr

Trough Vibrator

Application

- Deburring
- Polishing

Batch Size : 50 to 300 Kg

Machine Volume : 100 to 1200 Ltr





Centrifugal Barrel Finishing Machine

Application

- Descaling
- Polishing
- Superfinishing

Batch Size : 15 to 75 Kg and can be customized upto 1500 kg

Machine Volume : Standard 40 to 300 Ltr and can be customized upto 2000 Ltr

Disc Finishing System

Application

- Deburring
- Descaling
- Polishing
- Superfinishing

Batch Size : 5 to 100 Kg

Machine Volume : 20 to 300 Ltr



Washing and Cleaning of Machined Parts



Single Chamber Multi Processor (SCMP)

Application

- Degreasing
- Rinsing
- Vacuum Drying

Capacity : 50 to 300 kgs

Work Chamber Size : 100 to 500 Ltr

Working Pressure : 3 to 15 Bar

Cabinet Type Spray Cleaning

Application

- Degreasing
- Rinsing
- Drying

Capacity : 50 to 300 kgs

Table Size : Ø 300 to Ø 1200 mm

Working Pressure : 5 to 75 Bar





Single Piece Flow Conveyorised Ultrasonic Cleaning

Application

- Degreasing
- Rinsing
- Drying

Capacity : Customised

Single Chamber Ultrasonic

Application

- Degreasing
- Rinsing

Capacity : 50 to 1000 Ltr





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