

# **Industrial Parts Washing & Cleaning**

# 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.

As a result of decades of experience, we are able to respond to the special requirements of our clients. Innovative systems are designed & developed together with the client and are customized to their requirements. Different modules can be integrated into our systems as processing stations.

## Our Advantages

- Compact machines with latest technology
- Application based approach to offer customised systems
- New generation cleaning compounds
- All India service support

### Infrastructure

Corporate office at (Thane)  
Mumbai, India

Well established factory near  
Mumbai, India on 28000 Sq mt  
of land

Specialised Surface Engineering  
Division on 1858 Sq mt area

High skilled workforce

### R&D and Test Lab

Best in class R&D lab for sample  
testing, developing new solutions,  
process standardization and  
improvement and technology  
innovations

Millipore test facility

Ra Value measurement

Hardness testing

Chemical testing

5000 Sqft area for R&D

### Advanced Designing on CAD/CAM systems

Advanced Product Design &  
Manufacturing for quality  
machineries and finishing  
output of global standard

FMEA/FEA tools

AutoCAD version

Solid modeling version

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Experience of more than **25** years

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

Database of **10,000+** applications

**24 X 7** service helpline

**5000** sq feet for R&D process lab

**40%** repeat orders



# Applications

## Aerospace



## Defense



## Automotive



# Applications

## Precision Engineering

### Chain Parts



### Bearings



### Springs



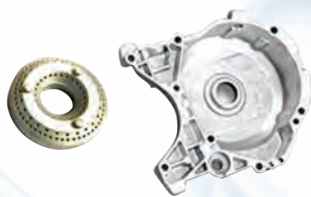
### Tools



### Compressor Parts



### Die Cast Part



### Precision Machined Parts



### Textile Machine Parts



### Gear & Sprockets



### Fasteners



# Applications

## Precision Engineering

### Jewelry & Watch Parts



### Hydraulic Parts



### Pumps & Valves



### Surgical Parts



### Optical





# Spray Cleaning

## Rotary Basket (Top Loading)

### Features

- Continuous rotation during spray cleaning
- Spray from top & bottom
- Manual front door with gas springs
- Rotation arrangement from side hence no obstruction in bottom for cleaning
- SS mesh and micron bag filter provided

### Optional

- Pneumatically operated lid
- Mist collector
- PLC based control panel



### Rotary Table Type Cleaning System (Top Loading)

Model	GCT 1	GCT 2	GCT 3
Basket Size (Ø mm)	600	900	1200
Max. Part Height (mm)	300	350	350
Max. Load (Kg.)	150	250	350
Washing Storage Tank (L)	350	450	500
Washing Pressure (Bar)	3	4	5

Dimensions are for reference only and subject to change\*

## Rotary Basket (Front Loading)

### Features

- Pneumatically operated front door
- Suitable for medium size parts
- Robust design

### Optional

- Multi-level filtration
- Rinse tank
- Hot air drying



### Rotary Table Type Cleaning system (Front Loading)

Model	GCF 1	GCF 2	GCF 3	GCF 4
Basket Size (Ø mm)	700	1000	1300	1600
Max. Part Height (mm)	450	500	550	600
Max. Load (Kg.)	300	350	350	400
Washing Storage Tank (L)	300	400	500	600
Washing Pressure (Bar)	3	5	5	5

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# Spray Cleaning

## Conveyorised Spray

### Features

- High performance in-line cleaning
- Continuous flow of parts cleaning in different cleaning zones
- Spray pressure 2 - 15 Bar
- Customised solution based on cleaning need
- Safety interlocks

### Optional

- Water filtration and oil skimmer
- Variable conveyor speed through VFD
- Hot air drying
- Fume extraction system
- PLC based control panel



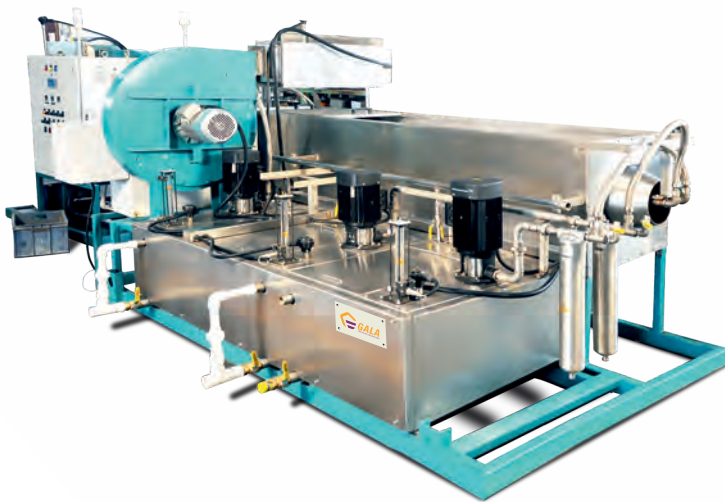
## Cylindrical Rotary Screw Spray

### Features

- Cleaning & Rinsing - Spray Type
- In-line Continuous cleaning
- High production rate
- Multiprocess cleaning zones
- Suitable for fasteners, valves, tubes, bearing parts etc
- Hot air drying
- All wet parts in stainless steel 304 or 316

### Optional

- Automatic loading and unloading
- Vapour extraction unit
- Oil skimmer
- Filtration and recirculation of cleaning media
- PLC based control panel





# Ultrasonic Cleaning

## Table Top Ultrasonic

### Features

- 100% stainless steel construction, including mesh basket, top lid, etc
- Digital or Analog Control Panel
- Standard sizes available – upto 50 ltrs
- Compact and light weight machine
- Stainless steel
- Temperature & time controller

### Optional

- Filtration and recirculation in bigger models
- Oil skimmer



## Multi Stage Ultrasonic

### Features

- Multiwash, Rinse, Drying & Rust preventive application
- PLC based control
- Simultaneous treatment of parts in various chambers
- Flexibility in washing programmes

### Optional

- Immersion, Spray, Flood Wash cycles
- Automatic material handling system
- Basket Rotation and Dunking
- Water filtration and Recirculation
- Oil Skimmer
- Hot Air Drying



# Single Chamber Multiprocess Cleaning

## Aqueous Based

### Single Chamber Multi Processor (SCMP)

#### Features

- Ultrasonic cleaning with immersed flood wash
- Multiple programs as per need
- Basket rotation
- Multi stage filtration
- Washing / Rinsing / Drying in a single chamber
- Programmed sequences
- Compact machine with multiple cleaning options
- PLC based control panel



#### Optional

- Vacuum drying
- Auto dosing of water and chemicals

### Standard Models

Model	Basket Sizes (mm)	Max Load (Kg)	Throughput
Aqueous 1	380 X 220 X 200	50	7 min / batch
Aqueous 2	530 X 320 X 200	80	10 min / batch
Aqueous 3	1000 X 455 X 400	200	15 min / batch
Aqueous 4	1250 X 850 X 500	350	18 min / batch

Note : Customised machines also can be offered.  
Dimensions are for reference only and subject to change\*

# Single Chamber Multiprocess Cleaning

## Solvent Based

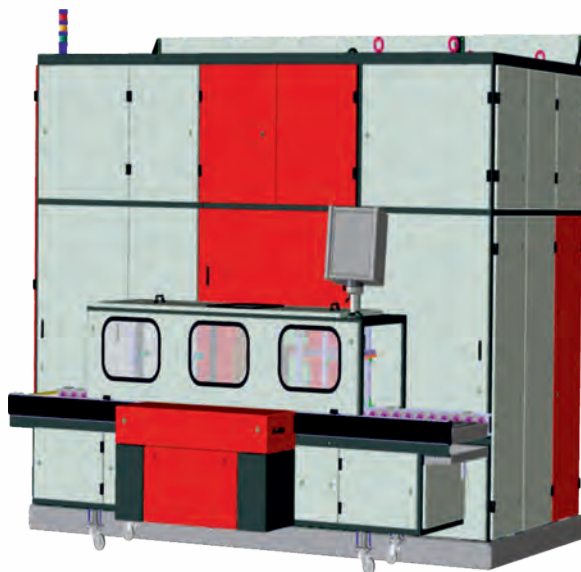
### Single Chamber Multiprocess Cleaning & Drying

#### Features

- High throughput
- Cleaning and Drying under vacuum
- Solvent based or Aqueous based cleaning media
- Effective cleaning of intricate shapes & blind holes
- Easy operation using touch screen panel
- Batch weight of 20 Kg to 150 Kg
- Most effective for cleaning of Grease and Oil
- Cycle time is approximately 4 min to 15 min

#### Optional

- Ultrasonic cleaning
- Additional storage tank for cleaning media
- Auto feed of parts



### Standard Models

Model	Basket Sizes (mm)	Max Load (Kg)	Throughput
Pero V0	380 X 220 X 200	50	04 - 06 min / batch
Pero R1	530 X 320 X 200	80	03 - 04 min / batch
Pero R2	660 X 480 X 300	20	04 - 05 min / batch

Note : Higher capacity model V3, V4& V5 also available  
Dimensions are for reference only and subject to change\*



# Customised Cleaning Machines

## Cylindrical Screw Feed Cleaning

Immersion Type



### Features

- Cleaning & Rinsing - Immersion Type
- Option of Acid pickling or Alkaline washing
- In-line continuous cleaning
- High production rate
- Multiprocess cleaning zones
- Suitable for fasteners, valves, tubes, bearing parts, etc
- Hot air drying zone
- All wet parts in stainless steel

### Optional

- Automatic loading and unloading
- Vapour extraction unit
- Filtration and recirculation of cleaning media
- PLC based control panel

## Multiple Basket Spray Cleaning

### Features

- High productivity
- Compact foot print
- Detachable trolley

### Optional

- PLC based panel
- Mist Collector
- Multilevel filtration



# Customised Cleaning Machines

## Single Piece Flow Conveyorised Ultrasonic Cleaning

### Features

- Washing / Rinsing / Air Blow / Hot Air Drying
- Suitable for small and medium size parts like swash plate & engine valve

### Optional

- Inbuilt filtration system
- Interlock for loading and unloading of parts
- PLC based control system



## Cabinet Type Spray Cleaning

### Features

- Washing | Rinsing | Drying
- Suitable for small parts

### Optional

- Multilevel filtration
- PLC based Panel



# Compounds for Parts Cleaning

Aqueous cleaning compounds are widely used for various industrial parts cleaning processes. These compounds can be used in Spray cleaning, Ultrasonic cleaning and Immersion cleaning methods.

## Selection of cleaning compound is based on following

- Cleaning process - Immersion, Spray, Ultrasonic
- Variables - process time, temperature, pressure
- Part size and complexity of geometry
- Required cleanliness level
- Part material - ferrous, non ferrous
- Nature of contamination
- Safety norms

### We offer following cleaning compounds

- Degreasing
- Cleaning and descaling
- Brightening

	Product Code	Application	Suitable For	Nature
Degreasing	GEW 1101 L	Degreasing - Spray and immersion	Ferrous, Non Ferrous	Acidic
	GEW 1201 L	Heavy Duty Degreaser for Ultrasonic / immersion method before plating	Ferrous, Non Ferrous	Alkaline
	GEW 1221 L	Heavy Duty Degreaser works at room temperature for Aluminum components	Aluminum	Alkaline
	GEW 1202 L	Heavy duty Degreaser for Ultrasonic and Immersion method specially suitable for imitation Jewellery	Ferrous, Non Ferrous, Imitation Jewelry	Alkaline
	GEW 2260 L	Alkaline solution to clean galvanized steel in immersion & ultrasonic cleaning	Galvanized steel	Alkaline
	GEW 913 P	Alkaline degreasing compound suitable for cleaning oil, grease, soil. Immersion & ultrasonic	Iron and steel surfaces	Alkaline
	GEW 2210 L	Highly alkaline detergent cleaner suitable for cleaning ferrous parts in Spray & Ultrasonic cleaning	Ferrous	Alkaline
	GEW 2220 L	Mild alkaline cleaner suitable for cleaning non ferrous parts (Aluminium, Copper, Brass)	Non Ferrous	Alkaline
Cleaning & Descaling	GEW 2021	Non Caustic no silicate cleaner for zinc and zinc alloy	Zinc & Zinc Alloy	Neutral
	GEW 2211	Online Spray cleaner specially for MS	Ferrous	Alkaline
	GEW 2121 L	Mild Acidic Ultrasonic cleaner to clean buffing paste and enhance shining for SS articles	Non Ferrous (SS)	Acidic
	GEW 2122 L	Descaling solution for Copper - Silver brazed parts	Copper, Silver	Acidic
	GEW 2142 L	Mild Acidic solution to clean / descale Aluminum die cast component prior to powder coating	Aluminum	Acidic
	GEW 2000 L	Neutral vibratory polishing and ultrasonic cleaning liquid to clean oil, shops oil and carbonaceous deposits	Ferrous, Non-Ferrous	Neutral
Brightening	GEW 5141 L	For extra bright surface finish of Aluminum components	Aluminum	Acidic
Bin Cleaning	GEW 2250 L	Alkaline solution to clean plastic bins	Plastic bins	Alkaline



We also offer high end compounds from **DST-CHEMICALS**, Denmark for descaling, degreasing and rust removing applications. These compounds are environment friendly and offers following benefits.

Dimensions are for reference only and subject to change\*



# Clientele



Ordnance Factory, Varangaon  
Ammunition Factory, Pune





**Surface Engineering Solutions**

## Inquiry

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