

Trinity Coating Systems, a 100% stakeholder owned by
Trinity Industrial Corp. Japan, into the business of
design, engineering, manufacture, fabrication,
installation & commission of
paint finishing systems / equipment and
paint application machine.
Trinity will propose solution
for customers' various concerns
with its unique after-sales service.



TRINITY COATING SYSTEMS



Low Air Pressure & Volume Automatic Spray Gun - G05 Series

Top market share in digital electrical appliances and cellular phone.

AUTOMATIC SPRAY GUN - G05 SERIES



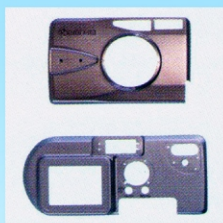
ADVANTAGES:

- ▶ **Atomizing at low pressure and low volume**
 - High efficiency for paint adhesion and little loss of paint
 - Good paint penetration
 - Less spattering and scattering of paint
 - Preventing the stains on booth or jigs (Preventing the over spray)
- ▶ **Atomizer nozzle is made of cemented carbide & precision processed**
 - Excels in atomizing
 - Smooth paint layer can be done at low pressure
- ▶ **Specially shaped paint nozzle**
 - Preventing the paint dripping and spitting
 - Less stain on air cap

LOW PRESSURE AUTOMATIC SPRAY GUN - G05 SERIES:

Recently, low pressure atomizing spray guns are apt to be used taking place of electrostatic sprayer because of high efficiency paint adhesion, good paint penetration and less paint scattering. We have two types of "Low pressure atomizing gun" which are flat spray pattern (G05-23) and round spray pattern (G05-38). Many of our low pressure atomizing guns are adopted in the painting for cellular phone, electromagnetic wave shield material on PC, functional paint on piston, valve, turbo charger of automotive parts fluorescent light (photocatalyst paint), super-thin paint layer of cosmetic bottle and receiving a favorable notice. Fluorine paint, UV paint, silicon paint and molybdenum are very expensive. Therefore, it requires high efficient paint adhesion even one percent for cost reduction and less paint spattering and scattering from the point of environmental. Mesac's low pressure atomizing gun G05 series meet those market needs perfectly.

APPLICATIONS



Digital Camera



Cellular Phone



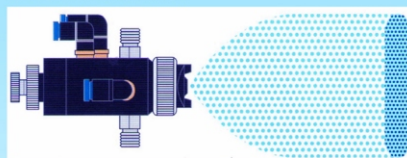
Compressor



Container Bottle

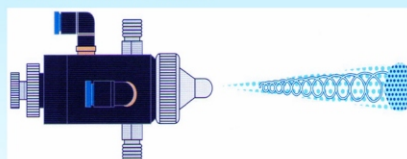
SPECIFICATIONS

G05-23 Flat Pattern



Weight	: 504g
Paint nozzle bore	: 1.0mm
Atomizing pressure	: 0.03~0.2 MPa
Pilot air	: 0.35MPa or over
Air Consumption	: 100~200L/min
Pattern size	: 30~120mm
Paint delivery	: 5~12cc/min

G05-23 Round Pattern



Weight	: 471g
Paint nozzle bore	: 0.8mm
Atomizing pressure	: 0.02~0.1 MPa
Pilot air	: 0.35MPa or over
Air Consumption	: 15~30L/min
Pattern size	: 3~20mm
Paint delivery	: 0.5~30cc/min

MAIN USES

Print Type	Market	Printing object
Fluorine paint	Automotive	Carburetor throttle, Piston, Valve, O-ring
	Electrical	Copy machine roll, PC parts, Electromagnetic valve plunger
	Others	Camera lens tube, VCR parts, gear
UV Paint	Plastic	Cellular phone, Cosmetic bottle, Optical instruments
	Carpentry	Furniture, Desk, Door, Golf club
Silicon paint	Electrical	Buttons of PC, Cellular phone
Molybdenum	Automotive	Turbo charger, Compressor
Photocatalyst		Lighting instrument, Mirror, Building material, Glass product
Inorganic paint		Container bottle, Sink utensil

EXAMPLES

Example for Molybdenum paint on automotive parts



Example for photocatalyst paint on automotive parts





Electrostatic paint spray gun with cascade module - RBG-42, RBG-40

ELECTROSTATIC PAINT SPRAY GUN - RBG-42, RBG-40 SERIES



Automatic electrostatic air spray guns 'Auto Radial' - ARG-20, ARG-30

AUTOMATIC AIR SPRAY GUN - ARG-20, ARG-30 SERIES



RBG-12

RBG-12 SERIES



ELECTROSTATIC HAND SPRAY GUN

MODEL BS



SPECIFICATIONS:

1. Applied voltage : DC~60KV
2. Current : DC 100uA
3. Air pressure : 0.1~0.75 MPa
4. Air consumption : 100~ 800Ne/min
5. Spray capacity : 100~650cc/min
6. Pattern width : 50~500mm (fan nozzle)
7. Weight of the gun : Model BS 550gr

MODEL BS & BM



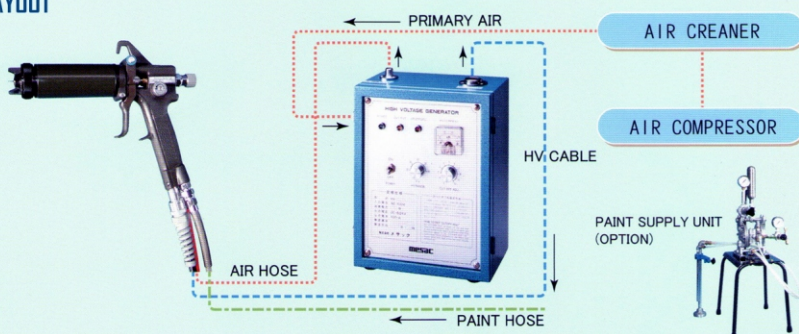
MODEL BM



SPECIFICATIONS:

1. Applied voltage : DC~60KV
2. Current : DC 100uA
3. Air pressure : 0.1~0.75 MPa
4. Air consumption : 100~ 800Ne/min
5. Spray capacity : 100~650cc/min
6. Pattern width : 50~500mm (fan nozzle)
7. Weight of the gun : Model BM 590g

LAYOUT



The gun of type "BS" is in general use for almost paint except water soluble paint, metallic paint, amino alkyd paint.

In case using electrical conductive paint such as "high-Metallic Paint, Amino Acid Paint (woodcraft use), please use gun type "BM".



Established in the year 1998, Trinity Coating Systems Ltd. Bangalore is a 100% subsidiary company of Trinity Industrial Corporation Japan. Trinity has a wide range of innovative products like paint finishing systems / equipment, paint application machine, pre-treatment systems, electro coating systems, spray booths, air make-up equipments, baking ovens, exhaust gas treatment equipments, VOC abatement equipments, factory ventilation systems, paint circulation systems, conveyor systems that we develop and manufacture and are being used in various industrial sectors nationwide and all over the world.

For leading International and Indian organizations that are looking for single source responsibility from basic engineering to commissioning of Turnkey Paint Shops - TRINITY has the expertise. Both Trinity Japan and Trinity India work in close combination to give our customers the service they expects in terms of technology expertise, quality of the end project, timeliness of completion, safety and optimum cost.

The sphere of Trinity - India's activities encompasses, Design and Engineering of Turnkey Paint Shops, fabrication of mild steel, stainless steel and galvanised steel items, purchasing of local parts as per designed requirements, quality checking and progress review during manufacturing, erection of locally procured and manufactured items, erection of imported equipment, commissioning and testing, and overall project management.

Trinity - India has a dedicated team of people, widely experienced in handling total Paint Shop Projects put up to attain International Standards. With this support, experience and excellent start, Trinity - India is now looking forward to expand its operations to other prestigious customers.

Administrative Management Capabilities:

- Design & Engineering
- Fabrication of Equipment
- To Handle Bought Out Items like Pumps, Motors, Valves etc.
- Erection of Imported & Local Equipments
- Adherence to Governmental Laws and Tax Regulations

Paint Finishing System

Trinity's total guarantee covers any size of entire paint finishing systems from start to finish stage and from planning to after-sales services.

As a leading expert of paint finishing systems, Trinity offers a total plant engineering service including the design, manufacture, installation and start-up of complete paint finishing systems comprising all stages such as pre-treatment, electro coating, surface coating, finish coating and baking. All aspects of our services and supplies, including our after-sales service, carry our total quality guarantee. We have the rare ability to act as a general contractor on a world-scale.

The capability applies not only to large-scale plants but also to mini-plants, which are handled with the same uncompromising commitment to quality and excellence. Trinity will propose optimum paint finishing system to meet the customers' need utilizing coating technologies developed with in-house coating experience.

Major Equipment

- ▶ Pretreatment
- ▶ Heat Exchange for Phosphating
- ▶ Electro Coating
- ▶ Spray Booth
- ▶ High Efficient Paint Collector
- ▶ Air Make-up
- ▶ Enthalpy Wheel
- ▶ Baking Oven
- ▶ Incinerator
- ▶ VOC Treatment
- ▶ Waste Water Treatment
- ▶ Paint Sludge Treatment
- ▶ Conveyor
- ▶ Factory Air Conditioning

Major Paint Coating System

- | | | |
|---|---|---|
| ▶ High Efficient Water Rinse | ▶ Water Borne Paint Coating | ▶ Planet Link (System Operation Management) |
| ▶ Iron Particle Removing | ▶ 2-Stage Water Rinse Recovery System by UF | ▶ Digital Engineering |
| ▶ Low Frequency Agitation | ▶ Centralized Spray Booth Control | ▶ System Operation Monitoring |
| ▶ High Quality Electro Coating | ▶ Air Flow/Direction Control | ▶ Hydrodynamic Analysis |
| ▶ Minimize Sludge at Pretreatment & E-Coating | ▶ Energy Saving Temperature Control | ▶ Conveyor Chain Weariness Measuring |
| ▶ Closed Waste Water Treatment | ▶ Paint Sludge Minimizing System | |
| ▶ Powder Coating | ▶ Energy Monitoring | |



Paint Application Machine

High performance and high efficiency are the hallmark of the extensive range of Trinity Paint Application Machine designed and manufactured by Trinity itself utilizing its superior know-how and experience.

Trinity undertakes the development, design and manufacture of a wide range of paint coating machines and related equipment. We offer a comprehensive array of systems designed to help our customers achieve major savings in coating costs. These systems include electrostatic paint coating equipment, all types of automatic paint coating equipment, paint circulation systems and a full range of painting machines. All of these products are developed with particular attention given to energy and resources savings, low manpower requirement, non-polluting and environment conserving features to make a decisive contribution to improving the efficiency and safety of paint finishing systems. Trinity paint application machines are completely manufactured in house to achieve and guarantee uncompromising standards.

Major Paint Application Machine

- ▶ Electrostatic Coating Machine
- ▶ Robot
- ▶ Reciprocator
- ▶ Automatic Coating Machine
- ▶ 2-Component Coating Machine
- ▶ Paint Circulation System
- ▶ Cartridge Paint Supply System
- ▶ Automatic Color Changer
- ▶ Electrostatic Spray Gun
- ▶ Electrostatic Rotating Bell Type Paint Adaptor
- ▶ Non Electro-Charge Bell
- ▶ Module Color Change Valve
- ▶ Multi Gear Pump
- ▶ Flushable Gear Pump
- ▶ Quick Washer
- ▶ Waste Liquid Recovery
- ▶ Electrostatic Flocking Machine

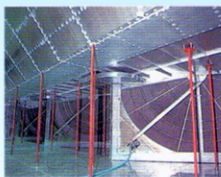
Major Paint Coating System

- ▶ Water Borne Paint Supply System
- ▶ Gun Change System
- ▶ Non-adjustable Dual Piping System

OVEN SYSTEMS



Spray Booth with built-in large size of glasses to visualize and make Kaizen Activity easy.



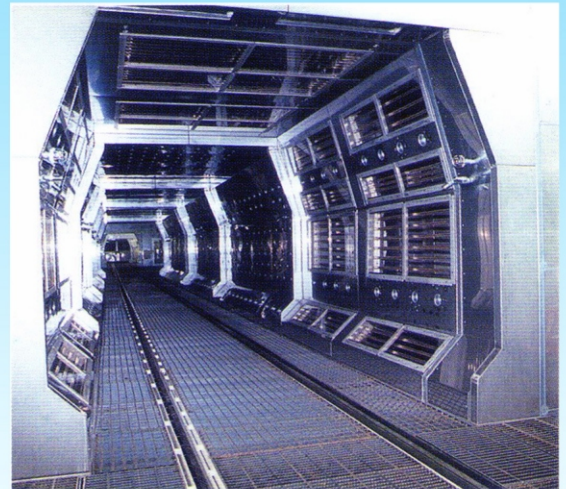
Entrapment Wheel



PT/ED Bumper Paint



Primer Paint Spray



Pre-Heat Oven for Water Borne Paint

Product Range

PAINT PLANTS

- ▶ **PRE TREATMENT SYSTEM**
 - Entrance
 - Bazooka Wash
 - Pre Wash Tank
- ▶ **E-COAT SYSTEM**
 - Entrance of ED Tank
 - Exit of ED Tank
 - E-Coat Paint Circulation
- ▶ **PAINT EQUIPMENT SYSTEM**
 - Primer Paint Robot
 - Top Coat Paint Robot
 - Paint Cartridge System
- ▶ **BUMPER PAINT BOOTH**
 - Primer Paint Spray
 - Clear Paint Spray
 - Booth Under Section

OVEN SYSTEM

- ▶ **PRE TREATMENT**
 - Piping
- ▶ **E-COAT SYSTEMS**
 - Ducting
 - Booth & Enclosures
 - Storage Tank & Automation
 - ED, Primer & Top Coat
- ▶ **TOP COAT**

CLEANING SERVICE

- ▶ **BOOTH OVEN PT/ED SECTIONS**

SMALL CONSTRUCTION

- ▶ **DECK INSTALLATION**
 - Deck, Piping & Duct



Trouble-free operation with automatic lubrication systems.

AUTOMATIC LUBRICATION

Perma CLASSIC / Perma FUTURA



Solutions

- ▶ Housing: perma CLASSIC - metal / perma FUTURA - transparent plastics
- ▶ Electrochemical / grease and oil
- ▶ Operating temperature 0°C to +40°C
- ▶ Discharge period at 20°C with SFOI: 1, 3, 6 or 12 months
- ▶ Pressure build-up: Max. 4 bar
- ▶ Lubricant volume: 120 cm³

Perma NOVA



Solutions

- ▶ Housing: Transparent plastics
- ▶ Electrochemical / grease and oil / temperature independent
- ▶ Operating temperature -20°C to +60°C
- ▶ Discharge period: 1, 2, 3... 12 months
- ▶ Pressure build-up: Max. 6 bar
- ▶ Lubricant volume: 130 cm³

Perma STAR Product Range



Solutions

- ▶ Housing: Transparent plastics
- ▶ Electrochemical / grease and oil / temperature independent
- ▶ Operating temperature -10°C to +50°C
- ▶ Discharge period: 1, 3, 6, 12 months or machine controlled
- ▶ Pressure build-up: Max. 5 bar
- ▶ Lubricant volume: 60 cm³, 120 cm³, 250 cm³

Perma PRO Product Range



Solutions

- ▶ Housing: Metal / transparent plastics
- ▶ Electrochemical / grease and oil / temperature independent
- ▶ Operating temperature -20°C to +60°C
- ▶ Discharge period: 1 day to 24 months or machine controlled
- ▶ Pressure build-up: Max. 25 bar
- ▶ Lubricant volume: 250 cm³, 500 cm³
- ▶ Number of lubrication points: 2-6

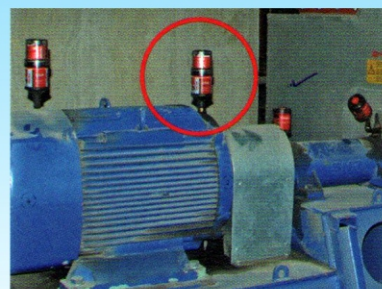
APPLICATIONS



Automatic lubrication system



Automatic lubrication system



Drive motor lubrication (2 points)

Welcome to "Techno-Forest" where New Environmental Technologies are developed



Our approach to INDUSTRY and ENVIRONMENT is how to minimize generating waste to treat and then how to treat the waste. Our goal is not only environment protection but also to realize cooperative relation between INDUSTRY and ENVIRONMENT.

High Quality

**Clean
(Environment)**

**Unmanned
Operation**

**Energy
Saving**

**Cost
Saving**

Resource Saving



Bangalore Unit, India



Headquarters, Aichi, Japan



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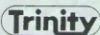
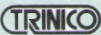
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