



Om Sai Industries

Company Profile

Unit 1: F-17 MIDC Waluj, Aurangabad

Unit 2: E-32 MIDC Waluj, Aurangabad



Om Sai Industries

Unit:1





Om Sai Industries

• Company Profile:

- Om Sai Industries is a Alkaline Zinc & Zinc Iron Plating Industry. The company was established in 2007 by Mr. Deepak Padalkar at Waluj MIDC Aurangabad, Maharashtra.
- **Unit-1** : Plot No. F-17 MIDC ,Waluj, Aurangabad
- **Unit-2** : Plot No. E-32 MIDC ,Waluj, Aurangabad
- Om Sai Industries has successfully implemented the Approved process of **Bajaj Auto Ltd, TATA Motors, Mahindra & Mahindra, Yamaha, Force Motor, John Deere, Piaggio, TVS.**
- The company is continuously growing and advancing its technology and to meet the global standards and to sustain the customers satisfaction.
- The company has received the grants from the Government body & implemented all the facilities required for safety of Environment.



- **New Project**

- **ECO Friendly Fully Automatic Scada controlled Alkaline Zinc Plating plant with Basket Passivation.**
- **Plating capacity 25mt per day.**

- **Vision, Mission & Values :**



- **Provide world class Plating facility in India.**



- **Continual Improvement**
- **Total elimination of waste**
- **Pollution free & safe Environment**



- **Transparent and customer based service**
- **Customer satisfaction**



- **List of Available Facilities**

- **Alkaline Zinc Plating Process**

- **Alkaline Zinc Iron Plating**

- **Trivalent Yellow Passivation with/w out top coat**

- **Trivalent Black Passivation with/w out top coat**

- **Trivalent Blue Passivation with/w out top coat**

- **Hydrogen De-embrittlement Process**



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- Plant Photos:





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- Plant Photos :





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- Plant Photos :





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- Plant Photos :





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- Scada Home Screen:

Movicon - [RunTime] - Demo mode Time elapsed: '0' min. - welcome screen

OSI Protovec 107 Rectifier 6 - AL-ZN 5 - No Current Applied

Auto : Manual : Fault : 15 : 06 : 29

WELCOME TO
Om Sai Industries Pvt. Ltd

OSI

Designed and developed by Protovec Technologies Pvt. Ltd for Komal Chemiequip Pvt. Ltd

Protovec

Overview
Part Entry
Alarms
Trends
Report
Settings
Tank Details
Rectifier
Dosing

Protovec

2021-06-19 3:06:17 PM The I/O Communication Driver 'MELSEC-QTCP' has been started... CAP NUM SCRL 1.5Gb(989Mb)



• Loading Screen:

Movicon - [RunTime] - Demo mode Time elapsed '70' min. - nextloadentry

OSI Protovec 107 W7 Manual Backward Without Lift Lower Auto : Manual: Fault : 15 : 04 : 12

Next Load Entry

Part Number: 26*12.5*2.5 Refresh Search

Part Name: Washer

Client Name: STARWAYS

Area/Part: 0.08 sq.dm Range (0-500 sq.dm.)

Weight Per Part: 8 gm Range (0-1000 gm)

Total Weight: 100 kg Range (0-500)

Current Density: Anodic Cleaning: 0.25 A/dm2 Alkaline Zinc: 0.50 A/dm2

Calculated Current - Nextload: 0265 amps Range (0-900 Amps.) 0531 amps Range (0-900 Amps.)

Load Type for Line 1: 3 Load Type for Line 2: 2

Line 1 Load Type Selection

- 1 = Descaling With 50%
- 2 = Descaling With 30%
- 3 = Without Descaling With 50%
- 4 = Without Descaling With 30%

Line 2 Load Type Selection

- 1 = Blue Passivation With Top Coat
- 2 = Yellow Passivation With Top Coat
- 3 = Black Passivation With Top Coat
- 4 = Blue Passivation Without Top Coat
- 5 = Yellow Passivation Without Top Coat
- 6 = H2D Only Nitric And Dryer

Calculate Download To PLC Part Master

2021-06-19 2:54:46 PM You're running in Demo Mode : time elapsed = '70' min. (max 120) CAP NUM SCRL 1.5Gb(1.1Gb) i

Protovec

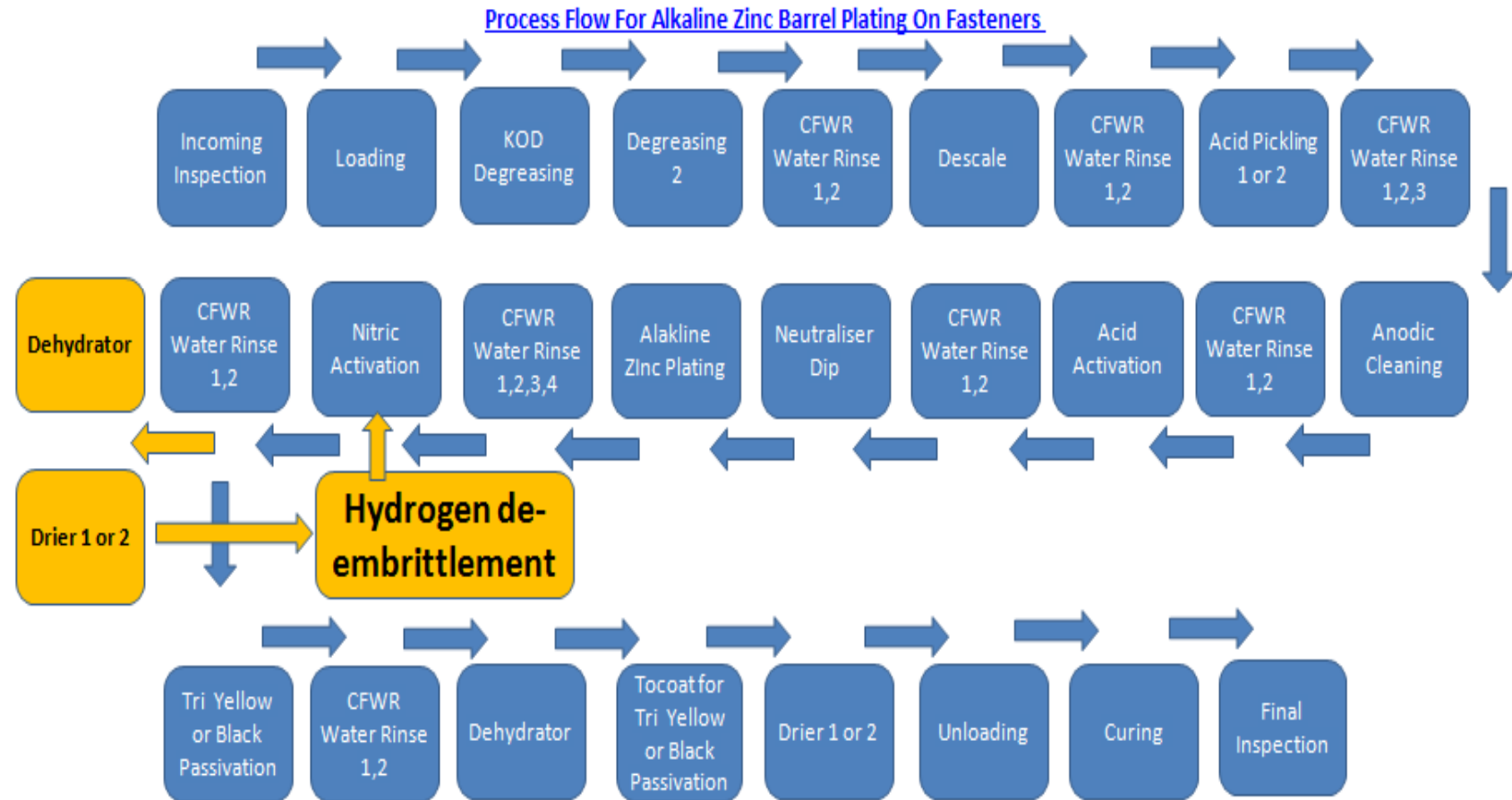
- Loading Weighing Balance:



- Weighing scale attached to loader to load accurate weight.
- Interlocked with the program



• Process Sequence:





- Automatic Loading System:



- Plating Tank:



- Total 16 Plating stations
- 14 Alkaline Zinc
- 2 Alkaline Zinc Iron

- **Process Parameter Display :**



- **Temperature controller with visual & Alarm for all tanks**
- **Level Indicator with Alarm both main Tank & Oil skimmer tank of Degreasing**
- **Oil skimmer with continuous circulation to remove floating oil from Degreasing Tank**
- **Filter Unit**



- **Process Qualification Board:**

STAGE 7 DESCALING	
TANK VOLUME	1200 LTR
CHEMICAL NAME	GINDOX 281
CONCENTRATION	100 TO 150 GM/LTR
TEMP.	60 TO 80 °C
DISCARD FREQUENCY	MONTHLY (IF BATH COLOUR TURN BROWN)
DISCARD DATE	
DIP TIME	4 TO 5 MINT

- **Additional Process in Pretreatment Line Decaling bath to remove heavy scale of heat treated parts & burnt oil parts**

- Acid Tank Filter:



- **Continuous Filtration system to remove floating smut & Iron from Acid Tanks**



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- Conveyor Oven:





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- Oil Skimmer:



- **IGBT Rectifiers:**



- 1) **Individual Rectifier for each tank**
- 2) **All rectifier advance IGBT with more Scada compatibility.**
- 3) **Alarm system if Trip or variation in current set value.**
- 4) **Fully sealed cabin for rectifier with 4AC unit with the capacity 1.5 ton of each.**



- **Dozing Pump With Level Indicator:**





Plating Tank Filter:



- Individual Filter Unit for each Tank
- All Filter with Pressure gauge.

- **Passivation & Topcoat tanks controls:**



- **Online pH Meter with display & Alarm system if the parameter goes out of tolerance auto dosing of Nitric.**
- **All tanks have the heaters to maintain temperature with controller with visual & Audio Alarm System.**
- **All tanks with level sensor & Indicator with visual display & Alarm.**



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- Chiller Unit for Plating Tank for continuous cooling with capacity of 15 ton of each with Auto controlled Temperature with Alarm system:





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- Online Centrifugal Dryer with Automatic Temperature Controller with Visual Alarm :





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- Dehydrator between Passivation & Top coat to avoid Contamination in Top Coat Tank





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- Auto Dosing of Chemical for Passivation & Top coat Tank with Level Sensor in Dosing Tank





- **Filtrations for Passivation & Topcoat Tank:**



- **All Passivation & Top Coat Tank with Filter Unit for Continuous Filtrations**



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- RO Plant Plus Mix Bed:



- **Scrubber:**



- **Separate scrubbers for Alkaline & Acidic Fumes with the capacity of 15k CFM**



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• Customers :





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- End Customer :



THE WORLD'S
FAVOURITE
INDIAN



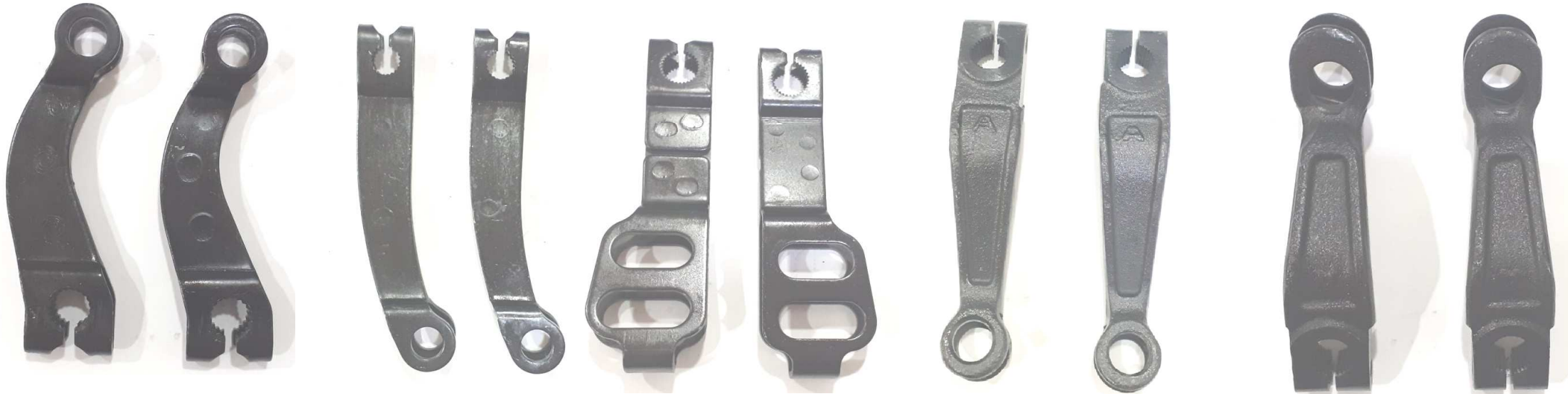
Mercedes-Benz





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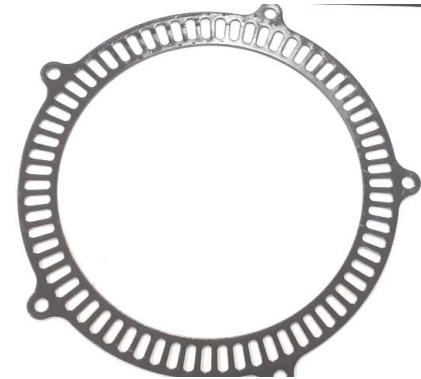
- Part Photos





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- Part Photos





- Part Photos





- Part Photos





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- Part Photos



• Unit-1 : System & Quality Control



Process parameter control graphical



ETP Plant



Specially designed quality inspection table



Online Ph meter & Timer



Online Ph meter & Timer for Trivalent Black Passivation



Passivation line



Hydrogen de-embrittlement oven

- Unit-1 Available in-house testing facilities

- Salt spray chamber
- Laboratory Setup
- NDT and DT thickness tester
- Electronic 3 digit weighing balance
- Hull cell testing
- Hydrogen de-Embrittlement oven
- Go/No-go thread gauges





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Awards & Achievements



switchasia ACIDLOOP

IMPROVEMENT IN ROTARY DRUM DRYERS
Location: Aurangabad | Process: Electroplating

Before

- 1. High energy consumption
- 2. High maintenance cost
- 3. High waste generation

After

- 1. Reduced energy consumption
- 2. Reduced maintenance cost
- 3. Reduced waste generation

Comparison of Energy Consumption (kWh/ton)

Month	January	February	March	April	May	June
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

SIAM



switchasia ACIDLOOP

WATER CASCADING
Location: Aurangabad | Process: Electroplating

Before

- 1. High water consumption
- 2. High waste generation

After

- 1. Reduced water consumption
- 2. Reduced waste generation

Comparison of Water Consumption (liters/ton)

Month	January	February	March	April	May	June
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

SIAM





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*Thank
you*

