JAI SAI SPECIAL PROCESS

Plot No. 224/2, Nageswara Rao Road
Extension, Athipet, Chennai - 600058

ANODIZING & CHROMATING
QUALITY SPECIAL PROCESS

An ISO 9001: 2015 Certified Company

AGENDA

We will begin with an introduction into our company’s background and areas of expertise, followed by overview of our core processes–Anodizing & Chromating

INTRODUCTION

20+ YEARS OF EXPERTISE

- Established our Chennai plant by 2019
- Specialized in Anodizing & Chromating

QUALITY THAT SPEAKS STANDARDS

- Certified under ISO 9001:2015 by TUV-SUD
- CQI-12: Special Process Assessment (DQS INDIA)

CUSTOMER CENTRIC VISION & MISSION

- On-time delivery with highest quality
- Commitment to quality in Every batch

ANODIZING PROCESS

01

Anodising is a process by which an anodic oxidation film formed on the surface of the aluminium component. The thickness of the film will vary from to 30 microns based on the prodcuct requirement.

02

This coating is composed of hydrated aluminum oxide, offering excellent resistance to corrosion and abrasion. It can be applied with customized colors to meet specific aesthetic or functional requirements

03

Anodizing preserves the natural luster, texture, & aesthetic appeal of the metal. This coating is hard, durable, & integrally bonded to the surface—it will not peel or flake under normal conditions, is highly resistant to wear

ANODIZED PARTS

BENEFITS OF ANODIZED PARTS

- Enhanced Corrosion Resistance
- Long Lasting Durability
- Environment Friendly Process
- Improved Surface Hardness
- Customizable Aesthetics
- Thermal & Electrical Insulation

CHROMATING PROCESS

Chromating, also known as chemical conversion coating, is a surface treatment process applied to aluminium components to enhance corrosion resistance and improve paint adhesion. It involves the application of a chromate-based chemical that reacts with the aluminium surface, forming a thin, protective layer

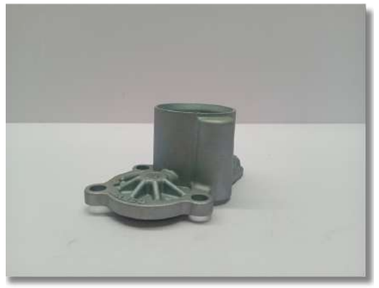
Chromating process produces a transparent, protective coating with a subtle bluish-yellow iridescence and it forms a non-conductive layer that resists corrosion. Also, it acts as an excellent base for further coatings, such as powder coating or painting. This process provides uniform coverage without affecting dimensional tolerances

CHROMATING (CASTING PARTS)









BENEFITS OF CHROMATING PROCESS

- Excellent Corrosion Resistance
- Electrical Conductivity Retention
- RoHS- and REACH-compliant (EU)
- Enhanced Paint & Coating Adhesion
- Minimal Dimensional Impact
- Durability & Longevity

CHROMATING FOR MACHINED PARTS

Long Lasting Durability

Chromating forms a very thin coating (typically under 1 micron), preserving the tight tolerances of machined components—ideal for precision engineering

Improved Coating Adhesion

Acts as an excellent pre-treatment layer for powder coating, liquid painting, or adhesive bonding, ensuring better grip and long-term performance

Cost-Effective Surface Protection

Compared to other post-machining treatments, chromating is relatively low-cost and quick, without compromising performance

BLACK ANODIZING (OR) CUSTOMIZED COLOURS

Custom Coloured Anodizing Process

It is a variation of the standard anodizing process, where special dyes or pigments are added to the anodic layer to produce a wide range of vibrant, durable colours on aluminium components. It ideal for products that require a specific visual identity without compromising on protection

Key Benefits of Custom Color Anodized Parts

Wide Range of Colour Options to match branding

Excellent Corrosion & Wear Resistance

Fade Resistance with proper sealing & high-quality dyes

Enhanced Appearance for industrial & consumer markets

Environmentally Safe and Non-Toxic Coating

QUALITY INSPECTION

- Incoming Material Inspection
- In-Process Inspection
- Final Visual & Dimensional Inspection
- Laboratory Testing
- Documentation & Traceability
- Total Quality Management (TQM) Philosophy

OUR QUALITY INSPECTION PROCESS

1) Incoming Material Inspection

Before processing, all raw materials and aluminium components are thoroughly verified for surface defects, contamination, and dimensional accuracy, ensuring they meet our quality standards from the very beginning.

2) In-Process Inspection

We conduct real-time monitoring at every stage of the anodizing & chromating process. This includes precise control of coating thickness, surface uniformity & bath chemistry parameters to reliable process outcomes

3) Final Visual & Dimensional Inspection

We carry out 100% visual inspections under controlled lighting conditions to identify any surface imperfections. Additionally, coating thickness is accurately measured using specialized gauges to ensure compliance

4) Laboratory Testing

We perform regular salt spray tests, adhesion tests, hardness measurements, and chemical analyses to ensure the durability and performance of each coating meet industry standards and customer requirements

5) Documentation & Traceability

Each production batch is systematically tagged, recorded, and fully traceable, ensuring complete transparency and readiness for quality audits. Detailed quality reports are available and can be provided to customers upon request

6) Total Quality Management (TQM) Philosophy

We strive continuous improvement, driven by root cause analysis and structured feedback mechanisms. Our commitment to quality is further reinforced through regular internal audits and process reviews.

THICKNESS GAUGE & TAGS

Coating Thickness Gauge

Jai Sai Special Process
Chennai - 600 058.
Incoming Accepted Tag

Customer Name :	
DC / Inv. No.:	Date:
Process :	Qty.:
Part Name :	
Part No.:	

JAI SAI SPECIAL PROCESS
Chennai - 600 058.

INCOMING ☐	ACCEPTED TAG	FINAL INSPECTION ☐
DATE		
CUSTOMER / SUPPLIER		
PART NAME		
PART NUMBER		
DC / INVOICE NO / DATE		

Jai Sai Special Process
Chennai - 600 058.
Rework Tag

Part Name :	
Part No.:	
Qty.:	Date of Rework :
Traceability No.:	
Process :	
Rework Reason :	
Disposition :	
Reworked By :	
Inspected By:	

Jai Sai Special Process
Chennai - 600 058.
Hold Tag

Part Name :	
Part No.:	
Qty.:	Date of Hold :
Traceability No.:	
Process :	
Reason :	
Disposition :	
Hold By :	
Inspected By:	

Inspection Tags which are Used

TESTING LAB

To ensure the consistency, quality, and effectiveness of our surface treatment processes, chemical composition tests are routinely conducted in our in-house lab for both anodizing and chromating baths.

Key Objectives of Chemical Testing

Maintain the correct concentration of active chemicals

Ensure uniform coating quality across batches

Detect any contamination or chemical degradation

Extend bath life and optimize process efficiency

Benefits of Chemical Testing

Ensures consistent coating thickness and appearance

Corrosion resistance & adherence to specifications

Supports regulatory compliance (e.g., RoHS, REACH)

Contributes to reliable, repeatable process control

SALT SPRAY CHAMBER TEST

Purpose of Salt Spray Chamber Test

The Salt Spray Test is a widely used accelerated corrosion testing method that helps evaluate the corrosion resistance of surface coatings—such as anodized or chromated aluminium components.

Objective of Salt Spray Chamber Test

To simulate a harsh, corrosive environment and assess how well a coated part resists rust, pitting, or degradation over time

FACILITIES & INFRASTRUCTURE

Air Compressor

Generator

IGBT - Insulated Gate Bipolar Transistor

Acid Storage Area

Hot Air Oven

Company - Front View

OUR ESTEEMED CLIENTS

Brakes India

Sundram Fasteners Limited

SUNDARAM DYNACAST

DELPHI-TVS Diesel Systems Limited

HIKUWA

motherson

India Japan Lighting Private Limited

CERTIFICATIONS

ZERTIFIKAT ◆ CERTIFICATE ◆ 認証書 ◆ СЕРТИФИКАТ ◆ CERTIFICADO ◆ CERTIFICAT

TÜV SÜD South Asia

CERTIFICATE

The Certification Body
of TÜV SÜD South Asia Private Limited
certifies that

JSSP

Jaisai Special Process
224/2, Nageswararao Road, Athipet, Ambattur IE Chennai – 600058, India

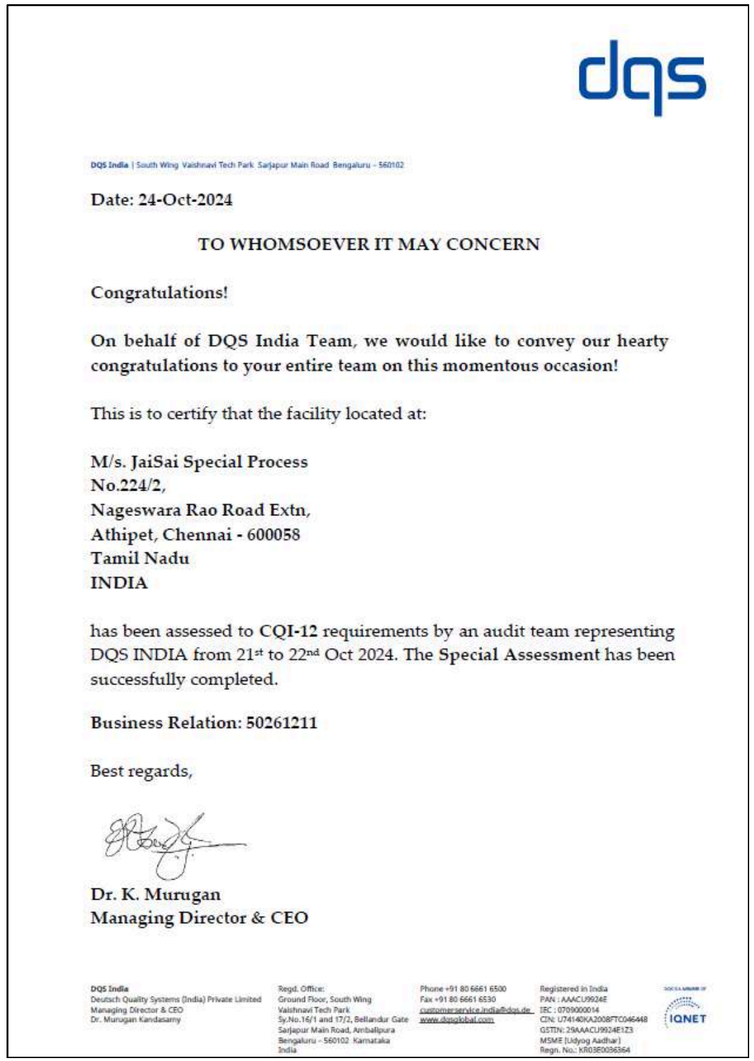
has implemented Quality Management System
in accordance with **ISO 9001:2015**
for the scope of

Providing Anodising & Trivalent Chromating Services on Aluminium Components

The certificate is valid from **2023-11-27** until **2026-11-26**
Subject to successful completion of annual periodic audits
The present status of this certificate can be obtained through TUV SUD website by scanning below QR code and by entering the certificate number (without spaces) on web page. Further clarifications regarding the status & scope of this certificate may be obtained by consulting the certification body at info.in@tuvsud.com
Certificate Registration No. **99 100 21241**
Date of Initial certification: **2020-11-27**
Issue Date: **2023-11-02** Rev. **00**

Rahul Kale
Head of Certification Body
of TÜV SÜD South Asia Private Limited,
Mumbai
Member of TÜV SÜD Group

TÜV SÜD South Asia Pvt. Ltd. ● TÜV SÜD House ● Saki Naka ● Andheri (East) ● Mumbai – 400072 ● Maharashtra ● India



dqs

DQS India | South Wing Vaishnavi Tech Park Sarjapur Main Road Bengaluru - 560102

Date: 24-Oct-2024

TO WHOMSOEVER IT MAY CONCERN

Congratulations!

On behalf of DQS India Team, we would like to convey our hearty congratulations to your entire team on this momentous occasion!

This is to certify that the facility located at:

M/s. JaiSai Special Process
No.224/2,
Nageswara Rao Road Extn,
Athipet, Chennai - 600058
Tamil Nadu
INDIA

has been assessed to CQI-12 requirements by an audit team representing DQS INDIA from 21st to 22nd Oct 2024. The Special Assessment has been successfully completed.

Business Relation: 50261211

Best regards,

Dr. K. Murugan
Managing Director & CEO

DQS India
Deutsch Quality Systems (India) Private Limited
Managing Director & CEO
Dr. Murugan Kandasamy

Regd. Office:
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www.dqsglobal.com

Registered in India
PAN : AAACI9924E
IEC : 0709000014
CIN: U74140KA2008FTC046448
GSTIN: 29AAACU9924E1Z3
MSME (Udyog Aadhar)
Regn. No.: KR03E0036364

IQNet

ISO 9001 : 2015

This Certification sets out the criteria for a robust quality management system and is based on principles such as customer focus, process-based thinking, commitment, and continual improvement.

CQI-12: Special Process Assessment

CQI-12 is a quality assessment tool developed by the Automotive Industry Action Group (AIAG) specifically for organizations involved in coating processes like anodizing, chromating, painting, and plating

FULLY AUTOMATED PLANT

Forefront of surface treatment solutions

As part of our continuous growth and commitment to innovation, are planning to set up a fully automated anodizing and chromating process plant in the near future.

Industry 4.0 Standards

This upcoming facility will serve as an extension to our existing operations, incorporating advanced automation technologies to enhance process precision, efficiency, and scalability

COMPANY PROFILE

Phone (Directors)

Antony Vincent - 8838955348
Rajkumar - 9940570517
Muthukumaravel - 7904653899

Email

jaisaispecialprocess@gmail.com

Website

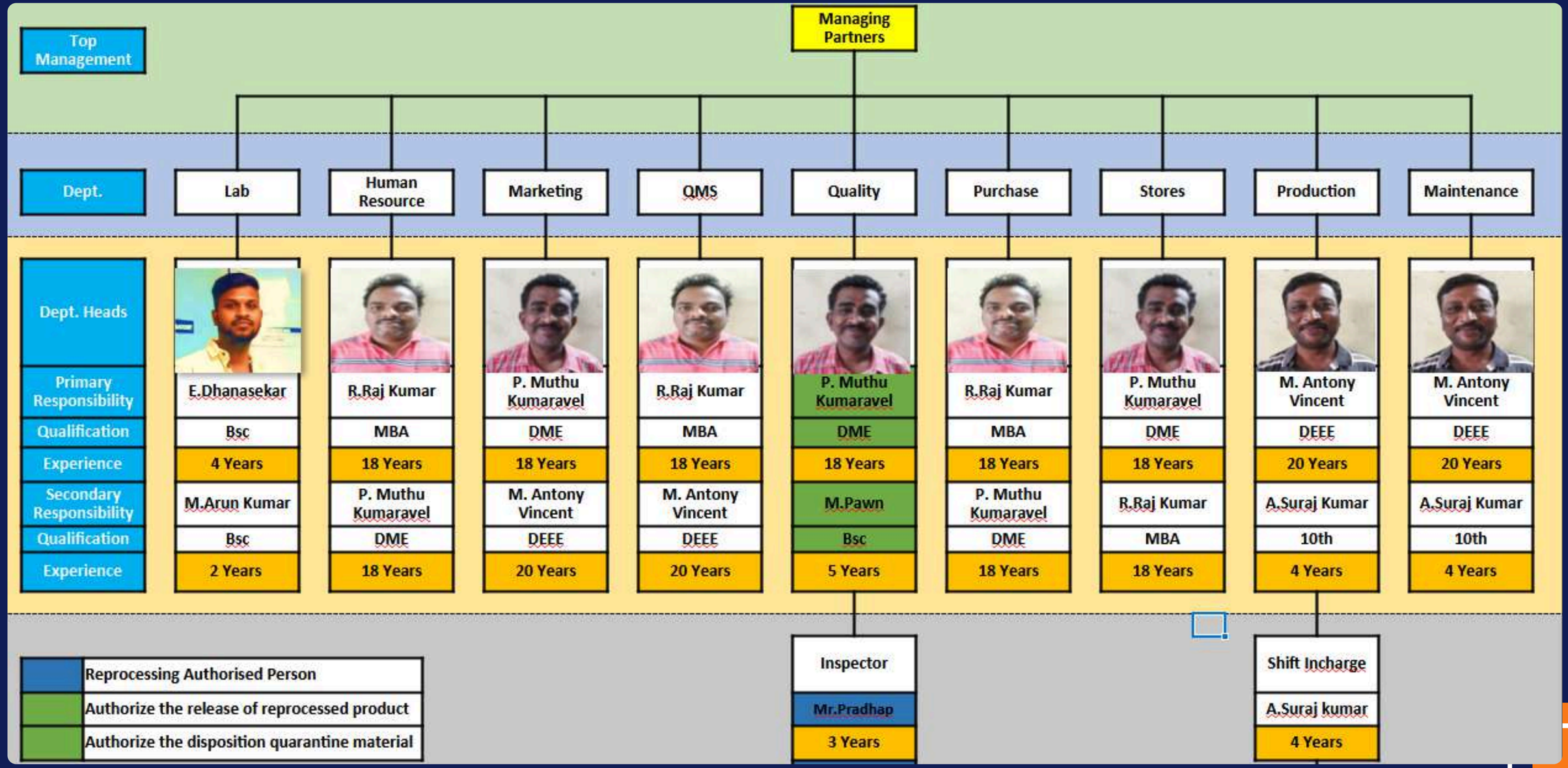
www.jaisaispecialprocess.in

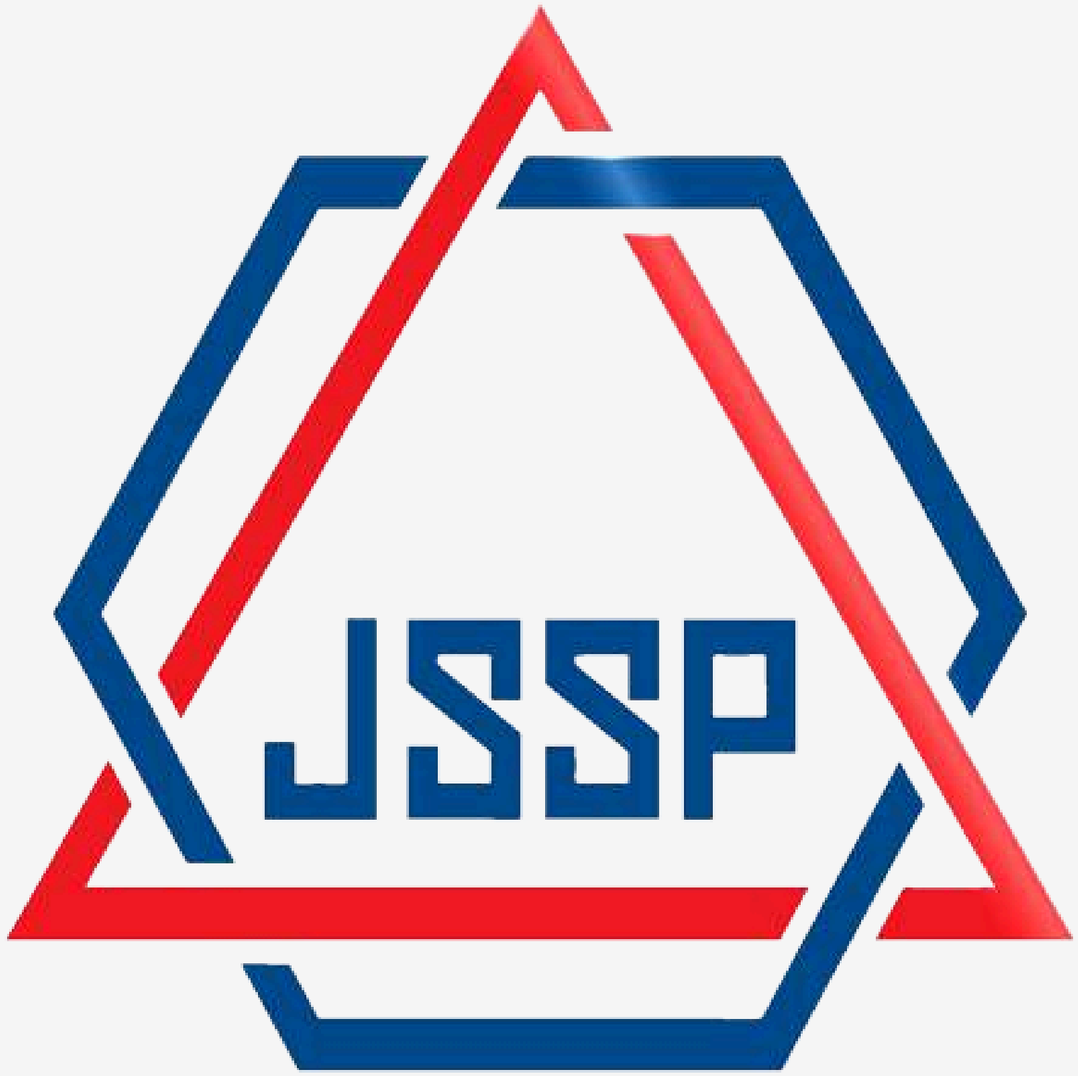
Location

Plot.224/2, NageswaraRaoRoad Extn,
Athipet, Chennai-600 058.

GSTIN: 33AANFJ5788P1ZD

ORGANIZATION STRUCTURE





THANK YOU