



AMARA RAJA

Gotta be a better way

GROUP PROFILE



Core Purpose



To transform our increasing spheres of influence and to improve the quality of life by building institutions that provide better access to better opportunities to more people all the time.



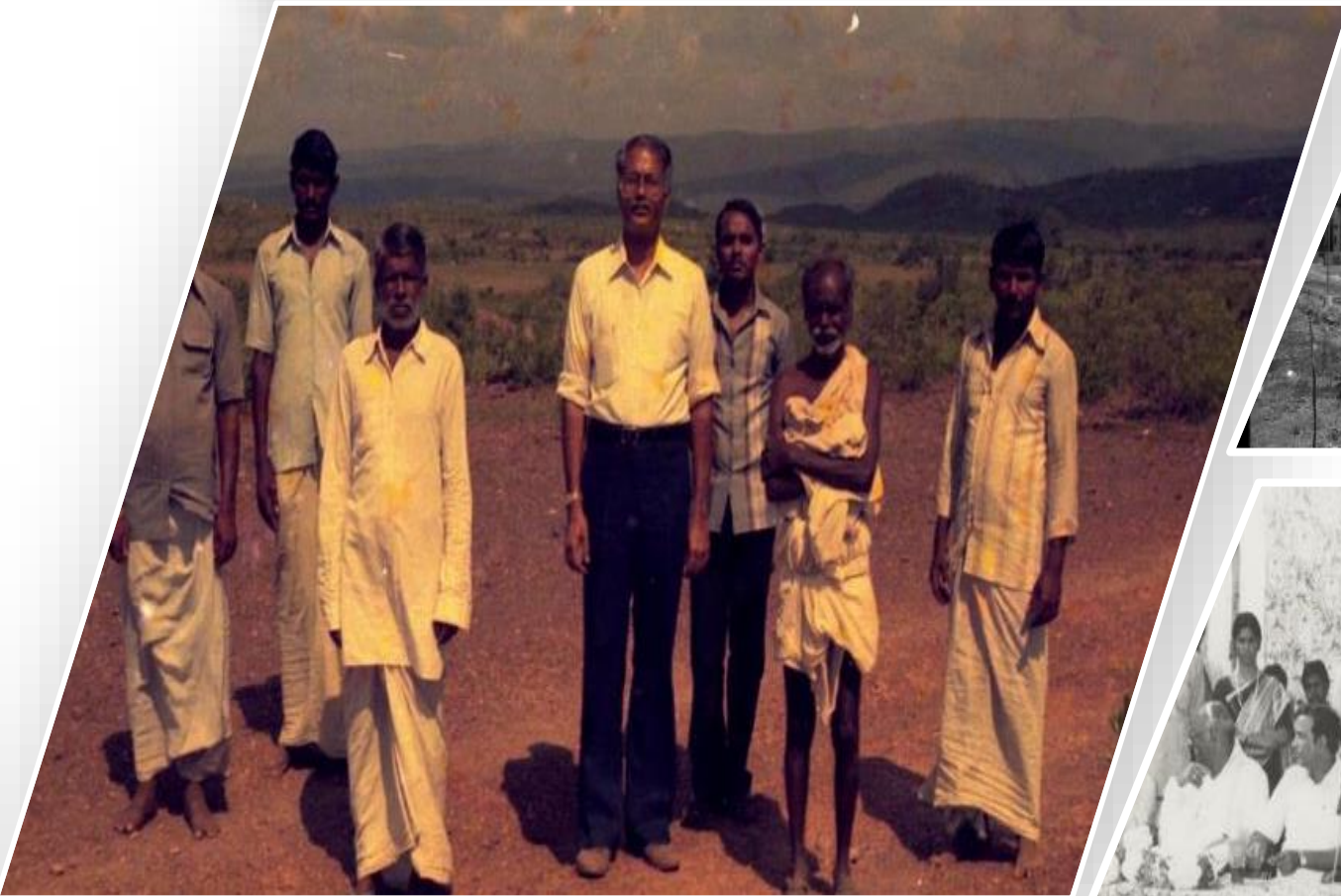
A Small Beginning



Founded in 1985 by
Dr Ramachandra Naidu Galla



Established the 1st manufacturing facility in
Karakambadi village, Chittoor, Andhra Pradesh



AR Group - Today



Recognized as one of the world's largest integrated manufacturing locations for advanced lead-acid battery systems



Providing direct employment to 16000+ and several thousand more indirectly



Key Milestones

1985

Amara Raja Batteries and Amara Raja Power Systems started by Dr. R.N. Galla



Collaboration with GNB for launching VRLA technology in India that replaced flooded batteries

1988

1997

ARBL diversified into automotive batteries & signed JV for technological collaboration with world leader in batteries.



Path breaking zero maintenance Amaron automotive batteries launched

2000

2005

Food processing business, Galla Foods launched to benefit local farmers



Amara Raja Infra is incorporated to reliably and efficiently undertake the group's growing Infra needs

2008

2015

Amara Raja Growth Corridor, a 500 Acre Industrial Park with modern infrastructure inaugurated



Amara Raja Electronics commences EMS business for industrial, automotive and consumer segments

2016

2017

State of the art plastic injection molding facility started at Mangal Industries to address needs of automotive industry



ARBL transforms into an Energy and Mobility company to address changing market needs.

2021



Core Values

INNOVATION

Proactively rebelling for better ways of doing things leading to newer possibilities.



ENTREPRENEURSHIP

Leading with courage and conviction to convert gaps into opportunities, create wealth and contribute to growth.



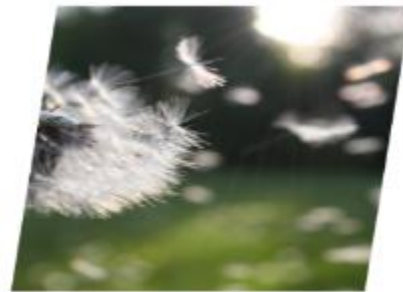
RESPONSIBILITY

Total ownership of our thoughts and actions in every situation to achieve maximum common good in the best interest of our spheres of influence.



Continually enhancing our performance to consistently produce outstanding results with lasting impact.

EXCELLENCE



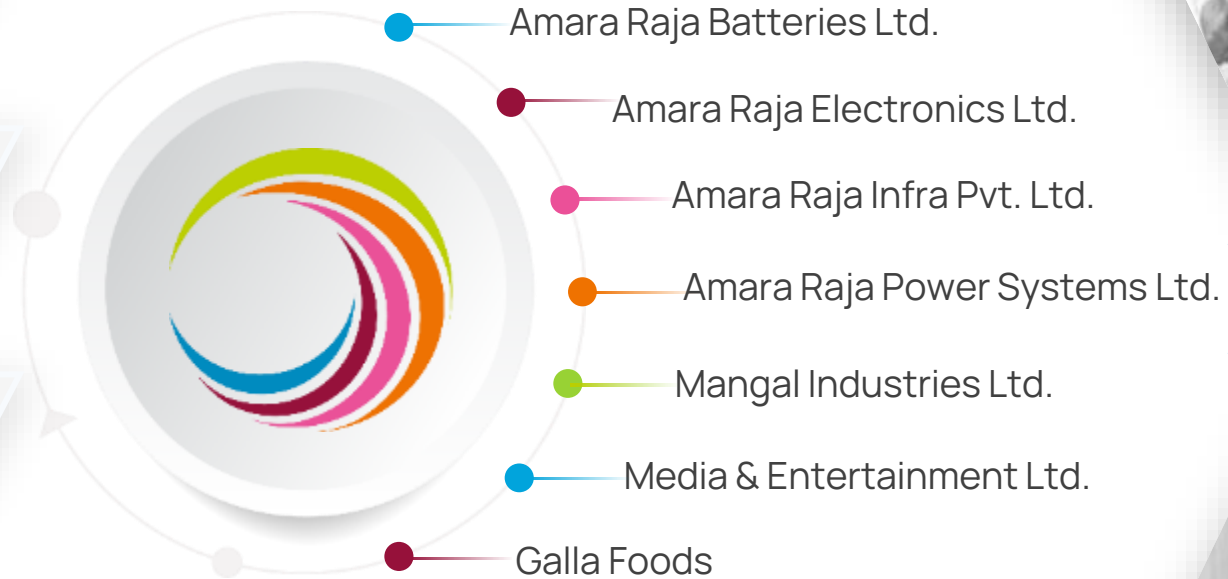
Make our stakeholders feel part of something special, leading to endearing relationships

EXPERIENCES



Amara Raja Group

Growing Bigger & Better Everyday



Amara Raja Electronics



Amara Raja Electronics is a technologically progressive company with focus in Consumer Power Products & Solutions, Consumer Durables and Electronics Manufacturing Services.

20,000
sq. meter

EMS Manufacturing

>15,000
line items

Electronic Components

225

Vendors Globally



Specializes in

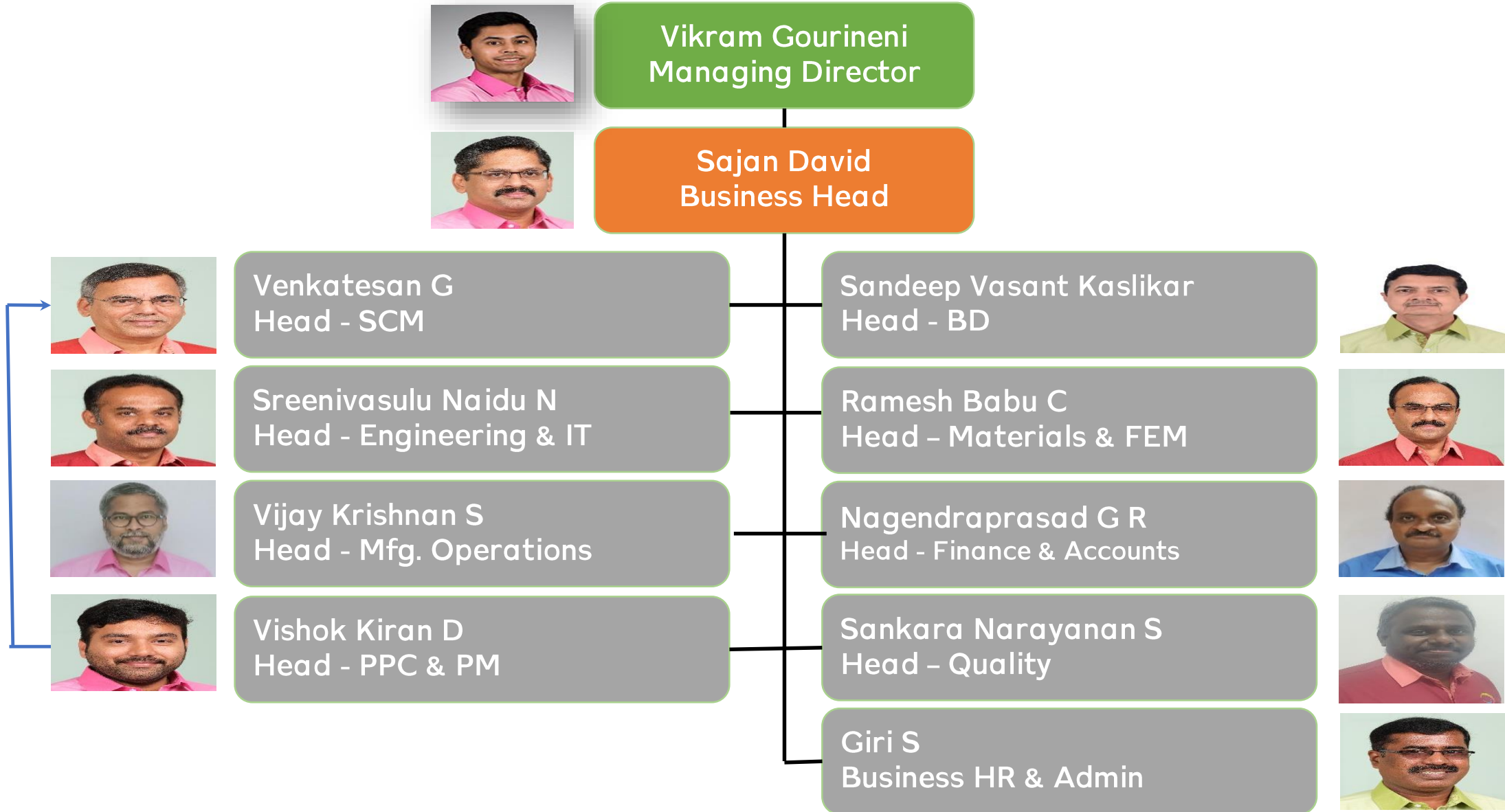
- End-to-end design
- Prototyping
- Sourcing
- Turnkey manufacturing
- Testing of high-reliability PCBAs
- Box Build
- Products & systems integration services

Serves Clients in various verticals

- Automotive
- Consumer
- Energy
- Healthcare
- Industrial
- Networking
- Railways



Amara Raja Electronics Management Team

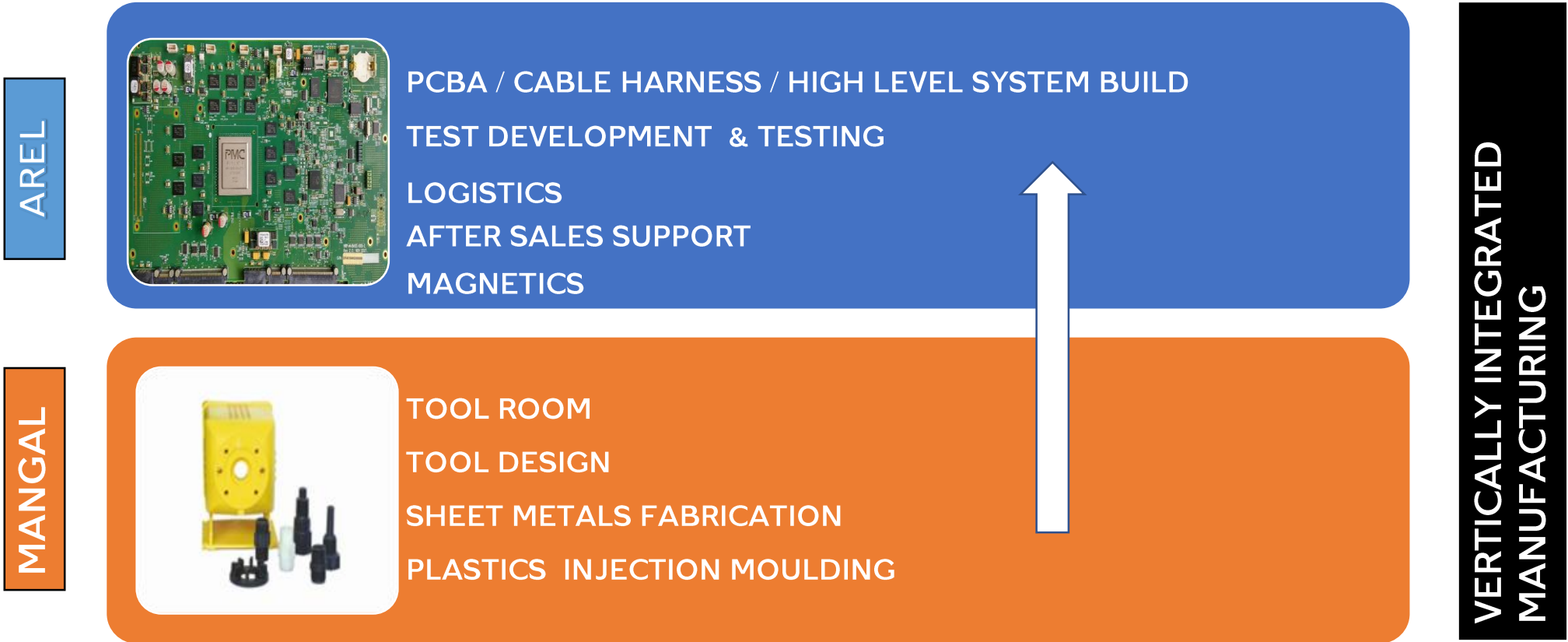


Amara Raja Electronics - Plant & Location



Location : Chittoor , Andhra Pradesh , India
Coordinates : Strategically located between Bangalore & Chennai
Space : 20,000 Sq.M
Workforce : 800+ Non Migratory stable workforce.
S/W Platform : SAP S4 HANA





“Unique One Stop Solution to AREL customers”

Amara Raja Electronics - Business Structure

High Mix - Medium to Low Volume

Low Mix - High Volume

High Level Integration

Test Development & Testing



Amara Raja Electronics - Key Capabilities

SMT Capacity – 600,000 CPH

PCB Handling Screen Printing : L510mmXW508mm

PCB Handling Screen Printing : 0.2mm to 6.0mm

Screen Printing Machine Alignment Capability: >2 Cpk @ $\pm 12.5\mu\text{m}$, 6 Sigma #

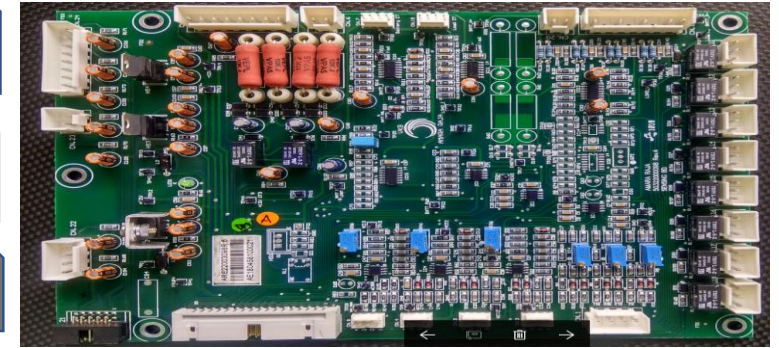
Screen Printing Process Alignment Capability : >2 Cpk @ $\pm 25\mu\text{m}$, 6 Sigma #

Solder Paste Inspection – 3D SPI High Precision

SPI -Volume Repeatability (on a PCB): $< 3\%$ at 3σ

SPI -Height Accuracy : $1\mu\text{m}$

SPI – Speed 22.5 – 56.1 cm^2/sec



Amara Raja Electronics - Key Capabilities

Pick n Place : Handle PCB 750mm(W) X 550mm(L)

Pick n Place : Handle up to component size 01005"

POP Capability / Handling Rigid , Flex , Rigid Flex and Aluminum PCB's

Reflow Ovens of 9+2 and 10+2 Top/Bottom Heating Zones

Reflow Ovens Temperature range 25-350°C

Reflow Ovens Accuracy of Temp Controller : +/-1°C

Inline 3D AOI with image resolution of 20 μm

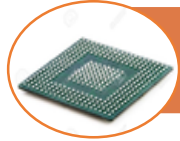
2- ICT's with Maximum Test pins of 2048 each.



Amara Raja Electronics - Key Capabilities



X-Ray -2D & 3D Inspection System : Up to 0.1mm BGA,POP with accuracy of 0.5 microns



BGA Rework Station : VJ Electronix Summt 1800 SRT Placement accuracy 12 microns



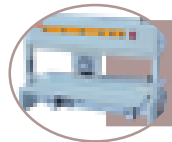
200X Electronic Microscopes



Dry Cabinets for maintaining minimum 1% RH for MSD's



PCB Router Elite EM5700N : PCBA of 550 X500 mm & Accuracy of +/- 0.01mm



PCB Separator HEDA 801-N L : PCB up to 600mm & speed of 300mm /sec



Conformal Coating with curing ovens



Sensing Transformer (EI)



SMPS Transformer (EI)



Low Power SMPS transformers (EE)



Toroidal Chokes



Amara Raja Electronics - SCM Capabilities

Electronic Component Data base with > 15,000 line items

Strong vendor base of 225 vendors globally

Expertise in segments of Industrial , Automotive , Consumer & Medical

VMI agreement is place for major vendors

Strong purchase policies in place

Amara Raja Group is AEO Certified in Tier 1 Level for customs Clearance

Amara Raja Group does Import/Export with 48 countries

Amara Raja Group has authorized shipping agents across the globe

Amara Raja Group has strong logistics in India with 7500 trucks per month



Mangal Industries

Mangal Industries is an evolving design-led manufacturing organization catering to diverse markets and applications.

1997

Established

3000+

People

INR 1400 Cr

Revenue

Auto Components

- High Tensile Fasteners
- Injection Moulded Plastics



Storage Solutions

- Pallette Racking
- Shelving
- Mezzanine
- ASRS Systems



Metal Fabrication

- Cabinets
- Enclosures
- Stamped Parts
- Consumer Goods
- Customized Products



Battery Components

- Containers
- Covers
- Bushes
- Small Parts
- Connectors
- Copper Inserts



Custom Fabrication

- Conveyors
- Curing Ovens
- Industrial Washing System
- Metal Doors



Toolworks

- Injection Moulds
- Die Casting Dies
- Jigs & Fixtures
- Aerospace & Defence Products



Amara Raja Electronics – Awards & Recognitions AMARA RAJA Gotta be a better way



Amara Raja has been adjudged as the Winner in category “Most Effective Recruitment, Engagement & Innovative Retention Strategy” at the CII -First National HR Circle Competition 2017



The CII has been recognized for ‘Strong Commitment to HR Excellence’. Congratulations to ARBL and AREL. The award received from National HR Conclave for HR Excellence at Delhi on 5th Dec 2014



6 teams from Amara Raja Won the highest category - Gold Awards in International Quality Control Circles competition, at Bangkok, in Aug 2016.



9 teams won the highest category “GOLD AWARDS” in International Convention on Quality Control Circles 2017 competition at Manila, Philippines.



Amara Raja Electronics – Awards & Recognitions AMARA RAJA Gotta be a better way



Amara Raja Group, won Global HR Excellence awards by Employer Branding Institute India in · Best Practices in Employee Relations· ‘Best Talent Management Practices’



Excellence at the Quality Circle Forum of India (QCFI) by winning awards held in the Chapter Convention at Tirupati in Sept 2016.



Best Supplier Award :
2017 – 18
from AO
Smith - Silver
Category



Complete people involvement drives the culture at Amara Raja !



Certifications & Industry Associations

ISO 9001 : 2015



ISO 14001 : 2015



IATF 16949 : 2016



ISO 13485 : 2016

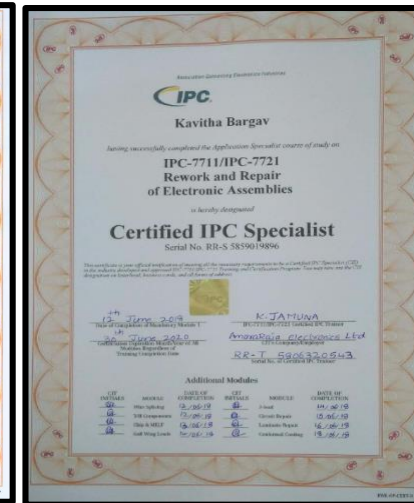


IPC Trainer



Certified 3 CIT's for Visual Inspection acceptance criteria as per IPC-A- 610

IPC Specialist



Certified 15 CIS's for doing the rework as IPC - 7711 / IPC - 7721

ESD S 20.20 : 2014



**MARUTI SUZUKI CENTER FOR EXCELLENCE
CERTIFIED GREEN CHANNEL SUPPLIER**



Confederation of Indian Industry



Leader Quotes



Dr. Ramachandra Galla
(Visionary, Founder Chairman)

“ To be an entrepreneur is to be a social worker.”



Jayadev Galla
(Co-Founder and Chairman)

“ Gotta be a better way reflects our attitude of constantly looking for better ways to do things.”





AMARA RAJA

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THANK YOU

Registered Office:

Karakambadi
Tirupati 517520
Andhra Pradesh
India

Tel: +91 877 2265000

Corporate Operations Office:

Terminal A ,1-18/1/AMR/NR
Nanakramguda, Gachibowli
Hyderabad 500032
Telangana, India

Tel: +91 40 23139000

Fax :+91 40 23139001

Factory:

Diguvamagham Post
Thavanampilly Mandal
517 129

Chittoor District
Andhra Pradesh, India
Tel: +91 8573 244000

Marketing Office

992/26 , 2nd Floor
Vijaya Nagar 2nd Stage
(Hampi Nagar) , Bengaluru
560 040 , Karnataka, India

Tel: +91 80 23102140

Email: svk1@amararaja.com

