CII Environment Best Practice Award-2025

Arjas Steel Private Limited
Andhra Pradesh

Presented By:

- Mrs. Aruna Kumari
- Ms. Indhu
- Mr. Bappaditya Banerjee

ARJAS STEEL
MOVING TOGETHER TOWARDS EXCELLENCE

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Arjas Steel at Glance

OUR COMPANY MISSION

TO BE A LEADING SPECIAL STEEL PRODUCER

in India and be a benchmark for supply chain solutions to our customers

OUR COMPANY VISION

TO CREATE VALUE

for all our stakeholders by operating our steel business, in a sustainable manner

OUR COMPANY VALUES

Be the **CUSTOMER**'s choice

SAFETY first

EMPLOYEE engagement with Respect

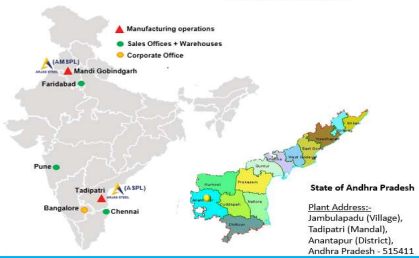
Achieve **EXCELLENCE** with **SIMPLICITY**

RESULTS Orientation

INTEGRITY always

SUSTAINABLE practices

Plant Location



Plant Address:-
Jambulapadu (Village), Tadipatri (Mandal), Anantapur (District), Andhra Pradesh - 515411

Strategic Location

- Plant is 250 km from Hospet/Bellary region which is the source of iron ore which comes in by railway rakes
- Coking coal is imported and comes in through Krishnapatnam and Ennore ports (approx. 300 km)
- The plant is located on the main trunk line between Chennai and Mumbai and the plant has its own railway siding

PRODUCTION YEARLY
SBQ round bars, hexagons, Garret Coils and heat-treated bars and bright bars
3,25,000 TONS

ENGAGED EMPLOYEES
1900+
1600 engaged employees with over 60% from Andhra Pradesh

CERTIFICATIONS
ISO 9001, ISO 14001 ISO 45001, ISO 50001 IATF 16949, ISO/IEC 17025
CERTIFIED

SHARED VALUES

SYSTEMS
Strong 5S, Kaizen and process controls to ensure traceability, root cause determination and problem solving

NEW APPLICATIONS SERVED
Steel developed for specific applications
359

CREDIT RATING
A+
INDIA Ratings rates Arjas Steel on quality of earnings and ability to sustain financial performance

Arjas Steel – Cultural Attributes

OPENESS
Accept that we don't know everything. Seek advice freely and share your ideas and knowledge freely

LEADERS DEVELOP LEADERS
Devote time to develop team and your immediate direct reports

EMPOWERMENT WITH ACCOUNTABILITY
Empower employees but with that responsibility comes accountability

SIMPLICITY AND AUSTERITY
Keep things, processes simple, Do things with a sense of ownership

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Project Title: Waste to Wonder: A Beautification Initiative

Category
Waste Management, Resource Conservation & Recycling

Trigger of the Project
- Commitment to **sustainability** goals with respect to **ESG**
- Desire to **enhance workplace aesthetics** & Showcasing **Innovation & Arjas Excellence**
- Growing accumulation of industrial wastes & Need **for sustainable waste utilization**
- Positioning the company as **a benchmark**.

Objectives of the Project
- Transforming industrial waste into **creative art forms**.
- Enhance **Workplace Aesthetics**
- Demonstrate **Innovation & Creativity**

Uniqueness of the Project
- **First-of-its-Kind project** in Steel Industry
- Scrap Yard Emission control project – **First in India**
- **Dual Benefit Approach** – Waste Recycling & pleasant workplace
- Transformative Use of Industrial Waste **for Innovation & Creativity**
- Shifting **perception** of waste from **liability to opportunity**

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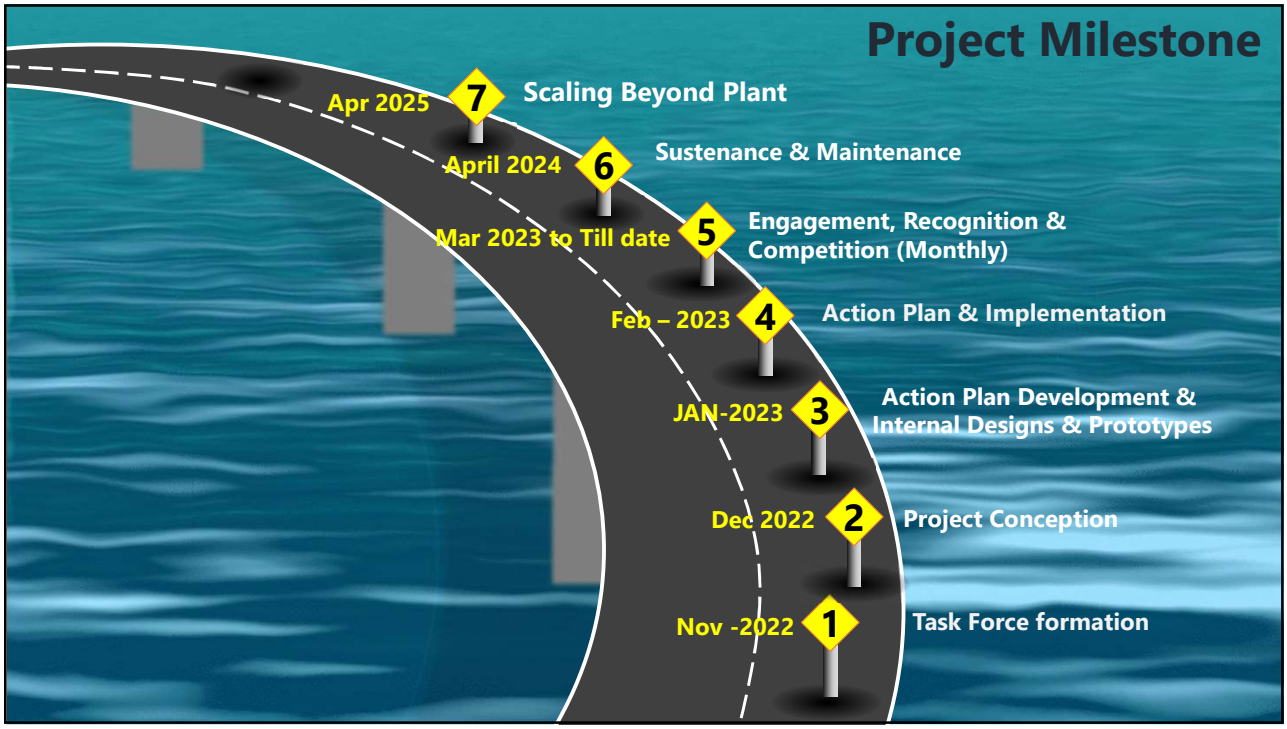

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Project Overview

Collection

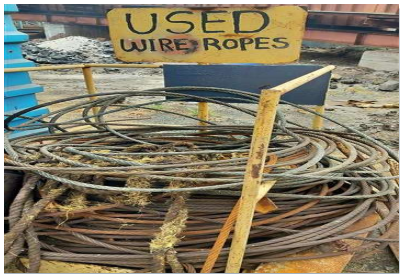
Gathering non-hazardous industrial waste, scrap metals, plastics, wood, and old machinery parts from within the premises

Transformation

Creative repurposing into decorative sculptures, planters, seating areas, and garden structures

Implementation

Improving visual appeal of targeted zones such as plant peripheries, walkways, and office entryways



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Beautification Project- Refractory Waste

- Type of Idea : Creativity
- Objective: Effective Utilization of WASTE to Improve The Aesthetic Look of Premises
- Implemented Area: Steel Melt Shop
- Waste: Used Refractory
- Accomplished: Used as Creating shape in Garden, and Flower Pots.
- Benefits:
  - Improved the External Aesthetic Look of the premises.

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Beautification Project- Wood Waste

- Objective: Effective Utilization of WASTE to Improve The Aesthetic Look of Premises
- Implemented Area: OHC, Administrative Office
- Waste: Wood Waste
- Accomplished: Used as Creating shape in Garden
- Benefits:
  - Improved the External Aesthetic Look of the premises.

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Beautification Project- Metallic Waste

- Objective: Effective Utilization of WASTE to Improve The Aesthetic Look of Premises
- Implemented Area: Administrative Office
- Waste: Metallic Waste
- Accomplished: Used as Creating shape in Garden
- Benefits:
  - Improved the External Aesthetic Look of the premises.

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Beautification Project- Tyre Waste

- Objective: Effective Utilization of WASTE to Improve The Aesthetic Look of Premises
- Implemented Area: Administrative Office
- Waste: Tyre Industrial Waste
- Accomplished: Used as Creating shape in Garden
- Benefits:
  - Improved the External Aesthetic Look of the premises.

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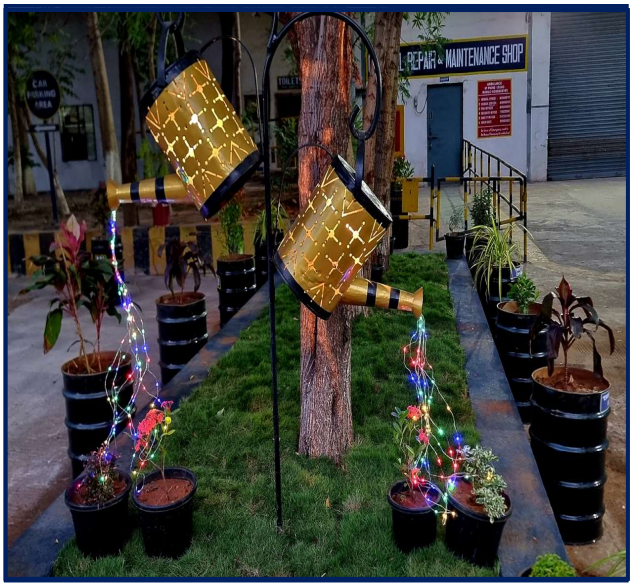
Beautification Project- Wire Rope Waste

- Type of Idea : Creativity
- Objective: Effective Utilization of WASTE to Improve The Aesthetic Look of Premises
- Implemented Area: CRMS
- Waste: Wire Rope Waste
- Accomplished: Used as Creating shape in Garden
- Benefits:
  - Improved the External Aesthetic Look of the premises.



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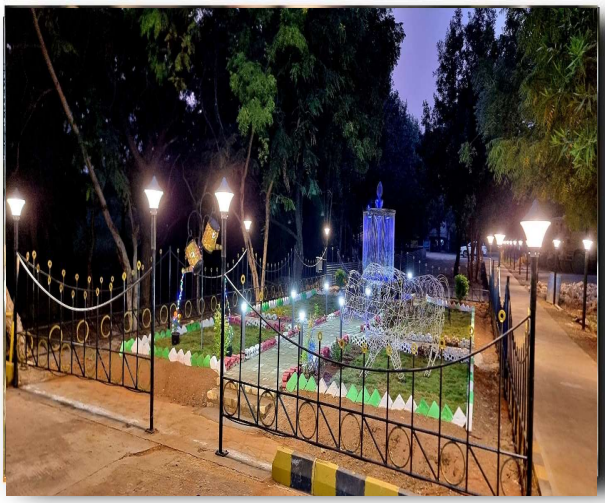
Waste to Wonder Project

Before

After



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Emission Control Innovation at an Overlooked Source—Scrap Yards

Before

After

Customized design – Movable Canopy – First in India

Investment 4 crores

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TEAM → Together Everyone Achieves More

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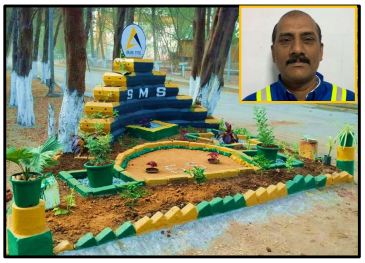
Sustenance

Responsible: KVSN Varma



Responsible: Dileep Reddy

Responsible: Maruthi Sudarshan

Responsible: GV Rao

Responsible: Ramesh

Responsible: Mrs. Asha

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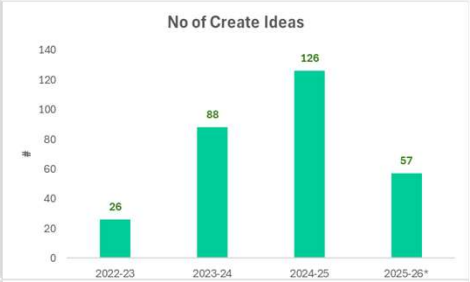
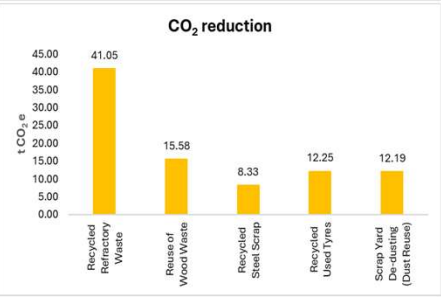
Tangible Benefits





Tangible benefit

- **Reduced Carbon footprint**
- **Cost Savings on Raw Materials**
- **Reduction in Waste Disposal Cost**
- **Improved Resource Efficiency**
- **Improved Asset Value**
- **Energy Savings**
- **Financial Recognition & Awards**

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Intangible Benefits

- **Enhanced Brand Image** – Showcases leadership in sustainability and circular economy.
- **Employee Pride & Engagement** – Inspires ownership through waste-to-art transformation.
- **Alignment with SDGs** – Supports global goals on sustainability and climate.
- **Support to Swachh Bharat Mission** – Promotes cleanliness and responsible waste practices.
- **Positive Stakeholder Perception** – Improves credibility with regulators and investors.
- **Cultural & Aesthetic Value** – Enhances workplace with art and inspiration.
- **Knowledge Sharing** – Provides learning platform for green practices.
- **Workplace Morale** – Boosts positivity through cleaner, artistic environment.
- **Visitor Attraction** – Creates landmark sites for guests and stakeholders.
- **Reputation as Sustainability Champion** – Positions company as green leader.
- **Industry Recognition** – Gains visibility in national sustainability forums.
- **Contribution to Net Zero Goals** – Cuts carbon footprint via waste upcycling.
- **Long-term Legacy** – Leaves sustainable impact for future generations

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Replication Potential & Project Assimilation

Key Project Assimilations

- **Simplicity & Cost-Effectiveness -** Enhances aesthetic appeal without significant capital investment
- **Scalable Model :** The concept of converting waste into aesthetic and functional assets can be adopted
- **Adaptability:** Scalable across diverse industries — manufacturing, steel, automotive, textile, and chemical sectors etc
- **Alignment with National & State Missions :** Supports Swachh Bharat Abhiyan, Swarna Andhra - Swachh Andhra mission, Make in India, and Waste to Wealth initiatives
- **Improve brand Image:** through Attracting positive attention from various stakeholders

Replication Potential

1. Our Group Companies – **In progress**
2. It can be replicated in the **Steel Sector and various other Industrial sectors**
3. It can be replicated in the **Cities, Institutions** etc.

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Planning for Further Scaling Up

- **Expansion Across Plant Units** – Beautify townships, green belts, and community parks.
- **Diversification of Waste Streams** – Use sludge, rubber, plastics, and other wastes.
- **Collaboration with Designers/Institutes** – Engage art schools and NGOs for innovation.
- **Digital Showcase** – Create virtual gallery to display transformations.
- **Recognition & Benchmarking** – Project as flagship for sustainability awards.

Succession Planning

- **Institutionalization of Project** – Embed into company's sustainability policy for continuity.
- **Dedicated Green Taskforce** – Multi-departmental team to drive and monitor progress.
- **SOP Development** – Clear procedures for waste use and safe handling.
- **Skill Transfer & Training** – Regular workshops to train employees and local youth.
- **Budgetary Allocation** – Annual budget support under CSR/ESG initiatives.
- **Leadership Pipeline** – Mentor second-line leaders for long-term ownership.

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Challenges & Mitigation: During the Implementation

Technical

Design Expertise

- **Challenge:** Lack of creative expertise limited design ideas
- **Mitigation:** In-house idea contests to encourage innovative concepts

Structural Safety

- **Challenge:** Ensuring installations were structurally sound
- **Mitigation :** Departmental reviews and appropriate reinforcements

Fabrication Challenges

- **Challenge:** Difficulty in reshaping large/irregular waste items.
- **Mitigation:** Use of specialized cutting/welding techniques and support from skilled fabrication teams.

Administrative

Employee Participation

- **Challenge:** Initial difficulty in gaining active employee interest
- **Mitigation :** Internal competitions and recognition schemes introduced

Budget Constraints

- **Challenge:** Limited budget for non-core activities
- **Mitigation :** Utilizing in-house waste, reusing materials, and departmental sponsorship

Inter-departmental Coordination

- **Challenge:** Delays due to multiple department involvement
- **Mitigation:** Formation of a cross-functional taskforce with defined responsibilities

Maintenance

Durability

- **Challenge**: Weather resistance and long-term maintenance issues
- **Mitigation**: Application of weather-resistant coatings, preventive maintenance, and periodic inspection schedule

Material Sorting

- **Challenge**: Identifying and segregating reusable waste was time-consuming
- **Mitigation**: Dedicated multi-departmental team formed (Housekeeping, Maintenance, Production) for waste segregation

Safety Concerns

- **Challenge**: Handling sharp, heavy scrap during fabrication
- **Mitigation**: Mandatory use of PPE, training on safe handling, and supervision by maintenance team

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Alignment with National/State Standards

Swachh Bharat Mission
The Swachh Bharat Mission promotes nationwide cleanliness, sanitation, and hygiene, with key goals including proper waste management, and fostering behavioral change in citizens towards maintaining a clean environment.

Swarna Andhra -Swachh Andhra
This mission actively promotes waste management through focused cleanliness drives, infrastructure development, and public awareness campaigns. A key goal of the program is to manage both new waste and clear existing legacy waste, with the state aiming to be waste-free by 2025

Net Zero By 2070
Net zero is the goal of balancing the amount of greenhouse gases (GHGs) emitted into the atmosphere with the amount removed, achieved by reducing emissions and removing residual emissions through carbon removal methods

SWM Rules, 2016
The Solid Waste Management (SWM) Rules, 2016, emphasize a comprehensive and integrated approach to waste management that goes far beyond simple collection and dumping

Pollution Control Boards
CPCB

SDG 12 - Responsible Consumption And Production
SDG 12 focuses on Promoting efficient and sustainable resource management and Substantially reducing waste through prevention, reduction, recycling, and reuse, moving towards a circular economy.

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Best Practices Adopted during Project Implementation

- One Spillage Control per Person **(OSOP)**
- **Environmental Inventory** of potential Environmental Hazards
- **SAP PM Module** for Autonomous Maintenance for all Environmental Inventory
- **Dashboard for Air Pollution Control** Equipment (APCE)
- Dashboard for Online Continuous Monitoring-
- **Digitalisation** of Carbon Inventory
- **Miyawaki** plantation
- **20 MWp Solar Power Plant** installed
- **5S QCFI JUSE certified** plant with Par excellence **first time** in integrated steel plant in India

➢ **Cast House Dedusting System:**
This is the **first time** in Indian Steel Plant of smaller size to installed this De-Dusting system.

➢ **SMS Scrap Yard Dedusting System:** This is the **first time** in Indian Steel Plant has installed this De-Dusting system.

➢ **PCM Dedusting System:**
This is the **first time** in Indian Steel Plant of smaller size to installed this De-Dusting system.

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Key Takeaways: Waste to Wonder

Reduces waste disposal while promoting circular economy principle & **reducing environment pollutions**

Cost-effective beautification with tangible savings on disposal and landscaping

Highly replicable model for diverse industrial sectors across India

Enhances workplace aesthetics and fosters employee pride and participation

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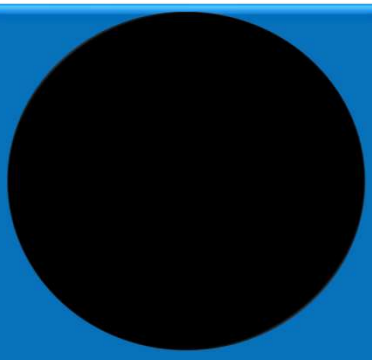

"Moving Together Towards Excellence"

THANK YOU

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