



**ENGINEERING  
SOLUTIONS**

D R E A M   B E Y O N D   L I M I T S

# EMPOWERING INDUSTRY

With

# QUALITY

Reliability & Innovation



**VR ENGINEERING SOLUTIONS**

**Address :**

**VR ENGINEERING SOLUTIONS**  
G/ F - 8 A Block- New MS, Mohan Garden,  
Uttam Nagar, New Delhi - 110059

# Who are we?



## Our Focus

For your temporary and full time Powerneeds at construction sites. We provide power solution With Diesel, Battery, and Solar powered solution for your Industry needs.

Our clients come from construction, mining and Automobile engineering segment. We consider ourselves a integral part of your team, supporting the planning for usage of your power resources. We work with your engineering and planning team to maximize the utilization of the resources.

## Our Mission

Reducing CO<sub>2</sub> emissions in construction and making the industry more efficient is crucial for addressing climate change and promoting sustainability.

## Our Vision

To make the concept of manufacturing products that help people better utilize resources more effective

# What is Us?

## Risk Inclusion

All design are analyzed with detailed, HAC & PHA Analysis.

## Standards

ISO| NFPA |IEC | IEEE |ASHRAE |GB etc.

## Sustainable

DBR & Eng. Are scalable and sustainable from inheritance.

## Customization

All Units/products are customizable as per Need

## Handholding

All stages – 8\*7\*365 online and phone support

## Among Few!

Compare us to the best known global giants in process and accuracy. 100% reliable and benchmarked against global standards.

## Process

### NPD

Feature list Requirement Detailed Application Study Product Finalisation with Customer Product Specific as per Customer Requirements



### Design

DFMEA of Products Prototype Development Design for Manufacturing (DFM) Product Designing with Solid works Analysis of Product such as Static and CFD analysis



### Production

Manufacturing of product with ISO Standards Lean Manufacturing Process to ensure 100% quality Assembly operations with IQC

# SMART WASHER

## VR Engineering Solutions Offer Bioremediating Parts Washing System

If you currently use solvent or aqueous-based parts washer, we can show you why switching to the VR SmartWasher® Bio remediating Parts Washing System can save you time and money while making your operations safer for employees and the environment.

### What Is Bioremediation?

Bioremediation is the use of microbes to break down and “eat” oil, grease, and carbon-based contaminants. This proven biotechnology is used to assist in the clean-up of waste water treatment ponds and lagoons in petroleum refineries and industrial manufacturing facilities all around the world.



Oil contaminants enter the solution as parts are washed.



Surfactant in OzzyJuice® solution emulsify the oils.



Emulsified oil is eaten by the Ozzy® microbe.



Oil is converted into water and carbon dioxide.

# The Performance Advantage

It works ! VR SMARTWASHER® is super effective, even on the toughest carbon, grease, gunk and oils.

## Exceptional Cleaning Power

Meets or exceeds the cleaning performance of manual solvent and aqueous parts washers.

## Self-Cleaning Solution

The bioremediation process keeps the fluid clean and ready to use.

## Mobile Options

Save time by ringing the washer to the parts instead of the parts to the washer.

# The Cost Advantage

When you compare traditional parts washers against the VR SMARTWASHER the savings are clear.

### LESS SPENDING

No ongoing purchase of solvent cleaners

### MINIMIZED WASTE

No changing or hauling away of cleaning

### NO CONTRACTS

Eliminates hazardous waste removal contracts.

### LOWER LIABILITY

No cradle to grave liability.

# The Safety Advantage

A VR SMARTWASHER® Bioremediating Parts Washing System delivers exceptional cleaning without any of the health risks associated with solvent and aqueous-based parts washers. It's safer for you and for the environment.

## Bioremediating Microbes

Naturally Occurring and Non-Pathogenic

## OzzyJuice® Cleaning Fluids

Non-Irritating and Environmentally-Friendly

## Safer For Employees

No Contact with Harmful Solvents

## Safer For The Environment

No Hazardous Waste



# LIGHT TOWER

## Solar Lightmast

Offering 300 Wx 4 LEDs with a life span of 30000 hours. Combined With 3 KW of solar panel a high service interval and 6-sections 7m Powder Coated iron mast with 340-degree rotation.

- Efficient and high Performance of 300-Watt x 4 IP
- 66 LED light with longer service life
- 10-12Hours of Battery Backup with single solar day charging.
- Compacted and High performance 550+ watts Solar panels.
- 6 section 7m or 9m Powder Coated Iron mast with 340 Degree rotation.
- Longer hours of continuous operation.
- Separate switches for all LEDs.
- Compact design and Robust Design.
- Multi-display controlpanel with alarms and sensors.
- Auto Operation of LED with respect to time.
- 5 adjustable jacks for better stability.
- Leaf spring mounted chassis with towing hook and towing speed of 20 KM/hr.
- Grid input for charging when solar is not present.

## OPTIONAL FEATURE

- Customize LED as per requirement IOT Enabled and Industry
- 4.0 Complaint.



# SPECIFICATIONS

## TECHNICAL DATA

Product	:	SOLAR Light Mast
Lighting System	:	300Watt X 4LED Flood Flood Light With IP66 Rating
Power type	:	SOLAR
Enclosure	:	IP65

### LUX LEVEL

Lamp Lumen @ tc 25°C	180000LM
Lamp Lumen efficacy tc 25 °C	150LM/W



### SOLAR

Make	:	Adani/ Trina/ Canadian
Max Voltage Vmpp	:	43.78
Max Current Impp	:	13.14
Open Circuit Voltage	:	52.3
Open circuit current	:	13.89
Module efficiancy	:	22.3%

### MAST

Type	:	Galvanised Iron 4 sesction with interlock
Extended Height	:	7M
Stowed Height	:	3M
Extention Mechanism	:	Manual
Rotation	:	340 Degree

### BATTERY

Battery Type	:	Lithium Ion
Battery Voltage/ Ampere Rating	:	48or 96Vdc
Inverter	:	3750 or 7500 VA
Backup time	:	10-12 Hrs
Charging time	:	1 Solar day

# Hybrid Towers

Zero Human Intervention Design-with Auto Operation of LED, and Power Source switching.

Efficient and high Performance of 200 - Watt x 6 IP 66LED light with longer service life with 158-Watt Lumen Per watt Total of 1,89,600 Lumens 12 hours of operation with 5 hrs of Diesel with 7 hours of Battery Backup.

50 Programable Outputs for LED operation Compact and high performance Diesel Gen set 6 section 7m or 9m Powder Coated mast with 340 Degree rotation Separates witches for all LEDs

Leaf spring mounted chass is with towing hook and towing speed of 20 KM/hr Compact and Robust Design.

Multi-display control panel with alarms and sensors 4 adjustable jacks for better stability.

Option available with 3200 M2 , 4500 M2 Coverage area Options



# Diesel Towers

- Fully automated solution-only diesel filling required with Auto operation of LED with Respect to Time.
- Efficient and high Performance of 200-Watt x 4 IP 66 LED light with longer service life with 158-Watt
- Lumen Per watt Total of 1,89,600 Lumens Compact and high performance 5-KVA Mahindra engine with Alternator
- CPCB-4+Compliant canopy designed 6section 7m or 9m Galvanized Iron mast with 340 Degree rotation
- Longer hours of continuous operation without fuel fill Separates switches for all LEDs Leaf spring mounted chassis is with towing hook and towing speed of 20 KM/hr
- CompactandRobustDesign. Multi-display control panel with alarm sand sensors 4 adjustable jacks for better stability.
- Customize option for 5 KVA,10 KVA ,15 KVA Power Output



# Mobile Services Van

**VR Engineering Solutions** introduces the Service VAN, a mobile maintenance and repair unit designed to provide on-the-go support for construction, mining, and industrial machinery. This fully equipped service vehicle ensures minimal downtime and maximum efficiency, delivering essential maintenance services directly to your site.



- Tyre Inflator
- Compressor
- Oil Dispenser
- Diesel Generator
- Grease Dispenser
- Washing Pump Unit
- Oil & Grease Dispenser



- JIB Crane
- Work Bench
- Welding Set
- Waste Oil Tank
- Other Workshop
- Complete Tool Box
- Tools & Equipments





- Light Tower
- Measuring Tools
- Mobile Service Van
- Design & Consultants
- Industrial MRO Supplies
- Oil & Greasing Equipment
- Portable Office Container
- Biological Parts Washing Machine
- Pneumatic Tools, Electric Tools & Hand Tools

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