



**vikramindia**

## Module Mounting Structure (MMS – Division)



*Vikram India Limited*

Tobacco House" 4th Floor, 10ld Court House Corner  
Kolkata West Bengal, 700 001

**Factory address:** Jala Dhulagori, P.O. Dhulagori,  
National Highway 6,  
Dhulagori, Howrah, West Bengal 711 302

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## **INTRODUCTION**

**Vikram India Limited (VIL)** is one of leading manufacturer and exporter of complete line of tea processing machineries across the globe since 1974. Its unwavering focus on providing premium quality to its customer in one of the key drivers for its remarkable success. Vikram Group has diversified into different business sectors such as manufacturing of Tea Processing Machinery, Textiles, EPC Solutions and the green industry of Solar Power projects. **Vikram India Limited has an ISO 9001-2008 Certification.**

The present capacity of **Vikram India** Ltd, Howrah plant is 24000/- MT per Annum of Module Mounting structur( **MMS** ) along with the upcoming HOT DIP Galvanizing facility . The plant has provision for increasing its capacity by double in shortest time. We are manufacturing MMS in an eco-friendly environment and we are also a member of INDIALEAD ZINC DEVELOPMENT ASSOCIATION (ILZDA ).



It also offers customized Project Consultancy Services and Training, presently involved in manufacturing of **Module Mounting Structure (MMS)** for mounting the solar panel based at **Dhulagarh, Howrah** in West Bengal. **Vikram Solar** is the flagship company of the Vikram Group.

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## Manufacturing and Quality

We are fully equipped with upgraded machineries in our plant to produce world class of material s per designed.

With superior quality solar module mounting structure systems , fabricated in our modern manufacturing unit. we have an edge when it comes to producing product at its excellence. We boast to provides the most economical and premier quality solar structure.

### Our state-of-art manufacturing facility is equipped with:-

- ◆ Cold Rolling Machine – Fully automatic high speed line.
- ◆ Shearing Machine –CNC.
- ◆ Press Brake—CNC.
- ◆ Power Press.
- ◆ Plasma Cutting-CNC.
- ◆ Iron worker and other equipment to produce 24,000 MT structure per annum.



## Environmental and Safety.

- We adhere to statutory and legal requirement for safety, health and environment in manufacturing process.
- We enhance and upgrade technology, resources and manpower competence to achieve total customer satisfaction.
- We accept customer suggestion by understanding their requirement and need for quality improvement.
- We have adopted numerous methodologies in entire value.



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## Manufacturing with high tensile IS products

- We are equipped with highly new technology broaching machines and band saw machine at our plant. These machines give us strength to do any kind of slotting based on design in high tensile steel products.
- Rate of production is very high with properly applied broaches, fixtures and machines, more pieces can be turned out per hour by broaching than by any other means.
- Our machines have high accuracy and high class of precision finish is possible. A tolerance of  $\pm 0.0075$  mm can be easily obtained in broaching.
- Both roughing and finishing cuts are completed in one pass of the tool.
- The process can be used for either internal or external surface operation.
- Any form that can be reproduced on a broaching can be machined.



- Cutting fluid may be readily applied where it is most effective because a broach tends to draw the fluid into the cut.



## Galvanizing unit.

- We purchase Special High Grade (SHG) quality of Zinc for our galvanizing plant. Mainly from Hindustan Zinc Limited.
- Our Galvanizing plant tank size is 9 x 1.1 x 1.6 meter.
- Our galvanizing tank are ultra Morden type and can perform at high temperature.
- Durability – a permanently bonded tough coating
- Hygienic – easy to clean surface
- Long Life - maintenance free



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## Product

We manufacture different sizes of Column, Rafters, "C" & "Z" Purlins, Struts, Bracing Angle, Cleat Short and **Tie Angle** etc..

We designed as per IS norms, our product are of advanced quality. We can provide hot dip galvanized to a thickness of 80 to 120 Micron.

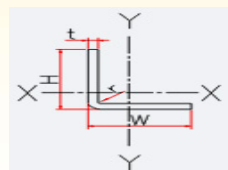
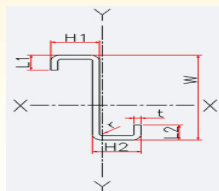
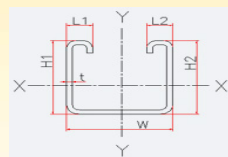
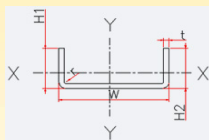
### Product Profile:-

- ⇒ Single and Double pole structure
- ⇒ Double pole structure with struts
- ⇒ Seasonal structure with unique turn buckle mechanism tilting.
- ⇒ Double pole seasonal tilting and static structure with struts.
- ⇒ Pre-galvanized structure for solar projects.
- ⇒ Solar parking structure.

Module mounting structure are easy to install structure provided an excellent solution to rural properties as they can be used on mountainous and rough terrain. Our products are quickly delivered and are easy to install.

### Mounting Structure –Types of Section.

- 'C' Channel
- 'C' Channel with Lip.
- Strut Rail
- 'Z' Channel.
- 'Z' Channel with Lip
- Sigma Section.
- 'L' Angle.



Description	Minimum	Maximum
Web Lip Ch.	70MM	300MM
Web Plain Ch.	40MM	250MM
Flange	30MM	80MM
Lip	10MM	25MM
Thickness	1MM	3MM



Description	Minimum	Maximum
Web Angle	20X20MM	200X200MM
Thickness	1MM	3MM
Length	1Mtrs.	7 Mtrs.



### Benefits of our product.

- ◆ Reduce overall project cost and significantly reduce installation time.
- ◆ High strength steel enables better capacity and longer spans.
- ◆ No site drilling and cutting required.
- ◆ Maintenance –free owing to application of proper surface finish.
- ◆ Factory-finished , cut to extra length with pre-punched holes to avoid time and material wastage.
- ◆ Accessories like, connecting plates, angles splicing plates supplied along with main structure.

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## Solar Pumps ( AC Pumps)

Our AC solar pumps solution are offers submersible pumps with energy efficient duty points ranging from 1m<sup>3</sup>/hrs to 280m<sup>3</sup>/hr. Each pump size is available with an optional number of stages to match the corresponding duty point. As a standard , all the pumps and motors are made of IS2062 grade with 80 micron surface to protect the risk of rust , when pumping ordinary cold water with chlorine content. These pumps can be used in both horizontal and vertical operation, depending on the site condition.

Additional Features of Vikram India Limited's Solar AC Pumps below:

Solar Power driven AC Pumps are supported with a Solar Inverter. The Solar Inverters are incorporated with a Technique called MPPT.

MPPT stands for Maximum Power Point Tracking in which the Inverters sample the Output Power (V-I Curve) by choosing the best load to be presented to the Solar / Photo Voltaic Modules or Cells in order to get the most usable power output. To add further, these Inverters being Programmable have got all the features of Sleep Function and Wakeup Function as follows:.

The Pump will automatically stop running if it fails to pump water during times when solar intensity decreases.

If the Pump stops running due to decrease in Solar Intensity, it can be programmed with a Sleep Time after which it will wake up.

After waking up the Inverter will check for the Voltage required to pump water and then will start running for a set time and check whether it is able to further pump water out unless which the Pump again goes back to Sleep Mode.



SHALLOW WELL SUBMERSIBLE PUMPS				
Description( AC)	Model-I	Model-II	Model-III	Model-IV
PV array (WP)	1200	1800	3000	4800
Moter capacity(HP)	1	2	3	5
Water output(LPD)	38,400	57,600	96,000	91,200
Head(Mtrs.)	30	30	30	50



DEEP WELL SURFACE PUMPS(AC)			
Description( AC)	Model-I	Model-II	Model-III
PV array (WP)	900	1800	2700
Moter capacity(HP)	1	2	3
Water output(LPD)	81,000	1,62,000	2,43,000
Head(Mtrs.)	10	10	10

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## Projects Supplied



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