

# UP MSME 1-Connect

## PROJECT REPORT

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PROJECT:

**PAINT BRUSH**

**PROJECT REPORT**

**Of**

**PAINT BRUSH**

**PURPOSE OF THE DOCUMENT**

This particular pre-feasibility is regarding Paint Brush Manufacturing unit.

The objective of the pre-feasibility report is primarily to facilitate potential entrepreneurs in project identification for investment and in order to serve his objective; the document covers various aspects of the project concept development, start-up, marketing, finance and management.

[We can modify the project capacity and project cost as per your requirement. We can also prepare project report on any subject as per your requirement.]



Total	0.38	2
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**PAINT BRUSH MANUFACTURING UNIT**

## **Introduction:**

Painters with high standards frequently take for granted the many remarkable attributes of a handcrafted brush created from high-quality raw materials. When properly produced, a natural hair brush should have good colour keeping capability, active elasticity, and the ability to immediately revert to the original shape produced by the brush manufacturer when new paint is absorbed. All the features result in a highly precise, elastic instrument. Natural or synthetic hair is used to make today's brushes. Brushes have a lengthy history and have evolved throughout time. Over time, the materials and forms of the brushes evolved. The materials utilised and the forms of the brushes evolved throughout time, becoming more specialized. Arts and civilizations have evolved significantly through time. As a result, the most significant tool utilised by painters has evolved and altered as well. Paint brushes are made up of stiff or soft hairs that might be natural or synthetic fibres. Soft brushes are great for painting with thin paint that spreads quickly, such as water colour paint, and for intricate work since they may produce a sharp tip that enables for precise painting.



## **Uses & Market Potential:**

A paintbrush is a hand-held instrument for applying paint or sealants to paintable surfaces. A ferrule keeps the filament and handle together and gives the brush strength, a spacer plug within the ferrule helps the filament sit securely in the brush

and forms a reservoir for paint, epoxy to lock the filament, and a handle that offers comfort and good balance. The market for painting tools was valued at USD 10.72 billion in 2019 and is expected to increase at a CAGR of 5% between 2020 and 2026. The need for paint tools is expected to rise as the world becomes more urbanized, particularly in emerging nations. The rise of the painting equipment market is predicted to be aided by mass urbanization, social and economic growth, particularly in developing nations. Favourable FDI policies that encourage the commercial use of tools. By 2025, global infrastructure investment is expected to reach over USD 9 trillion per year, with a 5% annual growth rate.

## **Product:**

Paint Brush

## **Raw Material:**

The raw materials are mentioned below:

- Synthetic Bristles
- Glue
- Plastic Handles
- Metal thin strips for ferrule □ Spacer

## **Manufacturing Process:**

— The bristle (which is frequently imported) is first delivered into the facility in little bundles that can be grasped in the hand. Bristle of the same length and taper ratio are included in each bundle. Brushes, on the other hand, must have bristles of varied lengths and taper ratios. Untie the bundles and mix them together.

— Each varied size and taper of bristle is unbundled and placed on a mixing machine with all bristles oriented in the same direction. This machine consists of a succession of belts that travel back and forth, folding and shuffling the bristles in and out.

— This happens as the bristle falls off the belt and lands on top of another belt with that set of bristle, then falls onto another set of bristle, and so on, until all of the bristle is mixed up (but still aligned in the same direction). It takes around 10 minutes to mix everything together.

— The combined bristles are then separated out of the required quantity of bristle (based on weight) to make the brush size.

— The bristle and ferrule assembly is placed on a conveyor belt with mechanisms for patting the bristle into the ferrule.

— A spacer to hold the paint with the filament is automatically pushed into the ferrule's "butt end" to meet the size of ferrule for the brush width under development (the end that will be attached to the handle). The bristles and plug are patted \ to verify that they are against the ferrule's top edge.

— Brushes are manually removed from the line, placed in racks with the ferrule end sticking out, and transported to the glueing station.

— The brush head is nearly finished; picking the bristle, adding the ferrule, inserting the plug, and epoxying the bristles within the plug and ferrule takes about two minutes. The brush head is now placed on a drying rack.

— After the brush head is made, it runs through a series of equipment that clean out all loose hairs. The brush head is also "tipped" meaning that the ends (that are dipped into paint) are slightly feathered or split so that they are finer and able to pick up paint more easily (the finer the bristles that fewer brush strokes the consumer will see when the paint has dried). The ends may also be tapered.

— The handles are made earlier and may have come from another manufacturer. Some manufacturers produce their own handles elsewhere in the plant and send them

to the brush-making department. After drying, the brush heads are piled one on top of the other. The brush heads are automatically inserted using the plastic moulded handle that is pressed against the ferrule, one at a time. The handles are machine nailed or riveted to the ferrule and crimped after insertion to keep the brush head firmly on the handle.

- Each completed brush is immediately packaged by the same machine that placed the handle into the ferrule. A number of paintbrushes, on the other hand, are offered in bins or cartons at the point of sale and come with minimum or no packing. Many brushes come with very little packaging, which usually consists of a little cardboard box that does not stretch the length of the brush.□

### **Area:**

The industrial setup requires space for Inventory, workshop or manufacturing area, space for power supply utilities and polishing area. Also, some of the area of building is required for office staff facilities, office furniture, etc. Thus, the approximate total area required for complete industrial setup is 2000-2500Sqft.

### **Cost of Machines:**

<b>Machine</b>	<b>Quantity</b>	<b>Rate</b>	<b>Amount</b>
Paint Brush Bristle mixing and cleaning machine	1	450000	450000
Fully Automatic Paint Brush Metal ferule making machine	1	550000	550000

Paint Brush making machine	1	500000	500000
Conveyor Belt	1	100000	100000
<b>Total Amount</b>			<b>1600000</b>

**Power Requirement-** The estimated Power requirement is taken at 25 HP.

**Manpower Requirement-** Following manpower is required:

- ⋮ Machine operator-2
- ⋮ Skilled/unskilled worker-3
- ⋮ Helper-4
- ⋮ Manager cum Accountant-1
- ⋮ Sales Personnel-1

## **FINANCIALS**

**PROJECTED BALANCE SHEET**

<b>PARTICULARS</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>
<b><u>SOURCES OF FUND</u></b>					
<b>Capital Account</b>					
Opening Balance	-	2.95	4.42	6.58	9.21
Add: Additions	2.04	-	-	-	-
Add: Net Profit	4.42	5.27	6.16	7.13	8.36
Less: Drawings	3.50	3.80	4.00	4.50	5.50
<b>Closing Balance</b>	2.95	4.42	6.58	9.21	12.07
CC Limit	3.49	3.49	3.49	3.49	3.49
Term Loan	13.20	9.90	6.60	3.30	-
Sundry Creditors	2.04	2.34	2.65	2.98	3.31
<b>TOTAL :</b>	<b>21.68</b>	<b>20.15</b>	<b>19.33</b>	<b>18.98</b>	<b>18.87</b>
<b><u>APPLICATION OF FUND</u></b>					
<b>Fixed Assets ( Gross)</b>	16.50	16.50	16.50	16.50	16.50
Gross Dep.	2.45	4.54	6.31	7.82	9.11
Net Fixed Assets	14.05	11.97	10.19	8.68	7.39

<b>Current Assets</b>					
Sundry Debtors	2.67	3.19	3.65	4.13	4.65
Stock in Hand	3.25	4.52	5.13	5.77	6.43
Cash and Bank	1.72	0.48	0.36	0.39	0.40
<b>TOTAL :</b>	<b>21.68</b>	<b>20.15</b>	<b>19.33</b>	<b>18.98</b>	<b>18.87</b>
	-	-	-	-	-

**PROJECTED PROFITABILITY STATEMENT**

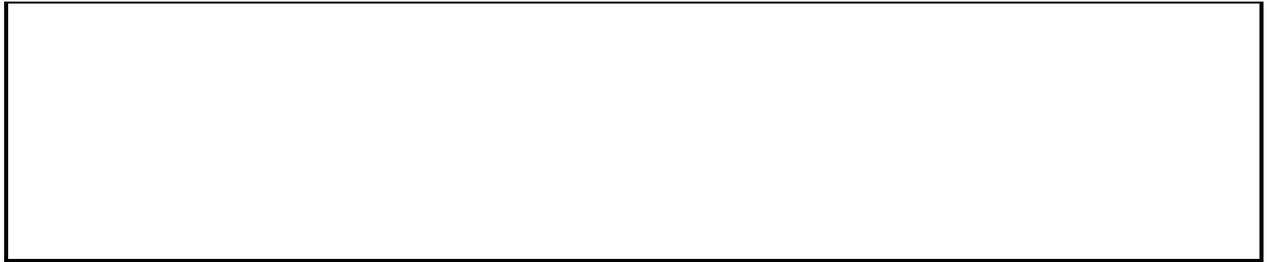
<b>PARTICULARS</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>
<b><u>A) SALES</u></b>					
Gross Sale	66.70	79.66	91.20	103.36	116.10
<b>Total (A)</b>	<b>66.70</b>	<b>79.66</b>	<b>91.20</b>	<b>103.36</b>	<b>116.10</b>
<b><u>B) COST OF SALES</u></b>					
Raw Material Consumed	40.80	46.82	53.06	59.54	66.20
Electricity Expenses	2.24	2.52	2.80	3.08	3.30
Repair & Maintenance	1.00	1.19	1.37	1.55	1.70
Labour & Wages	10.21	12.76	15.31	18.22	20.90
Depreciation	2.45	2.09	1.77	1.51	1.20
<b>Cost of Production</b>	<b>56.69</b>	<b>65.37</b>	<b>74.31</b>	<b>83.90</b>	<b>93.50</b>
<b>Add: Opening Stock /WIP</b>	<b>-</b>	<b>1.89</b>	<b>2.18</b>	<b>2.48</b>	<b>2.80</b>

<b>Less: Closing Stock /WIP</b>	1.89	2.18	2.48	2.80	3.11
Cost of Sales (B)	54.80	65.08	74.01	83.58	93.25
<b>C) GROSS PROFIT (A-B)</b>	11.90	14.57	17.18	19.78	22.90
	<b>17.83%</b>	<b>18.30%</b>	<b>18.84%</b>	<b>19.14%</b>	<b>19.72%</b>
D) Bank Interest i) (Term Loan )	1.61	1.32	0.95	0.59	0.25
ii) Interest On Working Capital	0.38	0.38	0.38	0.38	0.38
E) Salary to Staff	4.28	5.14	6.48	7.64	9.17
F) Selling & Adm Expenses Exp.	1.20	2.23	2.74	3.31	3.72
<b>G) TOTAL (D+E+F)</b>	<b>7.48</b>	<b>9.07</b>	<b>10.55</b>	<b>11.92</b>	<b>13.50</b>
H) NET PROFIT	4.42	5.50	6.63	7.85	9.40
	<b>6.6%</b>	<b>6.9%</b>	<b>7.3%</b>	<b>7.6%</b>	<b>8.1%</b>
I) Taxation	-	0.23	0.47	0.72	1.00
<b>J) PROFIT (After Tax)</b>	<b>4.42</b>	<b>5.27</b>	<b>6.16</b>	<b>7.13</b>	<b>8.35</b>

**PROJECTED CASH FLOW STATEMENT**

<b>PARTICULARS</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>
<b><u>SOURCES OF FUND</u></b>					
Own Contribution	2.04	-	-	-	-
Reserve & Surplus	4.42	5.50	6.63	7.85	9.40
Depriciation & Exp. W/off	2.45	2.09	1.77	1.51	1.29

Increase In Cash Credit	3.49	-	-	-	-
Increase In Term Loan	14.85	-	-	-	-
Increase in Creditors	2.04	0.30	0.31	0.32	0.34
<b>TOTAL :</b>	<b>29.28</b>	<b>7.89</b>	<b>8.72</b>	<b>9.69</b>	<b>11.02</b>
<b><u>APPLICATION OF FUND</u></b>					
Increase in Fixed Assets	16.50	-	-	-	-
Increase in Stock	3.25	1.27	0.61	0.64	0.66
Increase in Debtors	2.67	0.52	0.46	0.49	0.51
Repayment of Term Loan	1.65	3.30	3.30	3.30	3.30
Taxation	-	0.23	0.47	0.72	1.05
Drawings	3.50	3.80	4.00	4.50	5.50
<b>TOTAL :</b>	<b>27.57</b>	<b>9.12</b>	<b>8.84</b>	<b>9.65</b>	<b>11.02</b>
Opening Cash & Bank Balance	-	1.72	0.48	0.36	0.39
Add : Surplus	1.72	- 1.23	- 0.12	0.04	0.01
Closing Cash & Bank Balance	<b>1.72</b>	<b>0.48</b>	<b>0.36</b>	<b>0.39</b>	<b>0.40</b>



**COMPUTATION OF CLOSING STOCK & WORKING CAPITAL**

<b>PARTICULARS</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>
<b><u>Finished Goods</u></b>					
(10 Days requirement)	1.89	2.18	2.48	2.80	3.12
<b><u>Raw Material</u></b>					
(10 Days requirement)	1.36	2.34	.65	2.98	3.31
<b>Closing Stock</b>	<b>3.25</b>	<b>4.52</b>	<b>5.13</b>	<b>5.77</b>	<b>6.43</b>

**COMPUTATION OF WORKING CAPITAL REQUIREMENT**

<b>Particulars</b>	<b>Amount</b>	<b>Margin(10%)</b>	<b>Net Amount</b>
Stock in Hand	3.25		
Less:			
Sundry Creditors	2.04		
<b>Paid Stock</b>	<b>1.21</b>	<b>0.12</b>	<b>1.09</b>
Sundry Debtors	2.67	0.27	2.40
<b>Working Capital Requirement</b>			<b>3.49</b>

<b>Margin</b>			0.39
<b>MPBF</b>			3.49
<b>Working Capital Demand</b>			3.49

**REPAYMENT SCHEDULE OF TERM LOAN**

11.0%

<b>Year</b>	<b>Particulars</b>	<b>Amount</b>	<b>Addition</b>	<b>Total</b>	<b>Interest</b>	<b>Repayment</b>	<b>CI Balance</b>
<b>I</b>	Opening Balance						
	Ist Quarter	-	14.85	14.85	0.41	-	14.85
	Iind Quarter	14.85	-	14.85	0.41	-	14.85
	IIIrd Quarter	14.85	-	14.85	0.41	0.83	14.03
	Ivth Quarter	14.03	-	14.03	0.39	0.83	13.20
					1.61	1.65	
<b>II</b>	Opening Balance						
	Ist Quarter	13.20	-	13.20	0.36	0.83	12.38
	Iind Quarter	12.38	-	12.38	0.34	0.83	11.55
	IIIrd Quarter	11.55	-	11.55	0.32	0.83	10.73
	Ivth Quarter	10.73		10.73	0.29	0.83	9.90
					1.32	3.30	
<b>III</b>	Opening Balance						
	Ist Quarter	9.90	-	9.90	0.27	0.83	9.08
	Iind Quarter	9.08	-	9.08	0.25	0.83	8.25

	IIIrd Quarter	8.25	-	8.25	0.23	0.83	7.43
	Ivth Quarter	7.43		7.43	0.20	0.83	6.60
					0.95	3.30	
<b>IV</b>	Opening Balance						
	Ist Quarter	6.60	-	6.60	0.18	0.83	5.78
	Iind Quarter	5.78	-	5.78	0.16	0.83	4.95
	IIIrd Quarter	4.95	-	4.95	0.14	0.83	4.13
	Ivth Quarter	4.13		4.13	0.11	0.83	3.30
					0.59	3.30	
<b>V</b>	Opening Balance						
	Ist Quarter	3.30	-	3.30	0.09	0.83	2.48
	Iind Quarter	2.48	-	2.48	0.07	0.83	1.65
	IIIrd Quarter	1.65	-	1.65	0.05	0.83	0.83
	Ivth Quarter	0.83		0.83	0.02	0.83	0.00
					0.23	3.30	

Door to Door Period      60 Months  
Moratorium Period        6 Months  
Repayment Period        54 Months

**CALCULATION OF D.S.C.R**

<b>PARTICULARS</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>
<b><u>CASH ACCRUALS</u></b>	6.87	7.35	7.94	8.64	9.6

Interest on Term Loan	1.61	1.32	0.95	0.59	0.2
Total	8.48	8.67	8.89	9.23	9.87
<b>REPAYMENT</b>					
Repayment of Term Loan	1.65	3.30	3.30	3.30	3.30
Interest on Term Loan	1.61	1.32	0.95	0.59	0.2
Total	3.26	4.62	4.25	3.89	3.50
<b>DEBT SERVICE COVERAGE RATIO</b>	<b>2.60</b>	<b>1.88</b>	<b>2.09</b>	<b>2.37</b>	<b>2.80</b>
<b>AVERAGE D.S.C.R.</b>			<b>2.31</b>		

**Assumptions:**

1. Production Capacity of Paint Brush Manufacturing unit is taken at 500 Pcs per day. First year, Capacity has been taken @ 40%.
2. Working shift of 10 hours per day has been considered.
3. Raw Material stock and Finished goods closing stock has been taken for 10 days.
4. Credit period to Sundry Debtors has been given for 12 days.
5. Credit period by the Sundry Creditors has been provided for 15 days.
6. Depreciation and Income tax has been taken as per the Income tax Act,1961.
7. Interest on working Capital Loan and Term loan has been taken at 11%.
8. Salary and wages rates are taken as per the Current Market Scenario.
9. Power Consumption has been taken at 25 HP.
10. Selling Prices & Raw material costing has been increased by 3% & 2% respectively in the subsequent years.

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