

Rajasthan Skill & Livelihoods Development Corporation

1. Module Name	Metal Surface Painter
2. Sector	Paint
3. Entry Qualification	Minimum 5 th Pass
4. Minimum Age (in years)	15
5. Duration	49 days/ 294 hrs.
6. Provision of Tool kit	Yes
7. Terminal Competency	<p>After completion of the course the trainee will be able to:</p> <ul style="list-style-type: none"> • identify materials, tools and equipment required for various types of painting and polishing of different surfaces; • prepare basic surfaces (wall, metal & wood) for painting and polishing; • handle waste disposal & manage housekeeping, health & safety at work place; • prepare metal surfaces for painting; • prepare and apply putty and fillers etc; • select, mix, tint & prepare all types of oil paints/water paints, synthetic paints & other paints to obtain specific colours; • paint metal surfaces; and • repair various painting defects;

	Approx. hrs.
8. Registration, Inauguration, introduction and objectives of the course	2

9. Course content			
Practical competencies	Approx. hrs.	Underpinning Knowledge (Theory)	Approx. hrs.
<ul style="list-style-type: none"> • Use of protective clothing and equipment and carryout safe working practices. • Apply good housekeeping practices, proper handling of materials and waste disposal. • Identify and familiarize with tools & equipments used in painting. • Identify and familiarize with various types of raw materials used in painting e.g. Paints, Putty, Varnishes etc. 	9	<ul style="list-style-type: none"> • Paint Industry in India. • Importance of painting, painter & related works. • Health and safety precautions, safe working practices. 	3
<ul style="list-style-type: none"> • Use of tools, equipments used for painting. • Upkeep, care & maintenance of tools & equipments. 	9	<ul style="list-style-type: none"> • Tools & Equipment used in painting technique, their specifications & quality. • Various types of Putty, primer, paints, varnishes generally used for painting applications and their quality. 	9
<ul style="list-style-type: none"> • Familiarization with various types and conditions of painting surfaces e.g. wall, wood & metal etc. • Prepare basic surfaces: wall, metal and wood for good painting work. 	12	<ul style="list-style-type: none"> • Importance of using proper tools & equipments. 	3
<ul style="list-style-type: none"> • Apply putty, paint varnishes and polish to the different surfaces by 	21	<ul style="list-style-type: none"> • Systematic use of various types of painting tools & 	6

using proper application sequence.		equipment, spray guns, ford cup sets.	
<ul style="list-style-type: none"> Field visits to locations where painting is going on. 	12	<ul style="list-style-type: none"> Necessity and type of help to Painter by Helper. Waste disposal at work places. Behavior at work place. Customer & their expectations while painting. 	6
<ul style="list-style-type: none"> Use of protective clothing and equipment and carry out safe working practices. Apply good housekeeping practices, proper handling of materials and waste disposal. Demonstration and practical on Metal pretreatment such as Scraping, Rubbing by Emery cloth, Wire brushes, buffing, pickling, phosphating, and Blasting etc. Practical on Metal surface preparation for painting by rubbing with emery scraping, wire brushing, Manual chipping & by portable Grinder. Descaling of Metal surfaces and flame cleaning of rusted surfaces. 	30	<ul style="list-style-type: none"> Health and safety precautions, safe working practices and waste disposal at work place. Corrosion: Causes of Corrosion. Types of Corrosion, its effect on metallic surfaces, purpose of Metal pretreatment. Corrosion on different Metals both Ferrous and non-ferrous. Factors affecting corrosion. Economical loss due to corrosion. 	6
<ul style="list-style-type: none"> Demonstration and Practical on Pretreatment of Ferrous & nonferrous surfaces by degreasing, etching, pickling & solvent wiping. Preparing surface for primary coat of different metals. Practicing by brushes of various sizes. Cleaning & wiping of different surfaces to be painted to the required standard. 	30	<ul style="list-style-type: none"> Methods for the protection of Metal from corrosion. Various methods of spray applications. 	3
<ul style="list-style-type: none"> Practical on Preparation of Adhesive Compound like putties, filler and Metal, Cement and applying them on as metal surfaces. Primary painting & finishing painting by Brushes of Metal surfaces. 	30	<ul style="list-style-type: none"> Adhesives like putties, Filler and metal cement for metallic paintings Brushes, Description, sizes & uses. 	6
<ul style="list-style-type: none"> Practical on Selecting, Mixing, Tinting & preparing of all types of oil paints/water paints, synthetic paints & other paints to obtain specific colours. 	20	<ul style="list-style-type: none"> Colour and tone perception. Effect of light on colour, warm/cold colours. Special considerations of colour scheme selection. 	6
<ul style="list-style-type: none"> Practical on Rectifying the Common Coating Failures & repairing of various painting defects. 	15	<ul style="list-style-type: none"> Quality & Finishing of Work: Importance of quality & finish of job at all stages. Protection of finish surfaces. Economical use of material, calculation for quantity of paint required, costing & evaluation. Behavioral etiquette 	6

		Entrepreneurship & Soft Skills and Computer Literacy Module:	0
		• Entrepreneurship – its necessity and charms of being an entrepreneur.	1
		• Who is an entrepreneur and characteristics of a successful Entrepreneur?	2
		• How to identify Business opportunities?	2
		• Steps for setting up a small scale venture.	1
		• Institutional support for entrepreneurship (whom to contact for what)	2
		• Government (Central/ State) Schemes and assistance from Banks/ other financial institutions - Procedures and formalities for getting loan.	2
		• How to prepare Business plan?	2
		• Financial literacy-Costing, Pricing, Profitability and Break Even Analysis.	2
		• Cash management in small enterprises.	2
		• Accounting and Book Keeping	2
		• Introduction to Taxation	1
		• Shop and Establishment Act and its provisions.	1
		• Creativity, Problem solving & decision making.	1
		• Common mistakes generally made by entrepreneurs.	1
		• Interaction with successful entrepreneur and success stories.	2
		• Communication and Negotiation skills.	1
		• Interpersonal skills	1
		• How to Deal with customer attitude – Effective selling.	1
		• Marketing – Basic concepts/ Skills and effective mode of advertising.	1
		• Introduction to e-commerce.	2
Computer Fundamentals Customize the Desktop Environment e.g. Desktop, Start Menu, and Taskbar etc. Configuring & Migrating Files, Folders & Settings - Folder Views, Accessibility Settings	2	Computer Fundamentals, MS-Office & Internet introduction to Computers History of Computers Components of Hardware Peripherals	1
MS Word Creating, Organizing & Formatting Content Collaborating – Merge, Insert, View,	4	Concept of Operating System – Windows XP, Exploring & Configuring the Windows XP Desktop Environment-Customize	1

Edit, Track Mode etc. Formatting & Managing Documents		the Desktop, Start Menu, and Taskbar etc. Configuring & Migrating Files, Folders	
MS Excel Creating, Analyzing & Formatting Data & Content Collaborating - Insert, View, Edit etc. Managing Workbooks	3	Settings - Folder Views, Accessibility Settings Features of Windows XP Understanding concepts of Word processing using MS-Word Understanding concepts of Electronic spreadsheet and various types of entries in it	1
MS PowerPoint Creating & Formatting Content Collaborating - Track, Edit, Add, Delete Comments, Merge Managing & Delivering Presentations	3		
Internet Concepts Opening websites and downloading data Writing, reading and sending emails	4	Understanding concepts of URL Creating and Opening an E-mail account. Receiving and sending emails Searching information on Internet.	1
Approx. Total Practical hours	204	Approx. Total Theory hours	88
Grand Total (2+204+88)			294

10. Tools, Equipments and Material for a batch of 30 trainees

S.No.	Item	Quantity	S.No.	Item	Quantity
	Equipment			Materials	
1	Spraying Mask	8 Nos.	1	Metal putty	6 kg.
2	Steel combs	8 Nos.	2	Metal primer	6 kg.
3	Ford Cup No.4	3 Nos.	3	Metal cement	6 kg.
4	M.S. Panels 150mm x 100mm (18x22 swg)	45 Nos.	4	Oil paint	12 ltr.
5	M.S. Panels 300mm x 200mm (18x22 swg)	45 Nos.	5	Acrylic Emulsion Paint	6 ltr.
6	Wire Brushes	8 Nos.	6	Thinner/Dilutents (Turpentine)	15 ltr.
7	Gun spray with gravity feed cup with accessories with portable Air Compressor	3 Nos.	7	Synthetic paint white	6 ltr.
8	Airless Spray Gun with accessories	3 Nos.	8	Panels of painting defects	3 Nos.
9	Pressure feed container 20 ltr. capacity	3 Nos.			
10	Spray Booth	3 Nos.			

S.No.	Item	Quantity	S.No.	Item	Quantity
	Hardware			Software:	
1	Computers/Laptops	10 (one for three trainee)	6	Microsoft Windows 7/8/10 or UNIX/ LINUX or latest software	For all Systems
2	Power backup	For all Systems	7	Microsoft Office 2007/ 2010/ 2013 or latest software	For all Systems
3	Inkjet/Laser Printer (Network/USB Printer)	1	8	Antivirus Software (TVD/ Norton/ Quick Heal Total Security/ Kaspersky/ Any Popular brand)	For all Systems
4	Speaker	1	9	Internet Connection	For all Systems
5	Spare H/W components	As per requirement			