

GOVERNMENT OF INDIA MINISTRY OF SKILL DEVELOPMENT & ENTREPRENEURSHIP DIRECTORATE GENERAL OF TRAINING

**COMPETENCY BASED CURRICULUM** 

# IN PLANT LOGISTICS ASSISTANT

(Duration: One Year)

**CRAFTSMEN TRAINING SCHEME (CTS)** 

**NSQF LEVEL-4** 



**SECTOR – LOGISTICS** 



# IN PLANT LOGISTICS ASSISTANT

(Engineering Trade)

(Designed in 2020)

Version: 1.0

## **CRAFTSMEN TRAINING SCHEME (CTS)**

# **NSQF LEVEL-4**

Developed By

Ministry of Skill Development and Entrepreneurship Directorate General of Training Sectoral Trade Course Committee of Logistic Sector & CENTRAL STAFF TRAINING AND RESEARCH INSTITUTE EN-81, Sector-V, Salt Lake City, Kolkata – 700 091 www.cstaricalcutta.gov.in

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During the one-year duration of In Plant Logistics Assistant trade a candidate is trained on professional skills & knowledge, Engineering Drawing, Workshop Calculation & Science and Employability skill related to job role. In addition to this a candidate is entrusted to undertake project work and extracurricular activities to build up confidence. The Broad components covered during the course are given below:

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During the Course the trainee learns about Safety and Precaution which includes different type of dangerous goods and associated risks and ways of handling, Safety rules and Procedures, SOP and the handling procedure in case of miss-happenings, safety policy inside the company premises, Importance of Proper usage of PPE and consequences of wrong usage, Details OSHA and its application, 5S and its implementation and practice and how to maintain Health, Safety and Security measures during operations etc.

The trainee will learn Physical requirements for performing functions (Body Positions). He will learn basics of supply chain logistics and Understand key concepts of Logistics in a manufacturing setup and supply chain logistics . The trainee will practice the key activities of inbound, In plant and outbound activities like Loading, Unloading, Receiving, sorting, Storing, Picking and dispatch activities, basic of inventory & stores management.

He will also practice different types of inventory management, the use of Technology and equipment like computer based scanners, RFID scanners, other associated software used in inplant logistics, Inbound process like Identify and classify raw materials / goods into different types, Out-bound process like read and verify dispatch orders and collect acknowledgment and delivery reports and Prepare reports related to inventory change, dispatches, delivery success, inbound receipts.



#### 2. TRAINING SYSTEM

#### 2.1 GENERAL

The Directorate General of Training (DGT) under Ministry of Skill Development & Entrepreneurship offers a range of vocational training courses catering to the need of different sectors of economy/ Labour market. The vocational training programmes are delivered under the aegis of Directorate General of Training (DGT). Craftsman Training Scheme (CTS) with variants and Apprenticeship Training Scheme (ATS) are two pioneer schemes of DGT for strengthening vocational training.

In Plant Logistics Assistant trade under CTS will be delivered nationwide through network of ITIs. The course is of one year duration. It mainly consists of Domain area and Core area. The Domain area (Trade Theory & Practical) impart professional skills and knowledge, while Core area (Workshop Calculation and science, Engineering Drawing and Employability Skills) impart requisite core skill, knowledge and life skills. After passing out of the training program, the trainee is awarded National Trade Certificate (NTC) by DGT which is recognized worldwide.

#### Trainees broadly need to demonstrate that they are able to:

- Read and interpret technical parameters/ documents, plan and organize work processes, identify necessary materials and tools;
- Perform task with due consideration to safety rules, accident prevention regulations and environmental protection stipulations;
- Apply professional skill, knowledge & employability skills while performing jobs.
- Check the job/ assembly as per drawing for functioning identify and rectify errors in job/ assembly.
- Document the technical parameters related to the task undertaken.

#### **2.2 PROGRESSION PATHWAYS**

- Can join industry as Technician and will progress further as Senior Technician, Supervisor and can rise up to the level of Manager.
- Can become Entrepreneur in the related field.
- Can join Apprenticeship programme in different types of industries leading to National Apprenticeship certificate (NAC).
- Can join Crafts Instructor Training Scheme (CITS) in the trade for becoming instructor in ITIs.
- Can join Advanced Diploma (Vocational) courses under DGT as applicable.



#### **2.3 COURSE STRUCTURE**

Table below depicts the distribution of training hours across various course elements during a period of two-years: -

S No.	Course Element	Notional Training Hours
1	Professional Skill (Trade Practical)	1000
2	Professional Knowledge (Trade Theory)	280
3	Workshop Calculation & Science	80
4	Engineering Drawing	80
5	Employability Skills	160
	Total	1600

#### 2.4 ASSESSMENT & CERTIFICATION

The trainee will be tested for his skill, knowledge and attitude during the period of course through formative assessment and at the end of the training programme through summative assessment as notified by the DGT from time to time.

a) The Continuous Assessment (Internal) during the period of training will be done by **Formative Assessment Method** by testing for assessment criteria listed against learning outcomes. The training institute has to maintain individual *trainee portfolio* as detailed in assessment guideline. The marks of internal assessment will be as per the formative assessment template provided on <u>www.bharatskills.gov.in</u>.

b) The final assessment will be in the form of summative assessment. The All India Trade Test for awarding NTC will be conducted by Controller of examinations, DGT as per the guidelines. The pattern and marking structure is being notified by DGT from time to time. **The learning outcome and assessment criteria will be basis for setting question papers for final assessment. The examiner during final examination will also check** individual trainee's profile as detailed in assessment guideline before giving marks for practical examination.

#### **2.4.1 PASS REGULATION**

For the purposes of determining the overall result, weightage of 100% is applied for six months and one year duration courses and 50% weightage is applied to each examination for two years courses. The minimum pass percent for Trade Practical and Formative assessment is 60% & for all other subjects is 33%. There will be no Grace marks.



#### 2.4.2 ASSESSMENT GUIDELINE

Appropriate arrangements should be made to ensure that there will be no artificial barriers to assessment. The nature of special needs should be taken into account while undertaking assessment. Due consideration should be given while assessing for teamwork, avoidance/reduction of scrap/wastage and disposal of scrap/wastage as per procedure, behavioral attitude, sensitivity to environment and regularity in training. The sensitivity towards OSHE (Occupational Safety & Health Environment) and self-learning attitude are to be considered while assessing competencies.

Assessment will be evidence based, comprising the following:

- Job carried out in labs/workshop
- Record book/ daily diary
- Answer sheet of assessment
- Viva-voce
- Progress chart
- Attendance and punctuality
- Assignment
- Project work

Evidences and records of internal (Formative) assessments are to be preserved until forthcoming examination for audit and verification by examination body. The following marking pattern to be adopted while assessing:

Performance Level	Evidence
(a) Weightage in the range of 60 -75% to be allotted	during assessment
For performance in this grade, the candidate should produce work which demonstrates attainment of an acceptable standard of craftsmanship with occasional guidance, and due regard for safety procedures and practices.	<ul> <li>Demonstration of good skill in the use of hand tools, machine tools and workshop equipment.</li> <li>60-70% accuracy achieved while undertaking different work with those demanded by the component/job.</li> <li>A fairly good level of neatness and consistency in the finish.</li> <li>Occasional support in completing the project/job.</li> </ul>
(b)Weightage in the range of above75% - 90% to be	e allotted during assessment
For this grade, a candidate should produce work	• Good skill levels in the use of hand tools,
which demonstrates attainment of a reasonable	machine tools and workshop equipment.



standard of craftsmanship, with little guidance, and regard for safety procedures and practices.	<ul> <li>70-80% accuracy achieved while undertaking different work with those demanded by the component/job.</li> <li>A good level of neatness and consistency in</li> </ul>
	<ul><li>the finish</li><li>Little support in completing the project/job.</li></ul>
(c) Weightage in the range of above 90% to be allot	ted during assessment
For performance in this grade, the candidate, with minimal or no support in organization and execution and with due regard for safety procedures and practices, has produced work which demonstrates attainment of a high standard of craftsmanship.	<ul> <li>High skill levels in the use of hand tools, machine tools and workshop equipment.</li> <li>Above 80% accuracy achieved while undertaking different work with those demanded by the component/job.</li> <li>A high level of neatness and consistency in the finish.</li> <li>Minimal or no support in completing the project.</li> </ul>



An In-plant logistics Assistant is responsible for coordinating for receipt of goods and their storage within the stock yard, movement of goods within the industry premise from procurement to stock and stock to production line and for movement of finished goods within plant. He is also responsible for ensuring timely delivery of materials at the production line, maintaining records of inventory, receipt and despatches from the stock yard, providing daily and weekly reports on the inventory to the superiors, developing daily and weekly schedule for inbound and outbound activities, ensuring the safety and security of materials within the stockyard, initiate and apply new methods to reduce logistics costs and improve the process flow. It covers movements within the manufacturing plant of raw materials, components and sub-assemblies. These include storage of raw material and movement of raw material from stocking point to production line and movement of finished goods to stocking point, its storage and bringing finished products out to the factory gate.

#### Reference NCO-2015:

- a) 4321.0100 Store Keeper
- b) 4321.0601 Warehouse Picker
- c) 4321.0602 Warehouse Binner



### 4. GENERAL INFORMATION

Name of the Trade	In Plant Logistics Assistant		
Trade Code	DGT/2014		
NCO - 2015	4321.0100, 4321.0601, 4321.0602		
NSQF Level	Level-4		
Duration of Craftsmen Training (Instructional Hours)	One Years (1600 Hours)		
Entry Qualification	Passed 10 <sup>th</sup> class examination with Science and Mathematics or its equivalent.		
Minimum Age	14 years as on first day of academic session.		
Eligibility for PwD	LD, LC, DW, AA, DEAF, HH		
Unit Strength (No. Of Student)	20 (There is no separate provision of supernumerary seats)		
Space Norms	25 Sq. m		
Power Norms	4 KW		
Instructors Qualification for	r r		
Instructors Qualification for (i) Logistics Assistant Trade	B.Voc/Degree in Mechanical/ Production Engineering from AICTE/UGC recognized Engineering College/ university with one- year two years experience in the relevant field. OR 03 years Diploma in Mechanical/ Production Engineering from AICTE/recognized board of technical education or relevant Advanced Diploma (Vocational) from DGT with two years' experience in the relevant field. OR NTC/NAC passed in the trade of " In Plant Logistics Assistant" with three years' experience in the relevant field. Essential Qualification:		



	NOTE: Out of two Instructors required for the unit of 2(1+1), one
	must have Degree/Diploma and other must have NTC/NAC
	qualifications. However, both of them must possess NCIC in any of
	its variants.
(ii) Workshop	B.Voc/Degree in Engineering from AICTE/UGC recognized
Calculation & Science	Engineering College/ university with one-year experience in the
	relevant field.
	OR
	03 years Diploma in Engineering from AICTE/recognized board of
	technical education or relevant Advanced Diploma (Vocational)
	from DGT with two years' experience in the relevant field.
	OR
	NTC/ NAC in any one of the engineering trades with three years'
	experience.
	Essential Qualification:
	National Craft Instructor Certificate (NCIC) in relevant trade
	OR
	NCIC in RoDA or any of its variants under DGT
(iii) Engineering Drawing	B.Voc/Degree in Engineering from AICTE/UGC recognized
	Engineering College/ university with one-year experience in the
	relevant field.
	OR
	03 years Diploma in Engineering from AICTE/ recognized board of
	technical education or relevant Advanced Diploma (Vocational)
	from DGT with two years' experience in the relevant field.
	OR
	NTC/ NAC in any one of the Mechanical groups (Gr-I) trades
	categorized under Engg. Drawing'/ D'man Mechanical / D'man Civil'
	with three years' experience.
	Essential Qualification:
	National Craft Instructor Certificate (NCIC) in relevant trade
	OR
	NCIC in RoDA / D'man (Mech /civil) or any of its variants under
	DGT.
(iv) Employability Skill	MBA/ BBA / Any Graduate/ Diploma in any discipline with Two
	years' experience with short term ToT Course in Employability Skills



40 Hours 25 Hours			7 Hou	ırs	2 Hour	S	2 Hours		4 Ho	urs
Total Hrs. /week			Trade Th	neory	Workshop & Sc.	Cal.	Engg. Drawing	En	nploya Skil	ability Is
Distribution of	training on H	lour	ly basis: (I	ndicati	ve only)					
List of Tools & Equipment			As per Annexure-I							
Instructor										
(v) Minimum	age for	21	vears							
		in E	Employabi	lity Skil	s from DGT	instit	utes.			
		Exi	sting Socia	l Studie	es Instructo	rs in IT	Is with shor	t term	ToT C	Course
		OR								
		Computer at 12th / Diploma level and above)								
		(M	ust have	studie	d English/	Com	munication	Skills	and	Basic
			from DGT institutes.							



*Learning outcomes are a reflection of total competencies of a trainee and assessment will be carried out as per the assessment criteria.* 

#### **5.1 LEARNING OUTCOMES**

- 1. Recognize & comply safe working practices, environment regulation and housekeeping.
- 2. Follow right body position for different activities.
- 3. Explain the key concepts of Logistics in a manufacturing setup and supply chain logistics and key activities of in plant logistics.
- 4. Perform different type of In-plant logistic activities.
- 5. Apply knowledge of different inventory models, storage handling equipment and computer-based inventory, counting tools to meet the job requirement and increase productivity.
- 6. Validate the technical specification of various handling equipment which helps during movement processes.
- 7. Carryout activities based on daily receipt and dispatch instructions received.
- 8. Develop schedules and prioritize activities so as to plan every day without any delays.
- 9. Explain Reporting Activities, MIS System and its use.



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LEARNING OUTCOMES	ASSESSMENT CRITERIA			
<ol> <li>Recognize &amp; comply safe working practices, environment regulation and housekeeping.</li> </ol>	Identify, handle and store/ dispose of dangerous/unsalvageable goods and substances according to site policy and procedures following Occupational Health & safety regulations/requirements. Follow and maintain procedures to achieve a safe working environment in line with occupational health and safety regulations and requirements. Appraise company safety policy inside the company premises. Identify Personal Productive Equipment (PPE) and use the same as per related working environment			
<ol> <li>Follow right body position for different activities.</li> </ol>	Demonstrate right body position for different activities			
<ol> <li>Explain the key concepts of Logistics in a manufacturing setup and supply chain logistics and key activities of in plant logistics.</li> </ol>	Explain the key concepts of Logistics in a manufacturing setup and supply chain logistics. Explain key activities of inbound, In plant and outbound logistics.			
<ol> <li>Perform different type of In-plant logistic activities.</li> </ol>	Discuss basic activities in in-plant logistics. Explain loading, unloading, receiving, sorting, storing, picking and dispatch activities. Carryout different activities in in-plant logistics. Explain the process of coordinating with assembly line regarding their requirement and addressing the same in the timely manner.			
5. Apply knowledge of different inventory models, storage handling equipment and	Elaborate receiving and storage process. Determine location by basis of allocation of Goods storage. Explain different types of inventory management- FIFO, LIFO, etc. Perform allocation of goods storage location through team activities. Elaborate basic advantages, benefits, challenges associated with			
inventory, counting tools to meet the job	inventory models and suitability to different manufacturing set ups. Follow do's and don'ts during inventory counting and good practices associated with inventory management and handling.			



	requirement and increase productivity.	
6.	Validate the technical specification of various handling equipment which helps during movement processes.	Use computer based scanners, RFID scanners and other associated software. Use communication devices to track and count inventory. Select MHEs like forklift etc. based on their capacity, their usage, their technical limitations and suitability if use for different activities.
7.	Carryout activities	Identify and classify raw materials/goods into different types.
	receint and	Select right equipment for different scenarios and products.
	dispatch	Read and fill different types of forms and reports.
	instructions	Assess the requirement of the manufacturing line and maintain the
	received.	required inventory of different items.
		Perform verification of goods at the time of receipt of goods.
		Read and verify dispatch orders and collect acknowledgement and delivery reports.
		Follow the process to identify the item and the required carrier.
		Coordinate with vendors for timely supply of appropriate quantities of
		items based on usage norms and requirement of manufacturing setup.
		Carryout dispatch activities and generate dispatch record, verify
		number and type of product, collect acknowledgement of dispatch
8.	Develop schedules	Explain the various verifications to be undertaken at the time of
	and prioritize	receipt of goods.
	nlan every day	Explain activities to be conducted in dispatch- generate dispatch
	without any	record, verify number and types of product, collect acknowledgement
	delays.	of dispatch.
		Plan and schedule deliveries as per requirement.
		Schedule delivery so that no delay and the carrier resource is utilized
		In the most efficient manner.
		Follow with manufacturing and delivery team to ensure delivery and
		collect delivery reports.
		Use basic formats and reports associated with receipt of goods.



	Follow various best practices associated with handling in-plant
	logistics.
9. Explain Reporting	Prepare different types of reports related to inventory change,
Activities, MIS	dispatches, delivery success, inbound receipts, etc.
System and its use.	Handle different types of MIS systems that are commonly used for
	reporting.
	Update the reports in MIS. Use.
	Microsoft excel and office.
	Explaining various good practices associated with reporting activities
	and their benefits.

7. TRADE SYLLABUS



	SYLLABUS FOR	IN PLANT LOGISTICS ASSISTA	NT TRADE
		DURATION : ONE YEAR	
Duration	Reference Learning Outcome	Professional Skills (Trade Practical)	Professional Knowledge (Trade Theory)
Professional Skill 75 Hrs.; Professional Knowledge 21 Hrs.	Recognize & comply safe working practices, environment regulation and housekeeping.	<ol> <li>Handle and Understand associated risks involved with various types of dangerous goods and handle them safely. Follow the safe ways of handling</li> <li>Follow the Safety rules and Procedure at all time.</li> <li>In case of miss-happenings, apply SOP and follow the handling procedures.</li> <li>Follow always the company safety policy inside the company premises.</li> <li>Understand the consequences of wrong usage of PPE. Select the right PPE and use PPE properly. Follow OSHA.</li> <li>Implement 5S according to the company safety policy. Maintain Health, Safety and Security measures while carrying out operations.</li> </ol>	<ul> <li>Safe working Practice</li> <li>Types of dangerous goods and their associated risks.</li> <li>Ways of safe handling.</li> <li>Safety rules and Procedures.</li> <li>SOP and the handling procedure in case of miss- happenings</li> <li>Company safety policy to be followed inside the company premises if any.</li> <li>PPE and their usage and consequences of wrong usage. Selection of PPE.</li> <li>Details OSHA and its application</li> <li>SS and its implementation and practice in the company.</li> <li>Health, Safety and Security measures to be adopted during operations and its maintenance.</li> </ul>
Professional Skill 50 Hrs.;	Follow right body position for different activities	<b>Body postures - benefits and</b> <b>hazards</b> 7. Demonstrate right body	Body postures - benefits and hazards
Professional Knowledge		position for different activities.	Physical requirements for performing different



14 Hrs.		8. Use different body	functions (Body Positions)
		postures for different	
		activities keeping in view	Different body postures for
		their benefits and hazards.	different activities their
			benefits and hazards
Professional	Explain the key	Concepts of Logistics in a	Concepts of Logistics in a
Skill 75 Hrs.;	concepts of Logistics	manufacturing setup	manufacturing setup
	in a manufacturing	9. Understand key concepts	Introduction to Logistics in a
Professional	setup and supply	of Logistics in a	manufacturing setup
Knowledge	chain logistics and	manufacturing setup and	
21 Hrs.	key activities of in	supply chain logistics.	Key activities being
	plant logistics.	10. Perform key activities of	conducted – Inbound, in-
		inbound, In plant and	plant and outbound
		outbound logistics.	activities
		11. Watch Video of logistics	
		activities in an industrial	Types of roles and
		setup providing practical	associated responsibility of
		information of different	in plant logistics technician.
		logistic activities and	
		fellow	
		TOHOW.	
Professional	Perform different	In-plant logistics activities	In-plant logistics activities
Professional Skill 125 Hrs.;	Perform different type of In-plant	In-plant logistics activities 12. Carry out activities of in-	In-plant logistics activities Basic activities of in-plant
Professional Skill 125 Hrs.;	Perform different type of In-plant logistic activities.	In-plant logistics activities 12. Carry out activities of in- plant logistics (Loading,	In-plant logistics activities Basic activities of in-plant logistics
Professional Skill 125 Hrs.; Professional Knowledge	Perform different type of In-plant logistic activities.	In-plant logistics activities 12. Carry out activities of in- plant logistics (Loading, Unloading, Receiving, sorting Storing Picking and	In-plant logistics activities Basic activities of in-plant logistics Loading, Unloading, Beceiving sorting Storing
Professional Skill 125 Hrs.; Professional Knowledge 35 Hrs.	Perform different type of In-plant logistic activities.	In-plant logistics activities 12. Carry out activities of in- plant logistics (Loading, Unloading, Receiving, sorting, Storing, Picking and dispatch activities etc.,)	In-plant logistics activities Basic activities of in-plant logistics Loading, Unloading, Receiving, sorting, Storing, Picking and dispatch
Professional Skill 125 Hrs.; Professional Knowledge 35 Hrs.	Perform different type of In-plant logistic activities.	In-plant logistics activities 12. Carry out activities of in- plant logistics (Loading, Unloading, Receiving, sorting, Storing, Picking and dispatch activities etc.,) 13. Coordinate with assembly	In-plant logistics activities Basic activities of in-plant logistics Loading, Unloading, Receiving, sorting, Storing, Picking and dispatch activities.
Professional Skill 125 Hrs.; Professional Knowledge 35 Hrs.	Perform different type of In-plant logistic activities.	In-plant logistics activities 12. Carry out activities of in- plant logistics (Loading, Unloading, Receiving, sorting, Storing, Picking and dispatch activities etc.,) 13. Coordinate with assembly line for their requirement	In-plant logistics activities Basic activities of in-plant logistics Loading, Unloading, Receiving, sorting, Storing, Picking and dispatch activities. The process of coordinating
Professional Skill 125 Hrs.; Professional Knowledge 35 Hrs.	Perform different type of In-plant logistic activities.	In-plant logistics activities12. Carry out activities of in- plant logistics (Loading, Unloading, Receiving, sorting, Storing, Picking and dispatch activities etc.,)13. Coordinate with assembly line for their requirement and meet their	In-plant logistics activities Basic activities of in-plant logistics Loading, Unloading, Receiving, sorting, Storing, Picking and dispatch activities. The process of coordinating with assembly line regarding
Professional Skill 125 Hrs.; Professional Knowledge 35 Hrs.	Perform different type of In-plant logistic activities.	<ul> <li>In-plant logistics activities</li> <li>12. Carry out activities of inplant logistics (Loading, Unloading, Receiving, sorting, Storing, Picking and dispatch activities etc.,)</li> <li>13. Coordinate with assembly line for their requirement and meet their requirement in time</li> <li>14. Watch widea chawing the</li> </ul>	In-plant logistics activities Basic activities of in-plant logistics Loading, Unloading, Receiving, sorting, Storing, Picking and dispatch activities. The process of coordinating with assembly line regarding their requirement and
Professional Skill 125 Hrs.; Professional Knowledge 35 Hrs.	Perform different type of In-plant logistic activities.	<ul> <li>In-plant logistics activities</li> <li>12. Carry out activities of inplant logistics (Loading, Unloading, Receiving, sorting, Storing, Picking and dispatch activities etc.,)</li> <li>13. Coordinate with assembly line for their requirement and meet their requirement in time</li> <li>14. Watch video showing the activities coupled with</li> </ul>	In-plant logistics activities Basic activities of in-plant logistics Loading, Unloading, Receiving, sorting, Storing, Picking and dispatch activities. The process of coordinating with assembly line regarding their requirement and addressing the same in the timely manner
Professional Skill 125 Hrs.; Professional Knowledge 35 Hrs.	Perform different type of In-plant logistic activities.	<ul> <li>In-plant logistics activities</li> <li>12. Carry out activities of inplant logistics (Loading, Unloading, Receiving, sorting, Storing, Picking and dispatch activities etc.,)</li> <li>13. Coordinate with assembly line for their requirement and meet their requirement in time</li> <li>14. Watch video showing the activities coupled with learning group activities</li> </ul>	In-plant logistics activities Basic activities of in-plant logistics Loading, Unloading, Receiving, sorting, Storing, Picking and dispatch activities. The process of coordinating with assembly line regarding their requirement and addressing the same in the timely manner video showing the activities
Professional Skill 125 Hrs.; Professional Knowledge 35 Hrs.	Perform different type of In-plant logistic activities.	<ul> <li>In-plant logistics activities</li> <li>12. Carry out activities of inplant logistics (Loading, Unloading, Receiving, sorting, Storing, Picking and dispatch activities etc.,)</li> <li>13. Coordinate with assembly line for their requirement and meet their requirement in time</li> <li>14. Watch video showing the activities coupled with learning group activities connected with in plant</li> </ul>	In-plant logistics activities Basic activities of in-plant logistics Loading, Unloading, Receiving, sorting, Storing, Picking and dispatch activities. The process of coordinating with assembly line regarding their requirement and addressing the same in the timely manner video showing the activities coupled with learning group
Professional Skill 125 Hrs.; Professional Knowledge 35 Hrs.	Perform different type of In-plant logistic activities.	<ul> <li>In-plant logistics activities</li> <li>12. Carry out activities of inplant logistics (Loading, Unloading, Receiving, Sorting, Storing, Picking and dispatch activities etc.,)</li> <li>13. Coordinate with assembly line for their requirement and meet their requirement in time</li> <li>14. Watch video showing the activities coupled with learning group activities connected with in plant logistics</li> </ul>	In-plant logistics activities Basic activities of in-plant logistics Loading, Unloading, Receiving, sorting, Storing, Picking and dispatch activities. The process of coordinating with assembly line regarding their requirement and addressing the same in the timely manner video showing the activities coupled with learning group activities connected with in
Professional Skill 125 Hrs.; Professional Knowledge 35 Hrs.	Perform different type of In-plant logistic activities.	<ul> <li>In-plant logistics activities</li> <li>12. Carry out activities of inplant logistics (Loading, Unloading, Receiving, sorting, Storing, Picking and dispatch activities etc.,)</li> <li>13. Coordinate with assembly line for their requirement and meet their requirement in time</li> <li>14. Watch video showing the activities coupled with learning group activities connected with in plant logistics</li> </ul>	In-plant logistics activities Basic activities of in-plant logistics Loading, Unloading, Receiving, sorting, Storing, Picking and dispatch activities. The process of coordinating with assembly line regarding their requirement and addressing the same in the timely manner video showing the activities coupled with learning group activities connected with in plant logistics
Professional Skill 125 Hrs.; Professional Knowledge 35 Hrs. Professional	Perform different type of In-plant logistic activities.	<ul> <li>In-plant logistics activities</li> <li>12. Carry out activities of inplant logistics (Loading, Unloading, Receiving, Sorting, Storing, Picking and dispatch activities etc.,)</li> <li>13. Coordinate with assembly line for their requirement and meet their requirement in time</li> <li>14. Watch video showing the activities coupled with learning group activities connected with in plant logistics</li> <li>Basic inventory management</li> </ul>	In-plant logistics activitiesBasic activities of in-plantlogisticsLoading,Unloading,Receiving, sorting,Storing,Picking and dispatchactivities.The process of coordinatingwith assembly line regardingtheir requirement andaddressing the same in thetimely mannervideo showing the activitiescoupled with learning groupactivities connected with inplant logisticsBasicinventory
Professional Skill 125 Hrs.; Professional Knowledge 35 Hrs. Professional Skill 150 Hrs.;	Perform different type of In-plant logistic activities. Apply knowledge of different inventory	<ul> <li>In-plant logistics activities</li> <li>12. Carry out activities of inplant logistics (Loading, Unloading, Receiving, Sorting, Storing, Picking and dispatch activities etc.,)</li> <li>13. Coordinate with assembly line for their requirement and meet their requirement in time</li> <li>14. Watch video showing the activities coupled with learning group activities connected with in plant logistics</li> <li>Basic inventory management</li> <li>15. Carry out different types of</li> </ul>	In-plant logistics activitiesBasic activities of in-plantlogisticsLoading,Unloading,Receiving, sorting, Storing,Picking and dispatchactivities.The process of coordinatingwith assembly line regardingtheir requirement andaddressing the same in thetimely mannervideo showing the activitiescoupled with learning groupactivities connected with inplant logisticsBasicinventorymanagement
Professional Skill 125 Hrs.; Professional Knowledge 35 Hrs. Professional Skill 150 Hrs.;	Perform different type of In-plant logistic activities. Apply knowledge of different inventory models, storage handling equipment	<ul> <li>In-plant logistics activities</li> <li>12. Carry out activities of inplant logistics (Loading, Unloading, Receiving, sorting, Storing, Picking and dispatch activities etc.,)</li> <li>13. Coordinate with assembly line for their requirement and meet their requirement in time</li> <li>14. Watch video showing the activities coupled with learning group activities connected with in plant logistics</li> <li>Basic inventory management – Inventory management</li></ul>	In-plant logistics activitiesBasic activities of in-plantlogisticsLoading,Unloading,Receiving, sorting, Storing,Picking and dispatchactivities.The process of coordinatingwith assembly line regardingtheir requirement andaddressing the same in thetimely mannervideo showing the activitiescoupled with learning groupactivities connected with inplant logisticsBasicinventorymanagementElaboratereceivingand
Professional Skill 125 Hrs.; Professional Knowledge 35 Hrs. Professional Skill 150 Hrs.; Professional	Perform different type of In-plant logistic activities. Apply knowledge of different inventory models, storage handling equipment and computer	<ul> <li>In-plant logistics activities</li> <li>12. Carry out activities of inplant logistics (Loading, Unloading, Receiving, sorting, Storing, Picking and dispatch activities etc.,)</li> <li>13. Coordinate with assembly line for their requirement and meet their requirement in time</li> <li>14. Watch video showing the activities coupled with learning group activities connected with in plant logistics</li> <li>Basic inventory management</li> <li>15. Carry out different types of inventory management – FIFO, LIFO, etc.</li> </ul>	In-plant logistics activitiesBasic activities of in-plantlogisticsLoading,Unloading,Receiving, sorting,Picking and dispatchactivities.The process of coordinatingwith assembly line regardingtheir requirement andaddressing the same in thetimely mannervideo showing the activitiescoupled with learning groupactivities connected with inplant logisticsBasicinventorymanagementElaborate receiving andstorage processes.



42 Hrs.	counting tools to	inventory management.	storage location
	meet the job	(Through video files)	Introduction to different
	requirement and	17. Perform Receiving and	types of inventory
	increase	storage processes.	management – FIFO, LIFO,
	productivity.	(Through team activities)	etc.
		18. Perform allocation of	Basic advantages, benefits,
		Goods storage location.	challenges associated with
		(Through team activities)	inventory models and
		19. Follow Do's and Don'ts	suitability to different
		during Inventory counting	manufacturing setups
		20. Follow good practices	Keeping the inventory count
		associated with inventory	and records under various
		management and handling.	methods.
			Changing inventory levels
			Cross verification of
			Inventory
			Do's and Don'ts during
			Inventory counting
			Various good practices
			associated with inventory
			management and handling
			and their benefits.
Professional	Validate the technical	Use of Machineries and	Use of Machineries and
Skill 150 Hrs.;	specification of	Equipments in in-plant	Equipments in in-plant
	various handling	logistics	logistics
Professional	equipment which	21. Use of computer based	Knowledge on Computer
Knowledge	helps during	scanners, RFID scanners,	and Associated software
42 Hrs.	movement processes	other associated software.	
		22. Use communication	Communication Devices
		Devices to track and count	used in warehouse
		inventory	environment to track and
		23. Select MHEs like forklift,	count inventory
		etc., based on their	
		capacity, their usage, their	Knowledge on Scanning
		technical limitations, and	equipment including Bar
		suitability of use for	Scanner and RFID used
		different activities.	
		24. Watch Video	Various MHEs like forklift,
		domonstrating use of MULTs	Late thair canacity thair



		in different in-plant setups,	usage, their technical
		their technical and practical	limitations, suitability of use
		limitations, etc.	for different activities.
Professional	Carryout activities	Inbound process	Inbound process
Skill 175 Hrs.;	based on daily	25. Identify and classify	Different types of raw
	receipt and dispatch	different types of raw	materials and intermediary
Professional	instructions received.	materials / goods and	goods that can be procured
Knowledge		segregate them.	ad stored
49 Hrs.		26. Identify and select the right	
		equipment for different	Various WIP and finished
		scenarios and products.	goods that can be stored
		27. Identify different types of	
		forms and reports available	How to read the
		select the proper one. Read	requirement of the
		and fill them correctly	manufacturing line and
		without any error.	maintaining the required
		28. Identify/read the	inventory of different items
		requirement of the	
		manufacturing line and	Co-coordinating with
		supply Maintain the	vendors of timely supply of
		required inventory of	appropriate quantities of
		different items required for	items based on usage norms
		manufacturing line.	and requirement of
		29. Co-ordinate with vendors	manufacturing setup
		for timely supply of	The various verifications to
		appropriate quantities of	be undertaken at the time of
		items based on usage	receipt of goods
		norms and requirement of	
		manufacturing setup /line.	The basic formats and
		30. Verify goods at the time of	reporting associated with
		receipt of goods.	receipt of goods
		31. Use basic formats and	
		reports associated with	Updating of counts in
		receipt of good sat the time	routine
		of receipt of goods.	
		32. Update counts daily in	Planning and scheduling
		routine.	deliveries as per
		33. Plan and schedule	requirement
		deliveries as per	Various best practices



		requirement of	associated with handling in-
		manufacturing setup /line.	plant logistics
		34. Follow various best	
		practices associated with	
		handling in-plant logistics	
		activities.	
		35. Visit a site of an industrial	
		setup showing efficient	
		inbound process	
		management and follow.	
Professional	Develop schedules	Out-bound process	Out-bound process
Skill 150 Hrs.:	and prioritize	36. Read and verify dispatch	Different dispatch orders
,	activities so as to plan	orders and collect	and associated signing
Professional	everv day without	acknowledgment and	authorities
Knowledge	anv delavs.	delivery reports.	
42 Hrs.		37. Select the right equipment	How to read requirement
		for different scenarios and	instructions coming from
		products.	manufacturing setup
		38. Make a visit to industrial	
		setup showing efficient	Process of identifying the
		outbound process	item and the required
		management and follow	carrier.
		the process.	
		39. Identify/Read the	Scheduling delivery so that
		requirement instructions	there is no delay and the
		coming from	carrier resource is utilized in
		manufacturing setup and	the most efficient manner
		act.	
		40. Follow the process. Identify	Activities to be conducted in
		the item and the required	dispatch - generate dispatch
		carrier to carry/transport.	record, verify number and
		41. Plan and Schedule delivery	type of product, collect
		so that there is no delay	acknowledgement of
		and the carrier resource is	dispatch
		utilized in the most	
		efficient manner.	How to co-ordinate with
		42. Carry out dispatch activities	manufacturing and deliverv
		and generate dispatch	team to ensure delivery and
		record, verify number and	collect delivery reports



		type of product, collect	
		acknowledgement of	Various good practices
		dispatch.	associated with product
		43. Co-ordinate with	handling and their benefits
		manufacturing and delivery	
		team to ensure delivery	
		and collect delivery reports.	
		44. Follow various good	
		practices associated with	
		product handling and their	
		benefits.	
Professional	Explain Reporting	Reporting	Reporting
Skill 50 Hrs.;	Activities, MIS System	45. Prepare reports related to	Different types of reports
	and its use.	inventory change,	related to inventory change,
Professional		dispatches, delivery	dispatches, delivery success,
Knowledge		success, inbound receipts,	inbound receipts, etc.
14 Hrs.		etc.	
		46. Use MIS systems for	Different types of MIS
		reporting use Microsoft	systems that are commonly
		excel and office. Watch	used for reporting
		video of MIS systems	Making and updating
		generating reports.	reports in MIS ad or
		47. Follow various good	Microsoft excel and office.
		practices associated with	Various good practices
		reporting activities and	associated with reporting
		their benefits.	activities and their benefits.

#### Project work / Industrial visit Broad Areas:

- a) Inbound process management and outbound process.
- b) Generating reports using MIS systems
- c) Good practices associated with reporting activities and their benefits.
- d) Use of MHEs in different in-plant setups, their technical and practical limitations, etc.



#### SYLLABUS FOR CORE SKILLS

- 1. Workshop Calculation & Science (Common for one year course) (80 Hrs.)
- 2. Engineering Drawing (Common for Group –I (Mechanical Trade Group)) (80 Hrs.)
- 3. Employability Skills (Common for all CTS trades) (160 Hrs.)

Learning outcomes, assessment criteria, syllabus and Tool List of Core Skills subjects which is common for a group of trades, provided separately in <u>www.bharatskills.gov.in</u>



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	List of To	ools & Equipment	
	In Plant Logistics Assis	tant (for batch of 20 Candidates)	
S No.	Name of the Tools and Equipment	Specification	Quantity
A. TR	AINEES TOOL KIT (For each additional u	nit trainees tool kit Sl. 1-12 is required a	dditionally)
1.	Safety Shoes		(20 +1) pairs
2.	Safety Helmet		(20 +1) Nos.
3.	Gloves		(20 +1) pairs.
4.	Reflector Jackets		(20 +1) Nos.
5.	Ear Plugs		(20 +1) pairs.
6.	Industrial Goggles		(20 +1) Nos.
7.	SOP Charts		(20 +1) Nos.
8.	Safety Norms Handbook		(20 +1) Nos.
	Technical specification Sheet		1x5 sets (1
9.			(each/packing
10	Matarial Safaty Data Shoat		machines type)
10.	Material Safety Data Sheet		(20 +1) NOS.
11	DO'S and Don'ts sheet		IX5 sets (I
11.			(each/packing machines type)
B. SHC	DP TOOLS & EQUIPMENT – For 2 (1+1) u	nits no additional items are required	machines type)
(i) Li	st of Tools & Accessories	· · · ·	
12	Tools required for assembly line set		
12.	up		
(ii) List	of Equipment		
	MHE equipment's Battery Operated		
13.	Pallet Truck, Forklift, Reach Truck and		1each
1/	Order Picker		1 No
14.	Pallets		5 Nos
16	Packaging materials		25 Nos
17.	Packaging devices		10 Nos.
18.	Alarm		1 No.
19.	Scanner		15 Nos.
20.	PPE		15 Nos.
C. Shop	C. Shop Machinery		
21.	Assembly of components Set up		



D. Shop Floor Furniture and Materials - For 2 (1+1) units no additional items are required			
22.	Working Bench	2.5 m x 1.20 m x 0.75 m	4 Nos.
23.	white board	4 feet x 6 feet	1 No.
24.	Instructor's table	Suitable size	1 No.
25.	Instructor's chair	Normal class room chair	2 Nos.
26.	Metal Rack	100cm x 150cm x 45cm	4 Nos.
27.	Lockers with drawers		1 for Each Trainee
28.	Almirah	2.5 m x 1.20 m x 0.5 m	1 No.
29.	Black board/	(minimum 4X6 feet)	1 No.
30.	Fire Extinguisher CO2	2 KG	2 Nos.
31.	Fire Buckets	Standard size	2 Nos.
32.	Projector		1 No.
33.	Video player or TV		1 No.
34.	Printer		1 No.
35.	Tracker		1 No.
36.	Safety Norms Handbook		25 Nos.
37.	Technical specification Sheet		25 Nos.
38.	SOP		10 Nos.
39.	Computer		1 No.
40.	Stationeries		25 Nos.
41.	Marker		2 No.

Note: -

1. All the tools and equipment are to be procured as per BIS specification.

2. Internet facility is desired to be provided in the class room.



and the plant

The DGT sincerely acknowledges contributions of the Industries, State Directorates, Trade Experts, Domain Experts, trainers of ITIs, NSTIs, faculties from universities and all others who contributed in revising the curriculum.

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List of Europet Marshave contributed ( participated for finalizing the

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3.	Sh. M Kumarvel, Deputy Director	NSTI Banglore	Representative from NSTI
4.	Sh. T V Rajasekhar, Deputy Director	NSTI Chennai	Representative from NSTI
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#### **ABBREVIATIONS**

CTS	Craftsmen Training Scheme
ATS	Apprenticeship Training Scheme
CITS	Craft Instructor Training Scheme
DGT	Directorate General of Training
MSDE	Ministry of Skill Development and Entrepreneurship
NTC	National Trade Certificate
NAC	National Apprenticeship Certificate
NCIC	National Craft Instructor Certificate
LD	Locomotor Disability
СР	Cerebral Palsy
MD	Multiple Disabilities
LV	Low Vision
HH	Hard of Hearing
ID	Intellectual Disabilities
LC	Leprosy Cured
SLD	Specific Learning Disabilities
DW	Dwarfism
MI	Mental Illness
AA	Acid Attack
PwD	Person with disabilities



