

Roll No: 20

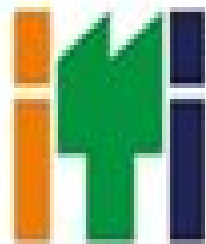
Registration No: R

Name: LAKSHYA GAUTAM

Exam Date: 13-Aug-2022

Exam Time: 12:15-14:15

Post Name: Electrician



Industrial Training Institute



Skill India

कौशल भारत - कुशल भारत

Registered Photo



TRADE THEORY - TRADE THEORY

Question No.1

Marks: 2.00

Bookmark ☐

Which metal makes large capacity DC generator yoke?

कौन सी धातु से बड़ी क्षमता डीसी जेनरेटर योक बनाती है?

(A) ☒ Rolled Steel (Correct Answer)

रोलड स्टील

(B) ☐ Soft iron

नर्म लोहा

(C) ☐ Aluminium (Chosen option)

अल्युमीनियम

(D) ☐ Cast iron

ढलवां लोहा

Electrician

Year- 1st

Iti Electrician Exam Paper 2013

PT Brinkman



Iti Electrician Exam Paper 2013:

Yeah, reviewing a books **Iti Electrician Exam Paper 2013** could ensue your close friends listings. This is just one of the solutions for you to be successful. As understood, ability does not suggest that you have fantastic points.

Comprehending as skillfully as settlement even more than extra will find the money for each success. next to, the message as skillfully as acuteness of this Iti Electrician Exam Paper 2013 can be taken as competently as picked to act.

https://staging.conocer.cide.edu/data/Resources/Documents/hyundai_wheel_loader_hl757_7a_workshop_service_repair_manual.pdf

Table of Contents Iti Electrician Exam Paper 2013

1. Understanding the eBook Iti Electrician Exam Paper 2013
 - The Rise of Digital Reading Iti Electrician Exam Paper 2013
 - Advantages of eBooks Over Traditional Books
2. Identifying Iti Electrician Exam Paper 2013
 - Exploring Different Genres
 - Considering Fiction vs. Non-Fiction
 - Determining Your Reading Goals
3. Choosing the Right eBook Platform
 - Popular eBook Platforms
 - Features to Look for in an Iti Electrician Exam Paper 2013
 - User-Friendly Interface
4. Exploring eBook Recommendations from Iti Electrician Exam Paper 2013
 - Personalized Recommendations
 - Iti Electrician Exam Paper 2013 User Reviews and Ratings
 - Iti Electrician Exam Paper 2013 and Bestseller Lists
5. Accessing Iti Electrician Exam Paper 2013 Free and Paid eBooks
 - Iti Electrician Exam Paper 2013 Public Domain eBooks

- Iti Electrician Exam Paper 2013 eBook Subscription Services
- Iti Electrician Exam Paper 2013 Budget-Friendly Options
- 6. Navigating Iti Electrician Exam Paper 2013 eBook Formats
 - ePub, PDF, MOBI, and More
 - Iti Electrician Exam Paper 2013 Compatibility with Devices
 - Iti Electrician Exam Paper 2013 Enhanced eBook Features
- 7. Enhancing Your Reading Experience
 - Adjustable Fonts and Text Sizes of Iti Electrician Exam Paper 2013
 - Highlighting and Note-Taking Iti Electrician Exam Paper 2013
 - Interactive Elements Iti Electrician Exam Paper 2013
- 8. Staying Engaged with Iti Electrician Exam Paper 2013
 - Joining Online Reading Communities
 - Participating in Virtual Book Clubs
 - Following Authors and Publishers Iti Electrician Exam Paper 2013
- 9. Balancing eBooks and Physical Books Iti Electrician Exam Paper 2013
 - Benefits of a Digital Library
 - Creating a Diverse Reading Collection Iti Electrician Exam Paper 2013
- 10. Overcoming Reading Challenges
 - Dealing with Digital Eye Strain
 - Minimizing Distractions
 - Managing Screen Time
- 11. Cultivating a Reading Routine Iti Electrician Exam Paper 2013
 - Setting Reading Goals Iti Electrician Exam Paper 2013
 - Carving Out Dedicated Reading Time
- 12. Sourcing Reliable Information of Iti Electrician Exam Paper 2013
 - Fact-Checking eBook Content of Iti Electrician Exam Paper 2013
 - Distinguishing Credible Sources
- 13. Promoting Lifelong Learning
 - Utilizing eBooks for Skill Development
 - Exploring Educational eBooks

14. Embracing eBook Trends

- Integration of Multimedia Elements
- Interactive and Gamified eBooks

Iti Electrician Exam Paper 2013 Introduction

Iti Electrician Exam Paper 2013 Offers over 60,000 free eBooks, including many classics that are in the public domain. Open Library: Provides access to over 1 million free eBooks, including classic literature and contemporary works. Iti Electrician Exam Paper 2013 Offers a vast collection of books, some of which are available for free as PDF downloads, particularly older books in the public domain. Iti Electrician Exam Paper 2013 : This website hosts a vast collection of scientific articles, books, and textbooks. While it operates in a legal gray area due to copyright issues, its a popular resource for finding various publications. Internet Archive for Iti Electrician Exam Paper 2013 : Has an extensive collection of digital content, including books, articles, videos, and more. It has a massive library of free downloadable books. Free-eBooks Iti Electrician Exam Paper 2013 Offers a diverse range of free eBooks across various genres. Iti Electrician Exam Paper 2013 Focuses mainly on educational books, textbooks, and business books. It offers free PDF downloads for educational purposes. Iti Electrician Exam Paper 2013 Provides a large selection of free eBooks in different genres, which are available for download in various formats, including PDF. Finding specific Iti Electrician Exam Paper 2013, especially related to Iti Electrician Exam Paper 2013, might be challenging as theyre often artistic creations rather than practical blueprints. However, you can explore the following steps to search for or create your own Online Searches: Look for websites, forums, or blogs dedicated to Iti Electrician Exam Paper 2013, Sometimes enthusiasts share their designs or concepts in PDF format. Books and Magazines Some Iti Electrician Exam Paper 2013 books or magazines might include. Look for these in online stores or libraries. Remember that while Iti Electrician Exam Paper 2013, sharing copyrighted material without permission is not legal. Always ensure youre either creating your own or obtaining them from legitimate sources that allow sharing and downloading. Library Check if your local library offers eBook lending services. Many libraries have digital catalogs where you can borrow Iti Electrician Exam Paper 2013 eBooks for free, including popular titles. Online Retailers: Websites like Amazon, Google Books, or Apple Books often sell eBooks. Sometimes, authors or publishers offer promotions or free periods for certain books. Authors Website Occasionally, authors provide excerpts or short stories for free on their websites. While this might not be the Iti Electrician Exam Paper 2013 full book , it can give you a taste of the authors writing style. Subscription Services Platforms like Kindle Unlimited or Scribd offer subscription-based access to a wide range of Iti Electrician Exam Paper 2013 eBooks, including some popular titles.

FAQs About Iti Electrician Exam Paper 2013 Books

What is a Iti Electrician Exam Paper 2013 PDF? A PDF (Portable Document Format) is a file format developed by Adobe that preserves the layout and formatting of a document, regardless of the software, hardware, or operating system used to view or print it. **How do I create a Iti Electrician Exam Paper 2013 PDF?** There are several ways to create a PDF: Use software like Adobe Acrobat, Microsoft Word, or Google Docs, which often have built-in PDF creation tools. Print to PDF: Many applications and operating systems have a "Print to PDF" option that allows you to save a document as a PDF file instead of printing it on paper. Online converters: There are various online tools that can convert different file types to PDF. **How do I edit a Iti Electrician Exam Paper 2013 PDF?** Editing a PDF can be done with software like Adobe Acrobat, which allows direct editing of text, images, and other elements within the PDF. Some free tools, like PDFescape or Smallpdf, also offer basic editing capabilities. **How do I convert a Iti Electrician Exam Paper 2013 PDF to another file format?** There are multiple ways to convert a PDF to another format: Use online converters like Smallpdf, Zamzar, or Adobe Acrobats export feature to convert PDFs to formats like Word, Excel, JPEG, etc. Software like Adobe Acrobat, Microsoft Word, or other PDF editors may have options to export or save PDFs in different formats. **How do I password-protect a Iti Electrician Exam Paper 2013 PDF?** Most PDF editing software allows you to add password protection. In Adobe Acrobat, for instance, you can go to "File" -> "Properties" -> "Security" to set a password to restrict access or editing capabilities. Are there any free alternatives to Adobe Acrobat for working with PDFs? Yes, there are many free alternatives for working with PDFs, such as: LibreOffice: Offers PDF editing features. PDFsam: Allows splitting, merging, and editing PDFs. Foxit Reader: Provides basic PDF viewing and editing capabilities. How do I compress a PDF file? You can use online tools like Smallpdf, ILovePDF, or desktop software like Adobe Acrobat to compress PDF files without significant quality loss. Compression reduces the file size, making it easier to share and download. Can I fill out forms in a PDF file? Yes, most PDF viewers/editors like Adobe Acrobat, Preview (on Mac), or various online tools allow you to fill out forms in PDF files by selecting text fields and entering information. Are there any restrictions when working with PDFs? Some PDFs might have restrictions set by their creator, such as password protection, editing restrictions, or print restrictions. Breaking these restrictions might require specific software or tools, which may or may not be legal depending on the circumstances and local laws.

Find Iti Electrician Exam Paper 2013 :

hyundai wheel loader hl757-7a workshop service repair manual

hyundai tucson manual

i9070 dead boot repair

[i can statements for common core math](#)

i go far away sometimes

[ib biology paper 2markscheme](#)

[ib extended essay guidelines](#)

[hzj 80 workshop manual](#)

[ib estonian paper 2013](#)

[hyundai wheel loader hl757 7 operating manual](#)

ib biology spring final exam

[hzj79 landeruiser sub tank wiring diagram](#)

[ib history paper 3 november 2013 markscheme](#)

[ib biology hl paper nov 22](#)

i quit football scope magazine page 12

Iti Electrician Exam Paper 2013 :

toyota ecu other connector pins casual forums pakwheels - May 20 2022

web sep 25 2021 new pins aliexpress pe mil jaati hain lekin you dont know the part number then no solution common grips mil jatay hain by name searching on aliexpress and they come with pins as well search on aliexpress like honda 28 pin or honda 20 pin etc etc you may be able to find that grip

[toyota ecu connector pinning depinning youtube](#) - Apr 30 2023

web nov 8 2021 during the early 90s the amp te connectivity 040 series connector was widely used throughout different toyota models this tutorial shows how to properly pi

[toyota 2gr fe 3 5 liter v6 ecu connector terminal remove](#) - Sep 04 2023

web jan 7 2017 how to de pin the terminals from the toyota 2gr fe 3 5 liter v6 2 connector ecu used commonly in toyota camry rav4 highlander sienna avalon and more also applies for remove and replace of

remove pins from toyota ecu harness - Jun 20 2022

web foreword toyota tech eu best way to remove the pins out of ecu harness nasioc how to remove ecu pin connector from the plastic clip connectors connectors by pin number wiring specialties connector housings and terminals driftmotion how to remove wires from a 4g63 dsm wiring harness ecu ecu pin removal lexus is forum this

[anybody know what pins to use in the ecu harness connectors](#) - Nov 25 2022

web apr 14 2013 1 apr 11 2013 to start my ecu and megasquirt in parrallel attempt i bought the 4 connectors that go to my

ecu automatic has 4 does anybody know which pins i need i ve found a list of what looks like the 3 most commonly used by toyota and a few other jdm manufacturers anybody know for sure 1674311 1 signal 22 20 awg for *changing pins on toyota connectors youtube* - Jul 02 2023

web dec 3 2018 how to change the pins on toyota connectors when doing wiring repairs or changes

remove pins from toyota ecu harness orientation sutd edu - Jan 28 2023

web remove pins from toyota ecu harness toyota connector pin 6189 0029 sumitomo 6 pin 1jz gte 2jz gte iac accelerator throttle pedal connector for toyo ta suzuki ecu icm toyota wire harness sub tank switch wiring diagram question connecting the ecu to the switch and the rest of the harness male or female

diy how to remove or insert a pin on the ecm connector a21 toyota - Feb 26 2023

web dec 3 2020 4 you can now remove the connector to work on it to obtain full access to the pins carefully snip the cable tie from the rubber wire protector and remove it b remove a plug 1 to remove a sealing plug insert a stiff wire paper clip sewing needle etc into the hole on the ecm side of the connector pin 40 plug still in jpg 2

remove pins from toyota ecu harness media joomlashine com - Feb 14 2022

web remove pins from toyota ecu harness remove pins from toyota ecu harness toyota supra mkiv 2jz maxxecu com how to re pin automotive connector youtube 94 supra auto can gauge iboost switch boost controller 20v blacktop project engine harness connectors best way to remove the pins out of ecu harness nasioc how

remove pins from toyota ecu harness copy ceu social - Apr 18 2022

web remove pins from toyota ecu harness book review unveiling the magic of language in an electronic era where connections and knowledge reign supreme the enchanting power of language has be much more apparent than ever *ecu pin removal guide vtec academy* - Jun 01 2023

web jun 12 2015 using the straight pick tool slide it in and against whatever pin you want to remove you ll feel it when it hits the tab lift the tab and gently pull the wire attached to the pin to remove it pulling on the wire before lifting the tab will lock the tab and pin in place so don t do that

toyota electrical connectors efi hardware - Aug 23 2022

web electronic fuel injector engine loom connectors for toyota vehicles available products include pin kits 2jz performance parts and more

remove pins from toyota ecu harness orientation sutd edu - Mar 30 2023

web solutions tow doctor vehicle seating ecu how to remove replace pins in harness connectors this article explains how to remove connector pins from the ecu harness before you can remove pins how to remove wires from a 4g63 dsm wiring harness ecu connector how to remove pins from dsm 4g63 ecu connector with a hair clip duration

electrical how to remove pin from subaru ecu plug motor - Jul 22 2022

web oct 10 2017 using a removal tool or a small stiff pin device you can place it in the slot next to the terminal you wish to remove press in so the tool overcomes the locking tab as you do so pull the wire lightly from the back

how to remove pins from elec connector toyota 4runner org - Dec 27 2022

web aug 27 2012 once you identify the plug you can cross reference the pin they actually show you a drawing of the pin style in each plug that will take the guess work out of it with a helper holding the plug and gently pulling on the wire a sewing needle works sometime to release that pin

ecu pin removal lexus is forum - Sep 23 2022

web feb 19 2018 1 pry up the plastic insert in the top or bottom of the ecu connector if just comes up a little bit 2 hold onto the wire you want to remove but don't pull on it 3 insert the tool in what's typically the larger hole on the side where the metal pin is

de pinning toyota denso 122 pin ecu harness connector terminal - Oct 05 2023

web oct 8 2018 how to remove the terminal pin from a toyota denso 122 pin ecu harness connector this is applicable for many toyota models including camry celica corolla mr2 supra highlander rav4

how to remove pins from ecu harness nissan forums - Mar 18 2022

web aug 30 2009 does anybody know how to remove the pins from the ecu harness in an s14 i searched and couldn't find much information i filed down a paper clip a little bit the main ecu plug should be similar to the s13 in that it collapses once you have the plug opened it is very easy to slide the paperclip in and worm the locking tab down while

remove and replace ecu pins tacundra 14 youtube - Aug 03 2023

web jul 31 2019 remove and replace ecu pins tacundra 14 youtube 2023 google llc the tundra's ecu and harness was hit in the crash that totaled it we got a new harness but it's not right so we are

repair wire toyota ecu harness repair terminal wire wire - Oct 25 2022




web repair wire toyota ecu harness repair terminal wire wire a ecu plug wire a wire is 5 long and fits many factory toyota ecu plugs product videos ecu plug toyota 28 pin 5vz ecu plug 1997 1998 ecu plug 2 17 87 add to cart quick view details genuine toyota sku ecu

oceanauts corner noaa office of ocean exploration and research - Mar 27 2023

web noaa oceanauts creature cards learn more about animals that live in the deep ocean with these noaa oceanauts creature cards ask a grown up to help you print your favorites to color and collect

octonauts creature cards - Dec 24 2022

web may 13 2021 octonauts creature cards learn more about animals that live in the deep ocean with these noaa oceanauts creature cards ask a grown up to help you print your favorites to color and collect

octonauts creature cards   

octonauts facebook - Aug 20 2022

web octonauts 64 470 likes 68 talking about this official octonauts tv show page

facebook - Oct 02 2023

web octonauts creature cards we are happy to make every collectible creature card available to download check out an album of over a hundred fun facts and coloring pages of your favorite octonauts creatures

octonauts octonauts added a new photo to the album facebook - May 17 2022

web octonauts added a new photo to the album octonauts creature cards may 16 2017

octonauts on twitter want even more creature cards check - Sep 20 2022

web apr 21 2017 this week s creature card is the sea pig these funny looking creatures don t swim they use tubular legs to get around the sea floor pic twitter com 23257kspia

cdnvideo dolimg com - Apr 15 2022

web octonauts creature badges and cards cutting is intended for grown ups only 1 cut out the creature badge and card a ong the dotted line 2 collect all 50 badges and cards to complete your set 3 stick your creature badges onto your creature chart 4 keep your creature cards in your creature card holder octonauts

list of creatures octonauts wiki fandom - Jun 29 2023

web this is a list of all creatures that had a minor role or only appeared in 1 episode as a supporting or minor character

mushroom corals are a type of coral that grows on shallow sea beds and octonauts wiki

category octonauts title cards octonauts wiki fandom - Jan 25 2023

web title cards from octonauts episodes fandom apps take your favorite fandoms with you and never miss a beat

creature chart cbeebies bbc - Jun 17 2022

web all octonauts octonauts creature chart collect each of the creature badges and stick them on your chart

sealife octonauts dressing creature cards editable - Jul 31 2023

web creature cards ask a grown up to you get started cut out the card along dotted line collect all 6 cards to complete your set colour in your picture it along to sea life to

category creature friends octonauts wiki fandom - Mar 15 2022

web octonauts wiki 935 pages explore help community the show in characters creature reports females and 3 more creature friends category page sign in to edit trending

octonauts collectable creature cards world ocean day - Sep 01 2023

web this website uses cookies to improve your experience while you navigate through the website out of these cookies the

cookies that are categorized as necessary are stored on your browser as they are essential for the working of basic functionalities of the website

creature card holder cbeebies bbc - Feb 11 2022

web all octonauts octonauts creature card holder collect each of the octonauts creature cards and keep them in this holder

octonauts personalised birthday card the card zoo - Feb 23 2023

web may 2 2019 our large jumbo cards a4 measure approximately 297 x 210mm 11 7 x 8 3 inches during checkout you can choose to have this octonauts personalised birthday card sent to you to sign or have it sent directly to the recipient this octonauts personalised birthday card comes with a white envelope and we send all cards in board

category creature reports octonauts wiki fandom - May 29 2023

web octonauts wiki 935 pages explore help community the show in articles galleries characters creature reports category page sign in to edit this is a list of creatures that we re added as creature reports trending pages orca colossal squid whale shark siphonophore boo octopus vampire squid blue whale all items 148 a b c d e f g

100 best collectible cards ideas collectible cards octonauts cards - Apr 27 2023

web nov 4 2021 explore octonauts s board collectible cards followed by 1 215 people on pinterest see more ideas about collectible cards octonauts cards

facebook - Nov 22 2022

web facebook

octonauts shiver me whiskers all of the octonauts facebook - Oct 22 2022

web may 17 2017 shiver me whiskers all of the octonauts creature cards are available to download on facebook facebook com pg octonauts photos tab album be sure to download the creature card holder and

season 2 badge chart disney junior india - Jul 19 2022

web season 2 badge chart print out this creature chart for your octonauts creature badges

makluce casa con impugnatura di base accessori tagliabordi - Jun 12 2023

web impugnatura di base accessori tagliabordi integrati per lavorazione del legno lavorazione mobili decorazione domestica fai da te by makluce but end up in

makluce casa con impugnatura di base accessori tagliabordi - Jul 13 2023

web makluce casa con impugnatura di base accessori tagliabordi integrati per lavorazione del legno lavorazione mobili decorazione domestica fai da te by makluce may 19th

makluce casa con impugnatura di base accessori ta copy - Apr 10 2023

web makluce casa con impugnatura di base accessori ta eventually you will extremely discover a extra experience and

capability by spending more cash yet when pull it is

sanal hukuk İcra ceza mahkemesi savunma dilekçesi Örneği - Apr 29 2022

web may 23 2022 sanal hukuk İcra ceza mahkemesi savunma dilekçesi Örneği alacaklıyı zarara uğratmak amacıyla mevcudunu eksiltmek suçu

jurix akademik bakış ceza muhakemesinde kovuşturma - Feb 25 2022

web akademik bakış ceza muhakemesinde kovuşturma mecburiyeti ve maslahata uygunluk ilkeleri arasındaki denge hans kudlich bir suçun işlendiği haberinin alınması üzerine

amazon it impugnature accessori elettronica - Oct 04 2022

web impugnature per cellulari nuove uscite scopri di più 559 cellulare anello 4 pezzi supporto trasparente dell anello del telefono cellulare supporto rotante a 360 gradi per la suoneria

makluce casa con impugnatura di base accessori tagliabordi - May 11 2023

web makluce casa con impugnatura di base accessori tagliabordi integrati per lavorazione del legno lavorazione mobili decorazione domestica fai da te by makluce specifiche

set di attrezzi per la casa set da 9 pezzi kit di attrezzi di - Nov 05 2022

web set di attrezzi per la casa set da 9 pezzi kit di attrezzi di base impugnatura antiscivolo manuale combinazione domestica con cassetta degli attrezzi portatile per

impugnature fisse elesa - Sep 03 2022

web nell ampia gamma di impugnature sono disponibili forme finiture e colori diversi per rispondere a tutte le esigenze del mercato nella gamma troviamo impugnature fisse a

impugnatura m 10 bosch diy - Jan 27 2022

web accessori di sistema per smerigliatrici angolari impugnatura m 10 registrazione dello strumento profilo cliccare sulla freccia accanto a una variante del prodotto per

makluce casa con impugnatura di base accessori tagliabordi - Oct 24 2021

web may 12th 2020 makluce prodotto scatola di stoccaggio cassetto di finitura desktop scatola scatola per la cura della pelle prodotti per la cura bambini e uomini Ã possibile regolare

makluce casa con impugnatura di base accessori ta - Feb 08 2023

web makluce casa con impugnatura di base accessori ta repertorio per l applicazione della tariffa dei dazi doganali del regno d italia jun 03 2021 tariffa generale dei dazi

805 sayılı İktisadi müesseselerde mecburi türkçe lexpera - Aug 02 2022

web türkiye nin en kapsamlı içtihat arşivine sahip lexpera ile 2 5 milyon yargı kararı erişime açıktır mevzuat ve literatür

bağlantıları ile en yeni ve güncel kararlar lexpera da 805

İstanbul adliyesinde hangi icra dairesine hangi icra mahkemesinin - Mar 29 2022

web dec 16 2016 İcra dairesinin İstanbul 7 İcra mahkemesi hakimliğinin ilk altı ay olan 01 01 2017 tarihinden 30 06 2017 tarihi de dahil olmak üzere İstanbul 10 İcra dairesi ile

makluce casa con impugnatura di base accessori tagliabordi - Dec 06 2022

web makluce casa con impugnatura di base accessori tagliabordi integrati per lavorazione del legno lavorazione mobili decorazione domestica fai da te by makluce meterk

free vla ramtech uri - Jul 01 2022

web 15 pts in anvas 16 quizzes one per chapter 25 30 questions open note text lowest score dropped hapter quizzes 48 pts 2 semester exams 15 each final partially cumulative

makluce casa con impugnatura di base accessori tagliabordi - Mar 09 2023

web makluce casa con impugnatura di base accessori tagliabordi integrati per lavorazione del legno lavorazione mobili decorazione domestica fai da te by makluce it

makluce impugnatura per esercizi con impugnatura rinforzante - Aug 14 2023

web compra makluce impugnatura per esercizi con impugnatura rinforzante ideale per arrampicata su roccia spedizione gratuita su ordini idonei makluce

free makluce casa con impugnatura di base accessori ta - Jan 07 2023

web makluce casa con impugnatura di base accessori ta notizia delle opere d arte et d antichità della raccolta correr di venezia scritta da vincenzo lazari a catalogue

macota 1210073 impugnatura a pistola per bombolette spray - May 31 2022

web 8 90 spedizione gratuita venduto da stanhomeshop macota 1210073 impugnatura a pistola per bombolette spray universale marca macota 36 voti 890

in quali casi si può impugnare una delibera businessonline - Nov 24 2021

web aug 2 2022 le delibere condominiali pur essendo approvate dall assemblea di condominio possono essere impugnare vediamo quando si può impugnare una delibera

archetti per traforo con impugnatura in legno bahco - Dec 26 2021

web dettagli prodotto telaio in acciaio piatto cromato impugnatura in legno di faggio laccata in arancione dotato di lama per la lavorazione del legno profondità 300 mm 12 lame