Level 2 Diploma in Saddle, Harness and Bridle Making (0101-02)

October 2017 Version 1.1





Qualification at a glance

Subject area	Land and Environment
City & Guilds number	0101-02
Age group approved	16-18, 18+, 19+
Entry requirements	n/a
Assessment	Centre-devised assignments (contact centre for assessments)
Fast track	Yes
Support materials	n/a
Registration and certification	Consult the Walled Garden/Online Catalogue for end registration and certification dates

Title and level	GLH	тұт	City & Guilds number	Accreditation number
Level 2 Diploma in Saddle, Harness and Bridle Making	690	1360	0101-02	600/6250/2
Level 2 Diploma in Saddle, Harness and Bridle Making – Unit Route	690	1360	0101-92	600/6250/2

Version and date	Change detail	Section
1.1 October 2017	Added TQT and GLH details	Qualification at a Glance, Structure
	Deleted QCF	Appendix



Contents

1	Introduction	4
	Structure	4
2	Centre requirements	6
	Approval	6
	Resource requirements	6
	Candidate entry requirements	7
3	Delivering the qualification	8
	Initial assessment and induction	8
	Support materials	8
4	Assessment	9
5	Units	10
Unit 201	Saddle making in the equestrian industry	11
Unit 202	Bridle making in the equestrian Industry	16
Unit 203	Harness making in the equestrian Industry	21
Unit 204	Equine studies for saddle fitters	26
Unit 205	Machining techniques for the saddlery industry	32
Unit 206	The principles of Lorinery in the equine industry	37
Appendix 1	Relationships to other qualifications	46
Appendix 2	Sources of general information	47

1 Introduction



This document tells you what you need to do to deliver the qualification:

Area	Description
Who is the qualification for?	It is for learners who work or want to work as saddlers.
What does the qualification cover?	It allows candidates to learn, develop and practise the skills required for employment and/or career progression in the saddlery sector.
Is the qualification part of a framework or initiative?	n/a
What opportunities for progression are there?	It allows candidates to progress into employment or to the following City & Guilds qualifications: • Level 2 Diploma in Saddlery (0084) • Level 3 Diploma in Saddle, Harness and Bridle Making (0101-03) • Level 3 Diploma in Saddlery (0084)
	• Level 3 Dipiorna in Saudiery (0084)

Structure

To achieve the **Level 2 Diploma in Saddle, Harness and Bridle Making**, learners must achieve a total of **136** credits; **112** credits from the mandatory units and a minimum of **24** credits from the optional units available.

Unit accreditation number	City & Guilds unit number	Unit title	Credit value	Excluded combination of units (if any)
Mandatory				
L/504/2447	Unit 201	Saddle making in the equestrian industry	40	
R/504/2448	Unit 202	Bridle making in the equestrian industry	36	
Y/504/2449	Unit 203	Harness making in the equestrian industry	36	

Optional

L/504/2450	Unit 204	Equine studies for saddle fitters	12	
R/504/2451	Unit 205	Machine techniques for the saddlery industry	12	
Y/504/2452	Unit 206	The principles of lorinery in the equine industry	12	

Total Qualification Time

Total Qualification Time (TQT) is the total amount of time, in hours, expected to be spent by a Learner to achieve a qualification. It includes both guided learning hours (which are listed separately) and hours spent in preparation, study and assessment.

Title and level	GLH	TQT
Level 2 Diploma in Saddle, Harness and Bridle Making	690	1360
Level 2 Diploma in Saddle, Harness and Bridle Making – Unit Route	690	1360



2 Centre requirements

Approval

If your Centre is approved to offer the qualification Level 2 Certificate in Saddlery (4750-12)] you can apply for the new Level 2 Diploma in Saddle, Harness and Bridle Making (0101-02) approval using the **fast track approval form**, available from the City & Guilds website.

Centres should use the fast track form if:

- there have been no changes to the way the qualifications are delivered, and
- they meet all of the approval criteria in the fast track form guidance notes.

Fast track approval is available for 12 months from the launch of the qualification. After 12 months, the Centre will have to go through the standard Qualification Approval Process. The centre is responsible for checking that fast track approval is still current at the time of application.

To offer this qualification, new centres will need to gain both centre and qualification approval. Please refer to the *Centre Manual - Supporting Customer Excellence* for further information.

Centre staff should familiarise themselves with the structure, content and assessment requirements of the qualification before designing a course programme.

Resource requirements

Physical resources and site agreements

Centres can use specially designated areas within a centre to assess. The equipment, systems and machinery must meet industrial standards and be capable of being used under normal working conditions.

Centre staffing

Staff delivering this qualification must be able to demonstrate that they meet the following occupational expertise requirements. They should:

- be occupationally competent or technically knowledgeable in the area for which they are delivering training and/or have experience of providing training. This knowledge must be to the same level as the training being delivered
- have recent relevant experience in the specific area they will be assessing
- have credible experience of providing training.

Centre staff may undertake more than one role, e.g. tutor and assessor or internal quality assurer, but cannot internally verify their own assessments.

Assessors and Internal Quality Assurer

The centre must provide Assessor personnel who must be occupationally competent in the industry either qualified to at least level 2 and/or have current experience of working in the industry at this level.

The centre must provide Internal Quality Assurance personnel who must be occupationally competent in the land-based sector either qualified to at least level 2 and/or have current experience of working in the industry at this level.

Assessors/Internal Quality Assurance personnel may hold relevant qualifications such as D32/33/34 or A1/V1 or TAQA however they are not a mandatory requirement for this qualification. They should have had formal training in assessment/IQA, which may be the qualifications above, or other training that allows the assessor to demonstrate competence in the practice of assessment/IQA. This training may be carried out in-house or with an external agency.

TAQA qualifications are considered very appropriate as Continuing Professional Development (CPD) or as best practice standards for new centre staff to work towards.

Continuing professional development (CPD)

Centres must support their staff to ensure that they have current knowledge of the occupational area, that delivery, mentoring, training, assessment and verification is in line with best practice, and that it takes account of any national or legislative developments.

Candidate entry requirements

City & Guilds does not set entry requirements for this qualification. However, centres must ensure that candidates have the potential and opportunity to gain the qualification successfully.

Age restrictions

City & Guilds cannot accept any registrations for candidates under 16 as this qualification is not approved for under 16s.



3 Delivering the qualification

Initial assessment and induction

An initial assessment of each candidate should be made before the start of their programme to identify:

- if the candidate has any specific training needs,
- support and guidance they may need when working towards their qualification.
- any units they have already completed, or credit they have accumulated which is relevant to the qualification.
- the appropriate type and level of qualification.

We recommend that centres provide an induction programme so the candidate fully understands the requirements of the qualification, their responsibilities as a candidate, and the responsibilities of the centre. This information can be recorded on a learning contract.

Support materials

The following resources are available for this qualification:

Description	How to access
Fast track approval forms /	www.cityandguilds.com
generic fast track approval form	



4 Assessment

Candidates must:

• successfully complete one centre-devised assignment for each unit – please contact the centre for assessment material

Recognition of prior learning (RPL)

Recognition of prior learning means using a person's previous experience or qualifications which have already been achieved to contribute to a new qualification.

RPL is allowed and is also sector specific.



5 Units

Availability of units

They are on The Register of Regulated Qualifications: http://register.ofqual.gov.uk/Unit

Structure of units

These units each have the following:

- City & Guilds reference number
- unit accreditation number (UAN)
- title
- level
- credit value
- guided learning hours
- unit aim
- relationship to NOS, other qualifications and frameworks
- endorsement by a sector or other appropriate body
- information on assessment
- learning outcomes which are comprised of a number of assessment criteria

Unit 201 Saddle making in the equestrian industry

UAN:	L/504/2447
Level:	2
Credit value:	40
GLH:	220
Relationship to NOS:	n/a
Endorsement by a sector or regulatory body:	This unit is endorsed by Skillset, the Sector Skills Council for Creative.
Aim:	This unit provides a practical introduction to the craft skills and knowledge necessary for the production of saddles. It aims to assess the ability to use a range of materials, fittings, tools and machinery, in order to select appropriate construction, materials and production skills, together with fostering the ability to transfer skills and techniques used in one discipline to that of another. It aims to provide the learner with a broad foundation of craft skills using both traditional and modern manufacturing processes.

Learning outcome

The learner will:

1. Know the types of materials used in Saddle production

Assessment criteria

The learner can:

- 1.1 list the different **leathers** used in saddle making
- 1.2 list **fittings** used in the production of saddles
- 1.3 state suitable thread types and sizes

Range Leathers Bridle shoulder Flap butt Stirrup butt Panel hide

Fittings

Saddle tree

Staples

Dees

Saddle nails

Thread types and sizes

Linen thread

18-3

18-4

25-3

Synthetic thread

8.0

1.4

Learning outcome

The learner will:

2. Be able to select appropriate materials for a range of saddle components

Assessment criteria

The learner can:

- 2.1 identify the different parts of a hide
- 2.2 identify the best end and side of a flap butt
- 2.3 identify hide size and thickness in both imperial and metric measurements
- 2.4 assess the **suitability of different parts of the hide** in the selection process
- 2.5 name the component parts of a rigid and a sprung **saddle tree**
- 2.6 check saddle trees for **faults**
- 2.7 compare the **differences** between a rigid and a sprung saddle tree
- 2.8 select suitable threads for use in saddle making

Range

Parts of a hide

Whole hide,

Half a hide/Hide side

Pair of Backs

Whole middle/Whole butt

Pair of butts

Shoulder

Leather cuts

Thicknesses and average size of different cuts

Suitability of different parts of the hide

Use, Strength, Safety

Saddle tree

List components of saddle trees

Faults

Symmetry, Fatigue, Fittings, Poor finish

Differences

Substance and weight of saddle trees, One has springs the other not, One flexes the other is rigid

Threads used in saddle making

Linen thread

18-3

18-4

25-3

Synthetic thread

8.0

1.4

Learning outcome

The learner will:

3. Know the names, uses and maintenance of the different tools used for saddle making

Assessment criteria

The learner can:

- 3.1 list the different **tools** used in saddle making
- 3.2 state the **use** of each tool in the making process
- 3.3 describe how to **maintain and store** each tool

Range

Tools

Knives

Hammer

Bull dog pliers

Tack lifter

Skirt shave

Stitch grove

Surform

Stuffing irons

Masher

Curved awl

Use

Cutting out leather

Tacking

Draw on saddle seat

Lift tacks

Shave saddle skirts

Make a channel for stitching

Shape saddle seat

Stuff saddle panel

Shape saddle panel

Backing holes for skirts and Lace in saddle panel

Maintain and store

Storage of tools and sharpening of knifes, skirt shave and awl

Learning outcome

The learner will:

4. Be able to use the methods and practices of saddle making

Assessment criteria

The learner can:

4.1 Use the skills and techniques required for each of the **making processes**

Range

making processes

- Webbing up
- Building and blocking a seat
- Hand seaming
- Machine seaming
- Cutting
- Flocking
- Quilting
- Lacing

Learning outcome

The learner will:

5. Be able to produce a simple saddle

Assessment criteria

The learner can:

- 5.1 Produce samples of a range of **saddle making techniques**
- 5.2 Produce a simple saddle on a sprung saddle tree

Range

Saddle making techniques

Cutting, Shave skirts, Backing holes for skirts, Welting and Seaming

Unit 201 Saddle making in the equestrian industry

Supporting information

Evidence requirements

You must provide your assessor with evidence for all the learning outcomes and assessment criteria. The evidence must be provided in the following ways taking into account any of the special considerations below.

Special considerations:

The nature of this unit means that most of your evidence must come from real work activities.

Simulation can only be used in exceptional circumstances for example: Where performance is critical or high risk, happens infrequently or happens frequently but the presence of an assessor/observer would prevent the Independent Advocacy relationship developing.

The evidence must reflect, at all times, the policies and procedures of the workplace, as linked to current legislation and the values and principles for good practice in Independent Advocacy.

Unit 202 Bridle making in the equestrian Industry

UAN:	R/504/2448
Level:	2
Credit value:	36
GLH:	165
Relationship to NOS:	n/a
Endorsement by a sector or regulatory body:	This unit is endorsed by Skillset, the Sector Skills Council for Creative.
Aim:	This unit provides a practical introduction to the craft skills and knowledge necessary for the production of bridles. It aims to assess the ability to use a range of materials, fittings, tools and machinery, in order to select appropriate construction, materials and production skills, together with fostering the ability to transfer skills and techniques used in one discipline to that of another. It aims to provide the learner with a broad foundation of craft skills using both traditional and modern manufacturing processes.

Learning outcome

The learner will:

1. Know the types of materials used in bridle production

Assessment criteria

The learner can:

- 1.1 list the different **leathers** used in bridle making
- 1.2 list **fittings** used in the production of bridle making
- 1.3 state suitable thread types and sizes

Range
Leathers
Bridle butt
Bridle shoulder
Rein back
Stirrup butt
Panel hide

Fittings

Head collar buckles

Swage buckles

Rings

Bridle buckles

Spiked rings

Billet hooks

Martingale rings

Stirrup buckles

Thread types and sizes

Linen thread; 3/25, 3/18 and 4/18

Learning outcome

The learner will:

2. Be able to select appropriate materials for a range of bridle components

Assessment criteria

The learner can:

- 2.1 identify the different parts of a hide
- 2.2 identify the best end and side of a bridle butt
- 2.3 identify hide size and thickness in both imperial and metric measurements
- 2.4 assess the **suitability of different parts of the hide** in the selection process
- 2.5 identify a range of **bridle fittings**
- 2.6 assess bridle fittings for **faults**
- 2.7 select suitable threads for use in bridle making

Range

Parts of a hide

Whole hide,

Half a hide/Hide side

Pair of Backs

Whole middle/Whole butt

Pair of butts

Shoulder

Suitability of different parts of the hide

Leather cuts

Thicknesses and average size of different cuts

Use, Strength, Safety

Bridle fittings

Head collar buckles

Swage buckles

Rings

Bridle buckles

Spiked rings

Billet hooks

Martingale rings

Stirrup buckles

Faults

Casting

Metal fatigue

Poor finish

Buckle tongues

Threads used in bridle making

Linen thread; 3/25, 3/18 and 4/18

Learning outcome

The learner will:

3. Know the names, uses and maintenance of the different tools used for bridle making

Assessment criteria

The learner can:

- 3.1 list the different **tools** used in bridle making
- 3.2 state the **use** of each tool in the making process
- 3.3 describe how to **maintain and store** each tool

Range

Tools

Cutting tools

Edge tools

Creasing tools

Preparation/Marking tools

Punching tools

Stitch markers

Awls

Finishing tools

Use

Cutting out leather

Chamfer edges of leather

Making an indent

Marking for stitching/patterns

Making holes

Dent marks in the desired area

for stitching

Makes holes for stitching

Polishing and finishing of edges

Maintain and store

Storing of tools and sharpening of knifes, edge tools and awls

Learning outcome

The learner will:

4. Be able to use the methods and practices of bridle making

Assessment criteria

The learner can:

4.1 use the **skills and techniques** required for each of the making processes

Range

Skills and techniques

- Measuring
- Cutting
- Edge
- Stain
- Crease
- Hole punching
- Stitch marking
- Skiving
- Stitching
- Finishing

Learning outcome

The learner will:

5. Be able to produce a range of bridle components

Assessment criteria

The learner can:

- 5.1 produce samples of a range of **bridle making techniques**
- 5.2 produce the following:
 - Foal slip
 - Head collar
 - Bridle
 - Martingale
 - Stirrup leathers

Range

Bridle making techniques

Measuring

Cutting

Edging

Staining

Creasing

Hole punching

Stitch marking

Skiving

Stitching

Finishing

Unit 202 Bridle making in the equestrian Industry

Supporting information

Evidence requirements

You must provide your assessor with evidence for all the learning outcomes and assessment criteria. The evidence must be provided in the following ways taking into account any of the special considerations below.

Special considerations:

The nature of this unit means that most of your evidence must come from real work activities.

Simulation can only be used in exceptional circumstances for example: Where performance is critical or high risk, happens infrequently or happens frequently but the presence of an assessor/observer would prevent the Independent Advocacy relationship developing.

The evidence must reflect, at all times, the policies and procedures of the workplace, as linked to current legislation and the values and principles for good practice in Independent Advocacy.

Unit 203 Harness making in the equestrian Industry

UAN:	Y/504/2449
Level:	2
Credit value:	36
GLH:	170
Relationship to NOS:	n/a
Endorsement by a sector or regulatory body:	This unit is endorsed by Skillset, the Sector Skills Council for Creative.
Aim:	This unit provides a practical introduction to the craft skills and knowledge necessary for the production of harness. It aims to assess the ability to use a range of materials, fittings, tools and machinery, in order to select appropriate construction, materials and production skills, together with fostering the ability to transfer skills and techniques used in one discipline to that of another. It aims to provide the learner with a broad foundation of craft skills using both traditional and modern manufacturing processes.

Learning outcome

The learner will:

1. Know the types of materials used in harness production

Assessment criteria

The learner can:

- 1.1 list the different **leathers** used in harness making
- 1.2 list **fittings** used in the production of harness components
- 1.3 state suitable thread types and sizes

Range Leathers Harness back Bridle butt Bridle shoulder Russet Patent Panel hide

Fittings

Harness buckles

Trace/Tug buckles

Breeching Dees

Standing Dees

Dees

Thread types and sizes

Linen thread; 3/18 and 4/18

Learning outcome

The learner will:

2. Be able to select appropriate materials for a range of harness components

Assessment criteria

The learner can:

- 2.1 identify the different **parts of a hide**
- 2.2 identify the best end and side of a bridle butt
- 2.3 identify hide size and thickness in both imperial and metric measurements
- 2.4 check the **suitability of different parts of the hide** in the selection process
- 2.5 identify a range of **harness fittings**
- 2.6 check harness fittings for **faults**
- 2.7 select suitable threads for use in harness making

Range

Parts of a hide

Whole hide,

Half a hide/Hide side

Pair of Backs

Whole middle/Whole butt

Pair of butts

Shoulder

Suitability of different parts of the hide

Leather cuts

Thicknesses and average size of different cuts

Use, Strength, Safety

Harness fittings

Harness buckles

Trace/Tug buckles

Breeching Dees

Standing Dees

Dees

Faults

Casting

Metal fatigue

Poor finish

Buckle tongues

Suitable threads for use in harness making

Linen thread (3/18 and 4/18)

Learning outcome

The learner will:

3. Know the names, uses and maintenance of the different tools used for harness making

Assessment criteria

The learner can:

- 3.1 list the different **tools** used in harness making
- 3.2 state the **use** of each tool in the making process
- 3.3 describe how to **maintain and store** each tool

Range

Tools

Cutting tools

Edge tools

Creasing tools

Preparation/Marking tools

Punching tools

Stitch markers

Awls

Finishing tools

Uses

Cutting out leather

Chamfer edges of leather

Making an indent

Marking for stitching/patterns

Making holes

Dent marks in the desired area

for stitching

Makes holes for stitching

Polishing and finishing of edges

Maintain and store

Storing of tools and sharpening of knifes, edge tools and awls

Learning outcome

The learner will:

4. Be able to use the methods and practices of harness making

Assessment criteria

The learner can:

4.1 use the correct skills and techniques requirement for each of the **making processes**

Range

Making processes

- Measuring
- Cutting
- Edging
- Staining
- Creasing
- Hole punching
- Stitch marking
- Skiving
- Stitching
- Finishing

Harness components fit for purpose

Learning outcome

The learner will:

5. Be able to produce a range of harness components

Assessment criteria

The learner can:

- 5.1 produce samples of a range of harness making techniques
- 5.2 produce the following harness components using corrects tools and methods:
 - short tugs
 - neck strap
 - breast collar
 - false martingale

Unit 203 Harness making in the equestrian Industry

Supporting information

Evidence requirements

You must provide your assessor with evidence for all the learning outcomes and assessment criteria. The evidence must be provided in the following ways taking into account any of the special considerations below.

Special considerations:

The nature of this unit means that most of your evidence must come from real work activities.

Simulation can only be used in exceptional circumstances for example: Where performance is critical or high risk, happens infrequently or happens frequently but the presence of an assessor/observer would prevent the Independent Advocacy relationship developing.

The evidence must reflect, at all times, the policies and procedures of the workplace, as linked to current legislation and the values and principles for good practice in Independent Advocacy.

Unit 204 Equine studies for saddle fitters

UAN:	L/504/2450
Level:	2
Credit value:	12
GLH:	85
Relationship to NOS:	n/a
Endorsement by a sector or regulatory body:	This unit is endorsed by Skillset, the Sector Skills Council for Creative.
Aim:	This unit provides an important base of equine knowledge necessary for the understanding of saddlery requirements for both horse and rider. It aims to assess the ability to assess equine behaviour, health, conformation and development together with safe handling and stable management requirements.

Learning outcome

The learner will:

1. Know the anatomy and conformation of a horse

Assessment criteria

The learner can:

- 1.1 name the **points** of the horse
- 1.2 identify the **skeletal structure** of the horse
- 1.3 identify the **specific muscles and bones** used to support the saddle and rider
- 1.4 describe the **conformational features** of different types of **sport** and **non-sport horses**
- 1.5 describe how, **conformation** can affect **saddlery fitting**.
- 1.6 identify differences in conformation in different types and breeds of horses

ange	
oints	
ar	
ape nroat	
nroat	
ane	
eck.	
/ithers	

Back

Hip

Rump

Buttock

Tail

Thigh

Leg

Hock

Cannon bone

Fetlock

Pastern

Stifle

Flank

Fetlock joint

Toe

Hoof

Coronet

Canon bone

Knee

Shoulder

Breast, Throat, Cheek, Jowl, Lower lip, Mouth.

Upper lip, Nostril, Tip of nose

Nose

Eye

Skeletal structure

Atlas

Cervical vertebrae

Thoracic vertebrae

Lumbar vertebrae

Sacrum.

Caudal vertebrae Pelvis

Femur

Patella

Tibia

Calcaneus

Tarsus

Metatarsus

Phalanges

Third phalange

Second phalange

First phalange

Cannon bone

Carpus

Radius

Sternum

Humerus

Rib

Scapula

Mandible

Tooth

Orbital cavity

Skull

Specific muscles and bones

Thoracic vertebrae

Lumbar vertebrae

Trapezius muscle

Latissimys muscle

Facia muscle

Conformational features – sport horse

Elegant, lighter than heavy horses but heavier than a Thou bread, good leg angles, neck well set and limbs long with a short back and good foot shape

Conformational features of non-sport horses

Native breed specific conformation features, working horse specific breed features, Arabs, Thou breads and other common non sports horse specific features

Conformation - saddle fitting

Mutton Withers –Saddle slipping from side to side

Short back – Saddle extends beyond the 18th rib

Sway back – Saddle bridging

Roach back – Saddle rocking

High withers – Saddle not clearing

Croup high – Saddle slipping forwards

Herring gutted - Saddle slipping forwards

Board shoulder - Pushing saddle back

Learning outcome

The learner will:

2. Know how to monitor health and well-being of horses

Assessment criteria

The learner can:

- 2.1 describe how to recognise signs of **ill-health**
- 2.2 describe how recognise a horses physical condition
- 2.3 describe routine measures of **worming**, **vaccination and hoof care**
- 2.4 describe how to recognise a **lame horse**

Range

III health

Common diseases, internal, external, disability and direct injury Worm infestation, skin parasites and diseases.

When and how to monitor

physical condition

Respiratory infections, colic, Azoturia, cushions disease, both worm, ring worm

worming, vaccination and hoof care

When to worm, how often, types of wormers for different times of the year, vaccinations and veterinary recording, foot care, trimming, shooing and signs of

Lame horse

What to look for in a lame horse, how the horse moves when lame:

Not wanting to use leg

Stride length

Foot fall sound

Head nod

Rhythm

Posture

Learning outcome

The learner will:

3. Be able to restrain a horse using specific methods

Assessment criteria

The learner can:

- 3.1 use suitable personal protective equipment (PPE)
- 3.2 restrain a horse according to instruction using correct **equipment**

Range

Personal protective equipment (PPE)

Gloves, footwear and removal of jewellery

Equipment

Head collar, and bridle

Learning outcome

The learner will:

4. Be able to lead and control a horse for inspection

Assessment criteria

The learner can:

- 4.1 use appropriate personal protective equipment (PPE)
- 4.2 maintain control of the horse by using suitable saddlery and control techniques
- 4.3 move the horse for health and soundness inspection according to instructions
- 4.4 lead and **control** the horse for inspection in accordance with instruction

Range

Personal Protective Equipment (PPE)

Gloves, footwear and removal of jewellery

Control

Control a horse with head collar or bridle Correct procedure, stand, walk and trot Walk, trot and turning

Learning outcome

The learner will:

5. Be able to fit and remove basic saddlery and boots

Assessment criteria

The learner can:

- 5.1 fit suitable **saddlery**
- 5.2 remove saddlery
- 5.3 fit suitable **boots**
- 5.4 remove boots

Range

Saddlery

Snaffle bridles, running martingale, breast plate, riding saddle, numnah and girth

Boots

Brushing boot types, front and back

Unit 204 Equine studies for saddle fitters

Supporting information

Evidence requirements

You must provide your assessor with evidence for all the learning outcomes and assessment criteria. The evidence must be provided in the following ways taking into account any of the special considerations below.

Special considerations:

The nature of this unit means that most of your evidence must come from real work activities.

Simulation can only be used in exceptional circumstances for example: Where performance is critical or high risk, happens infrequently or happens frequently but the presence of an assessor/observer would prevent the Independent Advocacy relationship developing.

The evidence must reflect, at all times, the policies and procedures of the workplace, as linked to current legislation and the values and principles for good practice in Independent Advocacy.

Unit 205 Machining techniques for the saddlery industry

UAN:	R/504/2451
Level:	2
Credit value:	12
GLH:	85
Relationship to NOS:	n/a
Endorsement by a sector or regulatory body:	This unit is endorsed by Skillset, the Sector Skills Council for Creative.
Aim:	An introduction to the knowledge and skills required to safely maintain, operate and control a range of sewing machines.

Learning outcome

The learner will:

1. Know the names, uses and maintenance of parts on a range of sewing machines

Assessment criteria

The learner can:

- 1.1 list the different types of **sewing machines**
- 1.2 state the differences between a range of sewing machine types
- 1.3 list the different **parts** of a sewing machine
- 1.4 describe the **maintenance** of a sewing machine

Range

Sewing machines

Flatbed

Cylinder arm

Post

Parts

Thread stand

Thread bracket

Fly wheel

Stitch adjustment and reverse lever

Thread stem

Wire loops

Tension discs

Knurled side tension

Black post

Check spring

Take up arm

Hole in the side casing

Tube/Wire loop

Hole in the bottom needle bar

Presser foot/Walking foot

Needle

Needle plate, Throat plate

Feed dog

Bobbin case

Maintenance

Daily service and check ups;

Oil the machine

Change/replace of a needle

Remove the bobbin case and shuttle

Remove the throat plate

Remove fluff or thread from shuttle or feed

Oiling

Learning outcome

The learner will:

2. Be able to select appropriate sewing machine needles and threads

Assessment criteria

The learner can:

- 2.1 list the different **sewing machine needles**
- 2.2 identify suitable machine thread types and their uses
- 2.3 identify **thread sizes** in the different systems used
- 2.4 assess the suitability of different needles and threads in the selection process

Range

Sewing machine needles:

Needle system 134-35; 90/14, 120/19, 125/20, 130/21, 140/22, 160/23,180/24, 200/25 with round point or left/right hand twist Needle system 328; 130/21, 140/22, 160/23, 180/24, 200/25, 230/26 with round point or left/right hand twist

Machine thread types and their uses:

Sizes to size of needle

Spun polyester thread;

90/14 and 100/16; TKT 50, 40

110/18 and 120/19; TKT 30, 24

140/22; TKT 16

160/23; TKT 16, 12

180/24; TKT 12

200/25; TKT 10

230/26; TKT 8?

thread sizes

both imperial and metric measurements

Learning outcome

The learner will:

3. Be able to safely control, operate, maintain and use a range of sewing machines

Assessment criteria

The learner can:

3.1 **operate** a sewing machine

Range

Operate

Operate the treadle with both feet on a range of sewing machines Thread a range of sewing machines

Wind and fit the bobbin on a range of sewing machines

Produce samples of straight stitching with and without a guide

Usage, Safety

Learning outcome

The learner will:

4. Be able to adjust a sewing machine to a range of stitching requirements

Assessment criteria

The learner can:

- 4.1 adjust the pressure to suit material
- 4.2 adjust tension to produce correct stitch formation
- 4.3 analyse possible reasons for faults in stitching
- 4.4 **prepare** a sewing machine for stitching a range of different materials.
- 4.5 assess sewing machines for **faults**

Range

Prepare

Setting/s of sewing machine

Choice of needle

Damaged needle

Choice of thread

Malfunction of mechanics

Choice of material

Operator error

Faults

Settings of sewing machine

Choice of needle

Damaged needle

Choice of thread Malfunction of mechanics Inadequate safety precautions

Learning outcome

The learner will:

5. Be able to produce a range of stitch and seam samples

Assessment criteria

The learner can:

5.1 produce samples of a range of **machine making techniques**

Range

Machine making techniques

Straight stitching

Turned edge

Plain seam

Closed seam

Silked seam

Lapped seam

Binding

French binding

Piping binding

Unit 205 Machining techniques for the saddlery industry

Supporting information

Evidence requirements

You must provide your assessor with evidence for all the learning outcomes and assessment criteria. The evidence must be provided in the following ways taking into account any of the special considerations below.

Special considerations:

The nature of this unit means that most of your evidence must come from real work activities.

Simulation can only be used in exceptional circumstances for example: Where performance is critical or high risk, happens infrequently or happens frequently but the presence of an assessor/observer would prevent the Independent Advocacy relationship developing.

The evidence must reflect, at all times, the policies and procedures of the workplace, as linked to current legislation and the values and principles for good practice in Independent Advocacy.

Unit 206 The principles of lorinery in the equine industry

UAN:	Y/504/2452	
Level:	2	
Credit value:	12	
GLH:	50	
Relationship to NOS:	n/a	
Endorsement by a sector or regulatory body:	This unit is endorsed by Skillset, the Sector Skills Council for Creative.	
Aim:	To proved a sound foundation of relevant and functional information on lorinery (bits and bridling) for the working saddler and equestrian professional.	

Learning outcome

The learner will:

1. Know the scope of lorinery in the equine industry

Assessment criteria

The learner can:

- 1.1 explain the origins and use of the term **lorinery**
- 1.2 identify early and modern lorinery
- 1.3 list the different **categories** of lorinery
- 1.4 explain the **purpose** of an item in each category

Range

Lorinery

The term Lorinery applies to all the metal parts of a horses saddlery, it includes stirrups, spurs, saddle-trees, horse brasses, harness and all other saddlery furniture as well as bits, a Loriner makes and sell these items.

Early and modern lorinery

Bits, spurs and stirrups from between 14-16th century to present date

Categories

Bits

Spurs

Stirrups

Fittings

Saddle trees

Purpose

Bits: a bit is placed in the mouth of a horse and assists a rider in communicating with the animal. It rests on the bars of the mouth in an interdental region where there are no teeth. It is held on a horse's head by means of a bridle and has reins attached for use by a rider.

Spurs: A spur is a metal tool designed to be worn in pairs on the heels of riding boots for the purpose of directing a horse to move forward or laterally while riding. It is usually used to refine the riding aids (commands) and to back up the natural aids (the leg, seat, hands and voice)

Stirrups: attaches to the saddle for the rider to brace their feet in to, the assist the balance and riding position

Fittings: for use in the production of bridle, harness and saddle making Saddle trees: are used as the foundation upon which a saddle is build

Learning outcome

The learner will:

2. Know the material components of Lorinery

Assessment criteria

The learner can:

- 2.1 list the most **common alloys used in bit manufacture**
- 2.2 list the advantages and disadvantages of each alloy
- 2.3 list the most common alloys used in stirrup and spur manufacture
- 2.4 list the **advantages and disadvantages** of each alloy
- 2.5 list the most common alloys used in buckle manufacture
- 2.6 list the **advantages and disadvantages** of each alloy
- 2.7 list the **types of forging**
- 2.8 describe the basic steps of casting

Range

Common alloys – bit manufacture

Stainless steel, nickel, iron, sweet iron, copper, aluminium, aurigan, brass

Advantages and disadvantages

Stainless Steel – hard wearing, no rusting, smooth – cold, does not encourage salivation, high nickel content

Nickel – cheap, no rusting – can flake – not hard wearing, not smooth

Iron – Strong, cheap, hard wearing – rusts

Sweet iron – taste sugary, encourage salivation – unsightly

Copper – conducts heat, corrosion resistant, antibacterial – not strong, expensive, oxidises

Aluminium – light, non toxic, conducts heat corrosion resistant – weak, can break

Aurigan – high quality finish, no rusting, warm , encourages salivation – expensive, can look dull

Brass – Nice in appearance but soft

common alloys - stirrup and spur manufacture

stainless steel, nickel, iron, copper, aluminium, aurigan, brass

Advantages and disadvantages

Stainless Steel – hard wearing, no rusting, smooth – high nickel content

Nickel – cheap, no rusting – can flake – not hard wearing, not smooth

Iron – Strong, cheap, hard wearing – rusts

Copper – Corrosion resistant, – Not strong, expensive, oxidises

Aluminium – light, corrosion resistant – weak, can break

Aurigan – high quality finish, no rusting, – expensive, can look dull

Brass – Nice in appearance but soft

Common alloys - buckle manufacture

Stainless steel, nickel, iron, copper, aluminium, aurigan, brass

Advantages and disadvantages

Stainless Steel - hard wearing, no rusting, smooth- high nickel content

Nickel – cheap, no rusting – can flake- not hard wearing, not smooth

Iron – Strong, cheap, hard wearing – rusts

Copper – Corrosion resistant, – Not strong, expensive, oxidises

Aluminium – Light, corrosion resistant – weak, can break

Aurigan – high quality finish, no rusting, – expensive, can look dull

Brass – Nice in appearance but soft

Types of forging

Upsetting

Swaging

Bending

Welding

Punching Cutting out

Basic steps of casting

Obtaining the casting geometry

Pattern making

Moulding box and materials

Core making

Moulding

Melting and pouring

Cleaning and Finishing

Learning outcome

The learner will:

3. Understand the principals of bitting

Assessment criteria

The learner can:

- 3.1 state the reason for bitting and bridling a horse
- 3.2 name the points of the horse head
- 3.3 identify the skeletal structure of the horse's head
- 3.4 identify the **dental arcade of a horse**
- 3.5 describe the how to **inspect a horse's mouth**
- 3.6 explain the role of the Equine Dental Technician or Vet
- 3.7 identify the **seven points** of bitting control
- 3.8 explain the importance of a **correct outline**
- 3.9 explain the action of the different groups of bits
- 3.10 explain the action of a range of mouthpieces

Range

Reason for bitting and bridling a horse

Horses are bitted and bridled to help control speed, direction and performance without the horse experiencing fear or pain.

Points of the horse head

Ears, poll, eyes, forehead, face, bridge, nostril, muzzle, mouth, chin grove, cheek, jaw

Skeletal structure of the horse's head

Nuchal crest

Fossa temporalis

Paracondylar process

Zygomatic arch

Frontal bone

Zygomatic bone

Mandibular angle

Lacrimal bone

Maxilla

Infraorbital hole

Molar teeth

Nasal Bone Nasal cavity Incisival bone Incisor teeth

Equine dental arcade

Molars, premolars, wolf teeth, canine teeth, incisors

Inspect a horse's mouth

A horse/pony should have its mouth and teeth inspected professionally at least every 12 month

Equine Dental Technician or Vet

To examine teeth and gums to identify symmetry/signs of disease/abnormal wear

Rasp rough edges found on teeth

Round off the 'bit seat' to improve the comfort of the horse when the bit is in his mouth and assist food flow

Seven points

Roof of mouth, bars, lips/corners, tongue, poll, nose, chin groove

Correct outline

riding from leg to hand with the bit at the end of the line of command rather than the beginning

action of different groups of bits Snaffles – pressure on bars, lips and tongue

Curb – pressure on tongue lips, chin, bars, roof, poll

Gag – pressure on bars, poll, lips, tongue

Pelham – pressure on tongue, lips, chin, bars, roof

Bitless – nose, poll, chin

action of a range of mouthpieces

Snaffles – upward action

Curb – encourages the horse to lower the head and flex

Gag – upward lift to head

Pelham – lower and flex head

Bitless – bringing the head inwards

successful bitting

families of bitting

correct sizing

effects of nosebands and martingales

Bit must suet the conformation of the individual horses mouth

the properties of the different materials used in bit manufacturer

Routine checks of the horses mouth

Learning outcome

The learner will:

4. Know how to correctly size lorinery

Assessment criteria

The learner can:

- 4.1 describe how to size a bit
- 4.2 explain how to size a saddle tree
- 4.3 explain how to size stirrups
- 4.4 explain how to size rings
- 4.5 explain how to size buckles

Range

Size a bit

Width of horse's mouth plus I cm or half an inch allowance at either side of the mouth inside the rings

Size a saddle tree

Width, length, contour

Size stirrups

Size of boot with half an inch allowance either side of the boot

Size rings

Rings are sized by measuring the inside diameter

Size buckles

Buckles are sized in both imperial measurements; the buckle is measured across for the width that needs to fit the strap.

Learning outcome

The learner will:

5. Be able to fit a range of lorinery

Assessment criteria

The learner can:

- 5.1 list the **aspects to consider** when selecting and fitting a bit
- 5.2 describe the signs of bitting discomfort
- 5.3 explain the **mouth conformation considerations** to take in to account when fitting bits.
- 5.4 fit a saddle tree to a horse
- 5.5 explain how the **saddle tree fits** the horse

Range

Aspects to consider

Work being done

Stable Management

Ability of the rider

Age of the horse

Horse's history

Mouth conformation

Signs of bitting discomfort

Head shaking

Bit resistance

Being behind the bit

Being over bent

Being on the forehand

Quidding (dropping food from the mouth)

Lugging (Pulling to one side)

Head too high or to low

Mouth conformation considerations

Allowance for the tongue, height of roof of the mouth etc.

Transferred pressures in bitting when related to varied mouth conformations

Saddle tree fits

Too wide, long, narrow, too small, not following horse contour curved, flat, well fitting, correct length, correct width, following horse contour.

Learning outcome

The learner will:

6. Be able to select lorinery for use in the manufacture of saddlery

Assessment criteria

The learner can:

- 6.1 explain the **purpose** of the British standard specification for saddle trees
- 6.2 explain how to recognise a **British standard saddle tree**
- 6.3 identify the different types of stirrup bars
- 6.4 list the different **buckles** used in saddlery manufacture
- 6.5 explain the uses of type of different buckles
- 6.6 explain how to recognise **faults** in buckles, fittings, spurs, stirrups and bits
- 6.7 describe how to **maintain and store** a range of Lorinery

Range

Purpose

Symmetry, metal quality, load, material quality, strength

British standard saddle tree

Stamped BS 6635:2003 for wooden saddle trees and BS7875:2009 for synthetic

saddle trees

Types of stirrup bars

Open ended stirrup bars

Thumb catch stirrup bars

Inset/Recessed stirrup bars Adjustable stirrup bars Felt pad stirrup bars Side saddle stirrup bar Double stirrup bars

Buckles

Bridle buckles for bridle work, harness buckles for harness work

Faults

buckles – casting faults, finishing faults, metal fatigue, cracks, rough edges

fittings – buckles – casting faults, finishing faults, metal fatigue, cracks, rough edges

spurs – buckles – casting faults, finishing faults, metal fatigue, cracks, rough edges

stirrups – buckles – casting faults, finishing faults, metal fatigue, cracks, rough edges

bits – buckles – casting faults, finishing faults, metal fatigue, cracks, rough edges

Maintain and store

Many cleaning products contain ammonia, weak acids, solvents, waxes, and fats which may have an adverse effect on metal objects. Use caution when using spray air fresheners and other cleaning products. Try to keep items in dry conditions and out of direct light and in cases which prevent dust and dirt from entering them.

Unit 206 The principles of lorinery in the equine industry

Supporting information

Evidence requirements

You must provide your assessor with evidence for all the learning outcomes and assessment criteria. The evidence must be provided in the following ways taking into account any of the special considerations below.

Special considerations:

The nature of this unit means that most of your evidence must come from real work activities.

Simulation can only be used in exceptional circumstances for example: Where performance is critical or high risk, happens infrequently or happens frequently but the presence of an assessor/observer would prevent the Independent Advocacy relationship developing.

The evidence must reflect, at all times, the policies and procedures of the workplace, as linked to current legislation and the values and principles for good practice in Independent Advocacy.



Appendix 1 Relationships to other qualifications

Literacy, language, numeracy and ICT skills development

This qualification can develop skills that can be used in the following qualifications:

- Functional Skills (England) see www.cityandguilds.com/functionalskills
- Essential Skills (Northern Ireland) see www.cityandguilds.com/essentialskillsni
- Essential Skills Wales see www.cityandguilds.com/esw



Appendix 2 Sources of general information

The following documents contain essential information for centres delivering City & Guilds qualifications. They should be referred to in conjunction with this handbook. To download the documents and to find other useful documents, go to the **Centres and Training Providers homepage** on **www.cityandguilds.com**.

Centre Manual - Supporting Customer Excellence contains detailed information about the processes which must be followed and requirements which must be met for a centre to achieve 'approved centre' status, or to offer a particular qualification, as well as updates and good practice exemplars for City & Guilds assessment and policy issues. Specifically, the document includes sections on:

- The centre and qualification approval process
- Assessment, internal quality assurance and examination roles at the centre
- Registration and certification of candidates
- Non-compliance
- Complaints and appeals
- Equal opportunities
- Data protection
- Management systems
- Maintaining records
- Assessment
- Internal quality assurance
- External quality assurance.

Our Quality Assurance Requirements encompasses all of the relevant requirements of key regulatory documents such as:

- SQA Awarding Body Criteria (2007)
- NVQ Code of Practice (2006)

and sets out the criteria that centres should adhere to pre and post centre and qualification approval.

Access to Assessment & Qualifications provides full details of the arrangements that may be made to facilitate access to assessments and qualifications for candidates who are eligible for adjustments in assessment.

The **centre homepage** section of the City & Guilds website also contains useful information such on such things as:

- Walled Garden: how to register and certificate candidates on line
- **Events**: dates and information on the latest Centre events
- **Online assessment**: how to register for e-assessments.

Useful contacts

UK learners General qualification information	T: +44 (0)844 543 0033 E: learnersupport@cityandguilds.com
International learners General qualification information	T: +44 (0)844 543 0033 F: +44 (0)20 7294 2413 E: intcg@cityandguilds.com
Centres Exam entries, Certificates, Registrations/enrolment, Invoices, Missing or late exam materials, Nominal roll reports, Results	T: +44 (0)844 543 0000 F: +44 (0)20 7294 2413 E: centresupport@cityandguilds.com
Single subject qualifications Exam entries, Results, Certification, Missing or late exam materials, Incorrect exam papers, Forms request (BB, results entry), Exam date and time change	T: +44 (0)844 543 0000 F: +44 (0)20 7294 2413 F: +44 (0)20 7294 2404 (BB forms) E: singlesubjects@cityandguilds.com
International awards Results, Entries, Enrolments, Invoices, Missing or late exam materials, Nominal roll reports	T: +44 (0)844 543 0000 F: +44 (0)20 7294 2413 E: intops@cityandguilds.com
Walled Garden Re-issue of password or username, Technical problems, Entries, Results, e-assessment, Navigation, User/menu option, Problems	T: +44 (0)844 543 0000 F: +44 (0)20 7294 2413 E: walledgarden@cityandguilds.com
Employer Employer solutions, Mapping, Accreditation, Development Skills, Consultancy	T: +44 (0)121 503 8993 E: business@cityandguilds.com
Publications Logbooks, Centre documents, Forms, Free literature	T: +44 (0)844 543 0000 F: +44 (0)20 7294 2413

Every effort has been made to ensure that the information contained in this publication is true and correct at the time of going to press. However, City & Guilds' products and services are subject to continuous development and improvement and the right is reserved to change products and services from time to time. City & Guilds cannot accept liability for loss or damage arising from the use of information in this publication.

If you have a complaint, or any suggestions for improvement about any of the services that we provide, email: feedbackandcomplaints@cityandguilds.com

About City & Guilds

As the UK's leading vocational education organisation, City & Guilds is leading the talent revolution by inspiring people to unlock their potential and develop their skills. We offer over 500 qualifications across 28 industries through 8500 centres worldwide and award around two million certificates every year. City & Guilds is recognised and respected by employers across the world as a sign of quality and exceptional training.

City & Guilds Group

The City & Guilds Group operates from three major hubs: London (servicing Europe, the Caribbean and Americas), Johannesburg (servicing Africa), and Singapore (servicing Asia, Australia and New Zealand). The Group also includes the Institute of Leadership & Management (management and leadership qualifications), City & Guilds Land Based Services (land-based qualifications), the Centre for Skills Development (CSD works to improve the policy and practice of vocational education and training worldwide) and Learning Assistant (an online e-portfolio).

Copyright

The content of this document is, unless otherwise indicated, © The City and Guilds of London Institute and may not be copied, reproduced or distributed without prior written consent. However, approved City & Guilds centres and candidates studying for City & Guilds qualifications may photocopy this document free of charge and/or include a PDF version of it on centre intranets on the following conditions:

- centre staff may copy the material only for the purpose of teaching candidates working towards a City & Guilds qualification, or for internal administration purposes
- candidates may copy the material only for their own use when working towards a City & Guilds qualification

The Standard Copying Conditions (see the City & Guilds website) also apply.

Please note: National Occupational Standards are not © The City and Guilds of London Institute. Please check the conditions upon which they may be copied with the relevant Sector Skills Council.

Published by City & Guilds, a registered charity established to promote education and training

City & Guilds
1 Giltspur Street
London EC1A 9DD
T +44 (0)844 543 0000
F +44 (0)20 7294 2413
www.cityandguilds.com

Docushare Ref. HB-02-0101