

LESSON PLAN

LESSON PLAN NUMBER: 8

Department: AMA Phase 2 Core Mechanical

Aim: To gain knowledge and understanding of Machine Shop Appreciation CME29**Topic:** Phase 2 ROA Core Mechanical – Machine Shop Appreciation CME29**Previous Knowledge:** Phase 1

Target Time	Record of Achievement Reference	Objectives/Content	Tutor Activity	Learner Activity	Resources		Assessment
					Handouts	Equipment	
Session 1 1.40 hrs (Subject to TTE Lunch & Break Rota)	CME29 Machinshop Appreciation Milling a External Keyway- Limits& Fits, Surface Finish, Specific Tolerances	Practical Session Objective 1– (Keyed Shaft) Setting up the milling machine Aligning the vice Selecting the correct milling tool Centring the tool	Set out the days objectives Re-cap planning Tool-Box Talk Explain the risks Break of –If required Explanation Demonstration Technical support	Check the Milling machine Re-cap plan Safe operation of the Milling Machine Milling operations Interim inspection	Drawing	Workshop tools Precision measuring tools	Observation Product
Session 2 1.40 hrs (Subject to TTE Lunch & Break Rota)	CME29 Machinshop Appreciation Milling a External Keyway Cont'd	Practical Session Objective 2– (Keyed Shaft) Selecting the correct speeds & feeds Using the Digital Readout	Recap/ Bridge last session Explanation Demonstration Technical support	Safe operation of the Milling Machine Milling operations Interim inspection Interim inspection	Drawing	Workshop tools Precision measuring tools	Observation Product
Session 3 1.40 hrs (Subject to TTE Lunch & Break Rota)	CME29 Machinshop Appreciation Producing a Internal Keyway &Produce a fitted key Broaching/Slotting/Bench Fitting,	Practical Session Objective 3 - (Keyed Hub) Introduction to key cutting Using Broaches Using the Arbour press	Recap/ Bridge last session Break of –If required Explanation Demonstration Technical support	Select the correct Broach & Guide Safe Use of the Arbour Press Final inspection	Drawing	Workshop tools Precision measuring tools	Observation Product
Session 4 1.40 hrs (Subject to TTE Lunch & Break Rota)	CME29 Machinshop Appreciation Producing a Internal Keyway &Produce a fitted key Cont'd	Practical Session Objective 4 - (Key) Hand Fitting Techniques	Recap/ Bridge last session, intro this session Technical support Examination of product feedback	Bench Fitting Activities Select correct Material for the Key Fit the key using Hand fitting techniques Fit Key Assemble Final inspection	Drawing	Workshop tools Precision measuring tools	Observation Product

Equality & Diversity	Differentiated Learning Activities (Highlight or tick where applicable)
<p><u>Challenge stereotypes by:</u></p> <ul style="list-style-type: none"> • Using non discriminatory language. • Using diverse images, names & scenarios. <p><u>Promote a positive learning environment by:</u></p> <ul style="list-style-type: none"> • Being a positive role model. • Encouraging collaborative work. • Valuing individual characteristics and experiences. • Encouraging learners to participate. • Nurturing mutual respect. • Promoting positive behaviour. <p><u>Promote inclusion by:</u></p> <ul style="list-style-type: none"> • Anticipating and addressing potential barriers to learning. • Using accessible resources. 	<ul style="list-style-type: none"> • Mix of individual, paired and group work. <input type="checkbox"/> • Variety of activities for different learning styles. <input type="checkbox"/> • Learner support. <input type="checkbox"/> • Targeted differentiated questioning to check learning with prompts/leads to support less able learners. <input type="checkbox"/> <p><u>Specific Differentiation activities:</u></p> <ul style="list-style-type: none"> • By Extension <input type="checkbox"/> (For example additional practical tasks after completion of ROA content for the most able) • By Group Work <input type="checkbox"/> (For example grouping learners of mixed ability to support each other within the peer group) • By Content. <input type="checkbox"/> (For example study different materials within the same topic area) • By Activities. <input type="checkbox"/> (For example study the same content but do different activities) • By Gradation <input type="checkbox"/> (for example the same information and activities are given as the activity becomes progressively more difficult only the more able complete the difficult tasks)
<p align="center">Individual Learner / Group Targeted Needs / Strategies (List details where applicable)</p>	
Empty space for individual learner/group targeted needs/strategies	