

LESSON PLAN

LESSON PLAN NUMBER: 10

Department: AMA Phase 2 Core Mechanical

Aim: To gain knowledge and understanding of Machine Shop Appreciation CME2**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 <u>Machinshop</u> <u>Appreciation</u> Manufacture a machined test piece to demonstrate Surface Finish	Practical Session Objective 1– (<i>Surface Finish Cube</i>) Setting up the milling machine Aligning the vice Selecting the correct milling tools Selecting the correct speeds & feeds to achieve the required Surface Finish & Lay	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 Select the correct speeds & feeds Interim inspection	Drawing	Workshop tools Precision measuring tools	Observation Product
Session 2 1.40 hrs (Subject to TTE Lunch & Break Rota)	CME29 <u>Machinshop</u> <u>Appreciation</u> Manufacture a machined test piece to demonstrate Surface Finish Cont'd	Practical Session Objective 2– (<i>Surface Finish Cube</i>) Setting up the Centre Lathe Setting up the Four Jaw Chuck Selecting the correct turning tools Selecting the correct speeds & feeds to achieve the required Surface Finish & Lay	Recap/ Bridge last session Break of –If required Explanation Demonstration Technical support	Safe operation of the Lathe Turning operations Set the four jaw chuck Select the correct speeds & feeds Interim inspection	Drawing	Workshop tools Precision measuring tools	Observation Product
Session 3 1.40 hrs (Subject to TTE Lunch & Break Rota)	CME29 <u>Machinshop</u> <u>Appreciation</u> Manufacture a machined test piece to demonstrate Surface Finish Cont'd	Practical Session Objective 3 – (<i>Surface Finish Cube</i>) Setting up the Lapping Machine Selecting the appropriate Abrasive Medium Selecting the time needed to achieve the required Surface Finish & Lay	Recap/ Bridge last session Break of –If required Explanation Demonstration Technical support	Safe operation of the Lapping Machine Selecting the correct abrasive medium Interim inspection	Drawing	Workshop tools Precision measuring tools	Observation Product
Session 4 1.40 hrs (Subject to TTE Lunch & Break Rota)	CME29 <u>Machinshop</u> <u>Appreciation</u> Manufacture a machined test piece to demonstrate Surface Finish Cont'd	Practical Session Objective 4 - (Key) Using Hand Fitting Techniques Filing to achieve the required Surface Finish & Lay	Recap/ Bridge last session, intro this session Technical support Examination of product feedback	Bench Fitting Activities Select the correct File Shape/Type Select the correct File Cut 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 y 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>	