

LESSON PLAN

LESSON PLAN NUMBER: 1
Department: AMA Phase 2 Core Mechanical
Aim: To gain knowledge and understanding of Limits & Fits CME6

To gain knowledge and understanding of Surface Finish Applications & Measurement

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)	Phase 1 ROA Module CME6 - 1,2,3&4 Limits & Fits	Objective 1 (<i>Limits & Fits</i>) Tolerancing - Applications & Uses Examples of a tolerances - unilateral tolerance bi-lateral tolerance fits by identification of tolerance	Set out the days objectives Introduction to the carousel Explanation of the objectives Ask open questions As targeted questions Encourage discussion Support	Identify the objectives for the day Take notes Discuss examples of tolerances Group interaction	Tolerance Handout	Classroom IWB PowerPoint Presentation Video	Observation <i>Q&A</i>
Session 2 1.40 hrs (Subject to TTE Lunch & Break Rota)	Phase 1 ROA Module CME6 - 5 Limits & Fits	Objective 2 (<i>Limits & Fits Cont'd</i>) Standards BS4500 Types & Classes of fit Interpreting & Understanding the data sheet	Recap/ Bridge last session, intro this session Explanation of examples of Limits & fits for specific applications Ask open questions Ask targeted questions Support during write-up	Takes notes Complete Write-up	BS 4500 Data Sheet Limits & Fits Handout Limits & Fits write-up	Classroom IWB	Observation Written – (<i>Write-up</i>)
Session 3 1.40 hrs (Subject to TTE Lunch & Break Rota)	Phase 1 ROA Module CME29-5 Surface Finish	Objective 3 (<i>Surface Finish</i>) Grades of finish for various machining applications	Introduction to topic Explanation of the objectives Demonstration Ask open questions Ask targeted questions Encourage discussion	Take notes Discuss examples of grades of surface finish Group interaction	Surface Roughness Measurement Handout	Classroom PowerPoint Presentation IWB	Observation <i>Q&A</i>
Session 4 1.40 hrs (Subject to TTE Lunch & Break Rota)	Phase 1 ROA Module CME29-5 Surface Finish	Objective 3 (<i>Surface Finish Cont'd</i>) How to Measure Tolerances & Drawing Symbols Lay	Introduction to topic Explanation of the objectives Demonstration Ask open questions As targeted questions Encourage discussion	Take notes Discuss examples of grades of surface finish Group interaction	Drawings Surface Finish Comparator	Classroom IWB	Observation <i>Q&A</i>

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>	