

## **Unit 10: Computer Aided Design in engineering**

### **Toolmakers clamp**

9<sup>th</sup> November 2017

### **This assignment is evidence of P3, P4, M2 and D2**

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On the next page is a customer drawing of a toolmakers clamp. It's not to BS8888 standard. Using a suitable 2D CAD package:

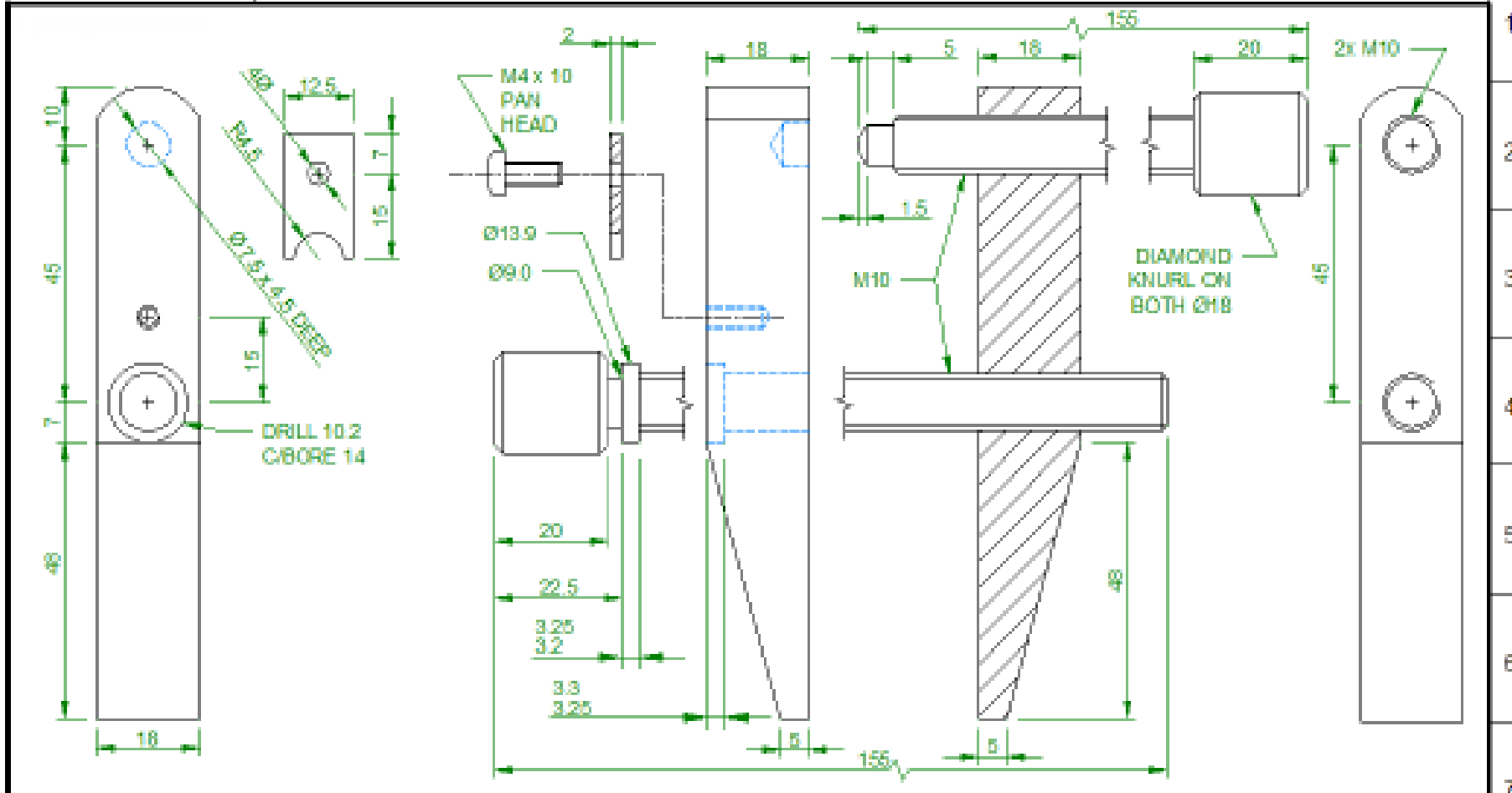
1. Draw to BS8888 standard the 7 parts that need to be manufactured
2. Then draw an assembly drawing of the toolmakers clamp

**NOTE: Each drawing should be of an appropriate scale using third angle projection, and in a title box properly filled out.**

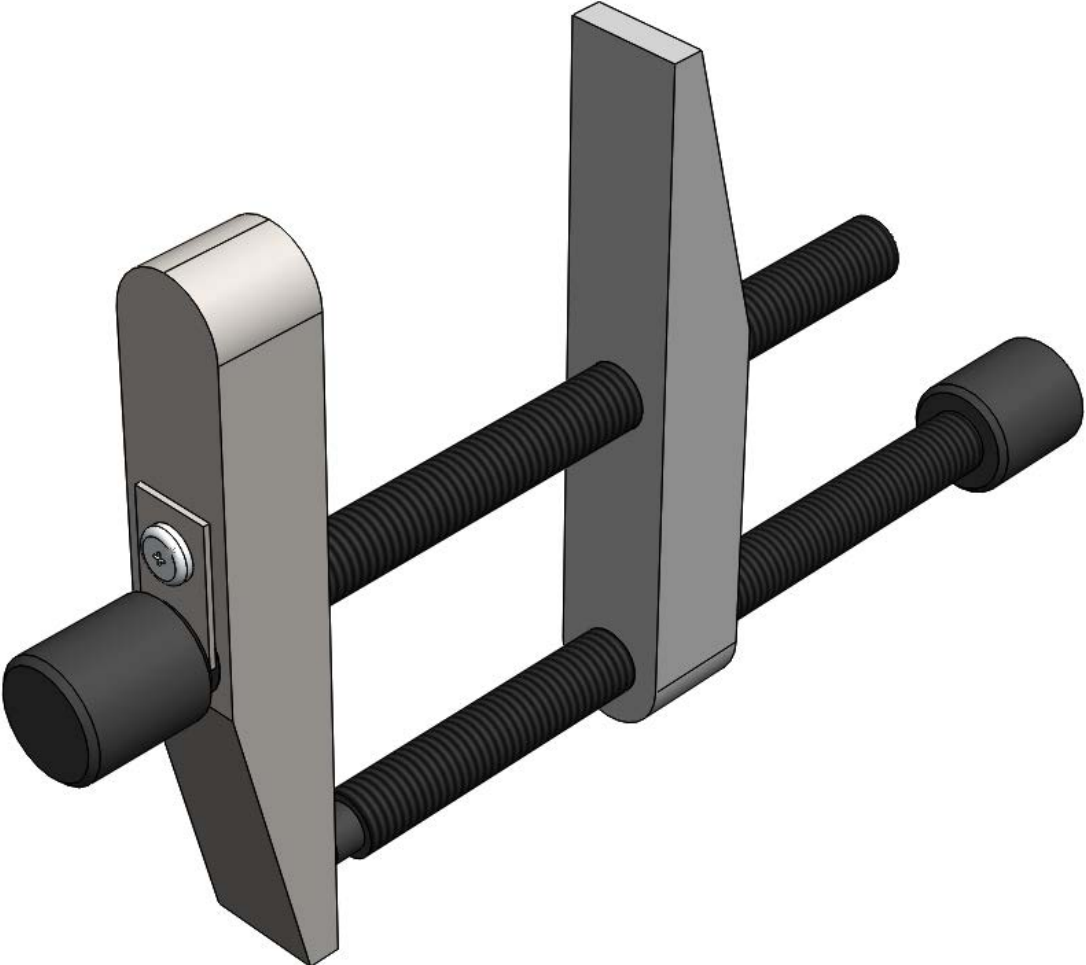


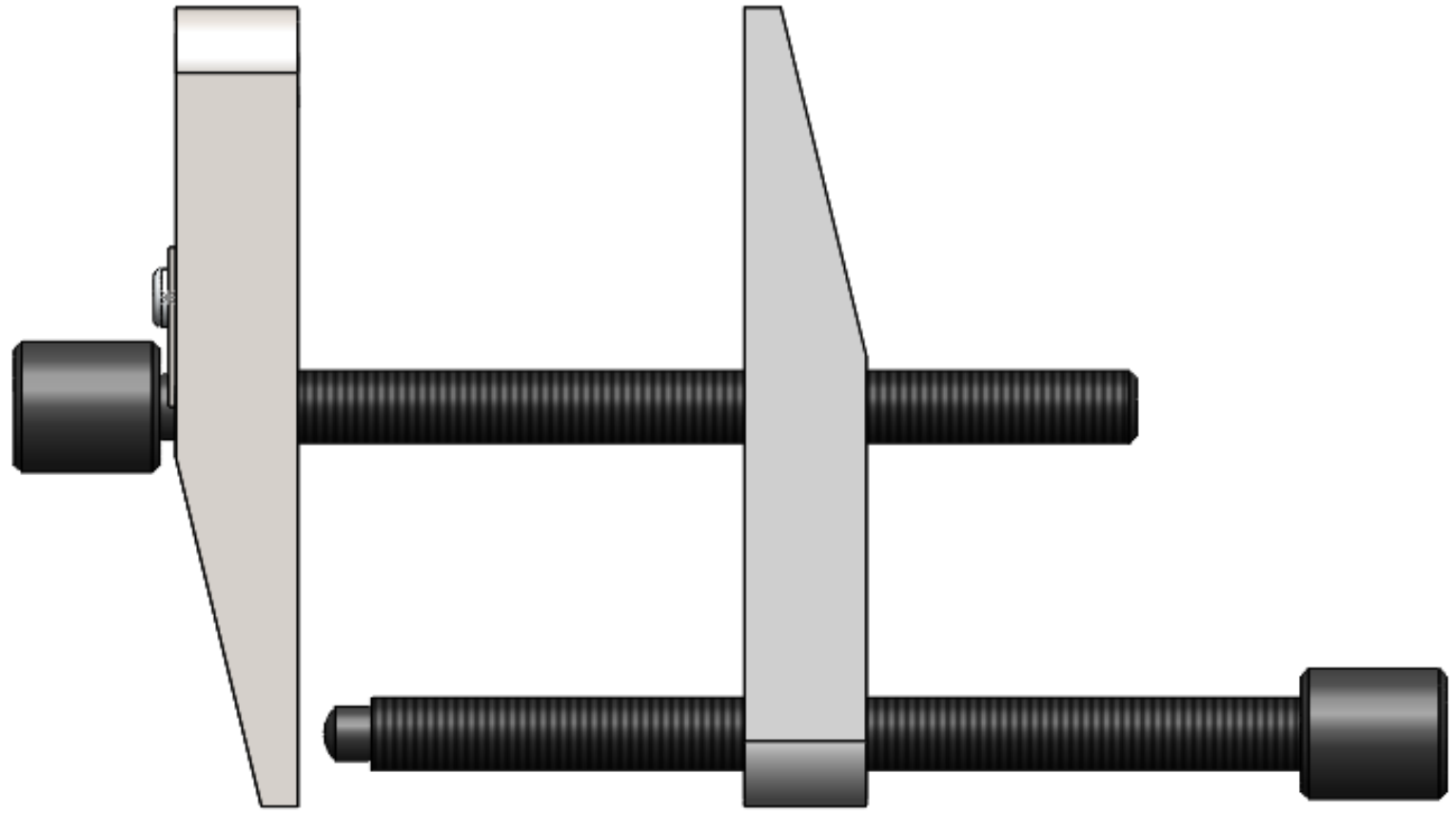
DRAWING NUMBER  
018

ALL DIMENSIONS ARE IN MILLIMETRES, UNLESS OTHERWISE STATED. CHAMFERS 1.5mm

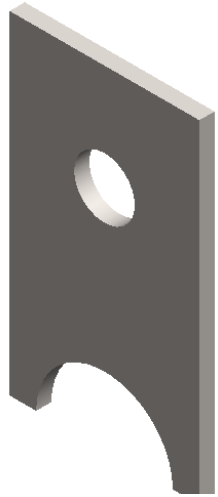


B		21/04/2010	NEW CUSTOMER			GENERAL DIMENSIONAL TOLS:		MATERIAL TYPE MILD STEEL		MATERIAL FORM VARIES	
COPY	MODIFICATION	DATE	DRN	CHD	AP'D	MACHINED LINEAR TOL. = ± 0.25		TITLE <b>TOOLMAKERS CLAMP</b>			
<p>This is a customer drawing. It is not to BS8888. Draw to BS8888 standards, the 5 parts that need to be manufactured. Each drawing should be 1:1 scale, and in an appropriate title box. Then draw an assembly of the toolmakers clamp.</p>						UNMACHINED LINEAR TOL. = ± 0.25					
						OTHER TOLERANCES STATED					
						MACHINING SHOWN THUS					
						REMOVE ALL BURRS & SHARP EDGES		FINISH AS MODEL	SHEET <b>A4</b>	SCALE <b>1:1</b>	DRAWING NUMBER 018
						SEE DRAWING NUMBER		SHEET 1 OF 1 SHEETS			
A		B		C		D		F		G	H





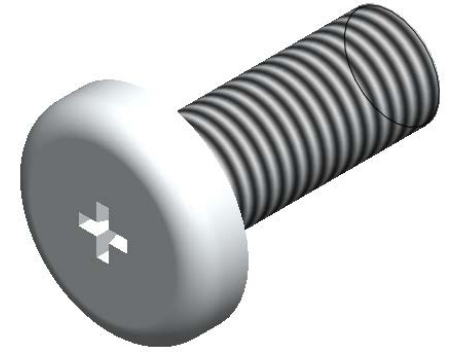
Components



*Plate*



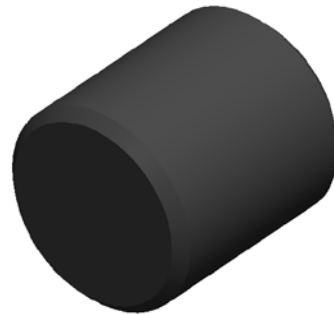
*Centre screw*



*Screws*



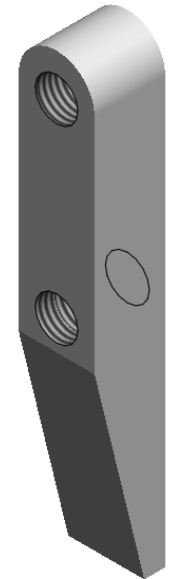
*Upper jaws*



*Screw head*



*Outer screw*



*Lower jaws*

