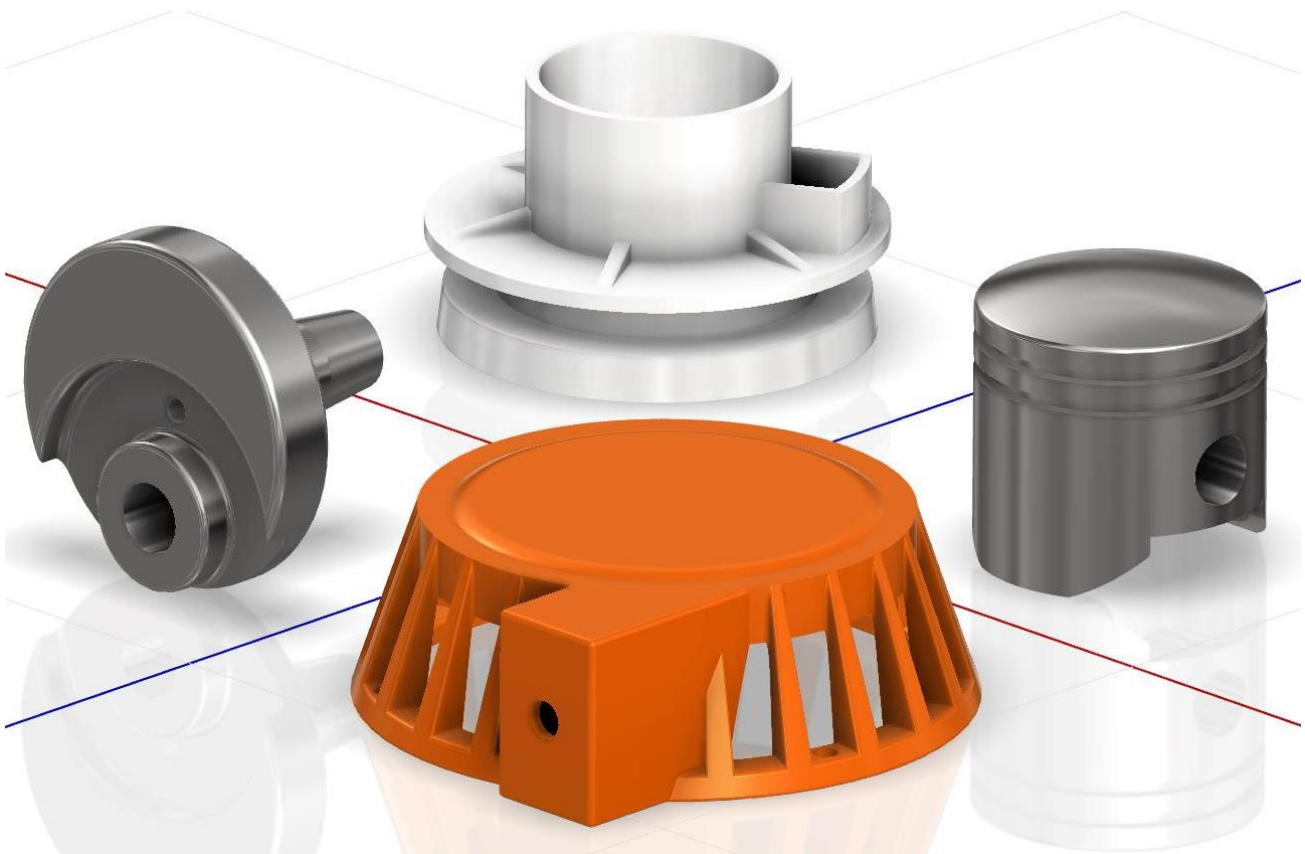


MECHANICAL ENGINEERING CAD

Pre-Passive Activity: Part Modelling Speed Test



TASK: Modelling parts in quickest time possible.

Time: 1.0 hour maximum time allowed

Given: Part Drawings

Task:

1. Create 3D models for all of the parts shown on the part drawings.

USE OF COMPUTER: Use of the computer is allowed from the beginning of the stated time.

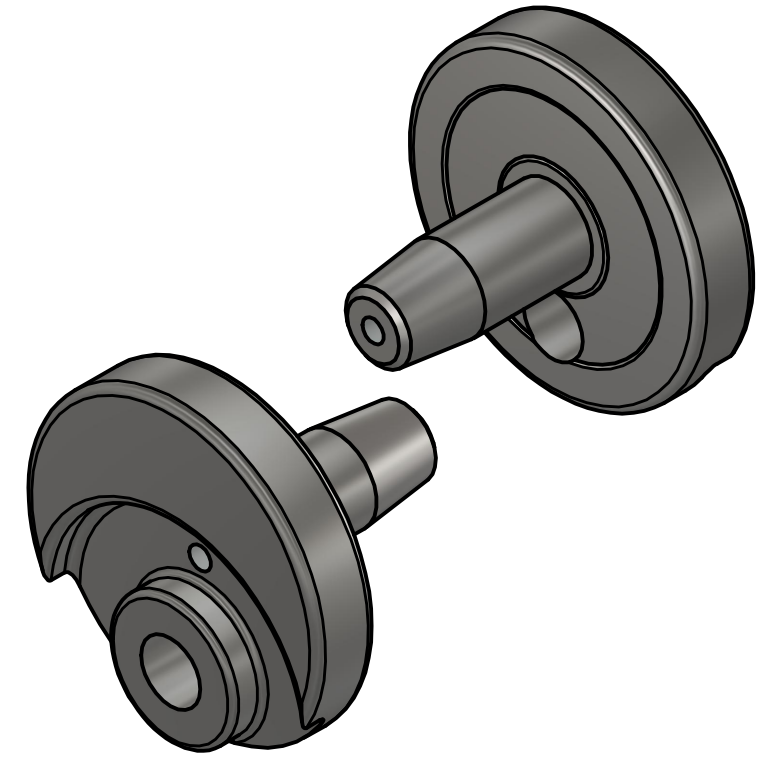
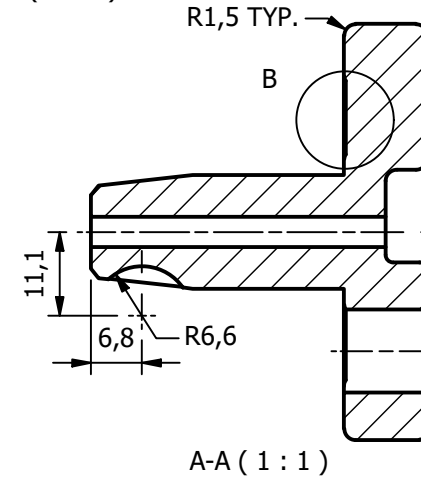
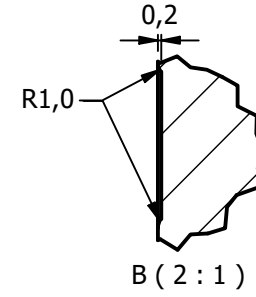
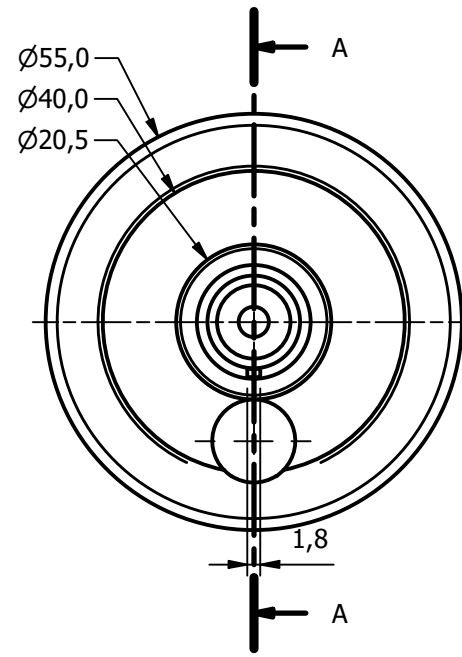
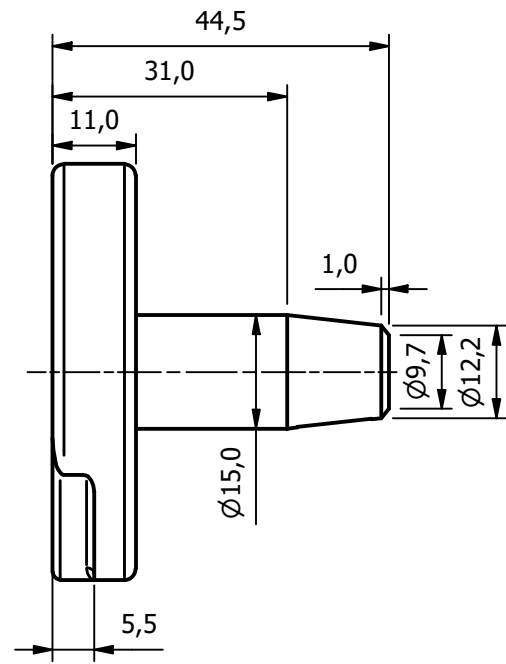
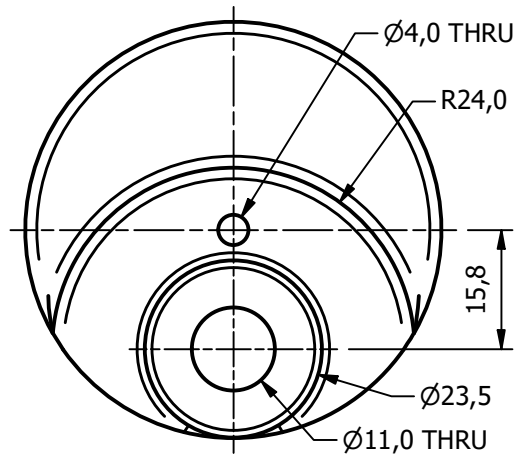
OUTPUT: Software Modeled Parts

NOTES: All marks are to be taken from digital files and printing is not required. All rendering of animations must be completed within the stated time.

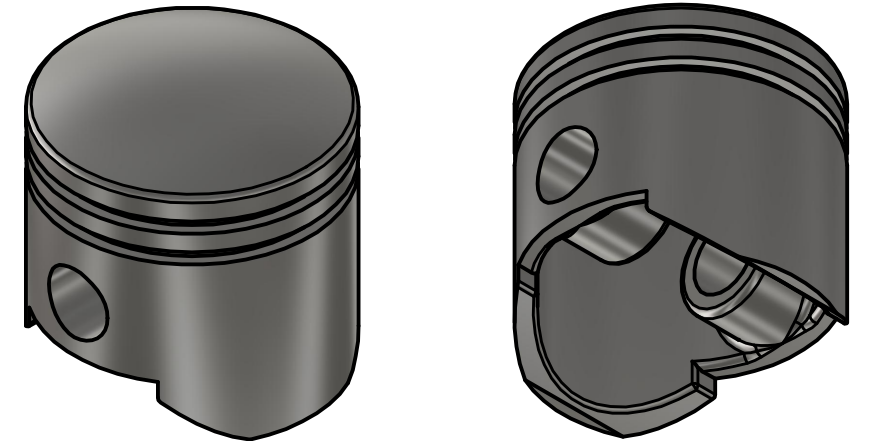
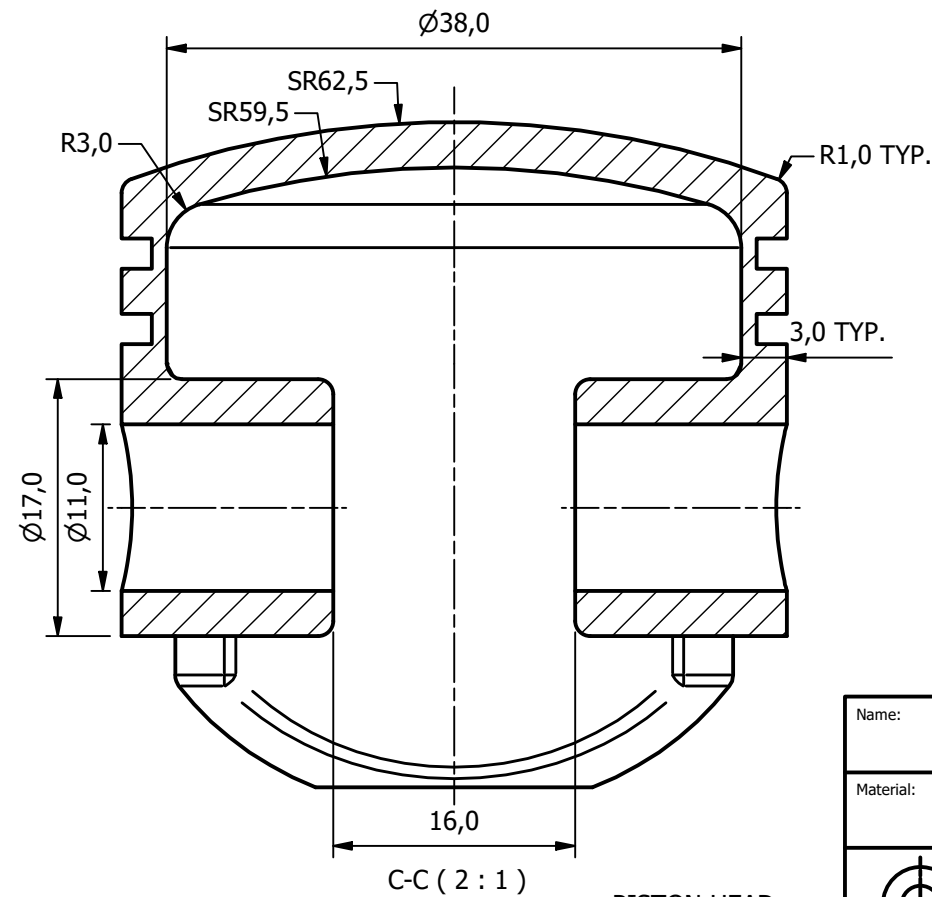
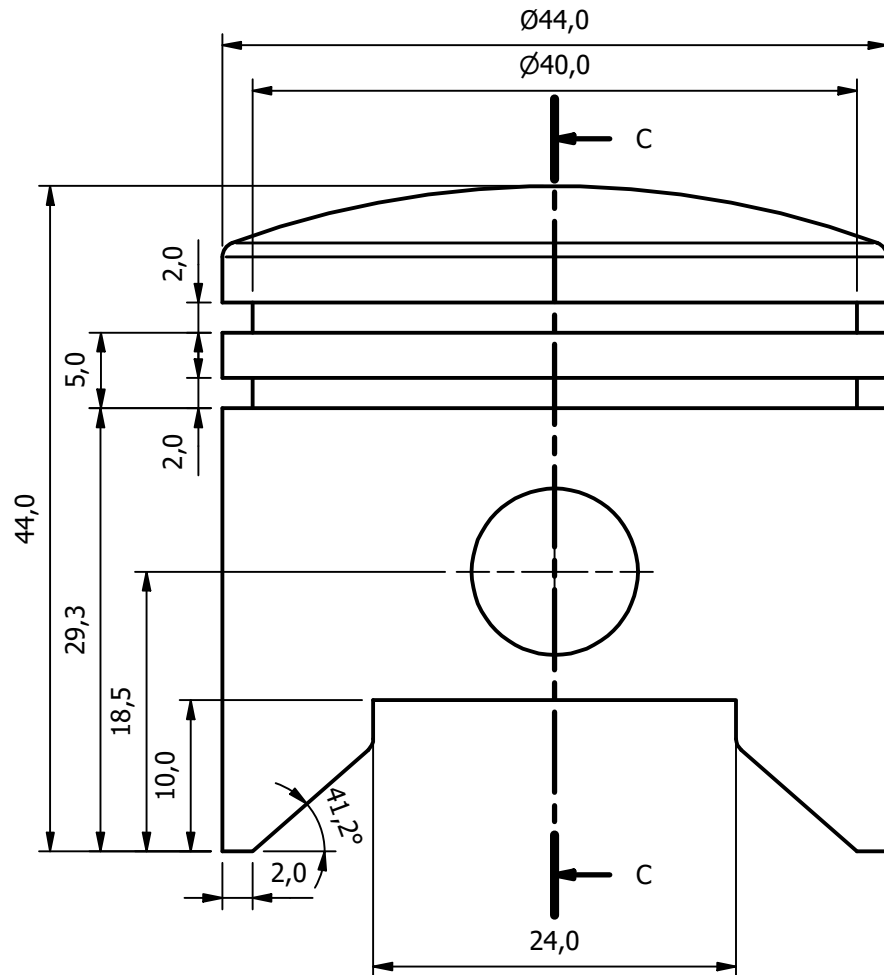
MARKING

All Marking is Objective and broken down as follows:

Aspect	Max Mark
Completed within in 1 hour	100
Total Marks	100

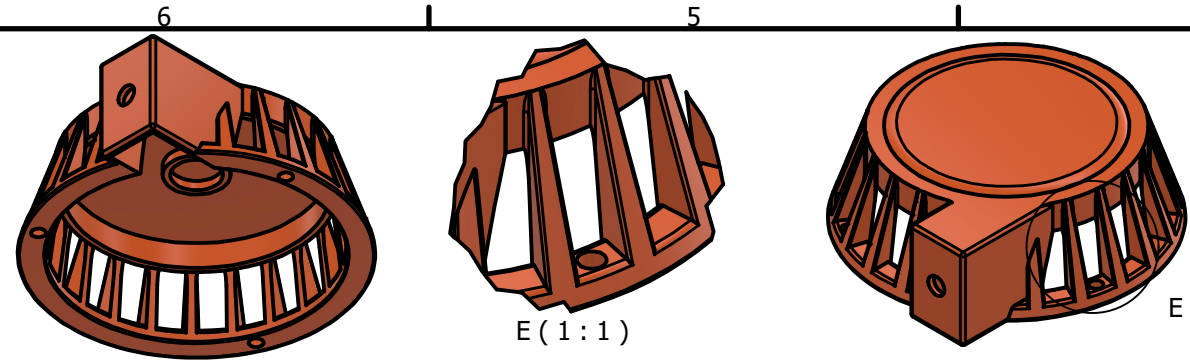


CRANK
Material: Mild Steel



PISTON HEAD
Material: Mild Steel

Name:	Date:	Title:	
Material:	Mass:	WorldSkills UK CPD Event	
	Sheet Size:	A3	Tolerances unless otherwise stated to ISO 2768 mK
	Sheet Number:	1 of 5	Casting Tolerances to ISO 8062
	Scale to ISO 5455	General Standards used ISO 128	Country: UK
			All dimensions in mm



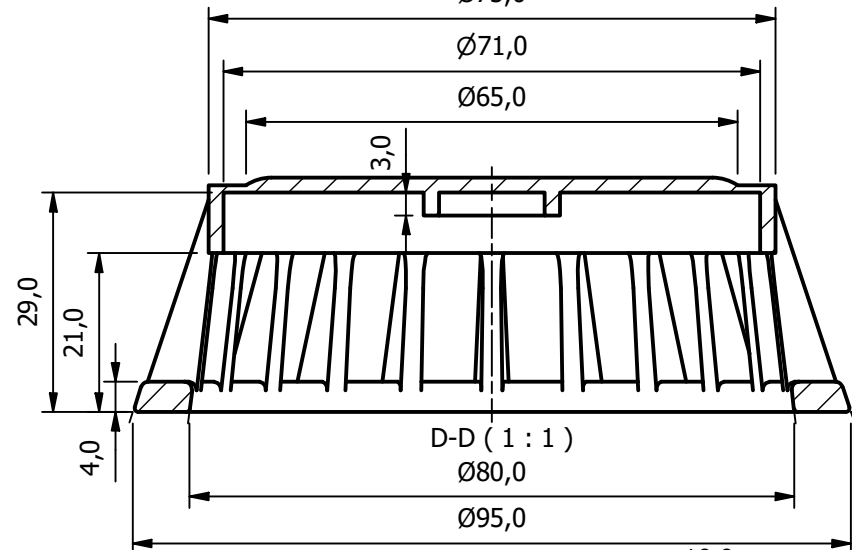
E (1:1)

E

Ø75,0

Ø71,0

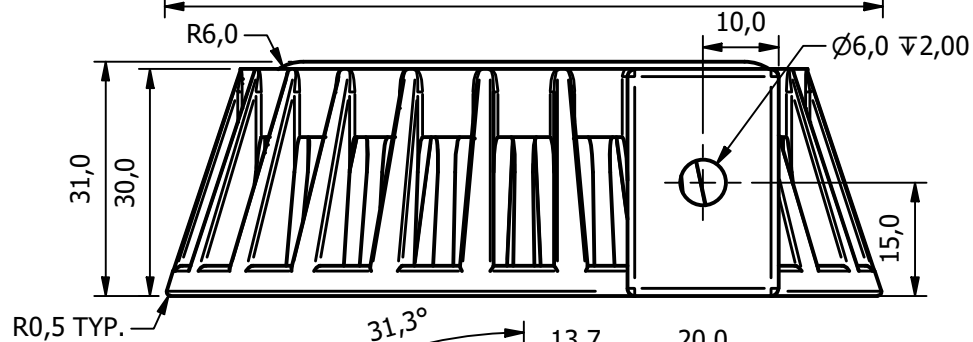
Ø65,0



D-D (1:1)

Ø80,0

Ø95,0



R0,5 TYP.

31,3°

8,0

13,7

20,0

3 x Ø4,0 THRU

R39,6

2,0

50,0

D

D

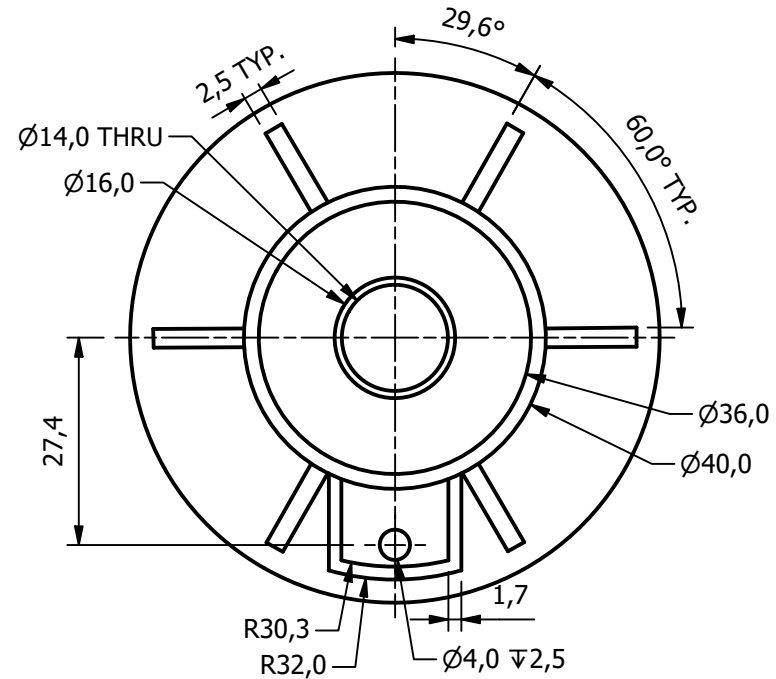
Ø18,0

Ø14,0

Ø71,0

23,5°

PULL CORD GRILL
Material: ABS PLASTIC
Appearance: Smooth, Light Orange



Ø14,0 THRU

Ø16,0

27,4

2,5 TYP.

29,6°

60,0° TYP.

Ø36,0

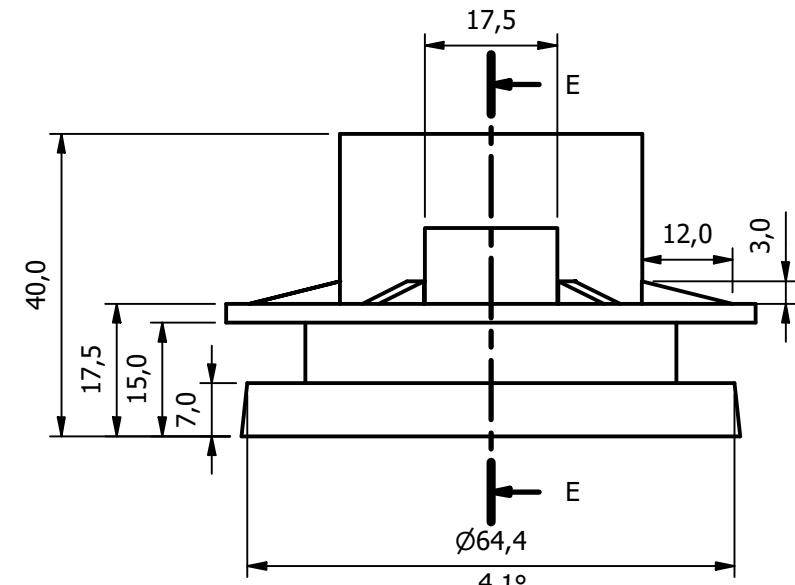
Ø40,0

R30,3

R32,0

Ø4,0 2,5

1,7



17,5

E

12,0

3,0

40,0

17,5

15,0

7,0

Ø64,4

4,1°

E

Ø70,0

Ø66,0

Ø64,0

F

Ø70,0

Ø66,0

Ø64,0

22,5° CRS

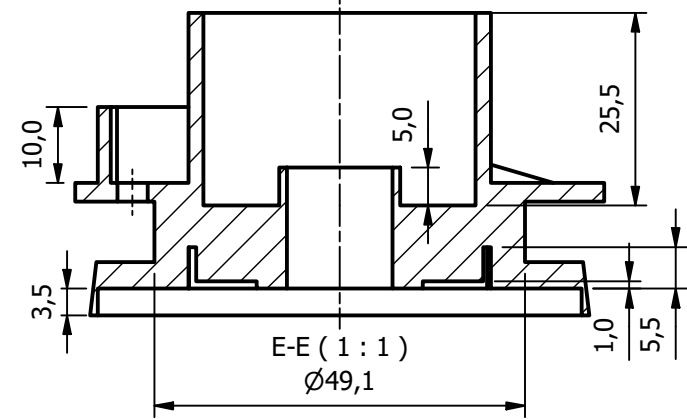
6,3 CRS

R20,0

R19,0

R11,0

F (2:1)



E-E (1:1)

Ø49,1

10,0

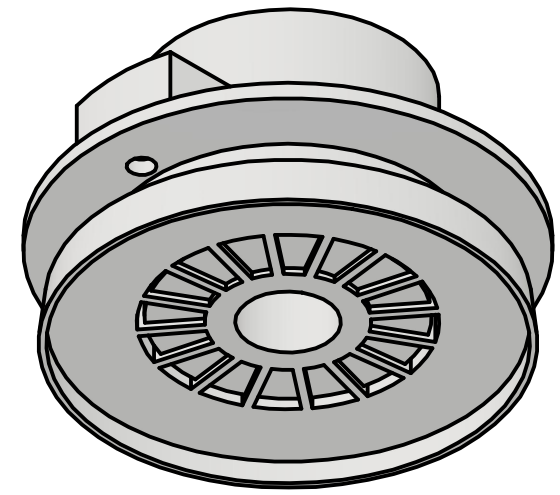
5,0

25,5

3,5

1,0

5,5



Name:	Date:	Title:
Material:	Mass:	WorldSkills UK CPD Event
Sheet Size:	A3	Tolerances unless otherwise stated to ISO 2768 mK
Sheet Number:	2 of 5	Casting Tolerances to ISO 8062
Scale to ISO 5455	General Standards used ISO 128	Country: UK
		All dimensions in mm

CORD CASE
MATERIAL - PEAK PLASTIC
SCALE - 1:1