Material choice

# Part number	Nome	Price CAD \$	Dimensions
8909 K 6 1	Cast Iron \$6" 1	356-2915	\$6" L=1ft
8 926 K32	Cart Iron Disk Ø 8° 1.25°	73.72	\$810 L=1.25

Drawing name or number : **Tube Teal** CONCORDIA UNIVERSITY MANUFACTURING PROCESSES SHEET Name of operator: Grace Kafechina Date: Date: Time In: Time In: Time Out: Time Out: Name of operator2 [assistant/supervisor/etc] Date: Name of staff member responsible Time In: EIR / Process approval: Time Out: Total Expected Duration [min] = 22.66427331 Op. Name Machine Tool Name # of teeth Carbide turning/facing tool Facing Lathe 1 Cutting Speed, V Max Dia Tool/Part Spindle Speed Tool Feed 102 160 0.013 6 Actual Comments: Before facing, the 2 inches of cast iron need to be cut so that about 6.25" remain.After the 6.25" rod undergo Actual D.O.C Machine Feed MRR Expected Duration [min] Duration [min 1.32 2.265404752 0.1 Drawing Op. Name # of teeth Machine Tool Name Carbide facing/turning tool Turning Lathe 1 Max Dia Tool/Part Cutting Speed, V Tool Feed Spindle Speed 102 160 0.013 6 Actual Comments: The diameter of the rod purchased need to be reduced. It has to go from 6" to 5 5.75". After the piece is Actual MRR D.O.C Machine Feed Expected Duration [min] Duration Imir 0.1 1.32 1.24 4.530809505 Drawing Op. Name Machine Tool Name # of teeth Center Lathe carbide center drill of 0.5" diameter 2 drillina Cutting Speed, V Max Dia Tool/Part Spindle Speed Tool Feed 1222 0.5 160 0.016 Actual Comments Actual D.O.C Machine Feed MRR Expected Duration [min] Duration [min] 0.010225785 0.4 39.117 N/A

CONCO	RDIA LINIVERSITY	/ MANI IE	ACTURIN	Drawing name or number : Tube Teal					
CONCORDIA UNIVERSITY MANUFACTURING PROCESSES SHEET								Name of operator: Grace Kafechina	
		Date:					[assistant/supervisor/etc]:		
		Time In:					ember responsible :		
Time Out: Time Out		Time Out:					Process approval : /		
								otal Expected Duration [min] = 87.32663361	
Op#	Op. Name	Machine			Tool Name		# of teeth	Drawing	
4	drilling	Lathe	Carbide dri			it of 1	2		
Cutting Speed, V Tool Fee		Tool Feed	Max Dia Tool/Part		Spindle Speed				
		0.016				611			
	160		·	1	Actual	A ctual		3 Jours Suude -	
					Actual				
	D.O.C Machine Feed		ne Feed	MRR Expected Duration [min]		Actual Duration [min]	Comments		
	6 19.56		.56	4.	4.71 0.30677356				
Op #	Op. Name	Machine		•	Tool Name		# of teeth	Drawing	
	Poring	Lotho	_						
6	Boring	Lathe		Boring bar with carbide insert			1		
Cutting Speed, V Tool Fe			Max Dia Tool/Part			Spindle Speed			
160		0.013				106			
			5.	75	Actual				
				, locad.			3 your duck		
	D.O.C Machine Feed		ne Feed	MRR Expected Duration [min]			Actual Duration [min]	Comments	
	0.1	1.38		17.64		4.342025775			
									_
Op#	Op. Name	Machine			Tool Name		# of teeth	Drawing	
	Polygone turning	Lathe	ca	carbide insert circular turning tool			4		
Cutting Speed, V		Tool Feed	Max Dia Tool/Part			Spindle Speed			
160		0.013				107			
			5.7		Actual			3 row durch	
	D.O.C	Machin	Machine Feed		RR	Expected Duration [min]	Actual Duration [min]	Comments: MRR calculated for all material removed not per passes	
0.1		5.	5.58		.83	0.179344543			

Drawing name or number: Flange CONCORDIA UNIVERSITY MANUFACTURING PROCESSES SHEET Name of operator: Grace Kafechina Name of operator2 [assistant/supervisor/etc] Date: Date: _____ Time In: Time In: Name of staff member responsible : Time In: Time Out: Time Out: EIR / Process approval: Total Expected Duration [min] = 9.076957687 Op. Name Tool Name Machine # of teeth carbide turning/facing tool Lathe Facing 1 Cutting Speed, V Tool Feed Max Dia Tool/Part Spindle Speed 76 0.013 8 160 Actual Comments: Before facing, cut a hole of about 4" with a hole saw Actual MRR D.O.C Machine Feed Expected Duration [min] Duration [min 0.1 0.99 3.80 2.013693113 Op. Name Machine Tool Name # of teeth 2 Boring Lathe Boring nar with carbide insert Tool Feed Max Dia Tool/Part Spindle Speed Cutting Speed, V 76 160 0.013 8 Actual Comments: Actual MRR D.O.C Machine Feed Expected Duration [min] Duration [min 0.99 17.64 1.006846557 0.1 Drawing Op. Name Machine Tool Name # of teeth Center Lathe carbide center drill 2 Max Dia Tool/Part Cutting Speed, V Tool Feed Spindle Speed 2445 160 0.016 0.25 Actual Comments: Repeat 6 times , workholding on a 4 jaw chuck Actual MRR Expected Duration [min] D.O.C Machine Feed Duration [min] 78.23 0.002556446 0.2

CONCORDIA UNIVERSITY MANUFACTURING PROCESSES SHEET								Drawing name or number :	Flange
CONCORDIA UNIVERSITT MANOFACTORING PROCESSES SHEET								Name of operator:	Grace Kafechina
Date: Date		Date:	Date: Date:				[assistant/supervisor/etc]:	1	
Time In:		Time In:		Time In:		ember responsible :	1		
	Time Out:		Time Out:			Time Out:		Process approval :	/
						·	To	otal Expected Duration [min] =	0.132832952
Op#	Op. Name	Machine	Tool Name				# of teeth	Drawing	
4	drilling	Lathe		carbide drill bit			2	_	
	Cutting Speed, V	Tool Feed	Max Dia Tool/Part			Spindle Speed			
160		0.016		4	1528			h disarts.	
			Ü	.4 Actual		ual			
D.O.C		Machine Feed		MRR		Expected Duration [min]	Actual Duration [min]	Comments: Repeat for six holes , define pitch di	ameter before mounting
	1 4		.90 6.77		77	0.020451571		1	
		<u>. </u>					<u> </u>		
Op#	Op. Name	Machine	Tool Name				# of teeth	Drawing	
5	threading	Milling	thread mill			I		1	
Cutting Speed, V		Tool Feed	Max Dia Tool/Part		Spindle Speed		1		
		#DIV/0!			#DIV/0!		1		
		Actual				•		1	
D.O.C		Machin	Machine Feed		RR	Expected Duration [min]	Actual Duration [min]	Comments:	
		#DI	#DIV/0!					1	
Op#	Op. Name	Machine		Tool Name			# of teeth	Drawing	
6	countersinking	Lathe		countersinking drill			5	-	
Cutting Speed, V		Tool Feed	Max Dia Tool/Part		Spindle Speed		None of the second		
160		0.040	0			1111		O _s kaski.	
		0.016	0.55		Actual				
D.O.C		Machine Feed		M	MRR Expected Duration		Actual Duration [min]	Comments: Turn the part and repeat for each ho	ple
0.075		88.90		0.000843627]		