

Provincial Scope Document

CNC Machining (Post Secondary) 2017



Contest Duration: 7 hrs. (3.5 hrs. Lathe - programming, 3.5 hrs. Mill - programming & operation)

Check in time: 7:40 am. - **Orientation:** 7:45 am. - **Contest Start:** 8:00 am.

Purpose of the Challenge:

Asses the knowledge and skills of each competitor in the areas of:

1. Interpretation of Engineering Drawings
2. Operation of CNC Machining Centres
3. CAD-CAM Programing using Mastercam - Lathe & Mill
4. Metrology

Skills & Knowledge to be Tested:

CAD/CAM - Lathe Programming	CAD/CAM - Mill Operation & Programming
<ul style="list-style-type: none">• Facing	<ul style="list-style-type: none">• Applied Metrology
<ul style="list-style-type: none">• Diameters: External & Internal	<ul style="list-style-type: none">• Contouring
<ul style="list-style-type: none">• Grooving: External & Internal	<ul style="list-style-type: none">• Drilling
<ul style="list-style-type: none">• Threading: External & Internal	<ul style="list-style-type: none">• Pocketing
<ul style="list-style-type: none">• Tapers: External & Internal	<ul style="list-style-type: none">• Facing
	<ul style="list-style-type: none">• Engraving

Equipment / Tools / Materials

Provided by the competitor: CSA approved personal protective equipment (Safety Glasses & Safety Boots)

Provided by the committee: All required equipment, measuring tools, cutters and materials.

Judging / Distribution of Marks

	Turning	Milling
Verification of CNC program	5%	
Compliance with OHS regulations		5%
Compliance with drawings specifications	10%	35%
Project Completion	20%	10%
	35%	65%
Total	100 %	

Note: in case of a tie in this competition, the competitors will write a 25 question theory test for an additional 25%.

Technical Committee

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David Araujo

Troy Littleford

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Sandvik Coromant

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Skills Canada BC reserves the right to update contest information. Please check the website for changes.