



## 2<sup>nd</sup> ANNUAL BEAUFORT DELTA REGIONAL SKILLS COMPETITION – SCOPE DOCUMENT

### WOOD LATHE TURNING Secondary

#### PURPOSE OF THE CHALLENGE

**DURATION: 5-6 HOURS**

Assess the contestant's precision Lathe Turning skills and trade knowledge through practical testing at the secondary level.

The contest will occur over one day and will consist of practical Wood Turning and technical design using a conventional engine wood lathe and conventional woodworking shop tools.

#### SKILLS AND KNOWLEDGE TO BE TESTED

##### GENERAL:

- Quality, accuracy, and attention to detail while performing tasks necessary to complete a given projects
- Site housekeeping
- Ability to safely work to a deadline

##### PRACTICAL SKILLS AND KNOWLEDGE:

##### Conventional Engine Lathe may include:

- External cylindrical turning
- Internal turning (bowl)
- Grooving (external and/or internal), and taper turning
- Applied understanding of the properties of wood
- Assembly of parts
- Proper finishing techniques

##### Conventional Shop Tool Use:

- Drilling,
- Band saw,
- 3/8" cordless drill
- Designing, sizing parts, dimensioning, including calculations
- Assembly of parts

#### EQUIPMENT, TOOLS, SUPPLIES, AND CLOTHING

- The dimensioning system or equipment may be metric or Imperial (Dependant on machine availability).

**All cutting tools will be supplied: competitors will not be allowed to use their own cutting tools.**

**Note:** Contestants may be required to share supplied tools and equipment depending on availability of equipment and competitor numbers.

**The following tools will be supplied by the competitor:**

- 6-8 inside and outside calipers
- Pencil or marking tool
- Combination square
- 6 inch rule
- Tape measure

**The following items must be supplied and worn by the contestants for the competition:**

- CSA approved safety glasses and safety boots or shoes
- Shop coat or equivalent (optional)
- Hearing protection (supplied)
- CSA approved hard hat

**If a competitor does not have all the necessary Personal Protection Equipment, please let Skills Canada NWT know as soon as possible. Competitors are required to wear the PPE listed above and cannot compete without it, but some PPE may be available for competitor use.**

**Contestants may bring the following optional items:**

- Woodturning design Handbook
- A non-programmable scientific calculator

**Project Materials:**

The project materials may include:

- Hardwood and Softwood
- Veneered Wood
- Plastic
- Acrylic

Each contestant will be supplied with the material to complete the lathe and milling machine projects.

**Note:** 50 points will be removed from the 750 point dimensioning/tolerancing category for every secondary work piece required due to damage or loss.

**Safety Orientation:**

Prior to the start of the competition contestants and coaches will be provided with a comprehensive safety rules orientation which will include machine operations. This orientation will be up to one hour.

**POINT BREAKDOWN / 1000 TOTAL**

Project assembly	50
Compliance with Occupational Health and Safety regulations	50
Compliance with dimensions, structural conformity	100
Compliance with appropriate surface finish of proper sanding, deburring, and final finish	350
Tolerances and fits as specified in plans and design specifications	450
<b>Total</b>	<b>1000</b>

In the event of a tie the contestant who completes the project in the shortest period of time will be awarded first place.

**TECHNICAL COMMITTEE MEMBERS & JUDGES**

**JP Langlois, Technical Chair – BDEC**