

# Tsubaki of Canada Capabilities

Tsubaki of Canada, Ltd. (TCL)

Location: Mississauga, Canada

The information contained herein may be used as a guide to aid in identifying MTO sprocket opportunities that fall within TCL's core manufacturing competency. When qualifying a given quote request, the discussion topics listed below may prove critical in quoting the most cost effective solution, and supplying the correct sprocket for a given application. For example; recognizing required material type, coating type, documentation and inspection services required, etc. will help UST be aware of what the requirements are at the onset of the process. When quoting MTO sprockets, it is also important to identify and note quantity variables and delivery expectations set forth by the customer.



## **Core Pitch & Size Range:**

- ANSI Roller Chain Sprockets : 100 through 240 Pitch
- ECD Sprockets: 1.654" Pitch and Greater
- 15" OD and above or 30+ teeth for ANSI sprockets
- 200-8 was the largest sprocket ever manufactured at this location

## **Associated Cost Drivers:**

- 25-80 Pitch sprockets have higher costs, but fast delivery may offset an increase in sell price
- The heavier the sprocket, the more competitive TCL can be due to incurred freight costs from global sources

## **TCL Limits (TCL will outsource when maximums are exceeded):**

- 96" OD for single plate (machined up to 60", flame-cut above)
- 60" OD for multi-strand (has to be hobbed, cannot flame cut)
- 39" Length-Thru-Bore
- 12" thick for 1045 material, 24" for ASTM A36
- *Spline Capability*
  - Most external splines are manufactured in-house
  - Internal splines are outsourced unless they have the broach
  - Depending on the volume and the business case, broaches can be purchased or rented

## **Coating Capabilities:**

- In-house capability: black and orange paint, powder coating, black oxide (8' OD max)
- Outsourced: clear zinc, yellow zinc, electroless nickel, phosphate, chrome, anodizing
- Impact on leadtime ranges from same day (in-house processing) to 3-5 days for outsourced coatings

## **Material Types: Readily Available & TCL Can Process:**

- 1045
- A36
- 4140
- 4340
- 4112
- 8620
- 304SS
- 316SS
- 410SS



### **CAD Capability; TCL Policy & Availability of Drawings:**

- TCL prefers not to provide detailed drawings until ARO
- If drawings are required before receipt of order, the drawing will not depict critical dimensional data
- Drawings are typically supplied 1-2 days ARO
- Drawings can be supplied in the following formats: SolidWorks, DXF, DWG, PDF

### **Inspection/Documentation/Certification Capabilities:**

- TCL does not have an optical comparator in-house
- TCL does have a CMM in-house, and can trace material up to 16" OD with .008" accuracy. Top table CMM accuracy to .0001"
- TCL has a form tracer in house that generates DXF drawings
- TCL can supply certificates of conformance (COC's), in process inspection documents, material certifications, and CMM reports. These requirements must be noted up front (at time of quote), and will usually incur additional charges
- TCL can provide material certifications with regard to chemical composition and mechanical properties
- This is provided by material supplier upon request.
- TCL has access to a metallurgical lab that can conduct more detailed analysis at an additional charge