



**THE MACHINE:**  
**HARDINGE TALENT TT51**

**MACHINE SPECIFICATION**

- Finish parts complete in one machine – less parts handling
- Reduced cycle times – two tools in the cut simultaneously
- Reduced work in process
- Reduced lead time for lean manufacturing and JIT delivery
- High volume production – long run batches or dedicated production of simple to complex components
- Easier processing of part families and less setups due to the large number of available tool stations and configurations
- Reduced setup time with the use of BMT industry standard tooling with very high repeatability
- Compact design requires less floor space than most competitors in its class
- Reduced labor costs – one operator can run multiple machines
- Full Y axis capability on upper turret

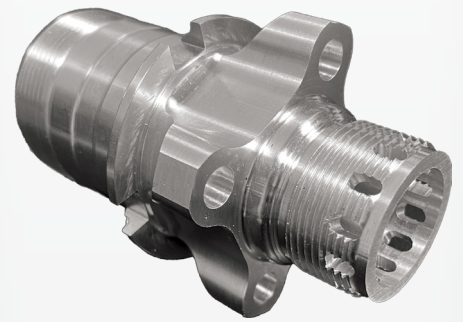
**THE INDUSTRY:**  
**HIGH PERFORMANCE AUTOMOTIVE & RACING:**

Automotive Performance manufacturers look to be efficient, whether in day to day production and competitive racing components. To meet these demands they look to produce parts in complete part machining processes. The Talent TT51 provides this solution in completing components in single setup applications with its dual turrets and sub spindle configuration. In this application the Talent TT51 is machining a SAE Race Hub complete while being tended with a robot from Automation Within Reach. Hardinge provides this and many more solutions for manufacturers in all industries.



**FOR MORE INFO  
SCAN THE QR CODE**

HARDINGE.COM | 800-843-8801



**THE APPLICATION:**  
**HIGH PERFORMANCE  
AUTOMOTIVE & RACING**

**FEATURES BEING MACHINED**

- Spindle 1
- 1-3/8" diameter end including all outside and inside diameter, thread and milled slot configurations
- Spindle 2
- 1.0" diameter end including all outside and inside diameters, thread, thru bore, milling of cross slots and hub features
- Part is machined complete from 2011-T3 Aluminum, parts in unloaded from machine via parts removal system, transferred from spindle 1 to spindle 2 and then autoloading of a new blank by the Automation Within Reach system integrated by Gosiger Automation

**PART TOLERANCES**

- Size +/- .001" on all diameters and lengths
- Size +/- .003 on milled features
- Surface Finish less than 32Ra

**TOOL LIFE**

- 500+ parts per tool

**CYCLE TIME**

- Complete part done in 6 min

The Talent TT51 with its twin spindles and twin turrets (with Y axis and milling capabilities) is able to machine the SAE Race Hub (scaled down version) complete in much less time than on a traditional single turret dual spindle machine thereby reducing the cost of end component. The dual 12 station turrets are configured to allow the following machining possibilities either independently or simultaneously.