



**ACT Robots, Inc.**

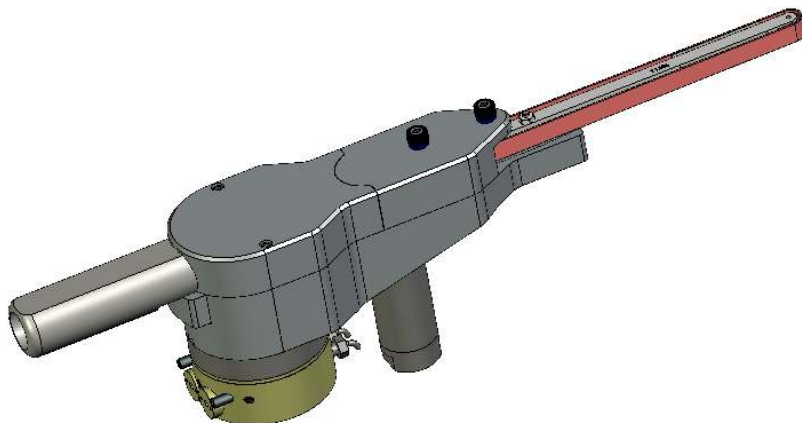
Integrated Robotic Solutions



### Applications

- Grinding
- Surface finish
- Polishing
- 'Shoe-shine' style operations
- Weld blending
- Deburring and edge chamfer

## ***BGT001-13800AR*** ***REVERSIBLE BELT TOOL***

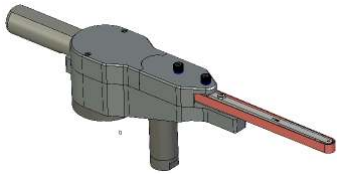


**BGT001-13800AR** Belt Tool is a precision tool assembly with fixed front contact wheel designed to be mounted to a tool changer or directly to a robotic arm. It can accommodate precision made TCA Tooling or standard Dynabrade style arms as well as custom attachments

### Standard Features and Specifications:

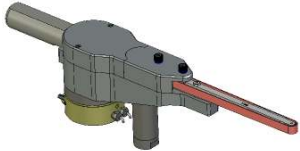
- Powered by reversing air motor with top speed of 13,800 RPM
- Accepts belts of up to ½ inch wide and 24 inch long (depending on the front arm)
- Belt tension easily released for belt change
- Broken or missing belt sensor
- Rotation sensor
- Belt stretch take –up in the back of the tool
- Fixed belt guide eliminates the need for tracking adjustments

## MAIN ASSEMBLIES



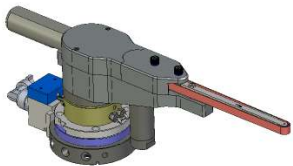
### **BGT001-13800AR**

Air Powered Belt tool assembly without rotary compliance device.



### **BGT001-13800AR-RC**

Air Powered Belt tool complete assembly with rotary compliance device.



### **BGT001-13800AR-RC-TC**

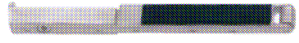
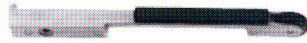
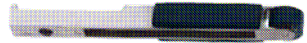

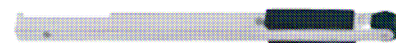

Air Powered Belt tool complete assembly with rotary compliance device and tool change adapter.

## SPECIFICATIONS

<b>MAX MOTOR SPEED WITH NO LOAD</b>	<b>13,800 RPM</b>
<b>BELT SURFACE SPEED WITH ½ IN DIAM PULLEY</b>	<b>1,800 SFM</b>
<b>AIR CONSUMPTION</b>	<b>10 CFM</b>
<b>MOTOR SPEED WITH MAX LOAD</b>	<b>6,500 RPM</b>
<b>BELT SPEED AT MAX LOAD WITH ½ IN PULLEY</b>	<b>850 SFM</b>
<b>MOTOR TORQUE AT MAX LOAD</b>	<b>0.24 Nm (2.12 lbs-in)</b>
<b>RC COMPLIANCE PRESSURE RANGE</b>	<b>30 – 100 PSI</b>
<b>RC COMPLIANCE TORQUE AT MAX PRESSURE</b>	<b>2.5 Nm (22 lbs-in)</b>
<b>RC FORCE AT 12 INCHES FROM CENTER</b>	<b>1.8 LBS</b>
<b>RC2 COMPLIANCE TORQUE AT MAX PRESSURE</b>	<b>6.5 Nm (57.52 lbs-in)</b>
<b>RC2 FORCE AT 12 INCHES FROM CENTER</b>	<b>4.7 LBS</b>
<b>COMPLIANCE MOTION RANGE (ADJUSTABLE)</b>	<b>0 to 45 DEGREES</b>
<b>COMPLIANCE MOTION FACTORY SETTING</b>	<b>0 to 15 DEGREES</b>
<b>STANDARD BELT ARM</b>	<b>½ INCH WIDE x 24 INCHES LONG BELT</b>

## OPTIONS

### Precision Machined Belt Arms

Part Number	Description	Belt Size	Image
<b>11201-ACTMOD</b>	Standard arm with 5/16" diameter x 3/8" wide steel contact wheel and 1/2" wide platen pad.	1/2" x 18"	
<b>11202-ACTMOD</b>	Low profile arm with 5/8" diameter x 1/8" wide rubber contact wheel and 1/4" wide platen pad.	1/4" x 18"	
<b>11203-ACTMOD</b>	Standard arm with 5/8" diameter x 3/8" wide rubber contact wheel and 1/2" wide platen pad.	1/2" x 18"	
<b>11206-ACTMOD</b>	Standard arm with 3/4" diameter x 5/8" wide rubber contact wheel and 3/4" wide platen pad.	3/4" x 18"	
<b>11286-ACTMOD</b>	Standard arm with 5/8" diameter x 3/8" wide rubber contact wheel and 1/2" wide platen pad.	1/2" x 24"	
<b>07040010</b>	Shoe-shine style arm where the belt is mounted with the abrasive side flipped thus providing reverse slack of the belt section between the front idlers. Reversing motor allows to replicate shoe-shine operation.	1/4" x 24"	



**07030001A ASS'Y** Tool nest assembly allows for precise staging of assemblies at 45 degrees for easy robot access. Includes tool present proximity sensor.

**07030001A ASS'Y 2** Tool nest assembly without sensor used for storage only



**ITV2030-32N2L4** Electro-pneumatic regulator, 0-10 VDC input signal, 0.5 – 70 PSI pressure output, powered by 24 VDC

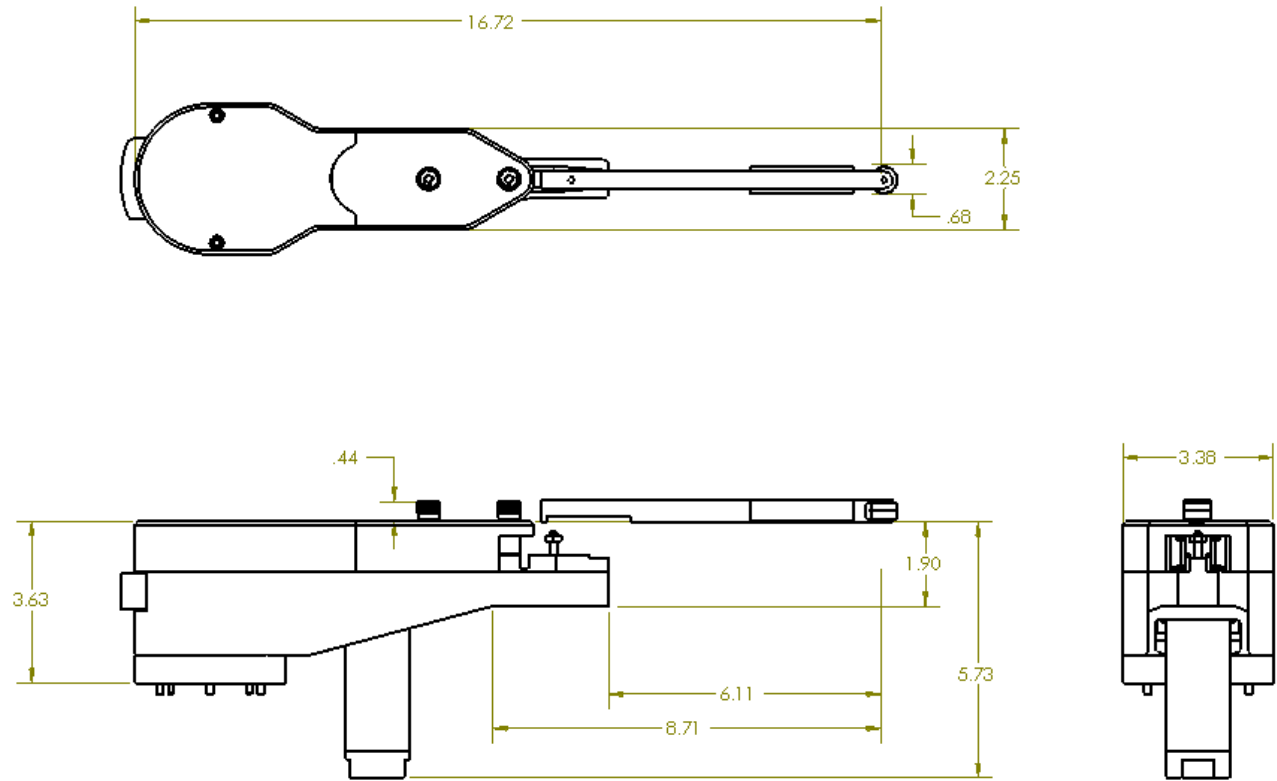
**ITV2050-32N2L4** Electro-pneumatic regulator, 0-10 VDC input signal, 0.5 – 130 PSI pressure output, powered by 24 VDC



**BGT001-13800AR-RC-TC-SETUP1** Tool and belt setup station allowing the operator to lock the tool assembly, change belts, run it using manual valve switch, and check compliance device operation. The station comes with a pedestal for easy mounting floor mounting. Air supply is required.

# DIMENSIONS

## BGT001-13800AR



## BGT001-13800AR-RC

