

RATS Grinder OPERATING INSTRUCTIONS

114 Potters Lane Port Matilda, PA 16870 www.GISquaredTech.com

- 1. Remove your grinder from the case and select the desired wheel attachment
- 2. Attach the grinding wheel or disc to the grinder using the included tool
- 3. Hold the grinder upright with the battery receptacle located to the rear of the grinder.
- 4. Make sure the wheel is facing away from you while holding the grinder
- 5. Insert the battery into the rear of the grinder
 - a. This will set the zero position for your tool during operation



6. Place the grinder into the gripper of your robot with the GI^2 Logo facing to the left then close the grippers.





RATS Grinder OPERATING INSTRUCTIONS

114 Potters Lane Port Matilda, PA 16870 www.GISquaredTech.com

- 7. Position the tool in front of the desired grinding/cutting location
- 8. Turn your gripper rotation speed down to the lowest setting
- 9. Rotate the gripper 360° clockwise to turn on the grinder
- 10. Using the telescopic joint slowly advance the grinder into the object you wish to cut
- 11. Cut in a small amount and then back out
- 12. Repeat the in and out cutting until you have made it all the way through the material
 - a. The robot is able to apply much more force than a human so the in and out maneuver will help to keep the tool from stalling.
 - b. The tool is equipped with a stall protection circuit that will automatically shut off the tool if the bit becomes stuck.
 - c. If the tool does stall then pull the cutting disc or wheel out of the material and then rotate 360° Counterclockwise and then back 360° Clockwise to reactivate the tool and continue your grinding operation
- 13. When your grinder operation is completed then retract the tool and straighten your gripper back to the initialized zero.
- 14. Rotate the gripper 360° counterclockwise to deactivate the tool