

# Mechatronics Technician

## Practical EXAM Part 1 and 2

### Wieland Metals

#### Practice Day and Equipment Drop off:

**Date:** June 22

**Time:** 8am-3pm

**Location:** Wieland Metals, 707 Northgate Pkwy, Wheeling, IL 60090 – park between the two buildings and you will enter the south building that actually has an address of 567

**Room:** Contact at check in – Tony Rubino (847-271-0450)

- **June 22** – From 8am to 3pm apprentices taking the practical exam at Wieland on June 23, 24, 25 are allowed optional practice time to:
  - Practice on manual machining equipment
  - Check tooling available, pneumatic connections, and plug connections for use and accessibility for the day of testing.
  - Set up and practice commissioning their test cabinets

Practical equipment should be set up in “exam ready” state (not-powered up, but proper assembly according to yellow for Part 1 or Yellow phase 2 for Part 2) when you leave or stored at the test site if you are not testing first. Please label equipment, tools, and binders. All material/tools should be stored in an organized and neat manner, (including Part 2 binders with all your preparation work and drawings for the practical exam).

- **June 23<sup>rd</sup> test takers:** If you are testing on the 23<sup>rd</sup>, you must bring equipment/tools to practice day and store it already set up in the testing room for the next day.
- **June 24<sup>th</sup> test takers:** If you are not testing on the 23<sup>rd</sup>, you may bring equipment/tools to practice day on June 22<sup>nd</sup> and store it at Wieland until your exam day. Set up can be done between 4:30 and 5:30pm on June 23<sup>rd</sup> (after testing is done) or the morning of your exam beginning as early as 7:00am.
- **June 25<sup>th</sup> test takers:** If you are not testing on the 23<sup>rd</sup> or 24<sup>th</sup>, you may bring equipment/tools to practice day on June 22<sup>nd</sup> and store it at Wieland until your exam day. Set up can be done 4:30pm and 5:30pm on June 24<sup>th</sup> (after testing is done) or the morning of your exam beginning as early as 7:00am.

#### Additional resources that should be brought to and used during the practical exam:

- Non-communicable, non-programmable, battery-operated calculator with trig capabilities – a basic calculator will be available in the test platform
- Blue Mechanical and Metal Trades Handbook and for Mechatronics also the Red Electrical Engineering Handbook
- A collection of formulas (one single-sided 3x5 index card of formulas that you believe might be necessary during the exam such as feeds and speeds, force...etc)
- Pen, Pencil and Drawing tools
- **Part 1** Clean hard copy of your yellow preparation documentation
- **Part 2** – Exam Binder

**NO PHONES Allowed during testing**

**TEST DATES and TIMES:**

**Date:** June 23-25

**Time:** **MT Part 1 8:00am** or **Part 2 8:15am start** - please arrive 30 min before start to check-in

**Location:** Wieland Metals, 707 Northgate Pkwy, Wheeling, IL 60090 - park between the two buildings and you will enter the south building that actually has an address of 567

**Room:** Contact at check in – Tony Rubino (847-271-0450)

First Name	Last Name	Company	Practical Start
Aaron	Borkowski	Krones, Inc.	Tues. June 23 @ 8am CT
Joel	Muehlthaler	Krones, Inc.	Tues. June 23 @ 8am CT
Jeremie	Muehlthaler	Krones, Inc.	Tues. June 23 @ 8am CT
Thomas	Manske	Krones, Inc.	Tues. June 23 @ 8:15am CT
Kyle	Kempowski	Krones, Inc.	Tues. June 23 @ 8:15am CT
John	Siri	Krones, Inc.	Wed. June 24 @ 8am CT
Joshua	Svatek	Krones, Inc.	Wed. June 24 @ 8am CT
Giancarlo	Perez	Mauser Packaging Solutions - IL	Wed. June 24 @ 8am CT
Jacob	Osterberg	Krones, Inc.	Wed. June 24 @ 8:15am CT
Marco	Vranic	Krones, Inc.	Wed. June 24 @ 8:15am CT
Juan	Rosales Parra	Freudenberg North America, LP	Thurs. June 25 @ 8am CT
Joseph	Rutkowski	Mauser Packaging Solutions - IL	Thurs. June 25 @ 8am CT
Ryan	Cornell	Mauser Packaging Solutions - IL	Thurs. June 25 @ 8am CT
Douglas	Durkin	KNUTH Machine Tools USA, Inc.	Thurs. June 25 @ 8:15am CT
Eddy	Parada	Wieland Metals, Inc.	Thurs. June 25 @ 8:15am CT

**PRACTICAL EXAM AGENDAS**

**MT Practical Exam Part 1 and Part 2 Agenda – Part 1, (6.5 hours) or Part 2 (6 hours).** Please arrive at least 30 minutes prior to your official start time to double check your equipment is still in a ready state.

- 7:00am** Set up – final preparation for apprentices and equipment check
- 7:45 am** **Part 1 and Part 2** sign in, apprentice final check and prep of equipment  
*Part 2 Apprentices must have their exam binders and be prepared to show and save your PLC program as a PDF to send to GACC representative on site. The Exam Board will check your binders once more before you begin.*
- 8:00 am** **Part 1 Drafting Instructions** provided - apprentices receive the drafting assignment
- ~8:15am** **Part 1 Start of Drafting** – approx. 30 min. Each apprentice will have a supplied timer. The amount of time you take to complete your drafting will be deducted from your total 6.5 hours. Drafting must be turned in before instructions continue for the work assignment
- 8:15 am** **Part 2** - Instructions provided - apprentices receive their work assignment for the day.
- 8:30 am** **Part 2** - START of 6-hour practical task. Each apprentice will have a supplied timer.



- ~8:45am** **Part 1 Start instructions of Work Assignment** – entire work assignment packet distributed
- ~9:00am** **Part 1 START of 6 hour (remaining time) practical task** – At any point during this time the exam board will ask you technical questions related to your project. This is part of the “technical discussion” portion of your exam. Exam board will deduct or add time for Part 1 apprentices depending on the amount of drafting time that was used.
- ~12:00pm** **30-minute lunch break** determined by exam board. All break at the same time.
- ~12:30pm** **Resume exam** (*remember to expect to need 1-2 hours of your exam time for commissioning. Commissioning is crucial. Even if you are not able to complete the entire mechatronics assembly and get it up and running as hoped, complete a commissioning in “as is” condition with the exam board!*) Your exam time will be stopped should an Exam Board member not be available to walk through the commissioning of your system with you and you must wait.
- ~3:00pm** **Part 2** expected end time, timers will hold official end time - Apprentices finish, unless your time was stopped due to limited exam board resources available, in that case you will have time remaining. *Once an apprentice is finished and equipment checked by the exam board, the apprentice will be instructed to return their equipment to yellow level (if it is going to be reused) removing machined and/or assembled mechanical parts for exam board inspection. Do not leave until an Exam Board member has dismissed you. Plan for as late as 5:30pm.*
- ~3:30pm** **Part 1 Exam end** expected end time, timers will hold official end time - Apprentices finish, clean up, unless your time was stopped due to limited exam board resources available, in that case you will have time remaining. *Once an apprentice is finished and equipment checked by the exam board, the apprentice will be instructed to return their equipment to yellow level (if it is going to be reused) removing machined and/or assembled mechanical parts for exam board inspection. Do not leave until an Exam Board member has dismissed you. Plan for as late as 5:30pm.*
- ~6:00 pm** **Exam board wrap-up evaluations**