Manufacturing Technology Skills Assessment

*Interview will include strength based questions, career exploration and LMI discussion. Field evaluators will be more limited in hands on activities but can include tours, interview with employers, Virtual Job Shadow and/or additional activities that explore the manufacturing technology field.

Element	WWRC Assessment Task	Field Evaluator
Response to multi-step instruction	• Use of assembly diagram to create a 1:1 scale drawing of an object, then layout center points as indicated in the diagram	Review of records VALPARS Assembly Diagram
Academics (includes reading comprehension, math skills, measurement, and computer skills)	• Reading • Calculation Quality Assurance Learning Assessment Program Silver CRC will be expectation for candidates targeting/completing the MT1 certification	CASAS WRAT 5 Woodcock Johnson Silver CRC will be expectation for candidates targeting/completing the MT1 certification
Math skills (training will involve algebra and geometry-analysis as to identify, retrieve and organize the data for solving applied math problems	• Series of applied math problem solving tasks • Selected tasks from MECA Electronics Tutorial and assessment software- Ohms law, electronics concepts and metric conversions	CASAS WRAT 5 Woodcock Johnson Review of records
Dimensioning and Measurement	Using Digital Vernier calipers to determine dimensions in objects to the nearest 1000^{th} of an inch	Ruler reading Kahn Academy items
Attention to detail, tracking multiple variables	After reading literature, test circuits for Continuity and resistance	Valpar options
Mechanical Reasoning	Disassemble and re-assemble bench top gear boxes using correct hand tools Mechanical Reasoning Subtest, Career Ability Placement Survey	Career ability Placement Survey Valpar hand tools
Critical thinking skills, Problem sensitivity	Mechanical tasks, academic exercises	Activities Problem solving situations
Linear Diagram Use	Circuit board wiring tasks	SAMS Circuit Board
Physical Skills	Standing, balance, carry, lift, vision, grasp, reach	VALPARS

Spatial Skills (includes use of diagrams	Career Ability Placement Survey- spatial relations subtest	CAPS Careerscope
Manual Dexterity **Fine finger dexterity**	VALPAR #8 Simulated Assembly small parts subtest, prevocational assessment screen	Valpar #8 Small parts
Learning Style Preferred modalities for instruction/learning new operations	Multimodal to include: demonstration, oral instruction, guided practice with repetition, written instruction.	

*Scores are recorded as an industrial standard called Method Time Measurement (MTM). Scores near the 100% level signify performance comparable to persons with entry level skills for jobs requiring that type of activity. Scores below suggest that some improvement would be required to acquire entry level proficiency.