## Northwest TN Workforce Board Outreach and Opportunities Committee

Monday, January 28, 2019 – 1:00 p.m.

Dyersburg State Community College
Gibson County Center, Room 129
2211 US 45 Bypass, Trenton TN

Conference Call – 1-877-216-1555 #845157

Chair – Ben Marks Vice Chair – Glad Castellaw

#### Minutes

**Committee Members Attending:** Ben Marks, Karen Bowyer, Brad Hurley, Justin Crice, Ronnie Gunnels **Committee Members Via Conference Call:** Landy Fuqua

**Others Attending:** Erica Nance, Jennifer Bane, LeAnn Lundberg, Laura Speer, Margaret Prater, Connie Stewart, Gina Johnson, Lana Burchfiel

<u>Review and Approval of Minutes of October 29, 2018 Meeting:</u> Ben Marks called the meeting to order and asked the group for comments regarding the prior meeting's minutes.

 MOTION: Ronnie Gunnels moved to approve the October 29, 2018 minutes and Justin Crice seconded the motion. All were in favor and the motion carried.

<u>Consideration of Eligible Training Provider List Program Renewals:</u> Laura Speer presented the list, stating that the only renewal is for Tennessee College of Applied Technology (TCAT) Paris's Outdoor Power Equipment. There have been no issues with the program and the labor market information continues to show positive growth.

• MOTION: Brad Hurley moved to approve the Eligible Training Provider List. Ronnie Gunnels seconded. Motion Carried.

**Recommendation for Work-Based Training Policy Change**: The group discussed the below changes to the Work-Based Training policy in order to align the pay for participants in transitional jobs and Youth Work Experience (YWE). YWE is a priority for our program but the difference in pay makes it not always the ideal choice for participants who may be eligible for either program.

- <u>Transitional Jobs:</u> Up to 320 hours of subsidized employment through a transitional job based on the job seeker's needs as documented on the Individual Service Strategy (ISS). The job seeker's employment is subsidized through the WIOA Adult or Dislocated Worker program at no cost to the employer. The job seeker will be paid through the program at the higher of 80% of the starting rate of the position being performed or *a* minimum of \$8.00 per hour wage.
- <u>Work Experience:</u> Paid Work Experiences will be paid through the program at the higher of 80% of the starting rate of the position being performed or a minimum of \$8.00 per hour wage. For instance, a participant working in a Production position which pays \$10 per hour would be paid \$8.00 per hour for the duration of the work experience (\$10.00 X 0.8 = \$8.00 per hour).
- MOTION: Ronnie Gunnels moved to approved the changes and Brad Hurley seconded. Motion carried.

#### <u>Promising Practices/ Supplemental Grant Updates & New Opportunities:</u>

 Bongards Creamery Community Grant: Margaret Prater distributed a product brochure for the proposed equipment. We are getting ready to start seeking sponsorships for equipment for the trailer. We currently have \$175,000 from Bongards and a donated trailer. There are different levels of equipment options, which include 3D printers, lasers, virtual welding, and VEX robots. TCAT Jackson has also donated a truck driving simulator. The cut-off for sponsorships is April 15, and then we will move forward for ordering the truck. We are also looking at hiring a part-time person through TCAT Jackson to take students through the trailer, primarily middle schools and then high schools, and jail programs. There is currently a name the trailer contest with Gibson County High Schools to develop a logo and signage for the truck and create excitement for the project. The intent of the committee is to have the truck on the road by Fall semester. We have switched equipment providers, and plan to have the Humboldt Chamber do all the actual purchasing. Brad Hurley suggested that we make sure we don't have to pay sales tax if we go through the chamber for purchasing.

- **DSCC Delta Healthcare Grant Partnership:** Jennifer Bane stated that we signed letter of support for this partnership with Dyersburg State Community College (DSCC), which allows for handouts and education about the opioid crisis to be available at the AJCs, along with workshops. We haven't heard if DSCC will receive the grant yet.
- National Emergency Grant to Address the Opioid Crisis: Jennifer also reported we submitted
  information for this grant to the State at the end of October, but the grant application hasn't been
  submitted by the State yet. The last update indicated that the application will be submitted after
  local and regional plans are completed.

#### **Special Populations Updates:**

• <u>Target Populations Report:</u> Erica Nance reported we have a total of 711 active enrollments as of December with 23 new enrollments in December. Of those, 625 are receiving training and education services, 9 new enrollments are youth 18-24, and we have 89 total offenders enrolled, due in part to our programs that we have in place in the jails.

#### Youth Services:

Registered Electrical Apprenticeship Preparation (REAP): Margaret Prater reported Amteck has already held their Showcases at several schools. During these showcases Jon Dougherty brings the Amteck teaching trailer for the students to tour. He also speaks to them in detail about what an electrician is and is not. For example, a lineman is not an electrician. Most of the schools had around 4-5 students who at the end said they were still interested. More showcases are scheduled and our goal is to enroll 30. After the showcases, the next step is April 20 when students will come to Amteck for "Shock and Awe" day. The two-week pre-apprenticeship program will begin in July with potential hiring by Amteck for those who successfully finish. They will finish with no debt, and will be earning a salary while training. The group discussed what lessons we learned from Lake County's pre-apprenticeship last year. Margaret said we will be focusing all on the job, and not on the money since we don't want students signing up just to get a stipend for the two-week program. Shock and Awe Day is to provide more hands-on information, like going up in a bucket truck, to weed out those who aren't a good fit for the occupation. We won't actually enroll anyone until after the Shock and Awe day. Margaret is also going to get in contact with the administration at Lake County High school to see what happened with our one student who completed the program last year and was hired by Amteck. We do know transportation was an issue for him. Amteck employees are required to travel so transportation and being away from home for long periods is a focus during the showcase. The committee agreed that it was wise to involve multiple schools this time and tried to focus on schools that had programs that would feed into this like Ag, Electronics, etc. Dr. Bowyer asked if college students in electrical classes might be able to enroll in this program. Margaret agreed to ask Jon about this.

<u>Youth Work Experience (YWE) Job Sites – Two Stage Approach</u>: Margaret reported that we are still struggling with YWE and with placements due to barriers and participants not showing up to interviews, etc. We are going to use some non-profit worksites for individuals who we feel are

not ready to go out to a private sector. The non-profit may not offer a job at the end, but the participant will earn skills and get paid through YWE program. If there is a non-profit that is in their career path we will try to place there, but most of the time it will not be in their career path. The goal is to learn work ethic more so than job skill.

<u>Work Experience Recruitment Efforts:</u> Connie Stewart reported we have a small amount of money designated for In-School Youth (ISY). All the TCATS need help in their offices so we will seek out young parents, or some that have a disability or a criminal background for a type of work study. Connie plans to work with Julie Frazier at DSCC to try to get criminal justice students placed at the Dyer County jail using ISY money. We also want to capture youth who may have failed post-secondary, so we can place them in work experience. Once they drop out of college they are considered an Out-of-School Youth. There are plans to target high schools in all nine counties to place graduating seniors in work experience positions.

#### Offenders:

Re-entry Advanced Manufacturing Program (RAMP): Connie and Margaret reported on RAMP. Gibson County has just started their 4<sup>th</sup> class, and has taken the first step into becoming a workhouse. A workhouse designation will enable inmates to go to work while they are in jail. In Henry County we now have 9 inmates on OJT. PML needed workers so desperately that they went ahead and took the first 9, but the intent is for RAMP to be a feeder program to their OJT program. We have a several employers really hurting for employees. We are also looking at more opportunities for women. The workhouse has to be a separate space with beds to separate them from the rest of the inmates which is a challenge for many local jails. Before we invest in another set of equipment, we may move the Henry County class to another county, possibly Weakley County or Benton County. The women have not been as successful in RAMP so other options besides manufacturing are being considered, such as clerical or food management. Food management/restaurant management may tie into the jail kitchen for hands-on training. IT, call center, and customer service training are other options being considered. Dyer County has been awarded a grant to secure a 10 bed unit for women, but we don't have a possible completion date. Local & Regional Corrections Partnership: Jennifer reminded the committee that as a region we picked corrections as our new planning partnership. The main focus is working with probation and parole to put individuals to work or training when they are released. Federal Bonding and some of the other available services were discussed.

Others: Jennifer pointed out the numbers on the Target Populations report are fairly low for Dislocated Workers, which is expected due to low unemployment rates. There were 13 Veterans and 33 Individuals with Disabilities active as of 12/31/18. We have seen quite a few underemployed with 287 active as of 12/31/18. We are allowed to transfer funds from Dislocated Worker to Adult if needed and will look into doing so. The group also discussed that so many times dislocated workers have been in manufacturing but Brad Hurley mentioned there may be an increase in healthcare due to hospital closures. Staff will look into if there is a report for the claims in VOS so we would be able to contact them.

<u>Proposed 2019 Meeting Dates:</u> future meeting dates for the rest of the year were proposed and the group agreed to tentatively schedule future meetings for April 29<sup>th</sup>; July 29<sup>th</sup>; and October 28<sup>th</sup> at 1:00 p.m.

<u>Other:</u> the next board meeting Feb  $26^{th}$  at the Elks Lodge in Trenton. Board members were asked to complete their annual Conflict of Interest form at or before the meeting. Justin Crice mentioned TN Pathways is hosting certification meetings on February  $6^{th}$  at TCAT McKenzie and February  $8^{th}$  at TCAT Newbern.

As there was no other business, meeting was adjourned.

Respectfully submitted,

Lana Burchfiel, Public Information Specialist

## Northwest TN Workforce Board Outreach and Opportunities Committee

Monday, January 28, 2019 – 1:00 p.m.

Dyersburg State Gibson County Center, Room 129

## 2211 US 45 Bypass, Trenton TN Conference Call – 1-877-216-1555 #845157

Chain Dan Manka

Chair – Ben Marks Vice Chair – Glad Castellaw

#### Agenda

		. ,0011313	
1.	Welcome and 0	Call to Order	Ben Marks
2.	Review and Ap	proval of Minutes of October 29, 2018 Meeting	Ben Marks
3.	Consideration (	of Eligible Training Provider List Program Renewals	Laura Speer
4.	a. Transit based of The job Worker program minimum. b. Work E of 80% hour we per hou	ion for Work-Based Training Policy Change ional Jobs: Up to 320 hours of subsidized employment throon the job seeker's needs as documented on the Individual a seeker's employment is subsidized through the WIOA Adult program at no cost to the employer. The job seeker will be must the higher of 80% of the starting rate of the position beam of \$8.00 per hour wage. Experience: Paid Work Experiences will be paid through the of the starting rate of the position being performed or a mage. For instance, a participant working in a Production pour would be paid \$8.00 per hour for the duration of the work \$8.00 per hour).	Service Strategy (ISS). Ilt or Dislocated e paid through the eing performed or a  program at the higher inimum of \$8.00 per sition which pays \$10
5.	<ul><li>a. Bongar</li><li>b. DSCC D</li></ul>	tices/ Supplemental Grant Updates & New Opportunities ds Creamery Community Grant elta Healthcare Grant Partnership al Emergency Grant to Address the Opioid Crisis	Margaret Prater Jennifer Bane Jennifer Bane
6.	b. Youth S o Reg o Wo	Populations Report	Erica Nance  Margaret Prater  Margaret Prater  Connie Stewart
	c. Offendo o Re- (Gil	·	Connie Stewart / Margaret Prater Jennifer Bane
	o Dis o Vet	ng-term Unemployed located Workers erans ividuals with Disabilities	Jennifer Bane

#### 8. Other

7. Proposed 2019 Meeting Dates

Monday, April 29<sup>th</sup>, 1:00 pm
 Monday, July 29<sup>th</sup>, 1:00 pm

Monday, October 28th, 1:00 pm

## Northwest TN Workforce Board Outreach and Opportunities Committee

Monday, October 29, 2018 2211 US 45 Bypass, Trenton, TN Conference Call – 1-877-216-1555 #845157

Chair – Ben Marks
Vice Chair – TBD

#### Minutes

Committee Members Attending: Ronnie Gunnels, Glad Castellaw, Ben Marks,
Committee Members via Conference Call: Jon Dougherty, Landy Fuqua, Lindsey Frilling, John Bucy
Others Attending: Erica Nance, Jennifer Bane, LeAnn Lundberg, Laura Speer, Margaret Prater, Connie
Stewart, Lana Burchfiel

#### Review and Approval of Minutes of July 25, 2018 Meeting

Ben Marks called the meeting to order and asked the group for comments regarding the prior meeting's minutes. Glad moved to approve the minutes and Ronnie seconded the motion. All agreed and the motion carried.

#### **Election of Vice Chair**

ſ

The former Vice Chair has been removed due to serving as Secretary on the Executive Committee. Ronnie moved to elect Glad Castellaw as the new Vice Chair. Jon Dougherty seconded the motion. All agreed and motion carried.

#### **Re-alignment Transition Update**

Jennifer announced that the re-alignment transition of Lauderdale and Tipton Counties to Greater Memphis Area was official October 1<sup>st</sup> and went relatively smoothly. We still need to make sure all grants are closed out and redo our fiscal reports as final reports. LeAnn worked to transfer phones and computers, and there are some items such as OJTs that will need to be billed to Memphis. There was some discussion on the possibility that the State Workforce Board may waive the 50% MPCR at the meeting in November. Members were given an updated Northwest TN Workforce Board organizational chart, effective October 2018. Margaret mentioned that the newly acquired Business Services Team has received positive feedback from the businesses and chambers. Connie was praised for helping with the transition of the business services team, and preparing them to immediately jump into Manufacturing Days. At this time, Erica Nance was also introduced as the new One-Stop Operator for Odle Management.

#### **Consideration of Eligible Training Provider List**

New Program: Staff received an application Friday afternoon, October 26, for a new Industrial
Maintenance Technology / Certified Production Technician program at TCAT Paris. We've been
working with TCAT Paris and the Henry County Sherriff's office to get this program started at the
Henry County Jail, like we have at the existing Gibson and Dyer County Jail programs. To be able

- to get the class in before the holidays, they would like to start the first class on Monday, November 12<sup>th</sup>. The Executive Committee will review the program at its meeting to Monday, November 5<sup>th</sup> since the application was not received in time to be presented to the Outreach and Opportunities committee.
- Program Renewals: All existing providers on the Eligible Training Provider List due to be renewed
  were reviewed. Magic Valley's CNA program is due for renewal, but the training provider is
  planning to end the program upon completion of the current class in December. The program
  does still need to be renewed for the final class to complete. After discussion and review of the
  corresponding labor market information, s motion was made by Ronnie and seconded by Glad
  to recommend all for renewal. All agreed and motion carried.

#### **Promising Practices/Supplemental Grant Updates & New Opportunities**

- Bongards Creamery Community Grant: The tractor trailer, truck, and generator have all been donated. Some industries have expressed a desire to help fund the project, and this along with the \$175,000 grant will go toward finishing out the trailer and hiring an instructor who will assist with training on the truck. The presented plan was from Amatrol, but another plan from a group in Tupelo will be finished soon for comparison. There is no launch date at this time.
- <u>DSCC Delta Healthcare Grant Partnership:</u> DSCC is in the process of applying for this grant which will focus on providing literature and workshops regarding opioid crisis, getting equipment updated, and updating their nursing curriculum to include classes on this topic.
- Other: Strengthening Working Families: This program is closing out due to the transition of Lauderdale and Tipton counties to the Greater Memphis area. Staff reported we have received payment for past due invoices and are awaiting payment for remaining final invoices. There was discussion about returning funds that were overpaid to us.

#### **Special Populations Updates**

- Youth Services:
  - O Registered Electrical Apprenticeship Preparation (REAP), Lake—Best Practices: Suggestions for improvement included more extensive interviews with students before enrolling in the program (many are unwilling to relocate), making the program more regional to include surrounding counties, and exposing participants to the more intimidating aspects of the job earlier in the program. Plans are to start recruiting the next class in early spring semester and possibly hold the class at Amteck after high school graduations.
  - O Work Experience—Mentoring Component: It was suggested that many issues need to be addressed before the participants get on-site. An orientation, which can be conducted either one-on-one, or more ideally as a workshop with several participants, is being implemented at the AJCs. Also, a mentoring component from a peer at the worksite was suggested to address issues with soft skills such as getting along with coworkers and getting to work on time.
  - O In-School/Out-of-School Expenditure Rates: A letter from the Department of Labor and Workforce Development outlined the approved waiver request to reduce the percentage of expenditures for out-of-school youth from 75% to 50%. Age of eligibility was not raised to 24 and barrier limitations were not removed. This makes it difficult for applicants to qualify as In-School Youth. We have to submit a service strategy plan by November 16 expressing our intentions whether or not to stay with current expenditure rate. Staff do not recommend adopting the waiver.

- Long-Term Unemployed-Transitional Jobs for Postsecondary Completers: Strategies to serve
  more of this group were discussed. Possible strategies include transitional jobs being paired with
  completion of classroom training and OJTs. Transitional jobs are utilized as a way for
  participants to get their foot in the door with a potential employer.
- Offenders-Re-Entry Advanced Manufacturing Program (RAMP) pilot
  - o <u>Gibson & Dyer Counties:</u> Selecting candidates for the training has been challenging due to many barriers. Only 10 out of the 20 men interviewed will be allowed to begin the next class at the Gibson County Jail. It was suggested that before an inmate's discharge, he is counseled about possible job placements, complete a resume, and have something ready for him *before* he leaves. Labor staff has been conducting some workshops in the past, but Connie suggested Career Advisors do the workshops to establish a good relationship with the staff at the American Job Center who will be assisting them. The next meeting to interview the next class of inmates is November 6.
  - Henry County: Henry County appears to have the benefit of the CPT program, along with a Work release program. Other details were discussed earlier in the meeting.
- <u>Dislocated Workers National Emergency Grant to Address the Opioid Crisis:</u> The TN
  Department of Labor is planning to apply for a grant to be used statewide to address the opioid crisis. There is a webinar to discuss this grant tomorrow. We have received numerous letters of support from our area.
- <u>Veterans AJC Staff Training:</u> The new Veterans Representative recently provided training to all American Job Center staff. Erica is working on an outreach program for vocational rehabilitation in order to increase the number of referrals. They also plan to partner more with the high schools.

#### Other

The next Board meeting is set for Tuesday, November 27, 2018 at the Elks Lodge in Trenton.

Respectfully submitted,

Lana Burchfiel
Public Information Specialist

Provider Name	Program Title	Prog ID	CIP Code	CIP Title	Completion Level	App Status	App Review Status	Expiration Date
TENNESSEE COLLEGE OF APPLIED TECHNOLOGY AT PARIS	Outdoor Power Equipment	1004792	460301	Electrical and Power Transmission Installation/Installer, Ge	Certificate 1-2 years	WIOA Approved	Eligible	05/22/2019

# Outdoor Power Equipment Occupation Snapshot

Emsi Q4 2018 Data Set

January 2019

#### **Northwest Tennessee Workforce Board**



708 E. Court Street

Dyersburg, Tennessee 38024



#### **Parameters**

#### **Occupations**

Code	Description	
49-3053	Outdoor Power Equipment and Other Small Engine Mechanics	

#### Regions

19 items selected. See Appendix A for details.

#### **Timeframe**

2018 - 2023

#### **Datarun**

2018.4 - Employees

## Outdoor Power Equipment and Other Small Engine Mechanics in 19 Counties

Outdoor Power Equipment and Other Small Engine Mechanics (SOC 49-3053): Diagnose, adjust, repair, or overhaul small engines used to power lawn mowers, chain saws, recreational sporting equipment and related equipment.

**Sample of Reported Job Titles:** Small Engine Mechanic, Golf Cart Mechanic, Small Engine Technician, Shop Mechanic, Service Technician (Service Tech), Outdoor Power Equipment Service Technician, Mechanic, Lawnmower Repair Mechanic, Chainsaw Technician, Production Engine Repairer.

Related O\*NET Occupation: Outdoor Power Equipment and Other Small Engine Mechanics (49-3053.00)

## Occupation Summary for Outdoor Power Equipment and Other Small Engine Mechanics

115
Jobs (2018)
130% above National average

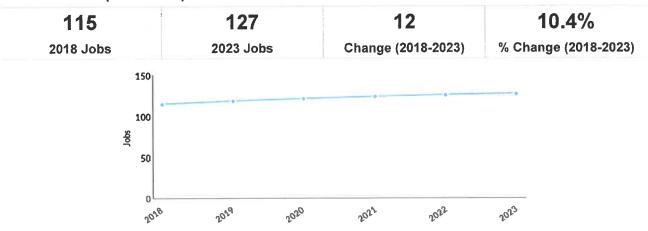
**10.4%** % Change (2018-2023)

Nation: 7.8%

\$13.52/hr

Median Hourly Earnings
Nation: \$16.53/hr

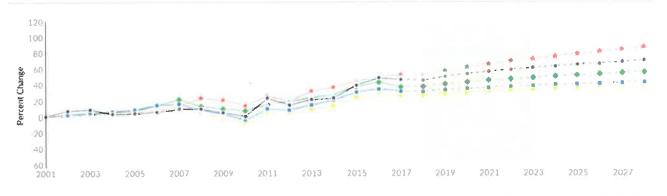
## Growth for Outdoor Power Equipment and Other Small Engine Mechanics (49-3053)



## Percentile Earnings for Outdoor Power Equipment and Other Small Engine Mechanics (49-3053)



#### **Regional Trends**



	Region	2018 Jobs	2023 Jobs	Change	% Change
•	Region	115	127	12	10.4%
•	West TN	237	250	13	5.5%
•	State	1,581	1,734	153	9.7%
•	Nation	32,051	34,563	2,512	7.8%
	All Counties	279	297	18	6.5%
•	Northwest TN	45	51	6	13.3%

## Regional Breakdown



County	2023 Jobs
Madison County, TN	44
Gibson County, TN	12
Henry County, TN	11
Fulton County, KY	<10
Calloway County, KY	<10

#### **Job Postings Summary**

40 days 5:1 **Median Posting Duration Posting Intensity Unique Postings** Regional Average: 3:1 Regional Average: 23 days 47 Total Postings

There were 47 total job postings for your selection from January 2018 to December 2018, of which 9 were unique. These numbers give us a Posting Intensity of 5-to-1, meaning that for every 5 postings there is 1 unique job posting. This is higher than the Posting Intensity for all other occupations and companies in the region (3-to-1), indicating that they may be trying harder to hire for this position.

#### Job Postings vs. Hires



#### **Occupation Gender Breakdown**

Other Small Engine Mechanics



	Gender	2018 Jobs 2	2018 Percent
•	Males	113	98.3%
•	Females	2	1.7%

### Occupation Age Breakdown



	Age	2018 Jobs	2018 Percent
•	14-18	2	1.3%
•	19-24	14	11.9%
•	25-34	23	20.2%
*	35-44	24	20.7%
•	45-54	24	21.0%
•	55-64	20	17.3%
•	65+	9	7.6%

### Occupation Race/Ethnicity Breakdown



	Race/Ethnicity	2018 Jobs	2018 Percent
•	White	109	95.1%
•	Black or African American	3	2.9% 📳
•	Hispanic or Latino	2	1.4%
•	Two or More Races	0	0.4%

	Race/Ethnicity	2018 Jobs	2018 Percent	
•	Asian	0	0.1%	
•	American Indian or Alaska Native	0	0.1%	
•	Native Hawaiian or Other Pacific Islander	0	0.0%	

#### **National Educational Attainment**



	Education Level	2018 Percent
		40.40
•	Less than high school diploma	18.1%
•	High school diploma or equivalent	40.7%
•	Some college, no degree	25.2%
×	Associate's degree	10.5%
•	Bachelor's degree	4.2%
•	Master's degree	1.1%
•	Doctoral or professional degree	0.2%

## **Occupational Programs**

1		0	12
Programs (20	017)	Completions (2017)	Openings (2017)
CIP Code	Program		Completions (2017)
47.0606		ine Mechanics and Repair gy/Technician	0



## Industries Employing Outdoor Power Equipment and Other Small Engine Mechanics

Industry	Occupation Jobs in Industry (2018)	% of Occupation in Industry (2018)	% of Total Jobs in Industry (2018)
Nursery, Garden Center, and Farm Supply Stores	50	43.8%	9.7%
Landscaping Services	<10	7.2%	1.0%
Farm and Garden Machinery and Equipment Merchant Wholesalers	<10	6.2%	1.5%
Home Centers	<10	5.5%	0.4%
Local Government, Excluding Education and Hospitals	<10	3.5%	0.0%

## Appendix A - Regions

Code	Description	
21035	Calloway County, KY	
21039	Carlisle County, KY	
21075	Fulton County, KY	
21083	Graves County, KY	
21105	Hickman County, KY	
47005	Benton County, TN	
47017	Carroll County, TN	
47033	Crockett County, TN	
47039	Decatur County, TN	
47053	Gibson County, TN	
47077	Henderson County, TN	
47079	Henry County, TN	
47083	Houston County, TN	
47085	Humphreys County, TN	
47113	Madison County, TN	
47125	Montgomery County, TN	
47131	Obion County, TN	
47161	Stewart County, TN	
47183	Weakley County, TN	

## Appendix B - Data Sources and Calculations

#### **Location Quotient**

Location quotient (LQ) is a way of quantifying how concentrated a particular industry, cluster, occupation, or demographic group is in a region as compared to the nation. It can reveal what makes a particular region unique in comparison to the national average.

#### **Occupation Data**

Emsi occupation employment data are based on final Emsi industry data and final Emsi staffing patterns. Wage estimates are based on Occupational Employment Statistics (QCEW and Non-QCEW Employees classes of worker) and the American Community Survey (Self-Employed and Extended Proprietors). Occupational wage estimates also affected by county-level Emsi earnings by industry.

#### **Emsi Job Postings**

Job postings are collected from various sources and processed/enriched to provide information such as standardized company name, occupation, skills, and geography.

#### **Institution Data**

The institution data in this report is taken directly from the national IPEDS database published by the U.S. Department of Education's National Center for Education Statistics.

#### **State Data Sources**

This report uses state data from the following agencies: Arkansas Department of Workforce Services; Kentucky Office of Employment and Training; Missouri Department of Economic Development; Tennessee Department of Labor and Workforce Development, Research and Statistics Division



# WIOA Targeted Population Summary - State Region: West TN - LWIA/Region: Northwest Tennessee - Filter By Date: Active Date

- Date Range: 12/1/2018 - 12/31/2018

Target Group	Total Enrolled	New Enrolled	Received Career Services	Received Training/ Educ Svcs	Total Exited	With Credent	Empl at Exit	Avg Wage
Total	711	23	711	625	0	193	0	\$0.00
Gender								
Female	<b>428</b> 60.20%	<u>12</u> 52.17%	<u>428</u> 60.20%	371 59.36%	ol	<u>112</u> 58.03%	ol	\$0.00
Male	282 39.66%	<u>11</u> 47.83%	<b>282</b> 39.66%	<u>253</u> 40.48%	0	<b>81</b> 41.97%	0	\$0.00
NA	<u>1</u> 0.14%	0	<b>1</b> 0.14%	0.16%	0	0	0	\$0.00
Age							لبيد	
18 and Under	68 9.56%	0	68 9.56%	48	0	19	0	\$0.00
19 to 24	301	9	301	7.68% <b>251</b>	0:	9.84%	- 0	\$0.00
13 10 24	42.33%	39.13%	42.33%	40.16%		71 36.79%		\$0.00
25 to 54	324	13	324	310	0	97	0	\$0.00
55 and Older	45.57% <u>18</u>	56.52% 1	45.57% <u>18</u>	49.60% 16	0;	50.26%	0	\$0.00
Deer/Ethyleit.	2.53%	4.35%	2,53%	2.56%		3.11%		
Race/Ethnicity			Na. 20-44					
White	<u>529</u> 74.40%	15 65,22%	74.40%,	488 78.08%	0	154 79,79%	0	\$0.00
African American/Black	179 25.18%	<u>8</u>	179 25,18%	<u>134</u> 21.44%	0	38 19.69%	0	\$0.00
American Indian/Alaskan Native	7	0	7	<u>6</u>	o <sub>j</sub>	1	0	\$0.00
	0.98%		0.98%	0.96%		0.52%		
Asian	<u>2</u> 0.28%	o	<u>2</u> 0.28%	<b>2</b> 0.32%	0	<u>1</u>	0	\$0.00
Hawaiian/Other Pacific Islander	0.14%	0)	<u>1</u> 0.14%	<u>1</u>	0	0.52%	0	\$0.00
Hispanic	22 3.09%	0	<b>22</b> 3.09%	17 2.72%	0	3 1.55%	0	\$0.00
Educational Status						·		- 1 - 1
n-school,H.S. or less	4	0,	4	4	0	2	0	\$0.00
v v	0.56%		0.56%	0.64%		1.04%		
n-school,Post-H.S.	116 16.32%	0	116 16.32%	114 18.24%	0	40 20.73%	O	\$0.00
Not attending school,H.S. Dropout	0.28%	0	0.28%	1 0,16%	0	0	0,	\$0.00
Not attending school, H.S. Graduate	179	0	179	150	0	84	0	\$0.00
	25.18%		25.18%	24.00%		43.52%		

Eligible claimant referred by WPRS	1	0	1	1	0	1	0	\$0.00
	0.14%		0.14%	0.16%	-	0.52%		da d
Eligible claimant not referred by WPRS	11	0	11	1000	0	<u>2</u> 1.04%	0	\$0.00
	1.55%		1.55%	1.60%				
Exhaustee	9 1.27%	0	9 1.27%	9 1.44%	0	3 1.55%		\$0.00
Neither claimant or exhaustee	<u>255</u>	0	255	229	0	<u>115</u>	o	\$0.00
	35.86%		35.86%	36,64%		59.59%		7 22 7 7
Veteran						E ANT ON BALBORADOR A	ç.e.	
All Veterans	<b>13</b> 1.83%	0	<b>13</b> 1.83%	13 2.08%	0	<u>4</u> 2.07%	0	\$0.00
Eligible Veteran Status	13	o	13	13	0	4	o.	\$0.00
	1.83%	į	1.83%	2.08%		2.07%		
Other Eligible Person/Veteran Spouse	03	O	O	0	o	0	o į	\$0.00
Campaign Veteran	<u>1</u> * 0.14%	0	1! 0.14%	<u>1</u> 0.16%	0	0.52%	0	\$0.00
Disabled Veteran	2 0.28%	0	<u>2</u> 0.28%	<u>2</u> 0.32%	0	0.52%	0	\$0.00
Transitioning Service Member	1	0	1 0.14%	1 0.16%	0	0	0	\$0.00
Recently Separated Veteran	0.14%	0	0.14%	0	0	0	o	\$0.00
Barriers	ţ	SC.						
Individuals with	33	<u>2</u> :	33	28	0	8	0	\$0.00
Disability	4.64%	8.70%	4.64%	4.48%		4.15%		
Displaced Homemaker	<u>2</u> 0.28%	<b>0</b> ,	<u>2</u> 0.28%	<u>2</u> 0.32%	o	<b>O</b>	o	\$0.00
Linda a malaya d	• ~ \$	11	287	274	0	66	0	\$0.00
Underemployed	287 40,37%	47.83%	40.37%	43,84%	Ĭ	34.20%		Ψ0.00
Dislocation Event	1	0	1,	1	0	1	o	\$0.00
	0.14%		0.14%	0.16%		0.52%;		
Within 2 Years of Exhausting TANF	<u>1</u> ) 0.14%	0.	<b>1</b> 0.14%	0.16%	0	0	0	\$0.00
Hawaiian Native	0.14%	O.	0	0.1070	0	0	0	\$0.00
Single Parent	<b>112</b>	<u>5</u> 21.74%	<b>112</b> 15.75%	<b>90</b> 14.40%	0	<u>32</u> 16.58%	0.	\$0.00
Facing Substantial Cultural Barriers	0	0	o <sup>l</sup>	0	o	o.º	0	\$0.00
Eligible Migrant and , Seasonal Farmworker	0	O	<b>o</b> .	0:	o	0	0.	\$0.00
Meets Governors Special Barrier	o	O	o	0	0	0	0	\$0.00
English Language Learner	o	0	0	0	0	0	0	\$0.00

					-		1	
Basic Skills Deficient	<u>6</u> 0.84%	<u>1</u> 4.35%	6 0.84%	3 0.48%	0	1 0.52%	0	\$0.0
Offender	89 12.52%	<u>2</u> 8.70%	89 12.52%	<u>80</u> 12.80%	0	<u>33</u> 17.10%	0	\$0.0
Homeless	3 0.42%	O	<u>3</u> 0.42%	2 0.32%	0	0	0	\$0.0
Runaway Youth	<b>O</b> a	011	0	0	0	0:	0	\$0.0
Foster Care (All)	3 0.42%	0	3 0.42%	<b>1</b> 0.16%	0	1 0.52%	0	\$0.00
In Foster Care	Og	0	0	0	0	0	0	\$0.00
Aged Out of Foster Care	3 0.42%	0	3 0.42%	<u>1</u> 0.16%	0	0.52%	0	\$0.00
Pregnant or Parenting Youth	<b>57</b> 8.02%	<u>1</u> 4.35%	<u>57</u> 8.02%	31 4.96%	0	13 6.74%	0	\$0.00
Out of Home Placement	0	0	O	0	0	0	o	\$0.00
Eligible Under Section 477	0	O.	0	0	0	0,	0	\$0.00
Youth Requires Additional Assistance	<b>69</b> 9.70%	1 4.35%	<b>69</b> 9.70%	<u>35</u> 5.60%	0	20 10.36%	O	\$0.00
Public Assistance			0.7072	3.307		10.0070		
TANF	10	0	10 1.41%	<u>6</u>	0	1.55%	0	\$0.00
SNAP	186 26.16%	<u>5</u> 21.74%	186 26.16%	<u>148</u> 23.68%	0	<u>51</u> 26.42%	ō	\$0.00
Social Security Disability Insurance (SSDI)	11	1	<u>11</u>	9	0!	2	0	\$0.00
	1.55%	4.35%	1.55%	1.44%		1.04%		
Supplemental Security ncome (SSI)	12	0	12	<u>10</u>	0	<b>Z</b>	0,	\$0.00
	1.69%		1.69%	1.60%	-1000	3.63%	000 Tab. C F - 473600	
General Assistance	0.14%	0	0.14%	<u>1</u> ! 0.16%	0	0	0	\$0.00
iving in the High Poverty Area	<u>15</u> 2.11%	<u>1</u> 4.35%	<u>15</u> 2.11%	<b>2</b> 0.32%	0	0	o	\$0.00
ree or Reduced unch	3	1	3	1	O	O	oſ	\$0.00
Low Income	0.42% <b>599</b>	4.35% <u>18</u>	0.42% 599	0.16% <b>526</b>	01	169	0	\$0.00

#### Registered Electrical Apprenticeship Preparation 2019



Up to thirty (30) graduating seniors from Northwest TN high schools will have an opportunity to "reap" the benefits of a new pre-vocational training program – Registered Electrical Apprenticeship Preparation (REAP), a partnership between Amteck, local schools, the American Job Center, the Northwest TN Workforce Board. Amteck delivers the latest in cutting-edge technology in the electrical engineering and contracting industry. Through agreements with the US Department of Labor, Amteck offers a 4-year Registered Apprenticeship including classroom and on-the-job training while being paid. Apprentices may travel to different locations to work on construction sites across the county. After successful completion of the 4-year program, apprentices are prepared to take the exam to become a Journeyman/Licensed Electrician earning an estimated \$70,000 annually.

Working with local schools, Amteck will schedule ½ day "showcase" visits\* to provide career related information to graduating seniors. Materials announcing the visit will be sent ahead of time to generate interest. During the "showcase", students will be provided more detailed information about careers in the electrical trade, expected wages, and the expectations of employers. Amteck will bring a mobile unit to provide a hands-on experience. Forty-five (45) minutes to one hour of student interaction is ideal.

Seniors with an interest in a career as an electrician will have an opportunity to apply for a 2-week (July 8 – July 19, 2019) Amteck University Pre-Apprenticeship program in Dyersburg (or other centrally located venue) to learn the fundamentals of basic electricity and construction applications. The program will include classroom instruction and hands-on experience, preparing the student to be ready to start work on a real construction project in the electrical field. Amteck will evaluate the following qualities during the pre-apprenticeship program: being willing to submit to a drug test; arriving on-time; dressing appropriately; being respectful; being proactive; being positive; working hard; working safely.

Applicants must be 18 or older by July 8, 2019, have reliable transportation and be able to attend the Amteck University Shock and Awe! Day on Saturday, April 20. A maximum of 30 applicants will be selected based on interest, aptitude and ability to meet program guidelines. A gas card, stipend, and necessary tools, uniforms, etc. will be available to enable participation in the two-week program.

Upon successful completion of the 2 weeks pre-apprenticeship program, graduates will be eligible for hire by Amteck and with supervisor recommendation, accepted into the Registered Apprenticeship to become a Journeyman/Licensed Electrician.

#### \*School Showcase dates:

January 23 – a.m. Dyersburg High School; p.m. Lake County High School

January 24 - a.m. Obion County Central High School; p.m. South Fulton High School

February 25 – p.m. only

February 26 – Gibson County High School (including South Gibson Students)

April 17 – a.m. available; p.m. Dyer County High School

April 18 - a.m. and p.m. available

The REAP program is jointly funded by the Northwest TN Workforce Board utilizing Workforce Innovation and Opportunity Act (WIOA) funds and Amteck. Contact Margaret Prater, Senior Executive Advisor NWTNWB – <a href="mailto:prater@nwtnworks.org">prater@nwtnworks.org</a> or 731-377-2171 for more information and to schedule a School Showcase. Check out photos and videos on Facebook @Amteck University

Since 1977, Amteck has built a reputation of delivering a quality product, in a cost-effective manner, while maintaining a safe work environment throughout a project's duration. Amteck's commitment to customer service, its safety program, and family atmosphere has grown the company into one of the most prominent electrical contractors in the southeast.



## RE-ENTRY ADVANCED MANUFACTURING PROGRAM (RAMP)

GIBSON COUNTY - TCAT JACKSON	(Men)						
3 Classes Completed	Safety	Quality	Manufacturing	Maintenance	Full CPT	Released	Working
Assessments Passed/Taken	30/30	30/30	26/27	27/27	26/30	8/30	6/8
Percent Passed Assessment Taken	100%	100%	96%	100%	87%	27%	75%
Percent Passed of 30 Enrolled	100%	100%	87%	90%	87%		
4th class started January 9							
DYER COUNTY - DYERSBURG STATE CO	MMUNITY CO	DLLEGE	(Women)				
2 Classes Completed	Safety	Quality	Manufacturing	Maintenance	Full CPT	Released	Working
Assessments Passed/Taken	18/23	13/17	11/14	8/10	8/23	6/23	2/6
Percent Passed Assessment Taken	78%	76%	79%	80%	35%	26%	33%
Percent Passed of 23 Enrolled	78%	57%	48%	35%	35%		•-
	, 0,0	3770	TQ/0	33/0	33/0		

**HENRY COUNTY - TCAT PARIS** 

(Men)

Started in December with 10. Three have dropped. Class has completed Safety and Quality, but test results are not available due to paper/pencil test scoring process.

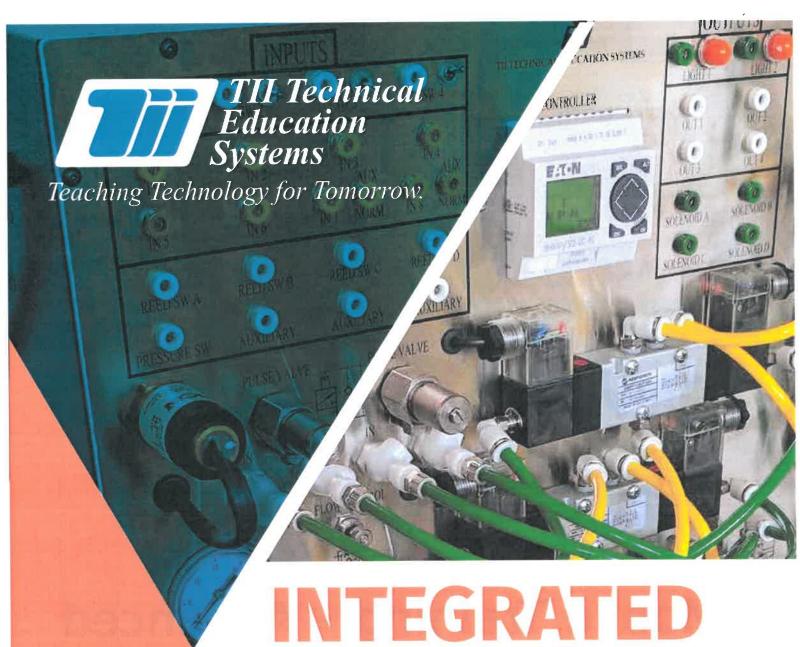


# Northwest Tennessee Workforce Board

## Mobile Training - Advanced Manufacturing

**Product Brochure** 





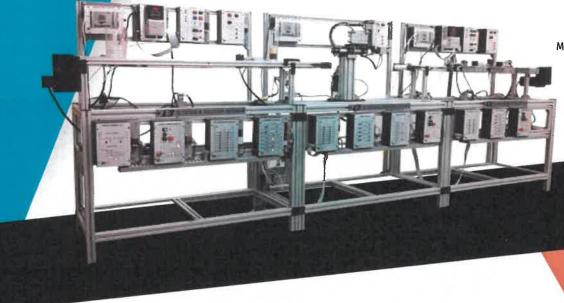
## INTEGRATED AUTOMATION

- S6 East End Drive Gilberts, IL 60136
  - 800.451.2169 Toll Free
- 847.428.3085 International 847.428.3286 Fax
- sales@tii-tech.com



TII Technical Education Systems (TII) is an internationally known leader in providing integrated, hands-on learning systems. Since our founding in 1964, we have excelled at producing innovative laboratory equipment and curricula geared toward technical training, workplace skills, and industrial certifications for schools, industry and government agencies worldwide.

We're incorporating the newest technology with an extensive curriculum for academic success, preparing students for today's modern employers.



Mechatronics - FMS-800

## **READ. SHOW. DO.**

At TII, we believe a hands-on approach should be the cornerstone of every technical training program.

Statistics prove that hands-on training creates the highest learning retention rate for students.

We recall 25% of what we hear, 45% of what we see, and 70% of what we DO.

That's why all of our programs have a hands-on focus and are supported by a comprehensive instructional curriculum: Read. Show. Do.

All of TII's training programs follow this three-step training method. This in-depth combination of coursework, demonstrations, and hands-on exercises achieves the greatest retention rate and promotes productivity, integral to the development of an Integrated Automation skill set.

## INTEGRATED AUTOMATION

TII's Integrated Automation series offers a complete, mobile Computer Integrated Manufacturing System (CIM, FMS, Mechatronics,) as well as smaller specific table top integrated automation systems for a wide range of automated training configurations. Trainees will gain authentic industrial automation knowledge and skills on real world hardware, designed for classroom and student use.

Our technical learning solutions focus on real world applications. Programs feature industrial control components for practical industry experience. Our programs simulate real-life work conditions that assist in the development of a skilled workforce. This series emphasizes career-focused, hands-on learning with a genuine integrated automation experience. Students will develop skills in troubleshooting, and fault identification, while furthering their competence in programming and operating industrial PLCs.

## TII'S CURRICULA

Our technical training solutions are user-friendly and customizable for a clear and concise learning experience.

TII's curricula have been designed and reviewed by a panel of experienced secondary and post-secondary educators.

Each program has received input from industry experts and has been tested by industry and educational professionals.

Students will discover the functions of the individual technology components and combine them to mimic real world operating systems. They will then master the application of learned principles through mathematic and scientific concepts, the driving forces behind each of TII's learning systems.

#### **Integrated Learning with TII**

- Emphasizes industry-focused, hands-on learning with STEM applications
- Delivers a program consistent with a technology-driven world
- Professionally written programs increase instructor efficiency and student results
- Flexible curriculum design: Use as an introduction, review or in-depth study
- · Easy to use instructor guide with student manuals
- · Designed for individual or group study
- Stand-alone training systems
- · Assessment testing included
- · Can be integrated with other training programs for advanced topics

Visit our website for more information on TII's curriculum: www.tii-tech.com

## **OUR LEARNING SYSTEMS**

The Integrated Automation learning systems use Windows-based software communications and interfacing, emphasizing real world inputs and outputs. Trainees will install, connect, operate, and control robots, valves, actuators, sensors, conveyors and other automation systems and components

The Integrated Automation offers an all-inclusive learning experience in industrial automation and hardware.

**MECHATRONICS** 

FMS-800

The FMS-800 Flexible Manufacturing System is part of TII's series of comprehensive manufacturing automation training systems that can be customized to customer requirements. As learning objectives change over time, so too can the FMS-800 System hardware, software, and configuration.

The FMS-800 System consists of three interconnected mobile tables and a fourth controls table (not shown). Each table can be used as a separate, standalone process or integrated into a dynamic three-table multistepped comprehensive process. Tables are connected physically and via Ethernet communications. System control is done with a single master PLC with remote I/O at each table for distributed control over Ethernet communications. Alternatively, a dedicated PLC at each table is used for local control with inter-communications among the three tables via Ethernet.



Note: Individual table PLCs would require Ethernet capability including teaching PLC control, robotic technology, and Ethernet communication skills.

#### Table I: Feeder Input

- Belt Conveyor
- · Parts Feeder
- Assembly Station
- VFD Controls
- Remote I/O (PLC)

#### **Table II: Robot Transfer**

- Robot
- Sensors
- · Assembly Interface
- · Remote I/O (PLC)

#### **Table III: Sorting Output**

- Belt Conveyor
- Sorting Station
- Sensors
- VFD Controls
- Remote I/O (PLC)

#### **Table IV: Controls**

- Master PLC
- HMI
- Ethernet

#### Table II

#### **Table III**



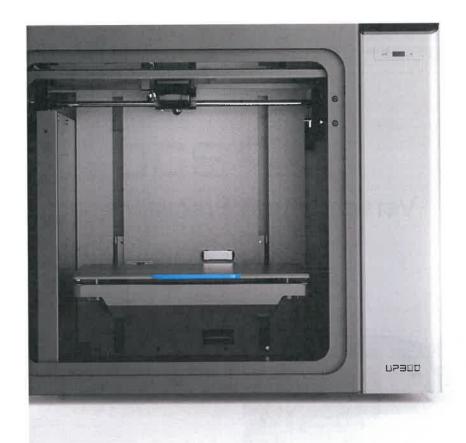
# UP300 Versatility with Precision



- Three Material-Specific Print Heads
- Double-Sided Interchangeable Build Plates
- Dual Filtration System
- Compatibility with Tiertime Print Queue



Find us on 🛐

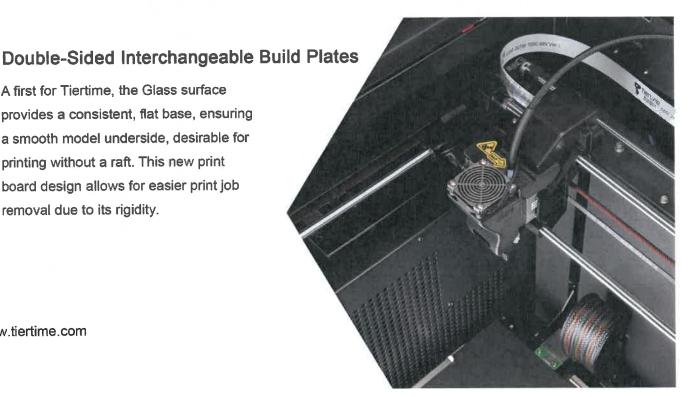


New for 2018, the UP300 is targeted for users demanding a large build volume and consistent performance across different materials. It combines new innovations and improved, popular UP features with Tiertime's renowned reliability.

#### Three Separate Extruders - Optimized for Different Materials

Each extruder is designed specifically for a matching material type. One is for ABS and other high temperature filaments, one for lower temperature filaments such as PLA, and the other is for TPU, a flexible polyurethane.

### A first for Tiertime, the Glass surface provides a consistent, flat base, ensuring a smooth model underside, desirable for printing without a raft. This new print board design allows for easier print job removal due to its rigidity.





# Laser Technology

Building Classroom Engineers & Entrepreneurs



Laser Engraving, Cutting, and Marking Systems

## A LaserPro Laser Engraver brings modern Industry

into the classroom and shows students the connection between

Engineering Skills and their Success in the real world.

# with ANY laser purchase! The Latest

The recommended graphics software package for use with GCC lasers.



C180 Desktop

#### **Open Front Door Design**

The top cover coupled with the front door open design allows easy loading of working pieces.

\*DC Servo Motors In All Models for precision engraving!

## LaserPro"

Family of Laser Engravers
Safe • Reliable •
Affordable

But also the IDEAL technical education tool! Every LaserPro models has all the Features and Flexibility to produce almost anything!

With their ability to cut, etch or mark almost any surface, the LaserPro is also the ultimate entrepreneurial springboard for fundraising local manufacturer contract-work & more!

C180 Specification	ns:					
Table Size	20.5 x 14.8 in. (520 x 375 mm)					
Work Area	18 x 12 in. (457 x 305 mm)					
Speed Control	Adjustable from 0.1~100% of 40 ips (Up to 16 color-linked speed settings per job)					
Power Control	Adjustable from 0~100% (Up to 16 color-linked power settings per job)					
Z-Axis Movement	Automatic					
Resolution (DPI)	Available 125, 250, 300, 380, 500, 600, 760, 1000					
Computer Interface	Standard parallel printer port and USB port					
Safety	Class IIIR for red pointer					
Electrical	100~240 Volt AC Auto Switching					
Available Wattages	12W, 30W, 40W					
Power Consumption	900W- 1320W					



## intelitek





## ROBOTICS

Since 1982, Intelitek's unmatched and worldrenowned ScorBot robotic training system, brings the exciting field of industrial robotics to your educational program.

Intelitek's skill-based curriculum include a comprehensive range of competencies that prepare students for jobs in industry.

The programs offer fundamental to advanced training using Intelitek's blended learning approach to deliver a powerful educational experience.

Combining engaging e-learning content with superior quality robotic equipment and dynamic 3D simulations prepares students for rewarding careers.

ROBOTICS CURRICULUM

ROBOTICS SOFTWARE SOLUTIONS

EDUCATIONAL ROBOTS

STEM ROBOTICS PROGRAMS

CTR 14

ROBOTICS AND AUTOMATION PROJECTS

CTR 15

## **EDUCATIONAL ROBOTS**

### ScorBot ER-4U Educational Robot



The ScorBot ER-4U robot is a versatile and reliable 5-axis robotic arm system for educational use. The ScorBot ER-4U robot arm can be mounted on a tabletop, pedestal, or linear slidebase.

The robot's speed and repeatability make it highly suited for both stand-alone operations and integrated use in automated workcell and FMS applications such as robotic welding, machine vision and CNC machine tending. Together with ScorBase control software and RoboCell 3D simulation software, the system lets students design and control industrial workcells.

#### STANDARD FEATURES

- 5 Axis Vertically Articulated Mechanical arm
- Controller with USB communication
- Floor-, wall- or ceiling-mounted options
- 0.18 mm (0.007") repeatability
- 1 kg (2.2 lbs) payload

#### **OPTIONAL ACCESSORIES**

- DC servo motor kit
- Gravity parts feeder
- Linear conveyor
- Linear slidebase for small robots
- MicroASRS
- Multi-purpose gripper adapters
- Rotary index table
- Teach Pendant for USB Controller
- Linear Table
- XY-Table
- Motor Kit

WWW.INTELITEK.COM



# Augmented Reality Welding System

#### The industry's most realistic welding simulation solution.

The AugmentedArc system improves the efficiency and economy of classroom education with "augmented reality" technology. Users wear a specially designed helmet that shows them images of the real world, augmented with computer-generated images of metal workpieces, weld arcs and weld beads. The result is a simulation that closely resembles live-arc welding —without using an actual arc or consuming wire, shielding gas or coupons.

The system provides an engaging and immersive student experience and allows instructors to make more effective use of their time. Users of any skill level can start working with the system almost immediately. AugmentedArc offers intuitive, easy-to-understand setup assistance and objective, post-weld feedback to help users quickly gain experience and develop proper welding techniques in SMAW, GMAW, FCAW and GTAW processes.



## AugmentedArc® Augmented Reality Welding System



#### How it works

- Instructors use the system's Teacher Software to develop a curriculum of process theory, quizzes, welding exercises, as well as monitor student performance and create progress reports.
- To complete an assignment, students wear a specially designed welding helmet that contains an external optical sensor, which captures images of coded devices and coupons and sends them to the AugmentedArc system's computer.
- The system's computer generates threedimensional images of metal workpieces, weld arcs and weld beads, augmenting them into a real-world environment.
- Inside the helmet, the augmented reality environment appears on a specially designed heads-up display panel, precisely showing the user's proximity to and interaction with the workpieces and welding gun/torch. The same images also appear on a second display panel in the system's computer case. Additionally, realistic arc sounds feed through speakers located in the helmet.

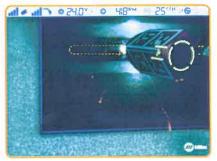
- The AugmentedArc system continuously monitors the user's adherence to predetermined or custom welding parameters—including travel speed, gun/torch angles, distance, aim, contact-tip-to-work (GMAW/FCAW only) and arc length, rod work angle and rod travel angle (GTAW/SMAW).
- The helmet's heads-up display delivers immediate visual feedback on the user's performance, providing confirmation when parameters are being maintained and alerts when they are exceeded. The same images also appear on the second display panel in the system's computer case.
- When the welding exercise is complete, an analysis screen provides feedback on the user's performance in the form of scores and graphs. Video of the welding exercise is also recorded and made available for later playback, allowing instructors to evaluate students' performance.

#### Augmented-reality displays

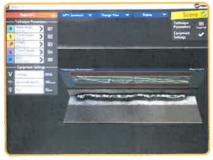
Computer and helmet displays combine real and computer-generated imagery to create a unique interactive environment.



Actual proximity and interaction data is processed by the system via specially coded devices and coupons



During a simulated weld sequence, visual graphical aids guide user to achieve adherence to parameters.



Performance is scored and graphed to allow for evaluation, and recorded for playback.



The AugmentedArc™ system is warranted for one year, parts and labor.



AugmentedArc provides a simulation that closely resembles live arc welding—without using an actual arc or consumables.

MillerWelds.com



276977 © 2016 Miller Electric Mfg. Co. 7/16







WHY VEX IQ?

VEX IQ is a snap-together robotics system designed to offer young students a rich and exciting introductory platform to the areas of science, technology, engineering and math (STEM). By encouraging essential life skills such as teamwork, problem solving, and leadership, this system specializes in both preparing and challenging students ages 8 through 14.

Simple, Flexible, Powerful,



## **VEXIQ** Kits & Bundles

Take the complications out of design and construction with tool less, snap-together pieces that allow students to build, drive and **program** robots in a matter of minutes.

With 850+ components and programming software included in each kit, the possibilities are endless as to what students can create!









#### The Ultimate Robotics Kit

The Super Kit takes educational robotics to the next fevel. Students can use the familiar hand held Controller with the pre-programmed code to drive robots right out of the box, or program them to run autonomously using the additional Smart Sensors.

- Over 850 Structural and Motion Components
   Included graphical instructions to build the Clawbot it.
   Storage Bin and Tray Included for organization of all parts
   Includes robot programming software options

228-2500 \$329



Starter Kit with Controller



#### Build and drive your first robot

The Starter kit with Controller is a focused introduction to STEM and robotics. Students can use the hand held Controller with the preprogrammed code to drive robots right out of the box.

- Over 850 Structural and Motion Components included graphical instructions to build the Clawbox [O Storage Bin and Tray included for organization of all parts includes robot programming software options

Starter Kit with Controller 228-3060 \$27914



Starter Kit with Sensors



#### Build and program your first robot

The Starter Kit with Sensors is a focused introduction to STEM and sensor integration. Students can use the included Smart Sensors to program autonomous robots right out of the box.

- Over 850 Structural and Motion Components Included graphical Instructions to build the Clawbot IQ Storage Bin and Tray included for organization of all parts Includes robot programming software options

Starter Kit with Sensors 228-3080 \$279\*\*



Classroom Bundle Implement a 12-team STEM solution into your classroom



Perfect for a group of 24 students (working in pair's), this discounted bundle contains everything needed to start building robots in your classroom, after school club, or summer STEM camp

(12) Super kits - Over 10,000 pieces totali (2) Cube kits Includes robot programming software options

Classroom Bundle 228-4000 \$3,849





Foundation Add-On Kit

Competition Add-On Kit 228-3600 \$99



Stay connected to VEX Robotics!







Foundation Add-On kit 228-2531 \$79



