



# HENRY FORD COLLEGE

## Technology Investment Fund (TIF)

### Application for Funding

This form and any attachments must be submitted electronically to the chairperson of the Technology Investment Committee by the published deadline date. (This application may be submitted as a document separate from the attachments.)

Please read the Outline of Approval Process and Expectations of Applicants/Project Directors on the last page, and check the box stating that you agree to the terms of the expectations.

<b>Date of Application:</b> 3/26/19	<b>Strategic Planning Initiative ID #:</b> 1860
<b>Project Name:</b> Classroom Technology Upgrade in E-236	<b>Total TIF Funds Requested:</b> \$111,330.00
<b>Project Director(s):</b> James Blair	<b>Department/Division/School:</b> ELEC. TECH/TAEL/IND.TECH./BEPD
<b>Summary of Project</b> <i>(Please limit to one paragraph.)</i>	
<p>Purchase 12 Siemens Model 6ZB23100CG00 SIMATIC STEP 7 S7-1200 PLC workstations and related software.</p> <p>This equipment will be used by Electrical Technology, Trade Electrical, and Mat2.</p> <p>Note: The quote from Electro-Matic products shows a quote for a quantity of 2 of item #6ES78221BA054YA5. This is a quote for a total of 12 software licenses.</p>	
<b>Detailed Description of Project</b>	
<p><b>Describe your project as specifically as possible.</b> What do you propose to do, and why do you propose to do this?</p> <p>The SIMATIC S7-1200 training workstation is a fully assembled system ready to plug and play. This unit is great for training, program testing, and line troubleshooting.</p> <p>The current Siemens software and PLC trainers are out of date. The current software and PLC trainers are 10 years old. The purchase of 12 PLC trainers and related software will add to the 6 PLC trainers and related software purchased in Fall 2018 with Perkins funding. This will allow a full class to work with up-to-date Siemens PLC trainers and software.</p>	
<b>Student Impact</b>	
<p><b>How many unique students will be served each academic year (Fall through Summer) by your project?</b> The term "unique students" refers to unduplicated headcount. Provide detail (course numbers; titles; and enrollments, for example).</p>	

With the recent transfer of the 58 students in Engineering Technology–Electrical program to the School of BEPD, the combined enrollment in the Electrical program is 258 students: 200 Electrical Technology plus 58 Engineering Technology-Electrical.

Trade-Electrical: approximately 250 students.  
MAT2 student population in the fall: approximately 50 students.

**Project Relevance to Technology Investment Committee Guidelines**  
*(Address only those that apply.)*

**Explain how the project provides technology to multiple courses or programs.**

See above. This equipment will be used in ELEC 235, TAEI 235, and in MAT2 courses.

**Explain how the project introduces student access to technology where it has not been available.**

This is an upgrade to current technology. Current software is almost 10 years old. The PLC trainers are equipped with modules that use the newer software. The new software will not function with the current, old PLC trainers.

**Explain how the project promotes innovation.**

James Blair is writing new lab experiments for the courses he teaches using the SIMATIC S7-1200 training workstation.

**Explain how the project promotes curricular revision.**

See above.

**Explain how the project supports areas that have established themselves as leaders using technology.**

HFC is the leader in Automation Controls and Instrumentation; that is where our students land high-paying jobs.

**Are you pursuing additional funding sources? If so, what are they?**

Most of our lab fee budget is already used up by expendable supplies.

**Project Budget**

**What will be purchased? (Include model numbers, if appropriate.) What is the cost? Include amounts that are committed from funds other than the Technology Investment Fund, and indicate the source of those other funds.**

From Electro-Matic Products Quote:

Quantity 12 - 6ZB23100CG00 PLC Training Workstation; unit cost, \$8,980; total cost, \$107,760  
Quantity 2 - 6ES78221BA054YA5 12 licenses of Simatic Step 7 Professional V15 2017 software; unit cost, \$1,785; total cost, \$3,570

Grand total: \$111,330

**From where will funds for future maintenance needs, consumables, and such come?**

**Forward any support for your budget (quotes, for example) to the chairperson of the Technology Investment Committee, and indicate here what has been forwarded.**

Copy of Electro-Matic Products quote  
Product brochure

**Rank your needs so that the Technology Investment Committee will have guidance should only partial funding be available to recommend.**

If only partial funding is available, the 12 licenses could be purchased; and any other available funding could purchase as many of the 12 trainers as possible.

### **Project Location and Equipment Security**

**Describe specifically where items to be purchased will be located or installed. Forward to the chairperson of the Technology Investment Committee room-layout diagrams if appropriate.**

Room E-236

**Indicate the status of any necessary approvals for using the space in which items will be located or installed.**

None

**Who, specifically, will do the installation?**

Plug in the trainer.

**How will equipment purchases be secured?**

Quote from Electro-Matic Products, Inc.

**Have you discussed with the Executive Director of Facilities Services to determine what, if any, infrastructure modifications are required to support this project such as electrical upgrades, locks, etc.? What has been determined?**

None needed

**Have you discussed with the Director of Network and IT Infrastructure to determine what, if any, software and/or network infrastructure modifications are required to support this project? What has been determined?**

None needed

**Evaluation**

**How, specifically, will you determine the success or shortcomings of your project?**

I will survey our students and Technical Advisory Committee. After this equipment and curriculum is implemented and once it is marketed, we should see an increase in enrollment.

## **TIF Funding: Outline of Approval Process and Expectations of Applicants/Project Directors**

1. Your project must be consistent with the description of the purpose of the Technology Investment Fund (See II.D.210 in the Faculty Organization Handbook.) and must have been submitted as part of your division's operational plan. Assuming that your project has not been funded otherwise (from general College funds or through Perkins funding, for example), you may complete and submit the application for TIF funding by the announced deadline.
2. A meeting will be scheduled for you to present your project to the Technology Investment Committee. You will be asked to give a short presentation and to take questions from Committee members about your project. The Committee will then meet to determine whether to recommend funding for your project. Please remember that even projects with great apparent merit may not be recommended for funding due to limited funds or other factors.
3. The recommendations of the Technology Investment Committee are forwarded to the President for consideration. Should your project be recommended by the Committee for funding and should the President concur with that recommendation, the funding request is placed before the Board of Trustees for consideration.
4. If your funding request is to be brought before the Board, the Technology Investment Committee Chair will notify you of the date of the Board meeting at which your request will be discussed. You or someone familiar with your project should plan to attend that meeting to answer any questions Board members may have.
5. The Board of Trustees will not actually vote whether to allocate funds for your project until the meeting following the meeting at which your project is discussed. The Board generally does not ask further questions about projects during the meeting in which it takes the vote. The Technology Investment Committee Chair will notify you of the outcome of the Board's vote.
6. Assuming that the Board votes to allocate funds to your project, you will work with the Office of Financial Services and Auxiliary Services and with Purchasing to use your funding to complete your project. (A copy of your proposal will be forwarded to the Purchasing Director.) You are responsible for coordinating the work to be done to complete your project including any tasks required during the Spring and Summer semesters.
7. During the third full semester (Fall or Winter semester) following the semester during which your funding is awarded, you will be asked to provide a written report evaluating your project and to present this report to the Technology Investment Committee.

I (We) have read the TIF Outline of Approval Process and Expectations of Applicants/Project Directors and do agree with the terms of the expectations.

Name(s):     Jim Blair

Date:            3/26/19



ELECTRO-MATIC PRODUCTS, INC.  
 23409 INDUSTRIAL PARK CT  
 FARMINGTON HILLS, MI 48335  
 USA  
 248-478-1182

# QUOTATION

Order Number	
1677567	
Order Date	Page
3/26/2019 11:12:38	1 of 1

Quote Expires On 4/25/2019

**Bill To:**

HENRY FORD COMMUNITY COLLEGE  
 5101 EVERGREEN ROAD  
 DEARBORN, MI 48128  
 US

313-845-6420

Customer ID: 119410

**Ship To:**

HENRY FORD COMMUNITY COLLEGE  
 5101 EVERGREEN ROAD  
 DEARBORN, MI 48128  
 US

Requested By: Jim Blair

Ship Via: UPS GROUND

**Job:**

PO Number	FOB	Terms	CSR
	ORIGIN	NET 30 DAYS	BJTATE

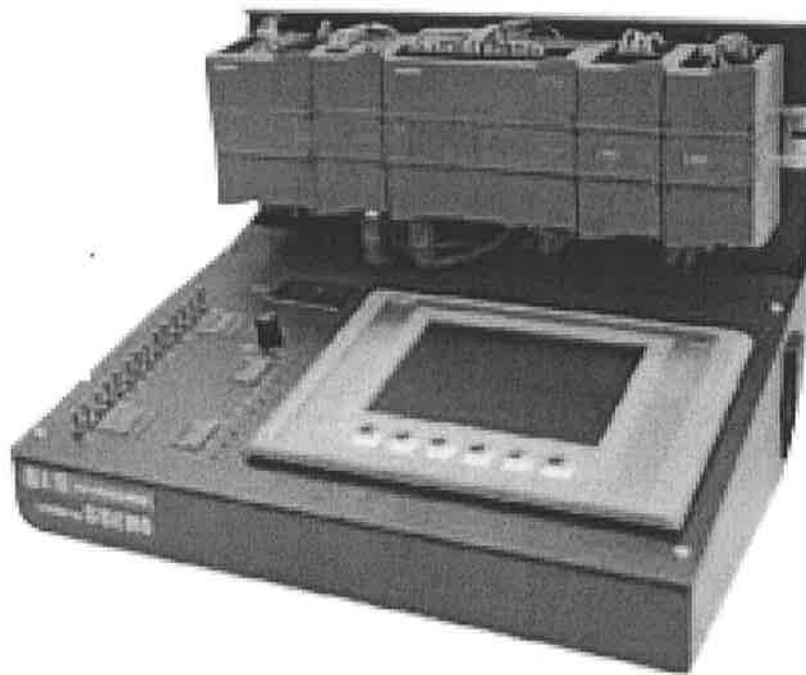
Quantities				UOM Unit Size	Item ID Item Description	Pricing UOM Unit Size	Unit Price	Extended Price
Line#	Ordered	Allocated	Remaining					

*Thank you for your business. If you have any questions or concerns, please feel free to call customer service at 248-478-1182 or email [ecustomerservice@electro-matic.com](mailto:ecustomerservice@electro-matic.com)*

001	12.00	0.00	12.00	EA	6ZB23100CG00 1.0 TRAINING DEVICE SIMATIC S7-1200 WITH CPU 1214	EA 1.0	8,980.0000	107,760.00
002	2.00	0.00	2.00	EA	6ES78221BA054YA5 1.0 SIMATIC STEP7 PROFESSIONAL V15 2017 NOT RETURNABLE OR CANCELLABLE.	EA 1.0	1,785.0000	3,570.00

Total Lines: 2

**SUB-TOTAL:** 111,330.00  
**TAX:** 0.00  
**AMOUNT DUE:** 111,330.00  
 U.S. Dollars



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## **SIMATIC S7-1200 Training Case**

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**Related courses: S7-1200 System Course**

**Design Includes:**

- **S7-1200 Power Supply**
- **CPU1214**
- **Analog output SB1234**
- **Analog input / output module SM 1234**
- **Digital input / output module SM 1223**
- **Switch CSM 1277**
- **Basic Panel KTP600**
- **Interface for conveyor belt model**

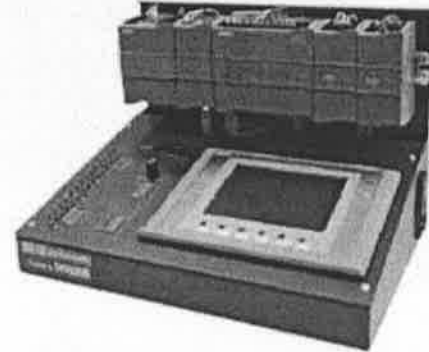
**Order number:**

**6ZB2310-0CG00**

## SIMATIC STEP 7 S7-1200 Fully Assembled Simulator Workstation

The SIMATIC S7-1200 training simulator is a fully assembled system ready to plug and play. This unit is great for training, program testing and line troubleshooting. This unit includes the following:

- S7-1200 Power Supply
- Ethernet Switch CSM 1277
- CPU1214
- Analog output SB1234, Analog in / out SM 1234, Digital in / out SM1223
- Basic Panel KTP600
- 16 Input switches, 16 Output Leds
- 16 potentiometers (Analog in)
- Digital Volt Meter
- Interface for conveyor model (conveyor sold separately, part 6ZB23100AP00P)



<b>System requirements:</b>	Windows XP SP3, Windows 7 (32 Bit)
<b>Sales note:</b>	For vocational school, Colleges and Universities, in-house vocational training departments, non commercial research institutions and non commercial training departments!
<b>Order number:</b>	<b>6ZB23100CG00</b>

**Order# 6ZB23100CG00**

<https://docplayer.net/22007964-Sce-guide-trainer-packages.html>



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Site Explorer

Product Search

Home Catalog > > > Ordering Data Overview > 6ZB23100CG00

6ZB23100CG00 | 6ZB23100CG00

Image viewer

Product data Further Product Information

Product

Article Number (Market / internal number)	6ZB23100CG00   6ZB23100CG00
Product Description	TRAINING DEVICE SIMATIC 57-1200 WITH HD 10 12TB
Product Name	> Ordering Data Overview
Product Reference (LM)	PROSIC Access Product

Price data

Price Group	234
List Price	> show price
Customer Price	> show price
Material Code	None

Delivery information

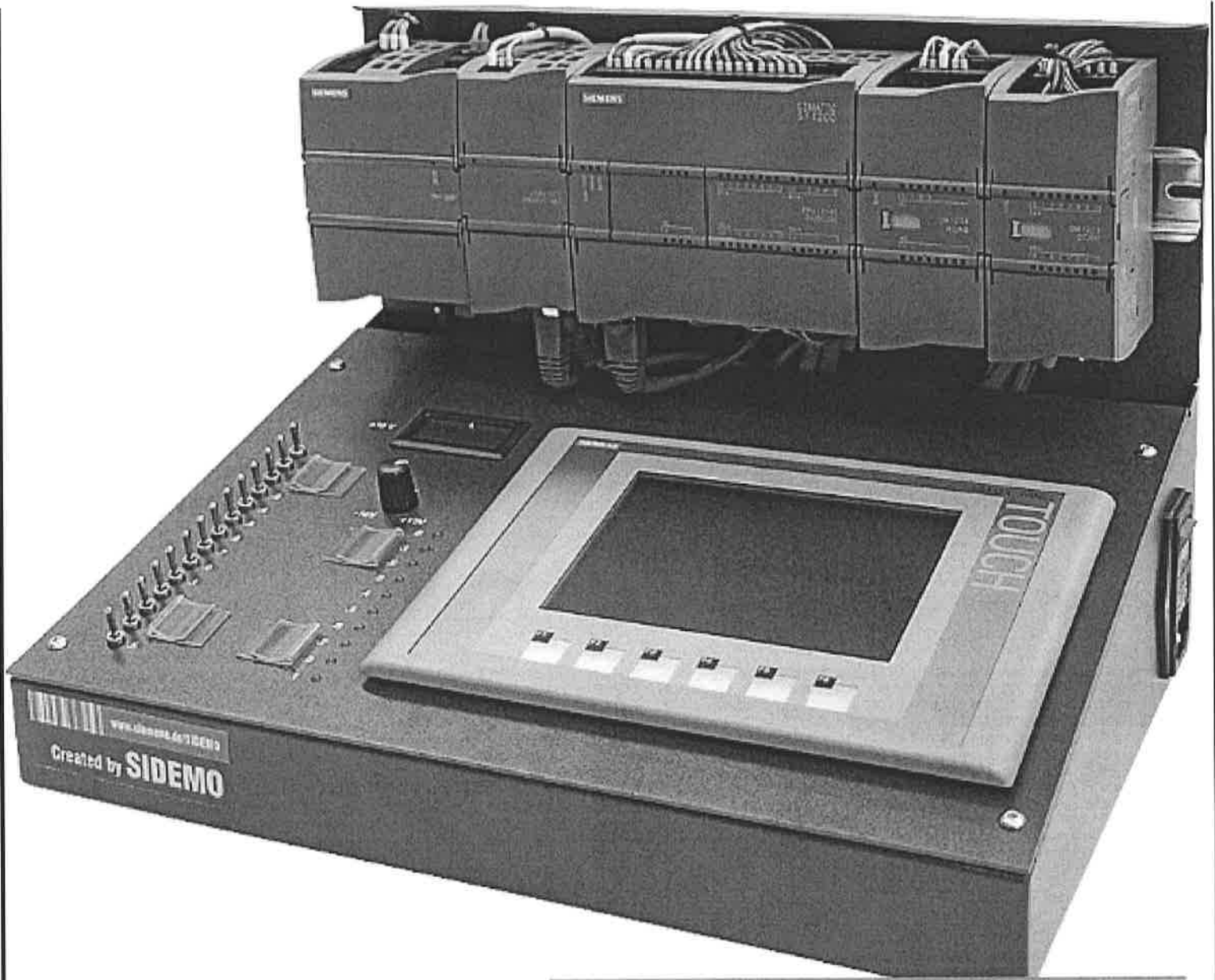
Export Control Regulations	AL, NL, BEL, DAN, DE, FR, GB, IT, JP, KR, SE, SW, TH, US, ZA
Standard lead time to stock	40 Days/2wks
Net Weight (kg)	24.417 kg
Product Dimensions (W x D x H)	Not available
Package Dimension	Not available
Package unit of measure	PI
Quantity Unit	1 Piece
Package Quantity	1

Additional Product Information

EAN	Not available
SKU	242802531000
Emergency Lock	001200280
EMC Class (EN55022)	III
Product Group	4378
Country of origin	Germany
Compliance with the substance restrictions according to RoHS directive	not available
Recyclable	No
WEEE (2012/19/EU) Take-Back Obligation	Yes

Characteristics

	Version	Classification
UNSPSC	74	41-20-15-10
UNSPSC	75	33-75-17-02



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## SIMATIC S7-1200 Training Case

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Related courses: S7-1200 System Course

Design Includes:

- S7-1200 Power Supply
- CPU1214
- Analog output SB1234
- Analog input / output module SM 1234
- Digital input / output module SM 1223
- Switch CSM 1277
- Basic Panel KTP600
- Interface for conveyor belt model

Order number:

6ZB2310-0CG00