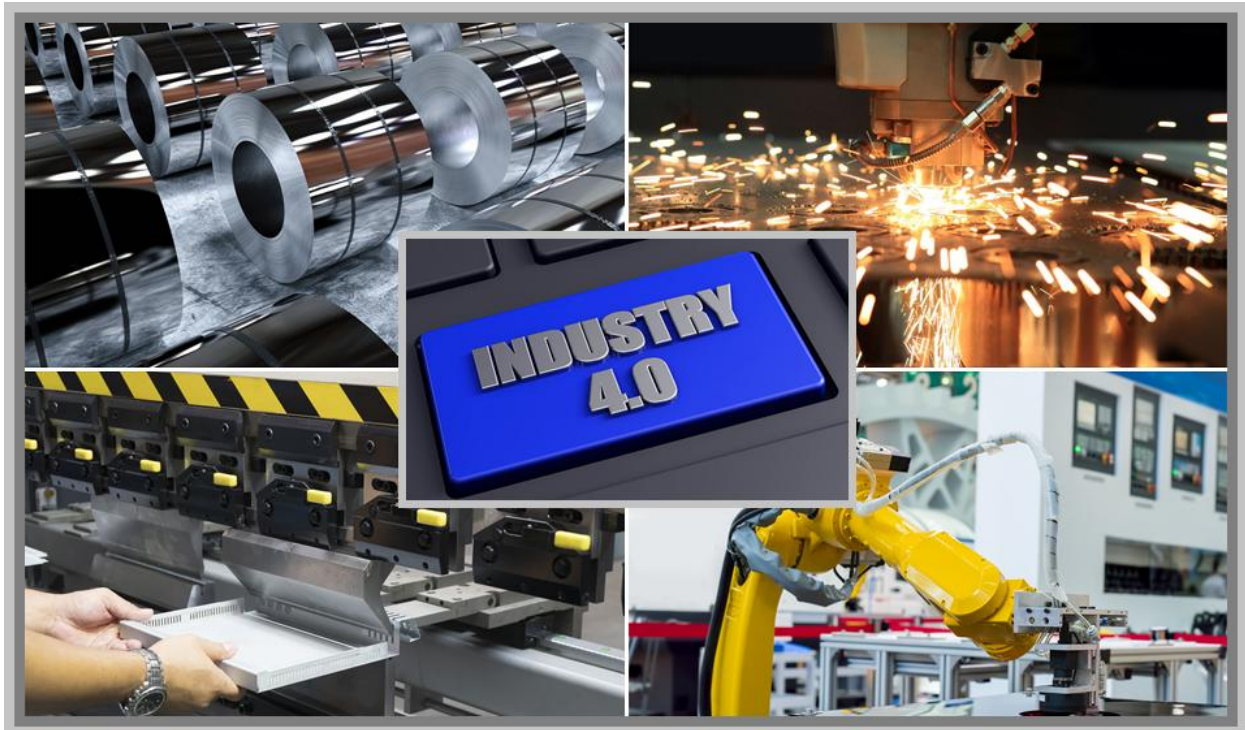




Global Edge® Engineering Assistant



Workflow #: 4 – Automated Quoting **(Process Parts & Generate Quote)**

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Demo Section 4: Quoting Workflow

Global Edge Engineering Assistant provides Quoting Workflow capabilities that includes **“Process Parts and Generate Quote”** to illustrate the processing of sheet metal parts for a Sales Quotes with Automated Routing Generation and Cost Rollups to produce accurate sales quotes.

- **4.1 – Automated Sales Opportunity Generation**
- **4.2 – Automated CAD Part Analysis**
- **4.3 – Automated Routing Generation**
- **4.4 – Automated Sales Quote Generation**

Quoting Workflow illustrates **“Automated Sales Quote Generation”** capabilities that provides an automated approach for generating accurate and timely sales quotes based on actual time and material costs.

Step 4.1: Starts with an **“Automated Sales Opportunity Generation”** that automates the generation sales opportunities by managing and automating the process of receiving incoming Request For Quote information and also automating steps necessary for the entire quoting workflow process.

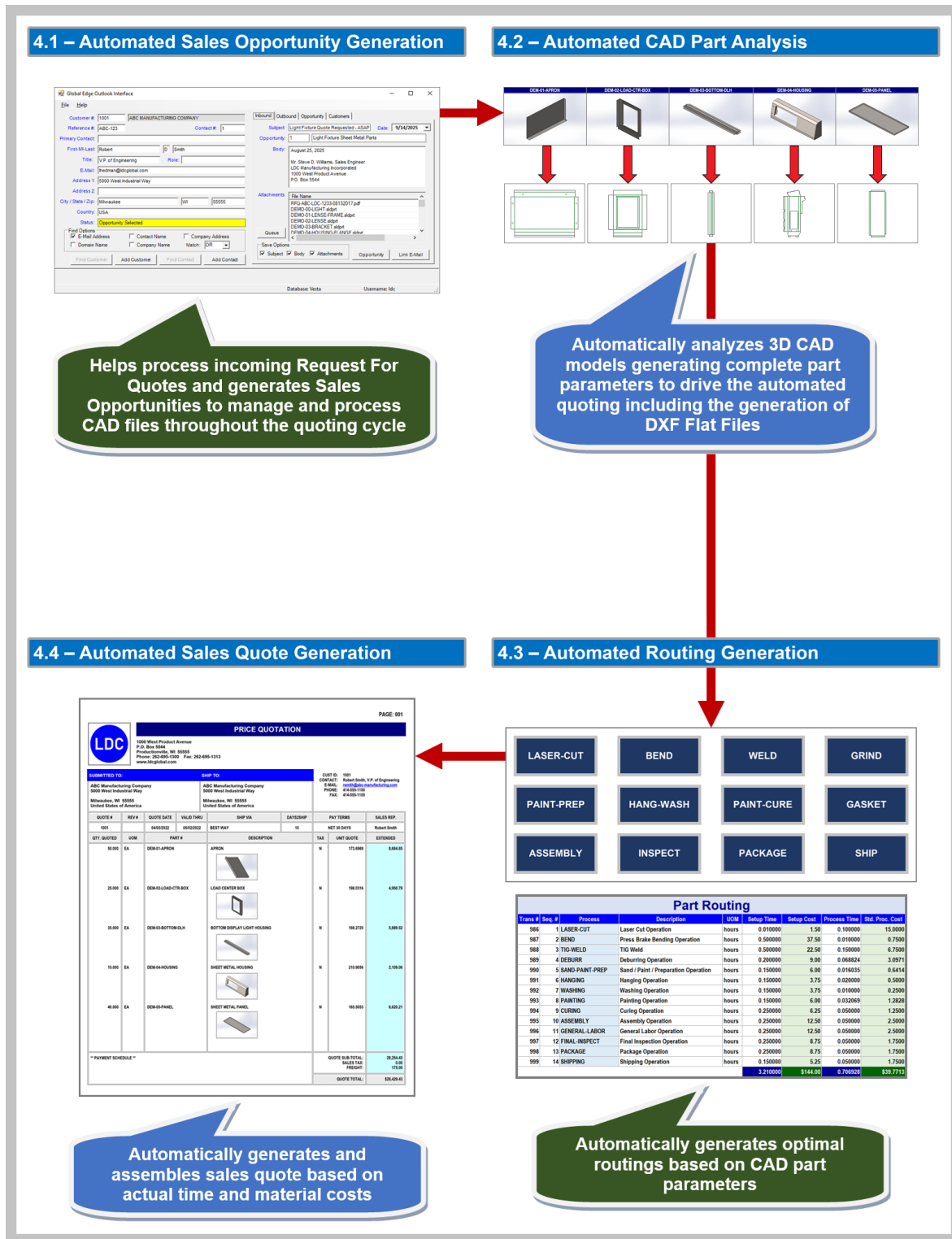
Step 4.2: Includes **“Automated CAD Part Analysis”** of complete sheet metal part parameters to serve as a foundation for Manufacturability Testing, Automated Routing, Bend Program and Sales Quote Generation.

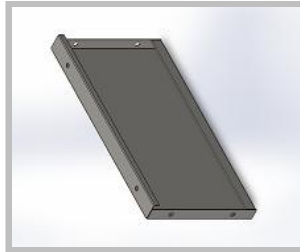
Step 4.3: Includes **“Automated Routing Generation”** that compares CAD part parameters with a matching bend process to identify any potential fabrication errors that may occur before leaving engineering.

Step 4.4: Enables **“Automated Sales Quote Generation”** by combining Automated CAD Part Analysis with Automated Routing Generation that produces accurate and timely sales quotes based on actual time and material cost rollups.

Workflow #: 4 - Process Parts & Generate Sales Quote (Quoting Workflow Diagram)

This scenario includes the processing of sheet metal parts for Sales Quotes with Automated Routing Generation and Cost Rollups to produce accurate sales quotes.



Work Queue Batch #: ?? (GlobalEdgeCAD_SLD)

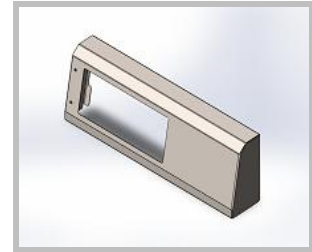
DEM-01-APRON
APRON



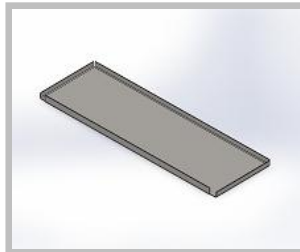
DEM-02-LOAD-CTR-BOX
LOAD CENTER BOX



DEM-03-BOTTOM-DLH
BOTTOM DISPLAY LIGHT HOUSING



DEM-04-HOUSING
SHEET METAL HOUSING



DEM-05-PANEL
SHEET METAL PANEL

Part Numbers Associated with 5 Demonstration Parts (Work Queue Batch #: #)

PART #	DESCRIPTION	DESCRIPTION 2	TYPE	CAT	MTL.	UOM
DEM-01-APRON	APRON	18 GA - Thick: 0.05000 - Bend Rad: 0.025	CMP	SHT	304-4	EA
DEM-02-LOAD-CTR-BOX	LOAD CENTER BOX	16 GA - Thick: 0.06250 - Bend Rad: 0.025	CMP	SHT	304-4	EA
DEM-03-BOTTOM-DLH	BOTTOM DISPLAY LIGHT HOUSING	18 GA - Thick: 0.05000 - Bend Rad: 0.025	CMP	SHT	304-4	EA
DEM-04-HOUSING	SHEET METAL HOUSING	14 GA - Thick: 0.07812 - Bend Rad: 0.125	CMP	SHT	304-4	EA
DEM-05-PANEL	SHEET METAL PANEL	16 GA - Thick: 0.05980 - Bend Rad: 0.070	CMP	SHT	CRS	EA

Customer Table (C-236)

The “**Customer**” table is one of the many database tables that are typically integrated with your ERP system. For demonstration purposes, the following Customer Record has been added to the **Global Edge** system:

CUST #	LOC. #	COMPANY NAME	CONTACT NAME	ADDRESS 1	CITY	ST	ZIP
1001	1	ABC MANUFACTURING	Robert Smith, V.P. of Engineering	5000 West Industrial Way	Milwaukee	WI	55555

Sales Quote Table (Q-221)

The “**Quote**” table includes the following Sales Quote Header that has been added for demonstration purposes as downloaded by the **Global Edge ERP Interface**:

QUOTE #	QUOTE DESCRIPTION	QUOTE DATE	VALID DATE	QUOTE TOTAL
1001	Fabricated Sheet Metal Parts	TODAY	TODAY + 30	\$28,429.43

Sales Quote Item Table (Q-223)

The **“Quote Item”** table includes the following Sales Quote Items for the above Sales Quote Header that has been added for demonstration purposes as downloaded by the **Global Edge ERP Interface**:

QUOTE #	ROW #	PART #	DESCRIPTION	QTY	UOM	UNIT	EXTENDED
1001	1	DEM-01-APRON	APRON	50.0000	EA	\$173.6969	\$8,684.85
1001	2	DEM-02-LOAD-CTR-BOX	LOAD CENTER BOX	25.0000	EA	\$198.0316	\$4,950.79
1001	3	DEM-03-BOTTOM-DLH	BOTTOM DISPLAY LIGHT HOUSING	35.0000	EA	\$168.2720	\$5,889.52
1001	4	DEM-04-HOUSING	SHEET METAL HOUSING	10.0000	EA	\$210.9056	\$2,109.06
1001	5	DEM-05-PANEL	SHEET METAL PANEL	40.0000	EA	\$165.5053	\$6,620.21

Sales Quote Quantity Table (Q-226)

The **“Quote Quantity”** table includes Quantity Pricing for each of the demonstration Sales Quote Items for the above sales quote that is downloaded by the **Global Edge ERP Interface**:

QUOTE #	ROW #	ORDER #	QTY	UOM	UNIT	LIST	UNIT	EXTENDED
1001	1	1	1.0000	EA	173.6969	208.4363	208.4363	208.44
1001	1	2	10.0000	EA	44.0969	52.9163	52.9163	529.16
1001	1	3	50.0000	EA	32.5769	39.0923	39.0923	1954.61
1001	1	4	100.0000	EA	31.1369	37.3643	37.3643	3736.43
1001	1	5	250.0000	EA	30.2729	36.3275	36.3275	9081.87
1001	2	1	1.0000	EA	198.0316	237.6379	237.6379	237.64
1001	2	2	10.0000	EA	68.4316	82.1179	82.1179	821.18
1001	2	3	50.0000	EA	56.9116	68.2939	68.2939	3414.70
1001	2	4	100.0000	EA	55.4716	66.5659	66.5659	6656.59
1001	2	4	250.0000	EA	54.6076	65.5291	65.5291	16382.28
1001	3	1	1.0000	EA	168.2720	201.9264	201.9264	201.93
1001	3	2	10.0000	EA	38.6720	46.4064	46.4064	464.06
1001	3	3	50.0000	EA	27.1520	32.5824	32.5824	1629.12
1001	3	4	100.0000	EA	25.7120	30.8544	30.8544	3085.44
1001	3	5	250.0000	EA	24.8480	29.8176	29.8176	7454.40
1001	4	1	1.0000	EA	210.9056	253.0867	253.0867	253.09
1001	4	2	10.0000	EA	81.3056	97.5667	97.5667	975.67
1001	4	3	50.0000	EA	69.7856	83.7427	83.7427	4187.14
1001	4	4	100.0000	EA	68.3456	82.0147	82.0147	8201.47
1001	4	5	250.0000	EA	67.4816	80.9779	80.9779	20244.48
1001	5	1	1.0000	EA	165.5053	198.6064	198.6064	198.61
1001	5	2	10.0000	EA	35.9053	43.0864	43.0864	430.86
1001	5	3	50.0000	EA	24.3853	29.2624	29.2624	1463.12
1001	5	4	100.0000	EA	22.9453	27.5344	27.5344	2753.44
1001	5	5	250.0000	EA	22.0813	26.4976	26.4976	6624.39

Sample Sheet Metal Part Routings

DEM-01-APRON			APRON					
Seq. #	Process	Description	WC #	Asset #	UOM	Setup Time	Load Time	Process Time
1	LASER-CUT	Laser Cut Operation	3	1123	hours	0.100000	0.010000	0.014345
2	BEND	Press Brake Bending Operation	7	1011	hours	0.250000	0.000000	0.020000
3	WELD-MD	Medium Seam-Tack Welding Operation	9	1020	hours	0.250000	0.000000	0.030000
4	GRIND-SM	Small Grinding Operation	8	1059	hours	0.000000	0.000000	0.010000
5	SAND-PAINT-PREP	Sand / Paint / Preparation Operation	10	1086	hours	0.000000	0.000000	0.020977
6	HANGING	Hanging Operation	10	1077	hours	0.000000	0.000000	0.010000
7	WASHING	Washing Operation	10	1082	hours	0.000000	0.000000	0.010000
8	PAINTING	Painting Operation	10	1084	hours	0.000000	0.000000	0.020000
9	CURING	Curing Operation	10	1089	hours	0.000000	0.000000	0.100000
10	FINAL-INSPECT	Final Inspection	12	1099	hours	0.000000	0.000000	0.100000
11	PACKAGING	Packaging Operation	14	1100	hours	0.000000	0.000000	0.200000
12	SHIPPING	Shipping Operation	15	1104	hours	0.000000	0.000000	0.001000

DEM-02-LOAD-CTR-BOX			LOAD CENTER BOX					
Seq. #	Process	Description	WC #	Asset #	UOM	Setup Time	Load Time	Process Time
1	LASER-CUT	Laser Cut Operation	3	1123	hours	0.100000	0.010000	0.014345
2	BEND	Press Brake Bending Operation	7	1011	hours	0.250000	0.000000	0.020000
3	WELD-MD	Medium Seam-Tack Welding Operation	9	1020	hours	0.250000	0.000000	0.030000
4	GRIND-SM	Small Grinding Operation	8	1059	hours	0.000000	0.000000	0.010000
5	SAND-PAINT-PREP	Sand / Paint / Preparation Operation	10	1086	hours	0.000000	0.000000	0.020977
6	HANGING	Hanging Operation	10	1077	hours	0.000000	0.000000	0.010000
7	WASHING	Washing Operation	10	1082	hours	0.000000	0.000000	0.010000
8	PAINTING	Painting Operation	10	1084	hours	0.000000	0.000000	0.015000
9	CURING	Curing Operation	10	1089	hours	0.000000	0.000000	0.100000
10	FINAL-INSPECT	Final Inspection	12	1099	hours	0.000000	0.000000	0.100000
11	PACKAGING	Packaging Operation	14	1100	hours	0.000000	0.000000	0.200000
12	SHIPPING	Shipping Operation	15	1104	hours	0.000000	0.000000	0.001000

Work Queue Batch #3 (Batch to Process Demo Parts)

TASK #	BAT #	JOB #	ROW #	QUOTE #	TASK DATE	TYPE	TASK NOTE	FROM	PROG.	SRC.
1016	3		1	1001	TODAY	Q	Create DXF File for PART #: DEM-01-APRON	ERP	SLD	
1017	3		2	1001	TODAY	Q	Create DXF File for PART #: DEM-02-LOAD-CTR-BOX	ERP	SLD	
1018	3		3	1001	TODAY	Q	Create DXF File for PART #: DEM-03-BOTTOM-DLH	ERP	SLD	
1019	3		4	1001	TODAY	Q	Create DXF File for PART #: DEM-04-HOUSING	ERP	SLD	
1020	3		5	1001	TODAY	Q	Create DXF File for PART #: DEM-05-PANEL	ERP	SLD	
1021	3	1006	1		TODAY	Q	Build Job for Demonstration Parts	ERP	MRP	1009

4.1 – Automated Sales Opportunity Generation

These steps illustrate how the automated quoting process can automatically capture, organize and store incoming RFQ (Request For Quote) information.

Sample Request For Quote – Fabricated Sheet Metal Parts

PAGE: 001

**ABC Manufacturing**

REQUEST FOR QUOTATION

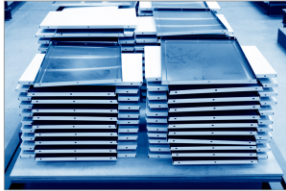
ABC Manufacturing Company
5000 West Industrial Way
Milwaukee, WI 55555
Phone: 414-555-1100 Fax: 414-555-1101

SUBMITTED TO:

LDC Manufacturing, Incorporated
1000 West Product Avenue
P.O. Box 5544
Productionville, WI 55555-5544
United States of America

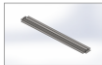
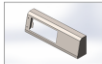
RFQ #: ABC-1001-03102026
SUBMIT DATE: 03/10/2026
QUOTE DUE DATE: 04/03/2026
REQ. DELIVERY DATE: 04/10/2026
SHIP METHOD: Truck

CONTACT: Robert Smith, V.P. of Engineering
E-MAIL: rsmith@abc-manufacturing.com
PHONE: 414-555-1100
EXT: 101



RFQ INSTRUCTIONS

This Request for Quote is for components needed for priority jobs requiring delivery no later than April 10, 2026.

ITEM #	PART NUMBER	DESCRIPTION	QTY	UOM	NOTES	IMAGES
1	DEM-01-APRON	APRON	25.000	each		
2	DEM-02-LOAD-CTR-BOX	LOAD CENTER BOX	50.000	each		
3	DEM-03-BOTTOM-DLH	BOTTOM DISPLAY LIGHT HOUSING	75.000	each		
4	DEM-04-HOUSING	SHEET METAL HOUSING	50.000	each		
5	DEM-05-PANEL	SHEET METAL PANEL	75.000	each		

NON-STANDARD CUSTOMIZATIONS

Based on projected steel prices, please recommend optimal choices for next 12 months.

COMMENTS / NOTES

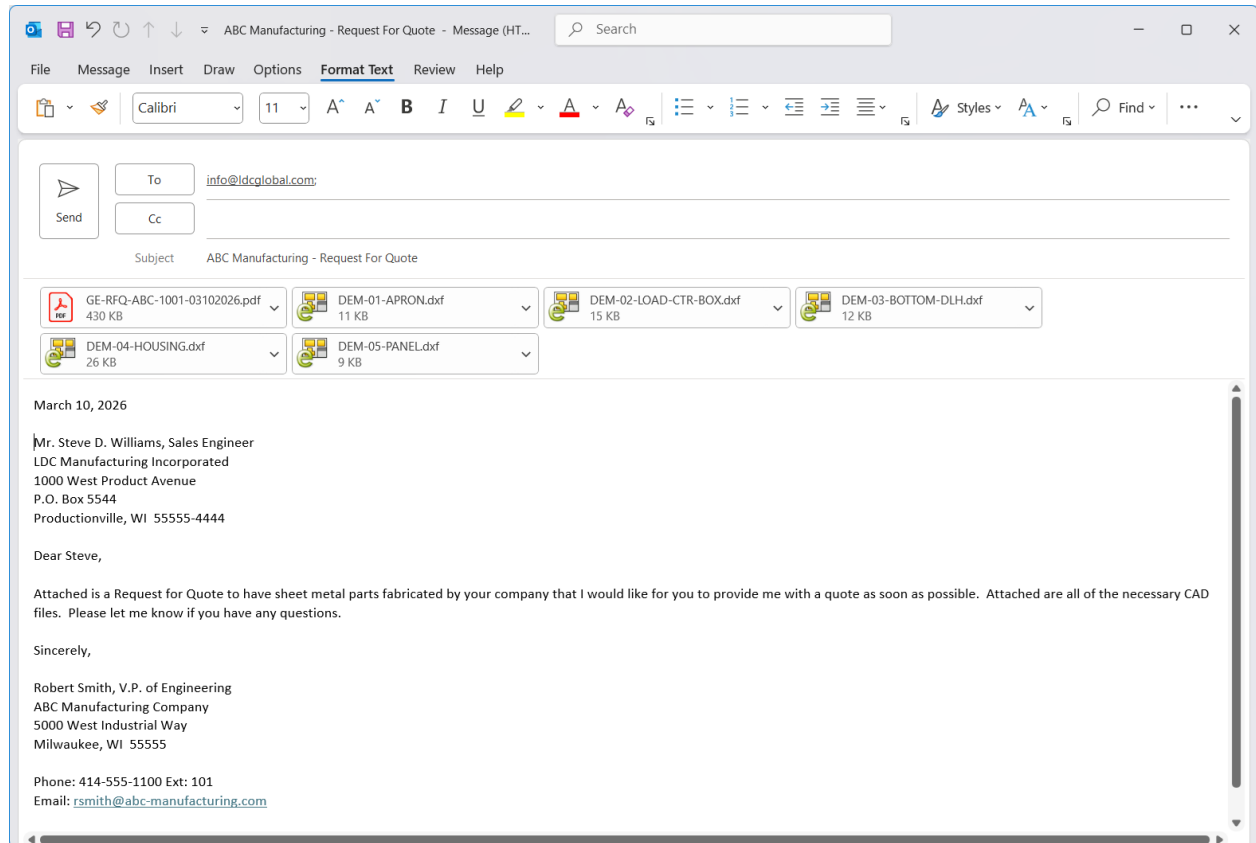
Potential delivery would be by the 15th of each month.

Workflow Steps

GE-04.1-Avatar-A.mp4

The ...

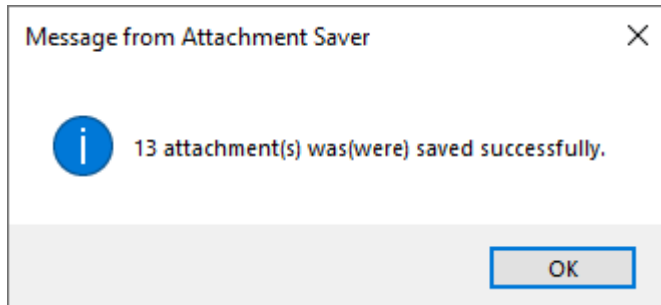
1. Receive RFQ (Request For Quote) in Microsoft Outlook including attachments:



GE-04.1-Avatar-B.mp4

The ...

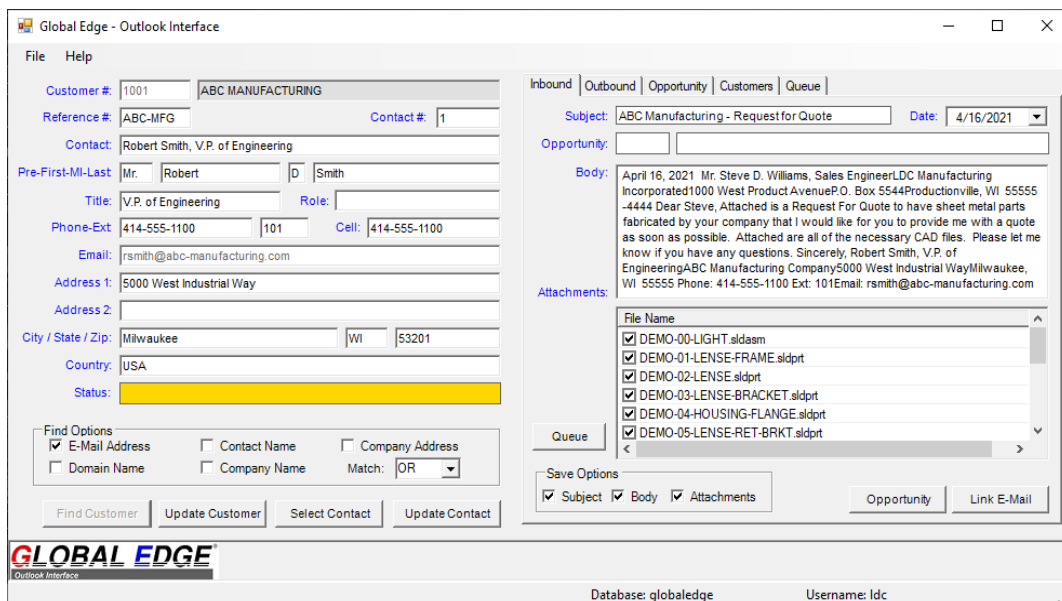
2. Select **“Global Edge > Inbound”** icon to execute capturing attachments of inbound email:



GE-04.1-Avatar-C.mp4

The ...

3. After selecting **“OK”**, the following **Global Edge – Outlook Interface** screen is displayed:



Global Edge - Outlook Interface

File Help

Customer #: 1001 ABC MANUFACTURING

Reference #: ABC-MFG Contact #: 1

Contact: Robert Smith, V.P. of Engineering

Pre-First-MI-Last: Mr. Robert D. Smith

Title: V.P. of Engineering Role:

Phone-Ext: 414-555-1100 101 Cell: 414-555-1100

Email: rsmith@abc-manufacturing.com

Address 1: 5000 West Industrial Way

Address 2:

City / State / Zip: Milwaukee WI 53201

Country: USA

Status:

Find Options: ☒ E-Mail Address ☐ Contact Name ☐ Company Address ☐ Domain Name ☐ Company Name Match: OR

Find Customer Update Customer Select Contact Update Contact

Inbound Outbound Opportunity Customers Queue

Subject: ABC Manufacturing - Request for Quote Date: 4/16/2021

Opportunity:

Body: April 16, 2021 Mr. Steve D. Williams, Sales EngineerLDC Manufacturing Incorporated1000 West Product AvenueP.O. Box 5544Productionville, WI 55555-4444 Dear Steve, Attached is a Request For Quote to have sheet metal parts fabricated by your company that I would like for you to provide me with a quote as soon as possible. Attached are all of the necessary CAD files. Please let me know if you have any questions. Sincerely, Robert Smith, V.P. of EngineeringABC Manufacturing Company5000 West Industrial WayMilwaukee, WI 55555 Phone: 414-555-1100 Ext: 101Email: rsmith@abc-manufacturing.com

Attachments:

File Name

- ☒ DEMO-00-LIGHT.sldasm
- ☒ DEMO-01-LENSE-FRAME.sldprt
- ☒ DEMO-02-LENSE.sldprt
- ☒ DEMO-03-LENSE-BRACKET.sldprt
- ☒ DEMO-04-HOUSING-FLANGE.sldprt
- ☒ DEMO-05-LENSE-RET-BRKT.sldprt

Queue

Save Options: ☒ Subject ☒ Body ☒ Attachments Opportunity Link E-Mail

GLOBAL EDGE
Outlook Interface

Database: globaledge Username: ldc

GE-04.1-Avatar-D.mp4

The ...

4. Select the **“Opportunity”** option to display the current Sales Opportunities that are attached the existing ABC MANUFACTURING customer record stored in the **Global Edge** database:

The screenshot displays the 'Global Edge - Outlook Interface' window. On the left, the 'Customer' tab is active, showing details for 'ABC MANUFACTURING' (Customer # 1001, Reference # ABC-MFG, Contact # 1). The contact is Robert Smith, V.P. of Engineering, with phone 414-555-1100 and email rsmith@abc-manufacturing.com. The address is 5000 West Industrial Way, Milwaukee, WI 53201, USA. On the right, the 'Opportunity' tab is active, showing a table of sales opportunities. The table has columns: Oppr #, Description, Date, Potential, and Status. The data is as follows:

Oppr #	Description	Date	Potential	Status
7	Customized Light Fixture	8/23/2019	25000.00	New
2	Configurable Utility Cabinet	8/14/2017	25000.00	New
1	Light Fixture Sheet Metal ...	8/14/2017	25000.00	New

At the bottom of the window, the status bar shows 'Database: globaledge' and 'Username: ldc'.

GE-04.1-Avatar-E.mp4

The ...

5. Fill in upper-right portion of screen with Sales Opportunity information, then select **“Add/Save”** option:

The screenshot displays the 'Global Edge - Outlook Interface' window. The left pane shows customer details for 'ABC MANUFACTURING' (Customer # 1001, Reference # ABC-MFG, Contact # 1). The contact is Robert Smith, V.P. of Engineering, with email rsmith@abc-manufacturing.com and address 5000 West Industrial Way, Milwaukee, WI 53201, USA. The right pane shows sales opportunity information for 'Quote for Sheet Metal Parts' (Opportunity # 29, Date 4/16/2021, Stage 4 - Quoting Stage, Rep. Robert D. Smith). The interest is 'SHEET METAL FAB.' and 'Light Fixture'. A table lists three opportunities:

Opportunity #	Description	Date	Potential	Status
29	Quote for Sheet Metal Parts	4/16/2021	25000.00	New
7	Customized Light Fixture	8/23/2019	25000.00	New
2	Configurable Utility Cabinet	8/14/2017	25000.00	New
1	Light Fixture Sheet Metal Parts	8/14/2017	25000.00	New

At the bottom, the status is 'New' and the 'Add/Save' button is visible. The bottom status bar shows 'Database: globaledge' and 'Username: ldc'.

GE-04.1-Avatar-F.mp4

The ...

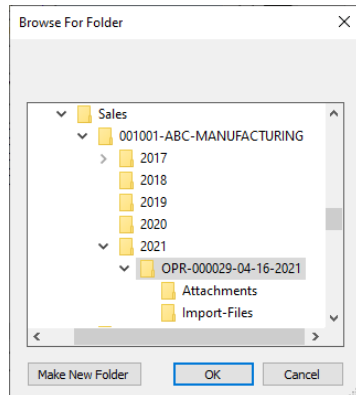
6. Select **“Browse”** option and the following prompt is displayed:

The screenshot shows a small dialog box titled 'GlobalEdgeOutlook64'. It contains the text 'Create Standard Opportunity Document Folder?' and two buttons: 'Yes' and 'No'.

GE-04.1-Avatar-G.mp4

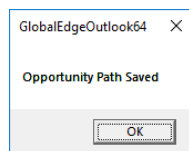
The ...

7. When answering “**Yes**” option, the following screen is displayed:

**GE-04.1-Avatar-H.mp4**

The ...

8. Highlight new Sales Opportunity folder and select “**OK**” option and the following prompt is displayed:



GE-04.1-Avatar-I.mp4

The ...

9. Select **"OK"** option which adds the selected document path to the below screen:

Global Edge - Outlook Interface

File Help

Customer #: 1001 ABC MANUFACTURING

Reference #: ABC-MFG Contact #: 1

Contact: Robert Smith, V.P. of Engineering

Pre-First-Mi-Last: Mr. Robert D. Smith

Title: V.P. of Engineering Role:

Phone-Ext: 414-555-1100 101 Cell: 414-555-1100

Email: rsmith@abc-manufacturing.com

Address 1: 5000 West Industrial Way

Address 2:

City / State / Zip: Milwaukee WI 53201

Country: USA

Status:

Find Options:
☒ E-Mail Address ☐ Contact Name ☐ Company Address
☐ Domain Name ☐ Company Name Match: OR

Find Customer Update Customer Select Contact Update Contact

Inbound Outbound Opportunity Customers Queue

Opportunity: 29 Quote for Sheet Metal Parts

Date: 4/16/2021

Stage: 4 Quoting Stage Rep: Robert D. Smith

Interest: SHEET METAL FAB. Light Fixture

Docs: C:\demo\Sales\001001-ABC-MANUFACTURING\2021\OPR-000029- Browse

Potential: Status: New Add/Save

Opportunity #	Description	Date	Potential	Status
29	Quote for Sheet Metal Parts	4/16/2021	25000.00	New
7	Customized Light Fixture	8/23/2019	25000.00	New
2	Configurable Utility Cabinet	8/14/2017	25000.00	New
1	Light Fixture Sheet Metal Parts	8/14/2017	25000.00	New

GLOBAL EDGE
Outlook Interface

Database: globaledge Username: ldc

GE-04.1-Avatar-J.mp4

The ...

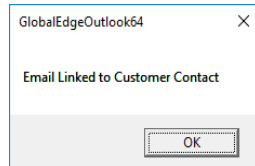
10. Select **"Inbound"** tab, then select the **"Link E-Mail"** option to update database and move selected attachments to Sales Opportunity folder:

The screenshot displays the 'Global Edge - Outlook Interface' window. The 'Inbound' tab is selected, showing an email from 'ABC Manufacturing - Request for Quote' dated 4/16/2021. The email body contains a request for a quote for sheet metal parts. The 'Attachments' section lists five files: DEMO-00-LIGHT.sldasm, DEMO-01-LENSE-FRAME.sldprt, DEMO-02-LENSE.sldprt, DEMO-03-LENSE-BRACKET.sldprt, and DEMO-04-HOUSING-FLANGE.sldprt. The 'Queue' section shows a list of files with checkboxes. The 'Save Options' section has checkboxes for 'Subject', 'Body', and 'Attachments'. The 'Opportunity' and 'Link E-Mail' buttons are visible. The bottom status bar shows 'Database: globaledge' and 'Username: ldc'.

GE-04.1-Avatar-K.mp4

The ...

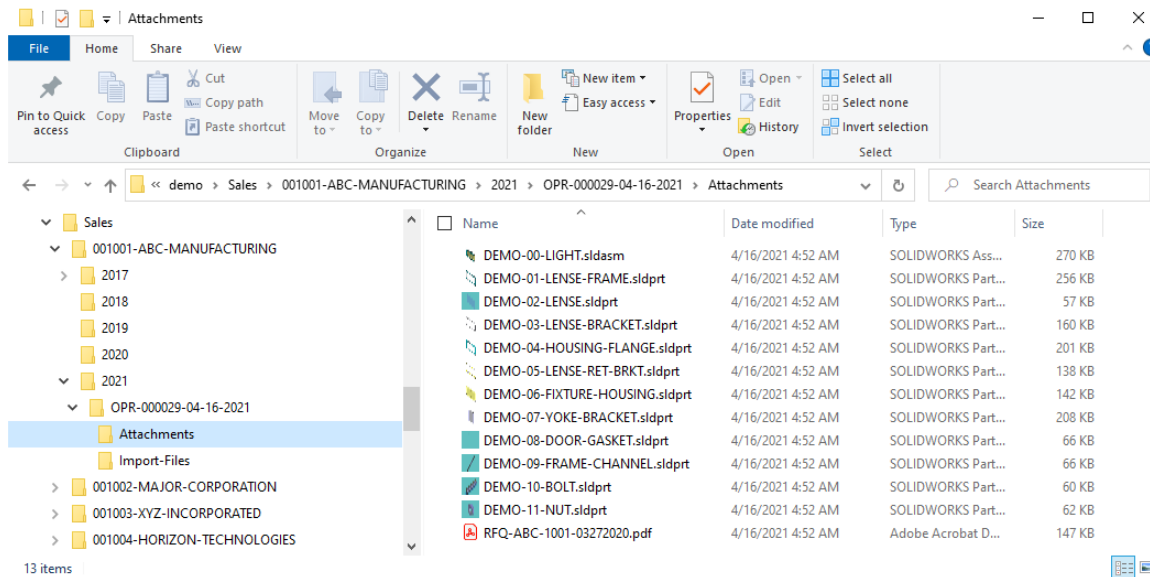
11. Upon completion of software execution, the following message is displayed:



GE-04.1-Avatar-L.mp4

The ...

12. The following shows a sample of the folders that are automatically created when a Sales Opportunity is generated and attached to a customer record in the **Global Edge** database including how those attached files are stored:



4.2 – Automated CAD Part Analysis

Global Edge® Engineering Assistant provides automated CAD model analysis to automatically analyze CAD part parameters and store these parameters in an SQL database. These CAD part parameters can then be utilized to automatically generate optimal routings including time and material cost rollups. Additionally, these CAD part parameters can be incorporated into DXF flat files to facilitate automated bend program generation for both press brakes and panel benders.

Workflow Steps

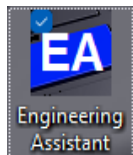
GE-04.2-Avatar-A.mp4

As the sheet metal is processed with Automated CAD Part Analysis functionality, the part is fully analyzed, and complete CAD part parameters are inserted into the **Global Edge** database. The software then utilizes these CAD part parameters to perform a Manufacturability Test which compares these parameters with matching shop floor machine tools. This process provides Design For Manufacturing functionality that identifies potential fabrication errors at the design stage to help ensure sheet metal parts can be successfully fabricated before reaching the shop floor.

GE-04.2-Avatar-B.mp4

The Automated CAD Part Analysis process culminates with the Automated Generation of optimal routing steps based on the CAD part parameters and matching machine tool capabilities. This includes the generation of DXF flat files that incorporate the necessary extended data to facilitate CAM bend program generation.

1. The first step is to open the **Global Edge® Engineering Assistant** software by clicking on the following desktop icon:



2. This will display the following screen form and menu options. Select **"Import > Import CAD Files"** option to display Import CAD Files screen. Select **"Create DXF(s)"** option to automatically generate 2D DXF Flat Files from 3D SolidWorks CAD Models. This process includes automatically embedding Extended Data into the 2D DXF Flat Files to drive Automated Bend Program Generation, Automated Routing Generation, and Automated Sales Quote Generation:

Import CAD Files

Batch #: 5 Configuration: Process Bend Process Parts

Queue Task #: 1016 Import and Test PART #: BP-01-GAL-060-06350-064

Item #: 1 of Total: 15 Imported: Next Previous

DXF Files: 0 CAD Models: Failed: Other Formats:

Import Path: C:\GlobalEdge\demo\CAD-Files\BP-01-GAL-060-06350-064.SLDPRPT

Operation: File Type: SolidWorks

QUOTE ITEM

Customer #: 1001 ABC MANUFACTURING

Opportunity #:

Quote #: Part Status:

Part #: BP-01-GAL-060-06350-064 Qty: 0.0000 EA

Description: BEND PROCESS TEST PART 01 Line: Items:

File Name:

PART CATEGORY AND STYLE

Main Assembly: Sub-Assembly: Sheet Metal: SMT SHEET METAL Parts:

DXF Import Rules: SolidWorks Format

Standard Bend Process:

SHEET METAL PART PROPERTIES

Flat Length: 96 Material: G60 GALVANIZED Detect

Flat Width: 71.547908 Thickness: 16 GA. 0.063500 Detect

Extrusions: 0 Cutouts: 21 Tolerance: 0.005000 Total Bends: 11

Perimeter: 335.095817 Cutout Perim: 262.558 No. Up Bends: 6 Down Bends: 5

Rnd Holes: 20 Round Sizes: 2 Int. Up Bends: 0 Int. Dn Bends: 0

Obrd Holes: 0 Obrnd Sizes: 0 Max Up Bend: 7 Max Dn Bend: 7

Rect Holes: 1 Rect Sizes: 1 No. Hems: 1 Total Folds: 1

Other Holes: 0 Other Sizes: 0 Max Bend Len: 80

Cutout Dist: 450.789009 Part Dist: 83.773954 UOM: Inches Standard: Not Set

DXF UOM: Not Set Configuration: QUOTING QUOTE CONFIGURATION

DXF IMAGE Zoom: Extents Rotation: 0

Scaling Imported Scaled

Flat Length: Flat Width: Adjusted Scale: 1.0000000

Pending Items: Import Status:

Line Key

Up Bend Down Bend Emboss Etch

Refresh

OPTIONS

Auto-Configure Build Routing Mfr Test Prompt Data Auto Queue Write Log File Detailed Log Debug

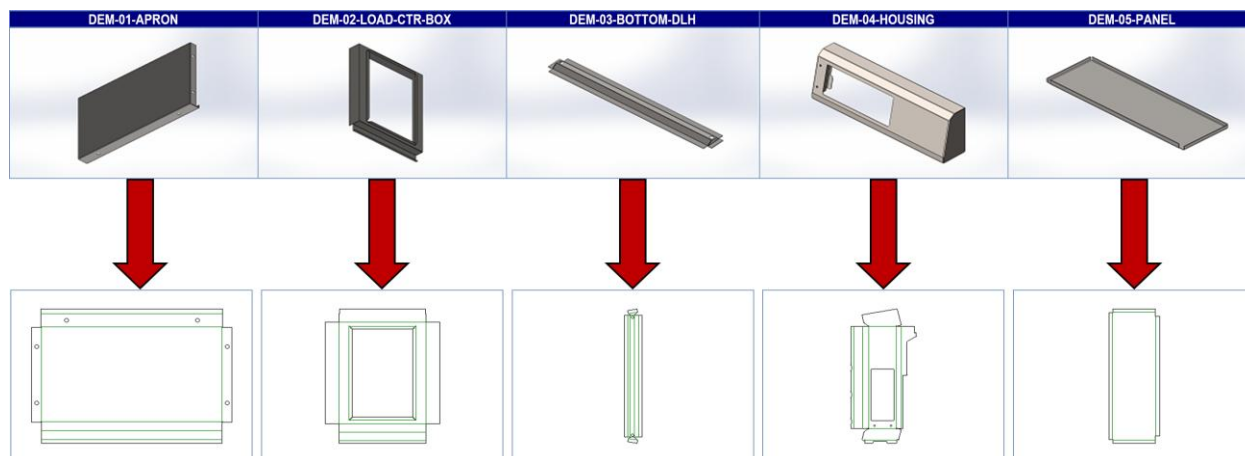
PART UPDATE

Pending Active Under Revision In-Active Obsolete Temporary

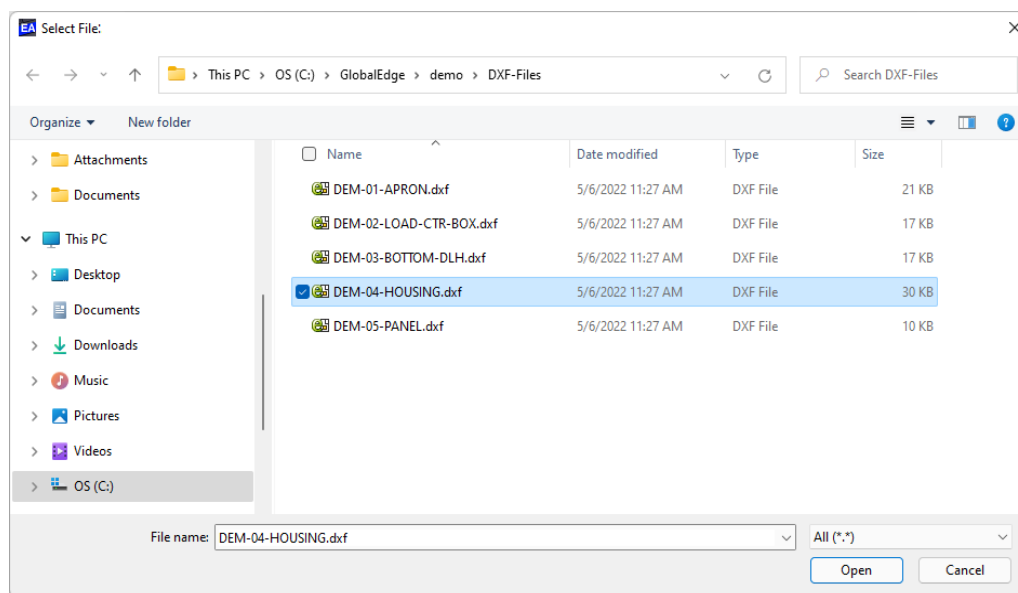
Work Queue

Find Customer Opportunity Find Quote New Quote Find File(s) Create DXF(s) Preview DXF Import Routing Save Print Documents View-Log Clear Finish Close

3. The following ...



4. Select **“Find File(s)”** option and select the DXF file(s) to process with the Select File screen:



Select **“Select All”** Option to Select Following Files:

Task #: 1009 – Create DXF File for PART #: DEM-01-APRON

Task #: 1010 – Create DXF File for PART #: DEM-02-LOAD-CTR-BOX

Task #: 1011 – Create DXF File for PART #: DEM-03-BOTTOM-DLH

Task #: 1012 – Create DXF File for PART #: DEM-04-HOUSING

Task #: 1013 – Create DXF File for PART #: DEM-05-PANEL

Select Following Check Boxes:

5. This displays the selected DXF file on the Import CAD Files screen:

Global Edge – Import DXF Files screen provides an easy method to import 2D DXF Sheet Metal Parts. The purpose of this functionality is to import the drawing attribute information into the **Global Edge** Engineering Data Warehouse for the purpose of Automated Routing Generation. Once a sheet metal part is imported, information such as: Part Height, Part Width, Part Perimeter, Number of Folds, Number of Hems, Number of Cutouts, and Cutout Perimeter is then stored in the **Global Edge** system.

The **Global Edge Engineering Assistant** provides the ability to process DXF Flat Files without the need of a 3D CAD system. The only required user input is specifying Material, Thickness, and Bend Radius if this is not included in the DXF Flat File. The above screen provides the ability to automatically launch an available 3D CAD system such as SolidWorks, Solid Edge, Inventor, Pro/ENGINEER (Creo), Catia, etc. This allows the user to produce DXF Flat Files with the appropriate 3D CAD system and make these files a part of the complete workflow of the **Global Edge** system including Manufacturability Testing and the incorporation Extended Data to each DXF Flat File to facilitate Automated Bend Program Generation.

4.3 – Automated Routing Generation

GE-04.3-Avatar-A.mp4

The Automated CAD Part Analysis process culminates with the Automated Generation of optimal routing steps based on the CAD part parameters and matching machine tool capabilities. This includes the generation of DXF flat files that incorporate the necessary extended data to facilitate CAM bend program generation.

GE-04.3-Avatar-B.mp4

Select the **“Routing”** button to display the routing steps that were generated during the processing of the sheet metal part.

GE-04.3-Avatar-C.mp4

Select the **“Close”** button to return to the Import screen and select the **“Test Results”** button to access the results of the Manufacturability Test that was performed during the processing of the sheet metal part.

1. The next step is to select the option to have the software automatically generate routings for the selected part:

The screenshot shows the 'Import CAD Files' dialog box. The 'QUOTE ITEM' section contains fields for Queue Task #, Customer #, Opportunity #, Import Path, Quote #, Part # (DEM-04-HOUSING), Description (SHEET METAL HOUSING), File Name (C:\GlobalEdge\demo\DXF-Files\DEM-04-HOUSING.dxf), and Part Status. The 'PART CATEGORY AND STYLE' section includes Main Assembly, Sub-Assembly, Sheet Metal (SHT), and Parts. The 'DXF Import Rules' section shows SolidWorks Format. The 'SHEET METAL PART PROPERTIES' section includes fields for Flat Length, Flat Width, Thickness, Tolerance, Total Bends, Extrusions, Cutouts, Perimeter, Cutout Perim, No. Up Bends, Down Bends, Rnd Holes, Round Sizes, Int. Up Bends, Int. Dn Bends, Obrd Holes, Obrnd Sizes, Max Up Bend, Max Dn Bend, Rect Holes, Rect Sizes, No. Hems, Total Folds, Other Holes, Other Sizes, Max Bend Len, Cutout Dist, Part Dist, UOM (Inches), and Standard (Not Set). The 'DXF UOM' is Not Set and the 'Configuration' is ROUTING. The 'Scaling' section includes Imported and Scaled fields for Flat Length, Flat Width, and Adjusted Scale (1.0000000). The 'Line Key' section includes Up Bend, Down Bend, Emboss, and Etch. The 'Pending Items' and 'Import Status' sections are empty. The 'OPTIONS' section includes Auto-Configure, Build Routing (highlighted with a red box), Prompt Data, Auto Queue, Write Log File, Detailed Log, and Debug. The 'PART UPDATE' section includes Pending, Active, Under Revision, In-Active, Obsolete, and Temporary.

The **Global Edge Engineering Assistant** provides the capability to define routing configuration rules that can generate routings based on imported CAD part parameters. These routing rules provides the ability to automatically calculate laser cut times based on material, thickness and specific laser capabilities that include:

- Laser Cut Speed
- Perimeter Cut Speed
- Cutout Cut Speed
- Piercing Time
- Load / Unload Time

This also includes machine time for punching, bending, welding, painting, assembly, and other related machine times that can be utilized for things like quoting, cost estimating and scheduling.

Select the **"Build Routing"** check box to have the software automatically generate routings with the ROUTING CONFIGURATION selected in the lower portion of the screen.

2. Select **"Import"** option which will display the Part Master Update screen:

The **Global Edge Engineering Assistant** provides the ability to define routing rules that are executed by the built-in routing configurator. This includes the automated generation of cutting times. The choices in the drop-down include:

- Laser
- Turret
- Open

When selecting the **"Open"** option, the routing configurator will determine the optimal method to cut part based on cost and/or delivery time.

The **"Material Properties"** that are comprised of Material and Thickness are automatically displayed if they are defined in the original CAD model. If they are not defined, the user can select the proper material and thickness that will then subsequently be added to the DXF flat file as extended data.

3. The following ...

The **Global Edge Engineering Assistant** provides the ability to define routing rules that are executed by the built-in routing configurator. This includes the automated generation of cutting times. The choices in the drop-down include:

- Laser
- Turret
- Open

When selecting the **“Open”** option, the routing configurator will determine the optimal method to cut part based on cost and/or delivery time.

The **“Editable Part Parameters”** section provides a list of 24 CAD part parameters. These 24 CAD part parameters can optionally be changed by the user need be. The software also analyzes an additional 24 CAD part parameters for a total of 48 CAD part parameters.

This section includes a **“Flip Bends”** option that allows the user to flip Up Bends to Down Bends or vice versa. This is to correct the bend direction from the original CAD model if it does not match the proper machine tool bend direction.

4. The following ...

The **Global Edge Engineering Assistant** will automatically add extended data to the DXF file with the information contained on the above screen. The software additionally includes a total of 48 CAD part parameters that can be added to the DXF file and routing steps that are outlined on the next screen. Refer to Page ## for a list of information that can be added as extended data to the DXF file.

This column of check boxes allows you to select routing steps to be executed on the selected part. This includes the following manufacturing processes to execute:

- Blank
- Emboss
- Turret
- Laser
- Press Brake
- Panel Bender
- Pem Nut / Stud
- Grain
- Weld
- Deburr
- Paint

The software will generate routings including time calculations for accurate machine process times.

5. After selecting “OK” option, and if “**Routing Check Box**” was checked, the following Part Routing screen is displayed with the generated manufacturing steps:

EA Part Routing

Part Number: DEM-04-HOUSING SHEET METAL HOUSING

Route #: 1 Description: STANDARD PART ROUTING Set Up: \$142.50

Type: Standard Optimization: None Component: \$43.63

Loca. Level: None Optimization Quantity: 1 Process: \$24.77

Operation: 14 Operations Found ... Total Cost: \$210.91

Standard Bend Process

Process #: Radius: UOM:

Seq #	Routing	Routing Description	Type	Units / Hour	Estimated Cost	Mach #	Mach Ref
1	LASER-CUT	Laser Cut Operation	Process	200.00	15.0000	1003	LASER-1003
2	BEND	Press Brake Bending Operation	Process	100.00	0.7500	1007	PB-1007
3	TIG-WELD	TIG Weld	Process	6.67	6.7500	1010	WELD-1010
4	DEBURR	Deburring Operation	Process	14.53	3.0971	1011	FINISH-1011
5	SAND-PAINT-PREP	Sand / Paint / Preparation Operation	Process	62.36	0.6414	1018	PAINT-1018
6	HANGING	Hanging Operation	Process	50.00	0.5000	1015	HANG-1015
7	WASHING	Washing Operation	Process	100.00	0.2500	1016	WASH-1016
8	PAINTING	Painting Operation	Process	31.18	1.2828	1017	PAINT-1017
9	CURING	Curing Operation	Process	20.00	1.2500	1019	OVEN-1019
10	ASSEMBLY	Assembly Operation	Process	20.00	2.5000	1021	ASSM-1021
11	GENERAL-LABOR	General Labor Operation	Process	20.00	2.5000	1025	LABOR-1025
12	FINAL-INSPECT	Final Inspection Operation	Process	20.00	1.7500	1026	INSPECT-1026
13	PACKAGE	Package Operation	Process	20.00	1.7500	1027	PACK-1027
14	SHIPPING	Shipping Operation	Process	20.00	1.7500	1028	SHIP-1028

These columns calculate / display the cost estimate to fabricate a single part. The software can also calculate the cost for various levels of production.

The **Global Edge Engineering Assistant** includes a configuration engine that runs in the background to generate routings based on the CAD part parameters and simple to define routing rules.

These columns (Units / Hour, Estimated Cost, Mach #) are automatically generated with the configuration engine which includes how many units can be produced per hour and the estimated cost per unit based on the machine tool selected for each specific process.

6. After selecting “OK” option, the following screen form is displayed upon completion of Import CAD Files process:

Import CAD Files

Batch #: 5 Configuration: Process Bend Process Parts

Queue Task #: 1016 Import and Test PART #: BP-01-GAL-G60-06350-064

Item #: 1 of Total: 15 Imported: Next Previous

DXF Files: 0 CAD Models: Failed: Other Formats:

Import Path: C:\GlobalEdge\demo\CAD-Files\BP-01-GAL-G60-06350-064.SLDPRT

Operation: File Type: SolidWorks

QUOTE ITEM

Customer #: 1001 ABC MANUFACTURING

Opportunity #: Part Status:

Quote #: Part #: BP-01-GAL-G60-06350-064 Qty: 0.0000 EA

Description: BEND PROCESS TEST PART 01 Line: Items:

File Name:

PART CATEGORY AND STYLE

Main Assembly: Sub-Assembly: Sheet Metal: SHT SHEET METAL Parts:

DXF Import Rules: SolidWorks Format

Standard Bend Process:

SHEET METAL PART PROPERTIES

Flat Length: 96 Material: G60 GALVANIZED Detect

Flat Width: 71.547908 Thickness: 16 GA. 0.063500 Detect

Extrusions: 0 Cutouts: 21 Tolerance: 0.005000 Total Bends: 11

Perimeter: 335.095817 Cutout Perim: 262.558 No. Up Bends: 6 Down Bends: 5

Rnd Holes: 20 Round Sizes: 2 Int. Up Bends: 0 Int. Dn Bends: 0

Obrd Holes: 0 Obrd Sizes: 0 Max Up Bend: 7 Max Dn Bend: 7

Rect Holes: 1 Rect Sizes: 1 No. Hems: 1 Total Folds: 1

Other Holes: 0 Other Sizes: 0 Max Bend Len: 80

Cutout Dist: 450.789009 Part Dist: 83.773954 UOM: Inches Standard: Not Set

DXF UOM: Not Set Configuration: QUOTING QUOTE CONFIGURATION

DXF IMAGE Zoom: Extents Rotation: 0

Scaling

Imported Scaled

Flat Length: Flat Width: Adjusted Scale: 1.0000000

Line Key

Up Bend Down Bend Emboss Etch

Pending Items: Import Status:

OPTIONS

Auto-Configure Build Routing Mfr Test Prompt Data Auto Queue Write Log File Detailed Log Debug

PART UPDATE

Pending Active Under Revision In-Active Obsolete Temporary

The **Global Edge Engineering Assistant** provides the ability to automatically analyze CAD part parameters. This includes a total of 48 CAD part parameters to drive:

- Automated Bend Program Generation
- Automated Routing Generation
- Manufacturability Testing
- Automated Sales Quote Generation

Refer to Page ## for a listing of the information that is analyzed and generated with the CAD part importation process.

7. Select the **"Print"** option to generate Part DXF Import Report:

CAD Part Parameter Report (Part 1 of 3)

The first portion of the **CAD Part Parameter Report** includes the following 48 CAD part parameters that are analyzed and recorded in an SQL database. These CAD part parameters provide the foundation for the automated generation of bend programs for press brakes, panel benders and other robotic folders. This is accomplished with the **Global Edge Engineering Assistant** software comparing the CAD part parameters with your available machine tool tooling such as part size, bend angles, hem counts, pem and louver gaps from bend lines, etc.:

Part Number	Description	UOM	Type	Cat.	Style	Mtl.
BP-06-SS-304-4-075-125	BEND PROCESS TEST PART 06	EA	C	SHT	-	304-4
Setup Cost:	104.2500	Material:	304-4-STAINLESS STEEL			
Process Cost:	18.7399	Ship Weight:	110.97			
Component Cost:	525.1589	Ship Weight UOM:	lbs			
Rollup Cost:	648.1488	Standard Cost:	648.1488			

CAD Part Parameters							
Par. #	Parameter Name	Value	UOM	Par. #	Parameter Name	Value	UOM
1	Sheet Length:	0.000000	inches	25	Minimum Pem Gap:	1.200000	inches
2	Sheet Width:	0.000000	inches	26	Minimum Down Pem Gap:	1.800000	inches
3	Blank Length:	0.000000	inches	27	Minimum Emboss Gap:	3.000000	inches
4	Blank Width:	0.000000	inches	28	Minimum Down Emboss Gap:	1.200000	inches
5	Material thickness:	0.078120	inches	29	Minimum Louver Gap:	2.000000	inches
6	Perimeter:	312.338773	inches	30	Minimum Down Louver Gap:	0.000000	inches
7	Flat Length:	98.000000	inches	31	Min. Taper Bend Line Gap:	0.000000	inches
8	Flat Width:	58.169387	inches	32	Minimum Die Cutout:	0.000000	inches
9	Round Hole Count:	20.000000	-	33	Up Bend Count:	6.000000	-
10	Round Sizes Count:	2.000000	-	34	Internal Up Bends Count:	0.000000	-
11	Obround Hole Count:	0.000000	-	35	Maximum Up Bend:	0.000000	inches
12	Obround Sizes Count:	0.000000	-	36	Down Bend Count:	5.000000	-
13	Rectangular Hole Count:	1.000000	-	37	Internal Down Bends Count:	0.000000	-
14	Rectangular Sizes Count:	1.000000	-	38	Maximum Down Bend:	0.000000	inches
15	Other Hole Count:	0.000000	-	39	Fold Count:	11.000000	-
16	Other Sizes Count:	0.000000	-	40	Hem Count:	1.000000	-
17	Number of Cutouts:	21.000000	-	41	Extrude Count:	0.000000	-
18	Cutout Perimeter:	262.558000	inches	42	Bend Radius:	0.125000	inches
19	Minimum Bend Length:	35.000000	inches	43	Cutting Method:	Open	-
20	Maximum Bend Length:	80.000000	inches	44	Cutter Ref. Number:	-	-
21	Minimum Bend Angle:	45.000000	degrees	45	Certified Material:	No	-
22	Maximum Bend Angle:	90.000000	degrees	46	Material:	304-4	-
23	Minimum Flange Width:	4.000000	inches	47	Cutout Distance:	382.601221	inches
24	Maximum Flange Width:	12.000000	inches	48	Part Distance:	78.084693	inches

CAD Part Parameter Report (Part 2 of 3)

The second portion of the **CAD Part Parameter Report** includes a list of the routing steps generated by the Routing Configurator built into the **Global Edge Engineering Assistant**. These routing steps are based on user defined routing rules that utilize the CAD part parameters to generate accurate process times based on part size, material and thickness including an accurate rollup of costs:

Part Routing								
Trans #	Seq. #	Process	Description	UOM	Setup Time	Setup Cost	Process Time	Std. Proc. Cost
986	1	LASER-CUT	Laser Cut Operation	hours	0.010000	1.50	0.100000	15.0000
987	2	BEND	Press Brake Bending Operation	hours	0.500000	37.50	0.010000	0.7500
988	3	TIG-WELD	TIG Weld	hours	0.500000	22.50	0.150000	6.7500
989	4	DEBURR	Deburring Operation	hours	0.200000	9.00	0.068824	3.0971
990	5	SAND-PAINT-PREP	Sand / Paint / Preparation Operation	hours	0.150000	6.00	0.016035	0.6414
991	6	HANGING	Hanging Operation	hours	0.150000	3.75	0.020000	0.5000
992	7	WASHING	Washing Operation	hours	0.150000	3.75	0.010000	0.2500
993	8	PAINTING	Painting Operation	hours	0.150000	6.00	0.032069	1.2828
994	9	CURING	Curing Operation	hours	0.250000	6.25	0.050000	1.2500
995	10	ASSEMBLY	Assembly Operation	hours	0.250000	12.50	0.050000	2.5000
996	11	GENERAL-LABOR	General Labor Operation	hours	0.250000	12.50	0.050000	2.5000
997	12	FINAL-INSPECT	Final Inspection Operation	hours	0.250000	8.75	0.050000	1.7500
998	13	PACKAGE	Package Operation	hours	0.250000	8.75	0.050000	1.7500
999	14	SHIPPING	Shipping Operation	hours	0.150000	5.25	0.050000	1.7500
					3.210000	\$144.00	0.706928	\$39.7713

CAD Part Parameter Report (Part 3 of 3)

The third portion of the **CAD Part Parameter Report** includes Manufacturability Test Results. These test results are the result of comparing CAD part parameters with user defined bend processes which provides the allowable limits of your tooling sets. The left-hand portion of the report includes the bend process limits while the right-hand portion includes the CAD part parameters:

Manufacturability Test Results									
Process #:	4	Bnd Proc., SS 304-4, 0.075, Rad - 0.120			DEM-04-HOUSING		SHEET METAL HOUSING		
Mtl. Code:	304-4	Pass			46		Material:	304-4	-
Thickness:	0.075000	Pass	Linear UOM:	inches	5		Material thickness:	0.075000	inches
Min. Thickness:	0.072000		Max. Thickness:	0.077000					
Upper Tool Set:	2		Upper Part #:	BIU-817					
Lower Tool Set:	7		Lower Part #:	OZU-318					
Inside 90 Radius:	0.120000	Pass	Radius Tol:	0.010000	42		Bend Radius:	0.120000	inches
K Factor 90:	0.445000		Bend Allowance 90:	0.008000					
Gage Allowance 90:	0.003000		Tons Per Foot:	25.000000					
Min. Flat Length:	4.000000	Pass	Max. Flat Len:	72.000000	7		Flat Length:	19.699142	inches
Min. Flat Width:	2.000000	Pass	Max. Fl. Width:	48.000000	8		Flat Width:	42.193245	inches
Max. Bend Len:	72.000000	-	Max. Tonnage:	150.000000					
Max. Part Weight:	125.000000	-	Mass UOM:	lbs					
Min. Angle:	39.000000	Fail			21		Minimum Bend Angle:	37.000000	degrees
Max. Angle:	180.000000	Pass			22		Maximum Bend Angle:	93.000000	degrees
Min Length:	0.750000	Pass			19		Minimum Bend Length:	8.451000	inches
Max Length:	96.000000	Pass			20		Maximum Bend Length:	32.210000	inches
Min. Flange Width:	1.200000	Pass			23		Minimum Flange Width:	0.927000	inches
Max. Flange Width:	24.000000	Pass			24		Maximum Flange Width:	5.296000	inches

4.4 – Automated Sales Quote Generation

Global Edge® Engineering Assistant includes Automated Sales Quote Generation by incorporating the CAD part importation capabilities into the quoting process. Within the previous section of the software, the user can look up a customer, generate a sales quote header and attach imported CAD parts to the sales quote. Once CAD part parameters are imported and stored in the SQL database, this section of the **Global Edge® Engineering Assistant** software provides the capabilities of a full functioning quoting system.

Workflow Steps

GE-04.4-Avatar-A.mp4

The ...

GE-04.4-Avatar-B.mp4

The ...

GE-04.4-Avatar-C.mp4

The ...

1. The first step is to open the **Global Edge® Engineering Assistant** software by clicking on the following desktop icon:



2. This will display the following splash screen and menu options:



3. The first step is to select **“CRM-Quoting > Prospect / Quote Management”** option to display the following screen:

The screenshot displays the 'PROSPECT QUOTE: Global Edge Windows Demo Server' application window. The main menu on the left includes 'MAIN_MENU' and 'CRM_Quote'. The 'Prospect-Maintenance' form is active, featuring fields for ID #, REF #, PHONE, EXT, MOBILE, FAX, LET, ATH, REP, TER, CUS, and TICKLER DATE. It also includes sections for ACTION, PRODUCT INTEREST, LEAD SOURCE, TYPE, POTENTIAL, PRICE LIST, SALES STAGE, INITIAL CONTACT, WEBSITE, LAST CONTACT, NAICS CODE, EMPLOYEE COUNT, SIC CODE, ANNUAL REVENUE, PRODUCTS, and NOTES. A 'DATE ADDED' and 'DATE MODIFIED' field is at the bottom. A 'PROSPECT' sidebar on the right contains buttons for Add, Find, Next, Previous, Goto, Tickler, Update, Contact, Edit Notes, Opportunity, Sales Quote, More, Delete, Work Queue, and QUIT.

4. Select **“Work-Queue”** option to display the following screen and menu options:

The screenshot displays the 'PROSPECT QUOTE: Global Edge Windows Demo Server' application window. The main menu on the left includes 'MAIN_MENU' and 'CRM_Quote'. The 'Work-Queue' form is active, featuring a 'PRIORITY' section with checkboxes for 3-NORMAL, 4-LOW, 2-HIGH, and 5-LOWEST. It also includes a 'STATUS' section with checkboxes for DRAFT, PENDING, OPEN, WIP, HOLD, FAILED, CLOSED, and CANCELLED. The form includes fields for BATCH #, CUST #, PROJ #, JOB #, and a 'QUERY' section with a SQL query. A table at the bottom lists tasks with columns: TASK #, BATCH #, DATE, FROM-TO, TYPE, PRIORITY, NOTE, APPLIES TO, ACTION, and REQ. DATE. A 'TASK COUNT' field is at the bottom left. A 'PROSPECT' sidebar on the right contains buttons for OK and Cancel.

5. Select **“Execute-Task”** option and highlight workflow task to execute followed by **“OK”** option:

The screenshot shows the 'Work-Queue' window in the PROSPECT QUOTE application. The interface includes a sidebar with 'MAIN MENU' and 'CRM Quote' options. The main area contains a 'Work-Queue' section with filters for Priority (3-NORMAL, 4-LOW, 2-HIGH, 5-LOWEST), Status (DRAFT, PENDING, OPEN, WIP, HOLD, FAILED, CLOSED, CANCELLED), and Task Type (CRM Quote, Prospect). A 'QUERY' section shows a SQL query: 'SELECT * FROM work_queue WHERE queue_program = "CRM_Quote" AND from_login = "lsc" AND (priority = 5 OR priority = 4 OR priority = 3 OR priority = 2 OR priority = 1) AND task_stat ORDER BY task_date DESC, priority DESC'. Below the query is a table with columns: TASK #, BATCH #, DATE, FROM-TO, TYPE, PRIORITY, NOTE, APPLIES TO, ACTION, and REQ. DATE. The table is currently empty. A 'TASK COUNT' of 0 is displayed at the bottom. On the right side, there is a 'WORK-QUEUE' menu with buttons: Add, Update, Filter, Clear, View, Execute-Task, Batch-Edit, Reports, Delete, and QUIT.

6. Select **“Yes”** option when prompted to **“Start Pending Task?”**, which will display the following screen form and menu options:

The screenshot shows the 'Quote-Header' window in the PROSPECT QUOTE application. The window displays 'Quote Header Information' for a quote with CUST #: 1001, REF #: ABC MANUFACTURING, and QUOTE #: 1001. The quote is for 'Fabricated Sheet Metal Parts' and is in 'Entered' status. The quote date is 03/29/2024, and the valid thru date is 04/28/2024. The quote is created by RDS (Robert D. Smith) and has a total value of \$28,429.43. The quote includes a list of items with columns: LINE, PART NUMBER, QUANTITY, UNIT, UNIT PRICE, EXTENDED, and CPG STATUS. The items are: 1. DEM-01-APRON (50.0000 EA, \$173.6969, \$8684.85, Pending), 2. DEM-02-LOAD-CTR-BOX (25.0000 EA, \$198.0316, \$4950.79, Pending), 3. DEM-03-BOTTOM-DLH (35.0000 EA, \$168.2720, \$5889.52, Pending), 4. DEM-04-HOUSING (10.0000 EA, \$210.9056, \$2109.06, Pending), and 5. DEM-05-PANEL (40.0000 EA, \$165.5053, \$6620.21, Pending). The right-hand menu includes buttons: Update, Items, Configure, Notes, Ship, Print, Letter, gXcel, Documents, Format, gStatus, gchedule, Orders, Work-Queue, and QUIT.

7. Select ***Items > Update*** option and highlight Part Number ***DEM-01-APRON***:

[illegible]

8. Select **“OK”** option to display the following screen form and menu options:

PROSPECT QUOTE: Global Edge Windows Demo Server

Quote-Item

Quantity-Pricing

Bill-of-Materials

Nestings

Image

CUST #:

1001

ABC MANUFACTURING

QUOTE #:

1001

ITEM #:

1

OPEN TASK #:

PART #:

DEM-01-APRON

PROJECT PHASE:

APRON

LIST PRICE:

\$0.00

STANDARD COST:

\$190.1969

QUOTE COST:

\$247.2560

ROLL-UP COST:

\$190.1969

MFR. SET-UP COST:

\$144.0000

ONE TIME CHARGE:

\$0.0000

ON HAND:

0.0000

PRICE METHOD:

Manual

FACTOR:

1.2

PRICE LIST #:

1

STANDARD PRICE LIST

TAXABLE:

No

QUANTITY

UOM

UNIT PRICE

EXTENDED

ORDER:

50.0000

EA

\$173.6969

\$8684.83

DISCOUNT:

%

CONFIG STATUS

WEIGHT:

bs

0.09

4.5

Pending

OVER/UNDER:

0.0

/

0.0

%

CERTIFIED MATERIAL?:

No

PR.10

QUOTE-ITEM

Update

Next

Previous

prod-Qty

Import-DXF

Configure

Fabrication

Summary

Notes

Work-Queue

Documents

gTatus

QUIT

Update Quote Item

QVR

- After the Configurator executes on a selected part, select the **"QUIT"** option, the software returns to the **"Quote-Item"** screen. Select **"Update"** option, fill in the remainder of the screen form with the proper information such as adding to the part description on the six descriptive lines located below the PART # field. Use the TAB key to move to the next data field. In the PRICE Method field, select **"Cost-Plus"** from the drop-down menu. In the FACTOR field, enter a factor as to what percentage the part should be marked up on the Sales Quote from the cost. Enter a factor of 1.5 to markup part. In the QUANTITY field, enter the quantity of parts to include on the Sales Quote:

PROSPECT QUOTE: Global Edge Windows Demo Server

Quote-Item Quantity-Pricing Bill-of-Materials Nestings Image

Update Quote Item Information, then Press [OK]:

CUST #: 1001 ABC MANUFACTURING

QUOTE #: 1001 ITEM #: 1 OPEN TASK #:

PART #: DEM-01-APRON PROJECT PHASE:

APRON

LIST PRICE: \$122.6523

STANDARD COST: \$122.6523

QUOTE COST: \$122.6523

ROLL-UP COST: \$122.6523

MFR. SET-UP COST: \$110.7500

ONE TIME CHARGE: \$35.0000

PRICE METHOD: Manual FACTOR: 1.5

ON HAND: 0.0000

TAXABLE?: No

PRICE LIST #:

QUANTITY	UOM	UNIT PRICE	EXTENDED
ORDER: 50.0000	EA	\$173.6969	\$8684.85

DISCOUNT: %

WEIGHT: lbs 0.09 4.5

OVER/UNDER: 0.0 / 0.0 % CERTIFIED MATERIAL?: No

PR.10

Enter Quantity: OVR

- For multiple price quantities, select the **"F10-Quantity"** option of right-hand menu to display the following **"Quantity-Pricing"** screen tab and fill in the various Quantity Prices in the QUANTITY field you want to appear on the Sales Quote:

PROSPECT QUOTE: Global Edge Windows Demo Server

Quote-Item Quantity-Pricing Bill-of-Materials Nestings Image

PART #: DEM-01-APRON APRON

LIST PRICE: \$122.6523

ROW	QUANTITY	UNIT COST	UNIT PRICE	EXT.COST	EXT.PRICE
1	1.0000	\$122.6523	\$208.4363	\$122.6523	\$208.44
2	10.0000	\$22.9773	\$52.9163	\$229.7730	\$529.16
3	50.0000	\$14.1173	\$39.0923	\$705.8650	\$1954.61
4	100.0000	\$13.0098	\$37.3643	\$1300.9800	\$3736.43
5	250.0000	\$12.3453	\$36.3275	\$3086.3250	\$9081.87

OK Cancel Insert Append Delete

OVR

11. Select **"OK"** option to display the following screen form and menu options:

PROSPECT QUOTE: Global Edge Windows Demo Server

Quote-Item | Quantity-Pricing | Bill-of-Materials | Nestings | Image

CUST #: 1001 ABC MANUFACTURING

QUOTE #: 1001 ITEM #: 1 OPEN TASK #:

PART #: DEM-01-APRON PROJECT PHASE:

APRON LIST PRICE:

STANDARD COST: \$122.6523

QUOTE COST: \$122.6523

ROLL-UP COST: \$122.6523

MFR. SET-UP COST: \$110.7500

ON TIME CHARGE: \$35.0000

ON HAND: 0.0000

PRICE METHOD: Manual FACTOR:

PRICE LIST #: TAXABLE: No

ORDER:	QUANTITY	UOM	UNIT PRICE	EXTENDED
	50.0000	EA	\$173.6969	\$8684.85

DISCOUNT: %

CONFIG STATUS: Complete WEIGHT: lbs 0.09 4.5

OVER/UNDER: 0.0 / 0.0 % CERTIFIED MATERIAL?: No

PR 10

Update Quote Item

QUOTE-ITEM

- Update
- Next
- Previous
- proD-Qty
- Import-DXF
- Configure
- Fabrication
- Summary
- Notes
- Work-Queue
- Documents
- Status
- QUIT

12. Select **"QUIT"** option to return to QUOTE-ITEM menu to display the following screen form and menu options:

PROSPECT QUOTE: Global Edge Windows Demo Server

Quote-Header | Quote-Item

Quote Header Information

CUST #: 1001 REF #: ABC MANUFACTURING

QUOTE #: 1001 QUOTE REF #: REVISION #: STATUS: Entered

NOTE: Fabricated Sheet Metal Parts ENG. APPROVAL: No

LOCATION #: 1 CORP. HEADQUARTERS / MANUFACTURING QUOTE DATE: 03/29/2024

CONTACT #: 1 Robert Smith VALID THRU: 04/28/2024

OPPORTUNITY #: 1 Light Fixture Sheet Metal Parts APPROVED:

PROJECT #: SUBMITTED:

JOB #:

QUOTE BY: RDS PURGE: No PURGE DATE:

SALES REP: RDS Robert D. Smith CLOSE %: 0.0 GEN PART: No

SHIP WEIGHT: 439.5 lbs SHIP DAYS: 10 OPEN TASKS:

SHIP VIA: UPS UNITED PARCEL SER. FOB LOCATION: Shipping Point

PAY TERMS: N30 NET 30 DAYS NET CHARGE: \$28254.43

METHOD: Cost-Plus FACTOR: 1.2 FREIGHT: \$175.00

PRICE LIST: 1 STANDARD PRICE LIST SALES TAX: \$0.00

TAXABLE: No RATE: 0.0 % 0.0 % QUOTE TOTAL: \$28429.43

LINE	PART NUMBER	QUANTITY	UNIT	UNIT PRICE	EXTENDED	CFG STATUS
1	DEM-01-APRON	50.0000	EA	\$173.6969	\$8684.85	Complete
2	DEM-02-LOAD-CTR-BOX	25.0000	EA	\$198.0316	\$4950.79	Pending
3	DEM-03-BOTTOM-DLH	35.0000	EA	\$168.2720	\$5889.52	Pending
4	DEM-04-HOUSING	10.0000	EA	\$210.9056	\$2109.06	Pending
5	DEM-05-PANEL	40.0000	EA	\$165.5053	\$6620.21	Pending

PR 08

Update Quote Item

QUOTE-ITEM

- Add
- Standard
- Update
- View
- Load
- Delete
- QUIT

13. Select **“QUIT”** option to return to QUOTE menu to display the following screen form and menu options:

PROSPECT QUOTE: Global Edge Windows Demo Server

Quote-Header
 Quote Header Information

CUST #: 1001 REF #: ABC MANUFACTURING

QUOTE #: 1001 QUOTE REF #: REVISION #: STATUS: Entered

NOTE: Fabricated Sheet Metal Parts ENG. APPROVAL: No

LOCATION #: 1 CORP. HEADQUARTERS / MANUFACTURING QUOTE DATE: 03/29/2024

CONTACT #: 1 Robert Smith VALID THRU: 04/28/2024

OPPORTUNITY #: 1 Light Fixture Sheet Metal Parts APPROVED:

PROJECT #: SUBMITTED:

JOB #: PURGE: No PURGE DATE:

QUOTE BY: RDS SALES REP: RDS Robert D. Smith CLOSE %: 0.0 GEN PART: No

SHIP WEIGHT: 439.5 lbs SHIP DAYS: 10 OPEN TASKS:

SHIP VIA: UPS UNITED PARCEL SER. FOB LOCATION: Shipping Point

PAY TERMS: N30 NET 30 DAYS NET CHARGE: \$28254.43

METHOD: Cost-Plus FACTOR: 1.2 FREIGHT: \$175.00

PRICE LIST: 1 STANDARD PRICE LIST SALES TAX: \$0.00

TAXABLE: No RATE: 0.0 % 0.0 % QUOTE TOTAL: \$28429.43

Quote Items

LINE	PART NUMBER	QUANTITY	UNIT	UNIT PRICE	EXTENDED	CFG STATUS
1	DEM-01-APRON	50.0000	EA	\$173.6969	\$8684.85	Complete
2	DEM-02-LOAD-CTR-BOX	25.0000	EA	\$198.0316	\$4950.79	Pending
3	DEM-03-BOTTOM-DLH	35.0000	EA	\$168.2720	\$5889.52	Pending
4	DEM-04-HOUSING	10.0000	EA	\$210.9056	\$2109.06	Pending
5	DEM-05-PANEL	40.0000	EA	\$165.5053	\$6620.21	Pending

Print Displayed Quote

14. Select **“Print”** option to display the following screen form and menu options:

PROSPECT QUOTE: Global Edge Windows...

Printer-List

SELECT REPORT PRINTER:

PRINTER: Print to PDF

PIPE:

NUMBER OF COPIES: 1

TRAY:

PREVIEW: ☐ E-MAIL: ☐

Print

Sample Sales Quote

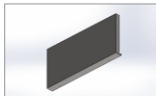
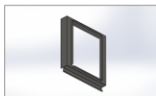
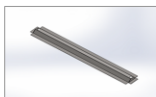
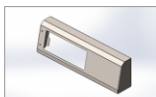
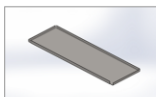


Logic Design Corporation

Transforming Engineering & Manufacturing ...

PRICE QUOTATION

2000 Industrial Blvd.
 Milwaukee, WI 53201
 Phone: 262-695-1300 Fax: 262-695-1313
 www ldcglobal.com

SUBMITTED TO:				SHIP TO:		CUST ID: 1001 CONTACT: Jim Smith, Purchasing Agent E-MAIL: jsmith@tool-die-supply.com PHONE: 666-444-2433 FAX: 666-444-2434		
TOOL & DIE SUPPLY COMPANY 3455 S. Milford Parkway Chicago, IL 60606-4444 United States of America				TOOL & DIE SUPPLY COMPANY 3455 S. Milford Parkway Chicago, IL 60606-4444 United States of America				
QUOTE #	REV #	QUOTE DATE	VALID THRU	SHIP VIA	DAYS2SHIP	PAY TERMS	SALES REP.	
1003		03/10/2026	04/09/2026	BEST WAY	10	NET 30 DAYS	Robert Smith	
QUANTITY	UOM	PART #		DESCRIPTION		TAX	UNIT QUOTE	EXTENDED
25.000	EA	DEM-01-APRON		APRON 		N	\$27.7103	\$692.76
50.000	EA	DEM-02-LOAD-CTR-BOX		LOAD CENTER BOX 		N	\$46.8617	\$2,343.09
75.000	EA	DEM-03-BOTTOM-DLH		BOTTOM DISPLAY LIGHT HOUSING 		N	\$18.9589	\$1,421.92
50.000	EA	DEM-04-HOUSING		SHEET METAL HOUSING 		N	\$75.2520	\$3,762.60
75.000	EA	DEM-05-PANEL		SHEET METAL PANEL 		N	\$17.7741	\$1,333.06
** PAYMENT SCHEDULE **						QUOTE SUB-TOTAL:	\$9,553.42	
						SALES TAX:	\$0.00	
						FREIGHT:	\$500.00	
						QUOTE TOTAL:	\$10,053.42	



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