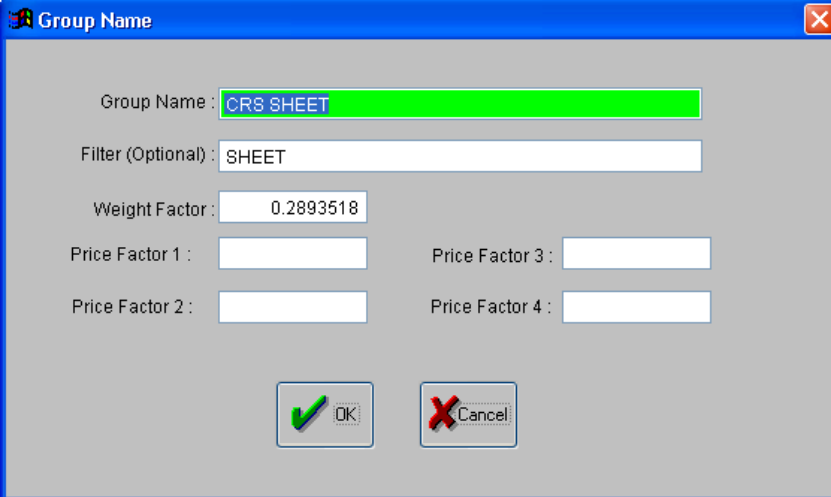


Entering Material into MIE Trak

When entering material into MIE Trak there are key fields that need to be entered depending on the type of material, i.e. Sheet, Plate, Coil, Structural material (Angle, Bar Stock {flat, round, square}, Tubing {round, rectangle, square}, Channel, I-Beam, etc.).

MATERIAL GROUPS

Groups are used so the user can group like materials and shapes together so it is easier to find the material that the user is looking for.



The screenshot shows a dialog box titled "Group Name" with a close button in the top right corner. The dialog contains the following fields and values:

- Group Name: CRS SHEET (highlighted in green)
- Filter (Optional): SHEET
- Weight Factor: 0.2893518
- Price Factor 1: (empty)
- Price Factor 2: (empty)
- Price Factor 3: (empty)
- Price Factor 4: (empty)

At the bottom of the dialog are two buttons: "OK" (with a green checkmark icon) and "Cancel" (with a red X icon).

KEY FIELDS

- 1) Group Name – enter the name of the group that describes the type of material and shape of the material to facilitate the finding of the inventory unit that is to be used in quoting, router design, purchasing, etc.
- 2) Weight Factor – enter the specific gravity (density) of a cubic inch of the material. The benefit of entering this in the group is that when the user adds a material to the group the system will default the weight factor to the new material record.

OPTIONAL FIELDS

- 1) Filter (Optional) – this field gives you the ability to filter the groups so when creating a quote or router the user can pick one of the filters and only the groups with the filter picked will be listed. This also is used when creating a purchase order line item when picking from Inventory Item.

SHEET AND PLATE MATERIAL

Sheet and Plate material is two dimensional. There is a width and length for each stock size of any material.

MATERIAL TAB

Material Maintenance : CRS 16 GAGE (0.0598)

Material: CRS 16 GAGE (0.0598)

Other Description:

S/N: Vendor P/N:

Lead Time: 1 Thickness: 0.0598

Tolerance: 0.0000 Weight Factor: 0.2893518

Sell Unit: LBS Safety Zone Width:

Ship Unit: Shts Safety Zone Length:

Grain Direction:

Type: Sheet Backflush Inventory

Calculation Type: Calc Include Scrap Default Pull

GL Link Code:

Vendor:

Comments:

Change Group Where Used

KEY FIELDS

- 1) ID – when creating a material item the system assigns an ID which is a key index for MIE Trak.
- 2) Material – the material field should be the description that will be used when purchasing the item. For sheet or plate material generally the field will include the designation for the type of material, i.e. CRS for Cold Rolled Steel, HRPO for Hot Rolled Pickled & Oiled Steel, CRES for Stainless Steel, ALUM for Aluminum.
- 3) Lead Time – enter the number of days it usually takes to have the item delivered from the time an order is placed with a vendor.
- 4) Thickness – enter the standard thickness of the material sheet or plate. This field is used by the system to calculate the theoretical weight of the sheet or plate stock size.
- 5) Weight Factor – the specific gravity (density) of the material should be entered in this field. If the weight factor was entered in the Group record the system will automatically fill in this field when

the user creates the record. This field is used by the system to calculate the theoretical weight of the sheet or plate stock size.

- 6) Sell Unit – pick the unit of measure that material is usually purchased by. For Sheet and Plate material the unit of measure is usually LBS (pounds) or Shts (Sheets) in North America, Kgs (Kilograms) or Shts (Sheets) in the United Kingdom, Australia and New Zealand.
- 7) Ship Unit – the ship unit is the unit of measure that the user is receiving and inventorying the material in would be Shts (Sheets).
- 8) Type – the type identifies whether the material is a Sheet or Plate. When the type is Sheet or Plate the system will use the following fields to calculate the theoretical weight of a stock size of the material:
 - a) Thickness
 - b) Weight Factor
 - c) Stock Width
 - d) Stock Length

If the material is an expanded sheet the type would be Special because the weight of the sheet would not be able to be calculated the information available.

- 9) Calculation Type – pick the default calculation method that the user wants to use when quoting the specific type of material. There are seven calculation types:
 - a) Single Part Price –
 - b) Calculate Include Scrap –
 - c) Calculate without Scrap –
 - d) Amortize –
 - e) Lot Price –
 - f) Calculate Blank Include Scrap –
 - g) Calculate Blank Without Scrap –

OPTIONAL FIELDS

- 1) Backflush Inventory checkbox – enter a checkmark in the backflush inventory checkbox if you want to have the system automatically issue the required material when the user logs out of the work order sequence with quantity produced. If they don't logout with quantity nothing will be issued.
- 2) Default Pull checkbox – enter a checkmark in the default pull checkbox if you want the system to automatically enter a status of Pull in the bill of material record when a work order is released so the record is not included in the to be purchased item list in purchasing.
- 3) GL Link Code – pick the GL Account that the material would normally be charged to when purchasing the material item. By picking the default account for the item when creating a purchase order line item the account number will be automatically added to the PO Line item.
- 4) Vendor – only pick a default vendor for items that are sole source items or that 90% of the time the item is purchase from one vendor.

STOCK SIZE TAB

The screenshot shows the 'Material Maintenance' window for 'CRS 16 GAGE (0.0598)'. The 'Stock Size' tab is active, displaying the following fields:

- Quantity On Hand: 20.000
- Quantity Allocated: 452.301
- Quantity Ordered: 40.000
- Quantity WIP: 398.021
- Quantity Pull: 0.000
- Average Cost: \$46.87500
- Standard Cost: \$45.50000
- Location: (empty)
- User Defined: (empty)
- Tolerance: (empty)
- Weight: (empty)
- Last Cost: \$48.25000
- Minimum Order: (empty)
- Maximum On Hand: (empty)
- Reorder Point: (empty)
- Good Until: //
- Vendor Unit: 100.00000
- Stock Unit: (empty)
- Minimum: \$0.000
- Last Ordered: 07/21/2009
- Sell Price: (empty)
- Lead Time: 1

Below these fields are checkboxes for 'Default Stock Size' (checked), 'Disabled', and 'Default Pull'. A table for defining stock sizes is shown with columns for 'Width' and 'Length':

Width	Length
48.000	120.000
32.000	36.000
36.000	96.000
36.000	120.000
36.000	144.000
48.000	48.000
48.000	72.000
48.000	120.000

At the bottom, there are buttons for 'Adjust Inventory', 'Transactions', 'Where Used', 'Vendor Quotes', and 'Update Prices'.

KEY FIELDS

- 1) Width – enter the width of the material defining the inventory unit.
- 2) Length – enter the length of the material defining the inventory unit.
- 3) Vendor Unit – the vendor unit should be equal to the number of sell units in a ship unit.
 - a) Example: For a CRS 16 Gage 48 x 120 sheet of material and the Sell Unit is equal to **LBS** and the Ship Unit equals **Shts** the vendor unit should be equal to the number of LBS in a sheet which would be 100 LBS. If the sell unit would have been **Shts** and the Ship unit was **Shts** then the vendor unit would be 1.
- 4) Standard Cost – enter the standard cost of the inventory unit. This should be the total cost of one inventory unit. In this case the cost of a sheet or plate.
- 5) Lead Time – enter the number of days it usually takes to have the item delivered from the time an order is placed with a vendor.
- 6) Breakouts & Prices – Breakouts and Prices are used in quoting. When the item and stock size is picked in the Quote Material screen the values are brought into the quote.

OPTIONAL FIELDS

- 1) Reorder Point – the reorder point field is used in the reorder report. If the inventories are relatively accurate this can be a useful report. When the on-hand inventory quantity plus on order quantity drops to the reorder point or below the inventory item will show up on the Reorder Report.
- 2) Default Stock Size checkbox – by entering a checkmark in the default stock size checkbox when the user picks the material item in quoting or router design the stock size will be defaulted to the default marked stock size.
- 3) Default Pull checkbox – by entering a checkmark in the default pull checkbox when the user picks the material item stock size in quoting or router design the bill of material item in router design will be marked to pull from inventory automatically when the user releases the work order.
- 4) Disabled checkbox – by entering a checkmark in the disabled checkbox when the user is picking the material item in quoting, router design or purchase order line items the disabled stock sizes will not be displayed to pick from unless the user puts a checkmark in the Show All checkbox on the stock size screen that is displaying by default the non disabled stock sizes.

COIL MATERIAL

Coil material only has a width for each stock size of any material and is inventoried in pounds of material in North America and kilograms in the United Kingdom, Australia and New Zealand.

MATERIAL TAB

Material Maintenance : CRS 16 GAGE COIL (.0598)

Material ID: 00330 Material: CRS 16 GAGE COIL (.0598)

Group Pick List: ALUMINUM-5052-H34, ALUMINUM-6061 0, ALUMINUM-6061 T4, ALUMINUM-6061 T6, CRS ANGLES, CRS CHANNEL, CRS COIL, CRS FLAT BAR, CRS RECT BAR, CRS ROUND BAR

Other Description:

S/N: Vendor P/N:

Lead Time: Thickness: 0.0598

Tolerance: Weight Factor: 0.2893518

Sell Unit: LBS Safety Zone Width:

Ship Unit: Coil Safety Zone Length:

Grain Direction:

Type: Sheet Backflush Inventory

Calculation Type: Calc Include Scrap Default Pull

GL Link Code: RAW MATERIAL INVENTORY

Vendor:

Comments:

Change Group Where Used

KEY FIELDS

- 1) ID – when creating a material item the system assigns an ID which is a key index for MIE Trak.
- 2) Material – the material field should be the description that will be used when purchasing the item. For coil material generally the field will include the designation for the type of material, i.e. CRS for Cold Rolled Steel, HRPO for Hot Rolled Pickled & Oiled Steel, CRES for Stainless Steel, ALUM for Aluminum.
- 3) Lead Time – enter the number of days it usually takes to have the item delivered from the time an order is placed with a vendor.
- 4) Thickness – enter the standard thickness of the material sheet or plate. This field is used by the system to calculate the theoretical weight that would be needed of the coil stock size.
- 5) Weight Factor – the specific gravity (density) of the material should be entered in this field. If the weight factor was entered in the Group record the system will automatically fill in this field when the user creates the record. This field is used by the system to calculate the theoretical weight that would be needed of the coil stock size.
- 6) Sell Unit – pick the unit of measure that material is usually purchased by. For Coil material the unit of measure is LBS (pounds) in North America, Kgs (Kilograms) in the United Kingdom, Australia and New Zealand.
- 7) Ship Unit – the ship unit of measure is Coil.
- 8) Type – the type would be Sheet.
- 9) Calculation Type – pick the default calculation method that the user wants to use when quoting the specific type of material. There are seven calculation types:
 - a) Single Part Price –
 - b) Calculate Include Scrap –
 - c) Calculate without Scrap –
 - d) Amortize –
 - e) Lot Price –
 - f) Calculate Blank Include Scrap –
 - g) Calculate Blank Without Scrap –

OPTIONAL FIELDS

- 1) Backflush Inventory checkbox – enter a checkmark in the backflush inventory checkbox if you want to have the system automatically issue the required material when the user logs out of the work order sequence with quantity produced. If they don't logout with quantity nothing will be issued.
- 2) Default Pull checkbox – enter a checkmark in the default pull checkbox if you want the system to automatically enter a status of Pull in the bill of material record when a work order is released so the record is not included in the to be purchased item list in purchasing.

- 3) GL Link Code – pick the GL Account that the material would normally be charged to when purchasing the material item. By picking the default account for the item when creating a purchase order line item the account number will be automatically added to the PO Line item.
- 4) Vendor – only pick a default vendor for items that are sole source items or that 90% of the time the item is purchase from one vendor.

STOCK SIZE TAB

Material Maintenance : CRS 16 GAGE COIL (.0598)

Material | Stock Size

Group Pick List

- ALUMINUM-5052-H34
- ALUMINUM-6061 0
- ALUMINUM-6061 T4
- ALUMINUM-6061 T6
- CRS ANGLES
- CRS CHANNEL
- CRS COIL**
- CRS FLAT BAR
- CRS RECT BAR
- CRS ROUND BAR

Name
 Description
 Vendor P/N

CRS 16 GAGE COIL (.0598)

Default Stock Size
 Disabled
 Default Pull

Quantity On Hand : 9,415.000 Last Cost : \$0.44500

Quantity Allocated : Minimum Order : / /

Quantity Ordered : Maximum On Hand : / /

Quantity VWP : Reorder Point : / /

Quantity Pull : Good Until : / /

Average Cost : \$0.45354 Vendor Unit : 1.00000

Standard Cost : \$0.46000 Stock Unit : / /

Location : Minimum : / /

User Defined : Last Ordered : / /

Tolerance : Sell Price : / /

Weight : Lead Time : / /

12.000 x Breakouts Prices

Width	Length	Breakouts	Prices
6.500		0.000	\$0.00000
12.000		0.000	\$0.00000
		0.000	\$0.00000
		0.000	\$0.00000
		0.000	\$0.00000
		0.000	\$0.00000
		0.000	\$0.00000
		0.000	\$0.00000

Adjust Inventory Transactions Where Used Vendor Quotes Update Prices

KEY FIELDS

- 1) Width – enter the width of the material defining the inventory unit. Coil only uses the width field never the length field because coil is inventoried in pounds.
- 2) Vendor Unit – the vendor unit will always be 1 because coil is bought by the pound and inventoried in number of pounds.
- 3) Standard Cost – enter the standard cost of the inventory unit. This should be the cost of one inventory unit, which is one pound.
- 4) Lead Time – enter the number of days it usually takes to have the item delivered from the time an order is placed with a vendor.

- 5) Breakouts & Prices – Breakouts and Prices are used in quoting. When the item and stock size is picked in the Quote Material screen the values are brought into the quote.

OPTIONAL FIELDS

- 1) Reorder Point – the reorder point field is used in the reorder report. If the inventories are relatively accurate this can be a useful report. When the on-hand inventory quantity plus on order quantity drops to the reorder point or below the inventory item will show up on the Reorder Report.
- 2) Default Stock Size checkbox – by entering a checkmark in the default stock size checkbox when the user picks the material item in quoting or router design the stock size will be defaulted to the default marked stock size.
- 3) Default Pull checkbox – by entering a checkmark in the default pull checkbox when the user picks the material item stock size in quoting or router design the bill of material item in router design will be marked to pull from inventory automatically when the user releases the work order.
- 4) Disabled checkbox – by entering a checkmark in the disabled checkbox when the user is picking the material item in quoting, router design or purchase order line items the disabled stock sizes will not be displayed to pick from unless the user puts a checkmark in the Show All checkbox on the stock size screen that is displaying by default the non disabled stock sizes.

STRUCTURAL MATERIAL

Structural material is usually inventoried in lengths. There is only a length for each stock size of any structural item.

MATERIAL TAB

The screenshot shows the 'Material Maintenance' window for the material 'CRS 2.000 X 2.000 X.250 ANGLE'. The window is divided into two main sections: 'Material' and 'Stock Size'.
The 'Material' section includes:
- ID: 00132
- Material: CRS 2.000 X 2.000 X.250 ANGLE
- Group Pick List: A list of materials with 'CRS ANGLE' selected.
- Other Description: Empty field.
- S/N: Empty field, Vendor P/N: Empty field.
- Lead Time: 1, Thickness: 0.2500.
- Tolerance: 0.0000, Weight Factor: 0.0000000.
- Sell Unit: Foot, Safety Zone Width: Empty field.
- Ship Unit: Length, Safety Zone Length: Empty field.
- Grain Direction: Empty field.
- Type: Angle Bar, Backflush Inventory: checked.
- Calculation Type: Calc Include Scrap, Default Pull: unchecked.
- GL Link Code: Empty field, Vendor: Empty field.
- Comments: Empty text area.
- Buttons: Change Group, Where Used.
The 'Stock Size' section is currently empty.

KEY FIELDS

- 1) ID – when creating a structural material item the system assigns an ID which is a key index for MIE Trak.
- 2) Material – the material field should be the description that will be used when purchasing the item. It should describe the characteristics of the structural item.
 - a) Example: the angle in the screen capture above is for cold rolled steel that is 2 inches by 2 inches by .25 inch thick (CRS 2.000 X 2.000 X 0.250 Angle)
- 3) Lead Time – enter the number of days it usually takes to have the item delivered from the time an order is placed with a vendor.
- 4) Thickness – enter the standard thickness of the material sheet or plate. This field is used by the system to calculate the theoretical weight that would be needed of the coil stock size.
- 5) Sell Unit – pick the unit of measure that the structural material is usually purchased by. The unit of measure is usually either a price per foot, price per LBS (pounds) or price per length.
- 6) Ship Unit – the ship unit of measure is Length.
- 7) Type – the type would be one of the following:
 - a) Square Bar
 - b) Flat Bar
 - c) Round Bar
 - d) Hex Bar
 - e) Channel Bar
 - f) Angle Bar
 - g) Pipe
 - h) Tubing Round
 - i) Tubing Rectangle
 - j) Tubing Square
- 8) Calculation Type – pick the default calculation method that the user wants to use when quoting the specific type of material. There are seven calculation types:
 - a) Single Part Price –
 - b) Calculate Include Scrap –
 - c) Calculate without Scrap –
 - d) Amortize –
 - e) Lot Price –
 - f) Calculate Blank Include Scrap –
 - g) Calculate Blank Without Scrap –

OPTIONAL FIELDS

- 1) Weight Factor – for structural material the weight factor is not used.

- 2) Backflush Inventory checkbox – enter a checkmark in the backflush inventory checkbox if you want to have the system automatically issue the required material when the user logs out of the work order sequence with quantity produced. If they don't logout with quantity nothing will be issued.
- 3) Default Pull checkbox – enter a checkmark in the default pull checkbox if you want the system to automatically enter a status of Pull in the bill of material record when a work order is released so the record is not included in the to be purchased item list in purchasing.
- 4) GL Link Code – pick the GL Account that the material would normally be charged to when purchasing the material item. By picking the default account for the item when creating a purchase order line item the account number will be automatically added to the PO Line item.
- 5) Vendor – only pick a default vendor for items that are sole source items or that 90% of the time the item is purchase from one vendor.

STOCK SIZE TAB

The screenshot shows the 'Material Maintenance' window for 'CRS 2.000 X 2.000 X.250 ANGLE'. The 'Stock Size' tab is active, displaying various inventory and cost metrics. The 'Material' list on the left includes several CRS ANGLE items, with 'CRS 2.000 X 2.000 X.250 ANGLE' selected. The 'Stock Size' section contains the following data:

Quantity On Hand:	15.000	Last Cost:	\$20.00000
Quantity Allocated:	0.000	Minimum Order:	
Quantity Ordered:	0.000	Maximum On Hand:	
Quantity WIP:	0.000	Reorder Point:	
Quantity Pull:	0.000	Good Until:	//
Average Cost:	\$19.93333	Vendor Unit:	20.00000
Standard Cost:	\$18.40000	Stock Unit:	LNGT
Location:		Minimum:	
User Defined:		Last Ordered:	//
Tolerance:		Sell Price:	0.00
Weight:		Lead Time:	

Below the data entry fields, there are checkboxes for 'Default Stock Size', 'Disabled', and 'Default Pull'. A table for 'Breakouts' and 'Prices' is also visible:

Breakouts	Prices
	\$0.92000
0.000	
0.000	
0.000	
0.000	

At the bottom of the window, there are buttons for 'Adjust Inventory', 'Transactions', 'Where Used', 'Vendor Quotes', and 'Update Prices'.

KEY FIELDS

- 1) Length – enter the length of the structural material defining the inventory unit. Structural material items only use the length field never the width field because structural material is inventoried in lengths.

- 2) Vendor Unit – the vendor unit should be equal to the number of sell units in a ship unit.
 - a) Example: For a CRS 2.000 X 2.000 X 0.250 Angle material item if the sell unit was **Foot** and the Ship unit was **Length** then the vendor unit would be 20 for a stock size of 240 inches. If the Sell Unit is equal to **LBS** and the Ship Unit equals **Length** the vendor unit should be equal to the number of LBS in the length. If the Sell Unit is equal to **Shts** and the Ship Unit equals **Length** the vendor unit should be equal to 1.
- 3) Standard Cost – enter the standard cost of the inventory unit. This should be the cost of one inventory unit, which is one length.
- 4) Lead Time – enter the number of days it usually takes to have the item delivered from the time an order is placed with a vendor.
- 5) Breakouts & Prices – Breakouts and Prices are used in quoting. When the item and stock size is picked in the Quote Material screen the values are brought into the quote.

OPTIONAL FIELDS

- 1) Reorder Point – the reorder point field is used in the reorder report. If the inventories are relatively accurate this can be a useful report. When the on-hand inventory quantity plus on order quantity drops to the reorder point or below the inventory item will show up on the Reorder Report.
- 2) Default Stock Size checkbox – by entering a checkmark in the default stock size checkbox when the user picks the material item in quoting or router design the stock size will be defaulted to the default marked stock size.
- 3) Default Pull checkbox – by entering a checkmark in the default pull checkbox when the user picks the material item stock size in quoting or router design the bill of material item in router design will be marked to pull from inventory automatically when the user releases the work order.
- 4) Disabled checkbox – by entering a checkmark in the disabled checkbox when the user is picking the material item in quoting, router design or purchase order line items the disabled stock sizes will not be displayed to pick from unless the user puts a checkmark in the Show All checkbox on the stock size screen that is displaying by default the non disabled stock sizes.