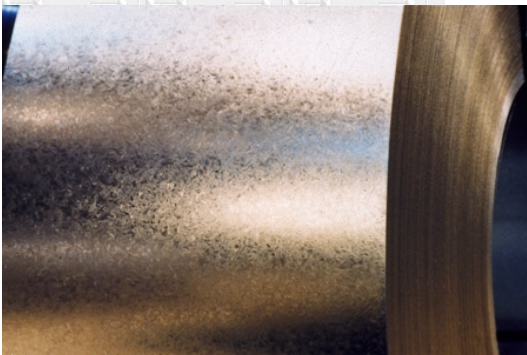
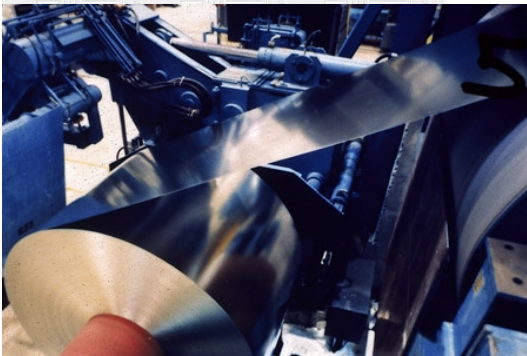


isXML: Customer Purchase Order

An Industry Document Guideline for Metal Transactions

American Iron & Steel Institute

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Customer Purchase Order

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Customer Purchase Order

Background

This document is intended to describe the ‘payload’ section of an XML-formatted ‘Customer Purchase Order’ message. Message routing structures are not currently a part of these guidelines.

The **structure** of the AISI XML message is as follows:

isXML DTD

1. Interchange level (described in ‘Draft V0001 – Control.doc)
2. Transaction level
 - 2.1. Control (described in ‘Draft V0001 – Control.doc)
 - 2.2. Data Area
 - 2.2.1. Header
 - 2.2.2. Detail

As part of the methodology used to develop these guidelines, the work group mapped transaction data requirements, grouped like elements together as ‘classes’ or common components, and structured the document.

The section labeled ‘**Class Relationships**’ diagrams the document structure in terms of the identified classes or components. The section labeled ‘**Document Structure**’ further outlines the hierarchical structure of the message.

The ‘**isXML DTD**’ portion of the guideline contains the message DTD. The common class definitions have been ‘included’ in the DTD and are described in ‘Draft V0001 – Overview.doc’.

A number of sections in the guideline have been reserved for ‘examples’. The ‘source document’ is a representation of a paper document used to derive the example. The ‘machine version’ example is a fully extended version of the XML that would be used where sophisticated systems are communicating and have access to industry and society codes and table structures. Finally, the ‘text version’ example is used for a lower-tech implementation where codes and tables need not be referenced.

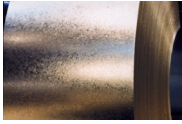
A tag dictionary is included in ‘Draft V0001 – Overview.doc’.



Customer Purchase Order

Transaction Description and Usage

This draft guideline contains the format and establishes the data content of the purchase order transaction set as communicated between a customer and a steel supplier.



Customer Purchase Order

Class Relationships

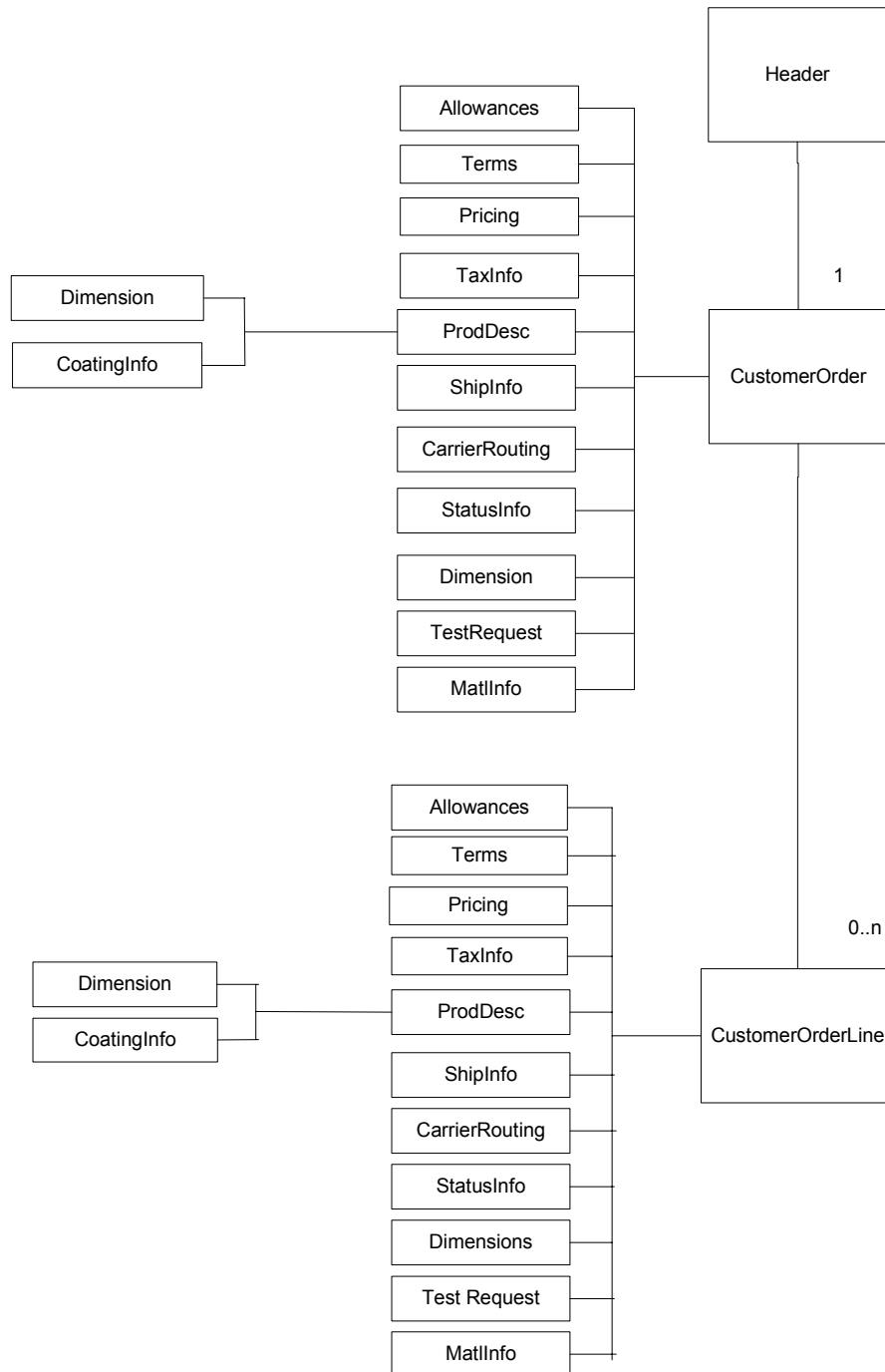
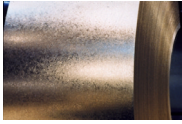


Figure 1



Customer Purchase Order

Document Structure

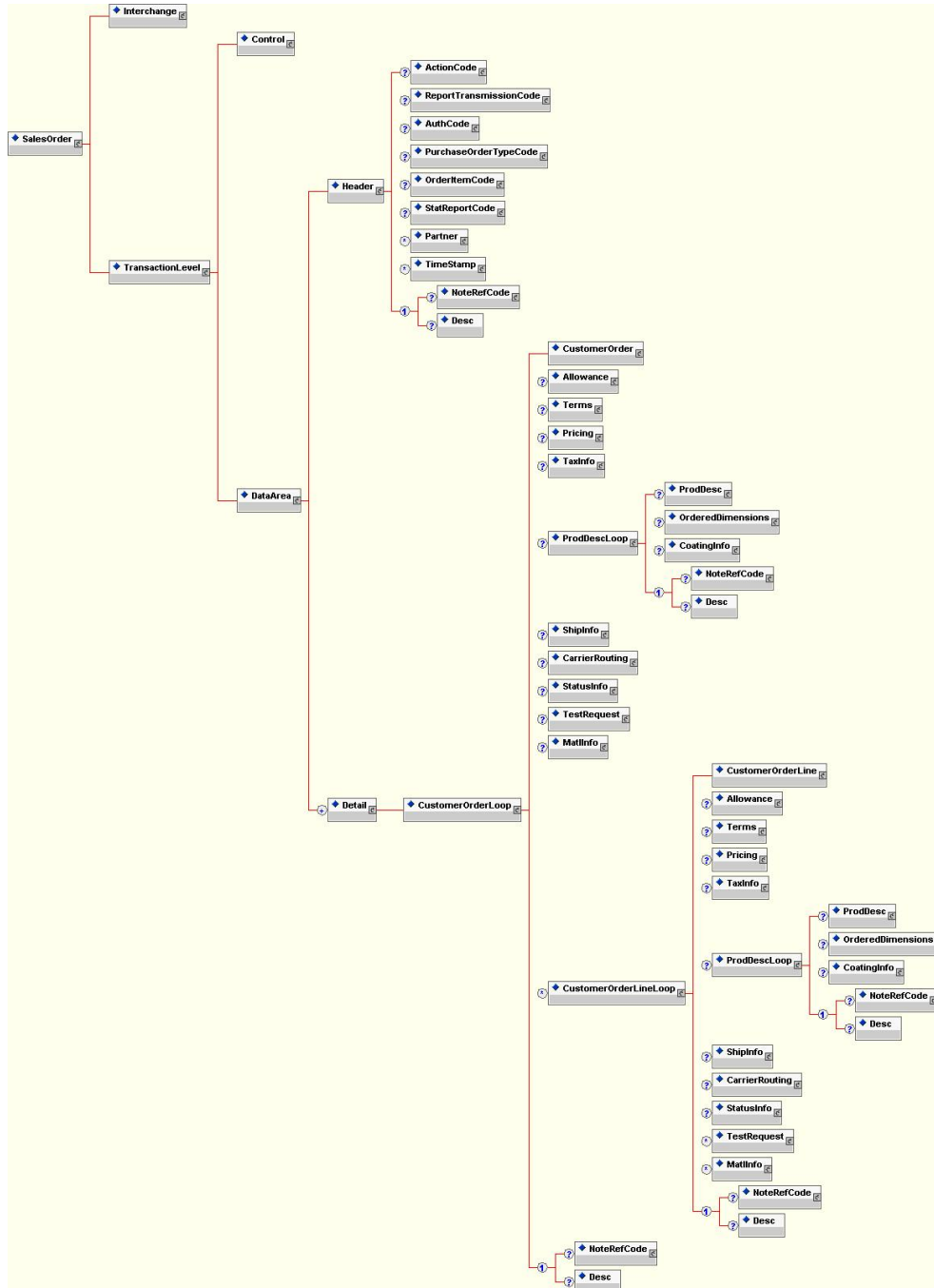
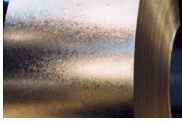


Figure 2



Customer Purchase Order

isXML DTD

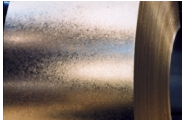
```
<?xml version="1.0" encoding="UTF-8"?>
<!ENTITY % classcommon.dtd SYSTEM "classcommon.dtd">
%classcommon.dtd;
<!ELEMENT SalesOrder (Interchange, TransactionLevel)>
<!-- Document Definition has envelope information and transaction information -->
<!ELEMENT TransactionLevel (Control, DataArea)>
<!ELEMENT DataArea (Header, Detail+)>
<!ELEMENT Detail (CustomerOrderLoop)>
<!ELEMENT CustomerOrderLoop (CustomerOrder, Allowance?, Terms?, Pricing?, TaxInfo?,
ProdDescLoop?, ShipInfo?, CarrierRouting?, StatusInfo?, TestRequest?, MatlInfo?,
CustomerOrderLineLoop*, Note*)>
<!ELEMENT ProdDescLoop (ProdDesc?, OrderedDimensions?, CoatingInfo?, Note*)>
<!ELEMENT OrderedDimensions (%Dimension;)>
<!ELEMENT CustomerOrderLineLoop (CustomerOrderLine, Allowance?, Terms?, Pricing?, TaxInfo?,
ProdDescLoop?, ShipInfo?, CarrierRouting?, StatusInfo?, TestRequest*, MatlInfo*, Note*)>
```



Customer Purchase Order

Examples

The following are examples of the actual customer purchase order transaction in use. You will see a sample source document followed by both a machine-based and a text-based isXML example that matches the source document



Customer Purchase Order

Example: Source Document

NEW STEEL CORPORATION.

A subsidiary of
PLATINUM STEEL CORP

123 East Main Street
Anytown, USA 12345-0001

Partner
Sold To

Purchase Order

26

Partner
Supplier

Order date: 04/09/2001 Order No.039-002301

To:
Steel Supplier Corp
1111 Big Steel Road
Steel Town, USA 10001

MAIL ORIGINAL INVOICE ON
DATE OF SHIPMENT TO:
New Steel Corporation
Comptroller - Room 0001
123 East Main Street
Anytown USA 12345

(Hereinafter "Seller")

Delivery date:ASAP
(If date cannot be met, advise at once)

Terms: NET PROX 25

Please furnish NEW STEEL CORP (Hereafter "Purchaser") in accordance with all conditions specified in this purchase order including the next page hereto and all attachments hereto, the following:

Ordered
Dimensions

Invoice in units ordered and as described below

Item Description	Quantity	Price	Ext Price
001 .025X55.54X66.258 GALV P/P	40,000 LB	\$1.90/100 LB	\$760.00

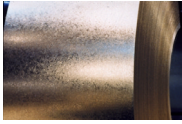
Pricing

.025 X 55.542 X 66.258 PREPAINT GALV., STRIPPABLE FILM, CQ, POLYFILM 3944 3 MTL 1 OZ/IN. W/TACK WM3563-KB8 G60, WM3561-B2, WM3563-A1, 2,000# MAX SKID WT. LINER BODY, TOP, BTM ** QUANTITIES TO BE RELEASED **

Desc

IF THE GOODS TO BE SUPPLIED TO THE BUYER PURSUANT TO THIS PURCHASE ORDER CONTAIN OR WERE MANUFACTURED WITH ANY CHEMICAL DEFINED AS A "CONTROLLED SUBSTANCE" IN 40 CFR PART 82, VENDOR SHALL LABEL SUCH GOODS IN FULL COMPLIANCE WITH THE REQUIREMENTS OF 40 CFR 82."

Total \$760.00



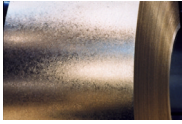
Customer Purchase Order

Example: Machine-Based Version

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE SalesOrder SYSTEM "SalesOrder.dtd">
<SalesOrder>
  <Interchange/>
  <TransactionLevel>
    <Control/>
    <DataArea>
      <Header>
        <ActionCode>
          <AgencyQualCode>AX</AgencyQualCode>
          <TableNum>306</TableNum>
          <CodeValue>5</CodeValue>
          <Desc>Send</Desc>
        </ActionCode>
        <ReportTransmissionCode>
          <AgencyQualCode>AX</AgencyQualCode>
          <TableNum>756</TableNum>
          <CodeValue>9</CodeValue>
          <Desc>Electronic Mail</Desc>
        </ReportTransmissionCode>
      </Header>
      <Detail>
        <CustomerOrderLoop>
          <CustomerOrder>
            <PurchaseOrderNum>039-002301</PurchaseOrderNum>
            <TimeStamp TimeStampType="PurchaseOrder">
              <Date>2001.04.09</Date>
            </TimeStamp>
            <Partner PartnerType="SoldTo">
              <Name>NEW STEEL CORPORATION</Name>
              <Addr1>A subsidiary of PLATINUM STEEL CORP</Addr1>
              <Addr2>123 EAST MAIN STREET</Addr2>
              <CityName>ANYTOWN</CityName>
              <StateOrProvinceCode/>
              <PostalCode>12345</PostalCode>
              <CountryCode>
                <CodeValue>USA</CodeValue>
              </CountryCode>
            </Partner>
            <Partner PartnerType="Supplier">
              <EntityIdCode/>
              <Name>STEEL SUPPLIER CORP</Name>
              <Addr1>1111 BIG STEEL ROAD</Addr1>
              <CityName>STEEL TOWN</CityName>
              <PostalCode>10001</PostalCode>
```

Partner
Sold To

Partner
Supplier

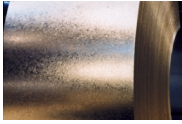


Customer Purchase Order

Example: Machine-based Version (con't)

```
<CountryCode>
  <CodeValue>USA</CodeValue>
</CountryCode>
</Partner>
<Partner PartnerType="BillTo">
  <EntityIdCode/>
  <Name>NEW STEEL CORPORATION</Name>
  <Addr1>COMPTROLLER - ROOM 0001</Addr1>
  <Addr2>123 EAST MAIN STREET</Addr2>
  <CityName>STEEL TOWN</CityName>
  <PostalCode>12345</PostalCode>
  <CountryCode>
    <CodeValue>USA</CodeValue>
  </CountryCode>
</Partner>
<Note>
  <NoteRefCode>
    <AgencyQualCode>AX</AgencyQualCode>
    <TableNum>363</TableNum>
    <CodeValue>ADD</CodeValue>
    <Desc>ADDITIONAL INFORMATION</Desc>
  </NoteRefCode>
  <Desc>PLEASE FURNISH NEW STEEL CORP (HEREAFTER "PURCHASER")
  IN ACCORDANCE WITH ALL CONDITIONS SPECIFIED IN THIS PURCHASE ORDER INCLUDING
  THE NEXT PAGE HERETO AND ALL ATTACHMENTS HERETO THE FOLLOWING:</Desc>
</Note>
</CustomerOrder>
<CustomerOrderLineLoop>
  <CustomerOrderLine>
    <PurchaseOrderItem>001</PurchaseOrderItem>
  </CustomerOrderLine>
  <Pricing>
    <PriceUnit>
      <AgencyQualCode>ST</AgencyQualCode>
      <TableNum>62</TableNum>
      <CodeValue>51</CodeValue>
      <Desc>POUNDS (100)</Desc>
    </PriceUnit>
    <PriceUnitOfMeas>
      <AgencyQualCode>ST</AgencyQualCode>
      <TableNum>24</TableNum>
      <CodeValue>32</CodeValue>
      <Desc>POUNDS</Desc>
    </PriceUnitOfMeas>
    <UnitPrice>1.90</UnitPrice>
  </Pricing>
</ProdDescLoop>
```



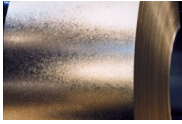


Customer Purchase Order

Example: Machine-based Version (con't)

```
<OrderedDimensions>
  <Len>
    <MeasValue>66.258</MeasValue>
    <UnitOrBasisForMeasCode>
      <AgencyQualCode>AX</AgencyQualCode>
      <TableNum>355</TableNum>
      <CodeValue>IN</CodeValue>
      <Desc>INCH</Desc>
    </UnitOrBasisForMeasCode>
  </Len>
  <Thk>
    <MeasValue>.025</MeasValue>
    <UnitOrBasisForMeasCode>
      <AgencyQualCode>AX</AgencyQualCode>
      <TableNum>355</TableNum>
      <CodeValue>IN</CodeValue>
      <Desc>INCH</Desc>
    </UnitOrBasisForMeasCode>
  </Thk>
  <Width>
    <MeasValue>55.54</MeasValue>
    <UnitOrBasisForMeasCode>
      <AgencyQualCode>AX</AgencyQualCode>
      <TableNum>355</TableNum>
      <CodeValue>IN</CodeValue>
      <Desc>INCH</Desc>
    </UnitOrBasisForMeasCode>
  </Width>
  <Weight>
    <MeasValue>40000</MeasValue>
    <UnitOrBasisForMeasCode>
      <AgencyQualCode>ST</AgencyQualCode>
      <TableNum>355</TableNum>
      <CodeValue>LB</CodeValue>
      <Desc>POUNDS</Desc>
    </UnitOrBasisForMeasCode>
  </Weight>
</OrderedDimensions>
<Note>
  <NoteRefCode>
    <AgencyQualCode>AX</AgencyQualCode>
    <TableNum>363</TableNum>
    <CodeValue>ADD</CodeValue>
    <Desc>ADDITIONAL INFORMATION</Desc>
  </NoteRefCode>
  <Desc>.025 X 55.54X66.258 PREPAINT GALV., STRIPPABLE FILM, CQ,
POLYFILM 3944 3 MTL 1 OZ/IN. W/TACK WM3563-KB8 G60, WM2561-B2, WM3563-A1, 2,000# MAX
SKID WT. LINER BODY, TOP, BTM ** QUANTITIES TO BE RELEASE **</Desc>
</Note>
</ProdDescLoop>
```

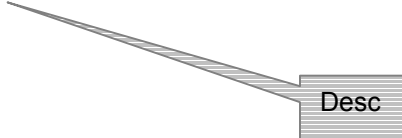


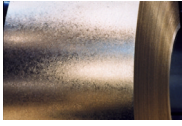


Customer Purchase Order

Example: Machine-based Version (con't)

```
<Note>
  <NoteRefCode>
    <AgencyQualCode>AX</AgencyQualCode>
    <TableNum>363</TableNum>
    <CodeValue>ADD</CodeValue>
    <Desc>ADDITIONAL INFORMATION</Desc>
  </NoteRefCode>
  <Desc>IF THE GOODS TO BE SUPPLIED TO THE BUYER PURSUANT TO
THIS PURCHASE ORDER CONTAIN OR WERE MANUFACTURED WITH ANY CHEMICAL DEFINED
AS A "CONTROLLED SUBSTANCE" IN 40 CFR PART 82, VENDOR SHALL LABEL SUCH GOODS
IN FULL COMPLIANCE WITH THE REQUIREMENTS OF 40 CFR 82.</Desc>
</Note>
</CustomerOrderLineLoop>
</CustomerOrderLoop>
</Detail>
</DataArea>
</TransactionLevel>
</SalesOrder>
```





Customer Purchase Order

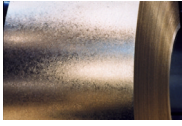
Example: Text-Based Version

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE SalesOrder SYSTEM "SalesOrder.dtd">
<SalesOrder>
  <Interchange/>
  <TransactionLevel>
    <Control/>
    <DataArea>
      <Header>
        <ActionCode>
          <Desc>Send</Desc>
        </ActionCode>
        <ReportTransmissionCode>
          <Desc>Electronic Mail</Desc>
        </ReportTransmissionCode>
      </Header>
      <Detail>
        <CustomerOrderLoop>
          <CustomerOrder>
            <PurchaseOrderNum>039-002301</PurchaseOrderNum>
            <TimeStamp TimeStampType="PurchaseOrder">
              <Date>2001.04.09</Date>
            </TimeStamp>
            <Partner PartnerType="SoldTo">
              <Name>NEW STEEL CORPORATION</Name>
              <Addr1>A subsidiary of PLATINUM STEEL CORP</Addr1>
              <Addr2>123 EAST MAIN STREET</Addr2>
              <CityName>ANYTOWN</CityName>
              <StateOrProvinceCode/>
              <PostalCode>12345</PostalCode>
              <CountryCode>
                <CodeValue>USA</CodeValue>
              </CountryCode>
            </Partner>
            <Partner PartnerType="Supplier">
              <EntityIdCode/>
              <Name>STEEL SUPPLIER CORP</Name>
              <Addr1>1111 BIG STEEL ROAD</Addr1>
              <CityName>STEEL TOWN</CityName>
              <PostalCode>10001</PostalCode>
              <CountryCode>
                <CodeValue>USA</CodeValue>
              </CountryCode>
            </Partner>
            <Partner PartnerType="BillTo">
              <EntityIdCode/>
              <Name>NEW STEEL CORPORATION</Name>
              <Addr1>COMPROLLER - ROOM 0001</Addr1>
              <Addr2>123 EAST MAIN STREET</Addr2>
              <CityName>STEEL TOWN</CityName>
            </Partner>
          </CustomerOrder>
        </CustomerOrderLoop>
      </Detail>
    </DataArea>
  </TransactionLevel>
</SalesOrder>
```

Partner Sold To

Partner Supplier

Partner Bill To



Customer Purchase Order

Example: Text-Based Version (con't)

```
<PostalCode>12345</PostalCode>
<CountryCode>
  <CodeValue>USA</CodeValue>
</CountryCode>
</Partner>
<Note>
  <NoteRefCode>
    <Desc>ADDITIONAL INFORMATION</Desc>
  </NoteRefCode>
  <Desc>PLEASE FURNISH NEW STEEL CORP (HEREAFTER "PURCHASER")
IN ACCORDANCE WITH ALL CONDITIONS SPECIFIED IN THIS PURCHASE ORDER INCLUDING
THE NEXT PAGE HERETO AND ALL ATTACHMENTS HERETO THE FOLLOWING:</Desc>
</Note>
</CustomerOrder>
<CustomerOrderLineLoop>
  <CustomerOrderLine>
    <PurchaseOrderItem>001</PurchaseOrderItem>
  </CustomerOrderLine>
  <Pricing>
    <PriceUnit>
      <Desc>POUNDS (100)</Desc>
    </PriceUnit>
    <PriceUnitOfMeas>
      <Desc>POUNDS</Desc>
    </PriceUnitOfMeas>
    <UnitPrice>1.90</UnitPrice>
  </Pricing>
  <ProdDescLoop>
    <ProdDesc/>
    <OrderedDimensions>
      <Len>
        <MeasValue>66.258</MeasValue>
        <UnitOrBasisForMeasCode>
          <Desc>INCH</Desc>
        </UnitOrBasisForMeasCode>
      </Len>
      <Thk>
        <MeasValue>.025</MeasValue>
        <UnitOrBasisForMeasCode>
          <Desc>INCH</Desc>
        </UnitOrBasisForMeasCode>
      </Thk>
      <Width>
        <MeasValue>55.54</MeasValue>
        <UnitOrBasisForMeasCode>
          <Desc>INCH</Desc>
        </UnitOrBasisForMeasCode>
      </Width>
    </OrderedDimensions>
  </ProdDescLoop>
</CustomerOrderLineLoop>
```




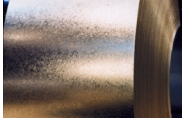


Customer Purchase Order

Example: Text-Based Version (con't)

```
<Weight>
  <MeasValue>40000</MeasValue>
  <UnitOrBasisForMeasCode>
    <Desc>POUNDS</Desc>
  </UnitOrBasisForMeasCode>
</Weight>
</OrderedDimensions>
<Note>
  <NoteRefCode>
    <Desc>ADDITIONAL INFORMATION</Desc>
  </NoteRefCode>
  <Desc>.025 X 55.54X66.258 PREPAINT GALV., STRIPPABLE FILM, CQ,
POLYFILM 3944 3 MTL 1 OZ/IN. W/TACK WM3563-KB8 G60, WM2561-B2, WM3563-A1, 2,000#
MAX SKID WT. LINER BODY, TOP, BTM ** QUANTITIES TO BE RELEASE **</Desc>
</Note>
</ProdDescLoop>
<Note>
  <NoteRefCode>
    <Desc>ADDITIONAL INFORMATION</Desc>
  </NoteRefCode>
  <Desc>IF THE GOODS TO BE SUPPLIED TO THE BUYER PURSUANT TO
THIS PURCHASE ORDER CONTAIN OR WERE MANUFACTURED WITH ANY CHEMICAL
DEFINED AS A "CONTROLLED SUBSTANCE" IN 40 CFR PART 82, VENDOR SHALL LABEL
SUCH GOODS IN FULL COMPLIANCE WITH THE REQUIREMENTS OF 40 CFR 82.</Desc>
</Note>
</CustomerOrderLineLoop>
</CustomerOrderLoop>
</Detail>
</DataArea>
</TransactionLevel>
</SalesOrder>
```





Appendices