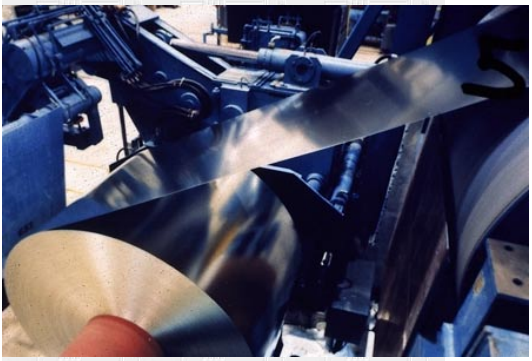
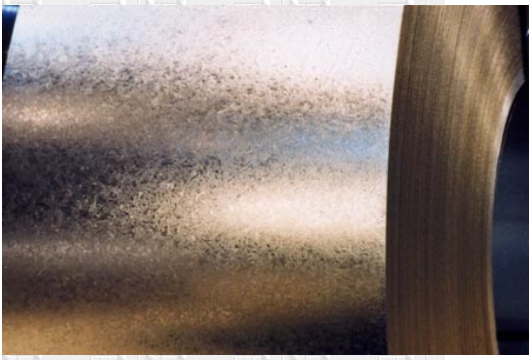
American Iron & Steel Institute
XML Work Group

isXML: Order Status

An Industry Document Guideline for Metal Transactions





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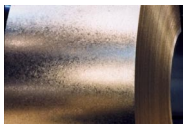

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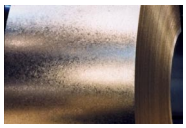

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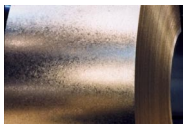


Background

This document is intended to describe the 'payload' section of an XML-formatted 'Order Status' 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

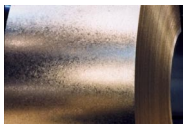
As part of the methodology used to develop these guidelines, the work group mapped transaction data requirements, grouped like elements together as 'classes' or common components, and structured the document.

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 which 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.



Transaction Description and Usage

This draft guideline contains the format and data content for reporting order status. The transaction can be used to report on the current status of an entire PO, selected items, or purchase orders for a specific customer or facility.

Class Relationships

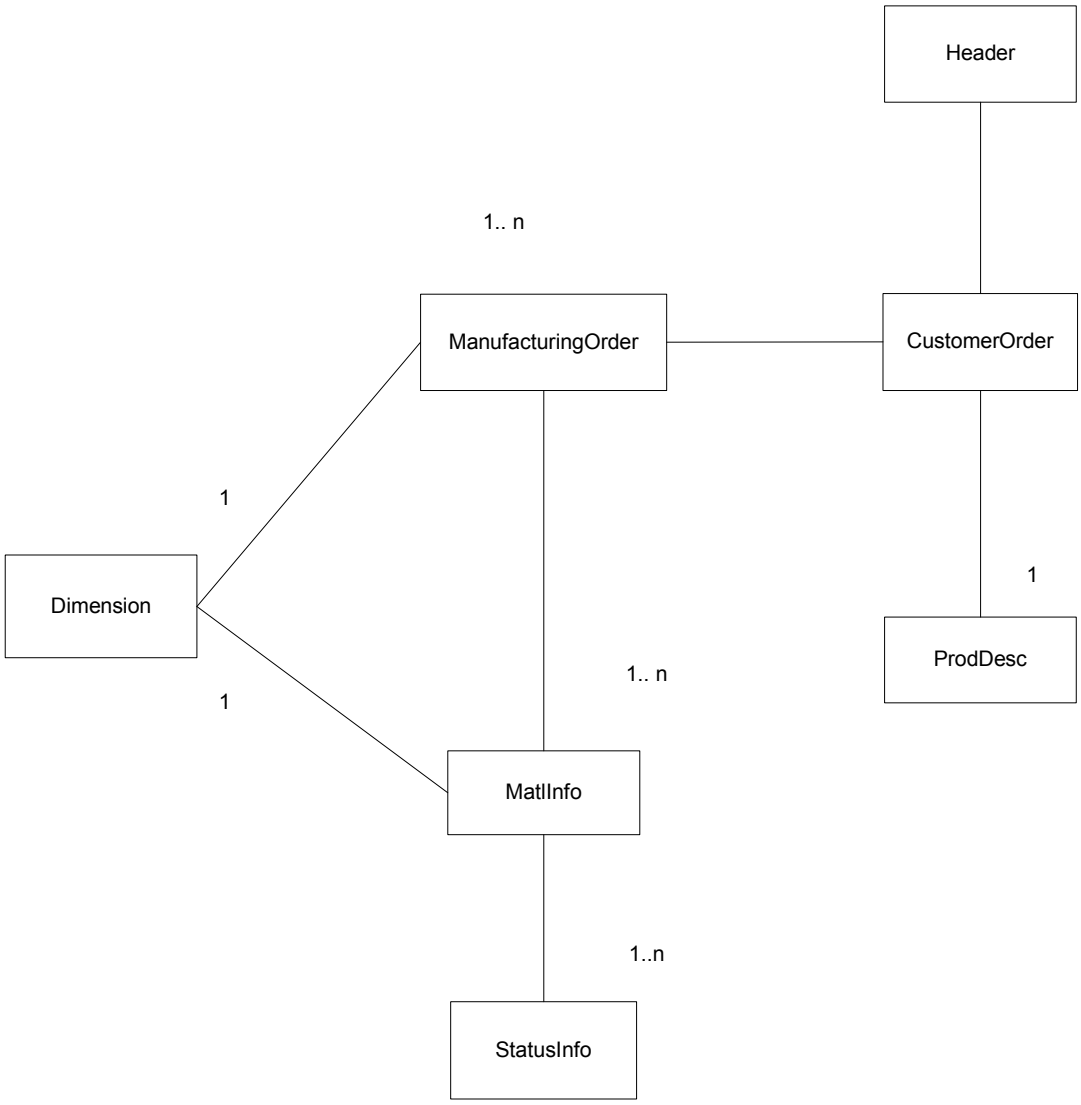


Figure 1

Document Structure

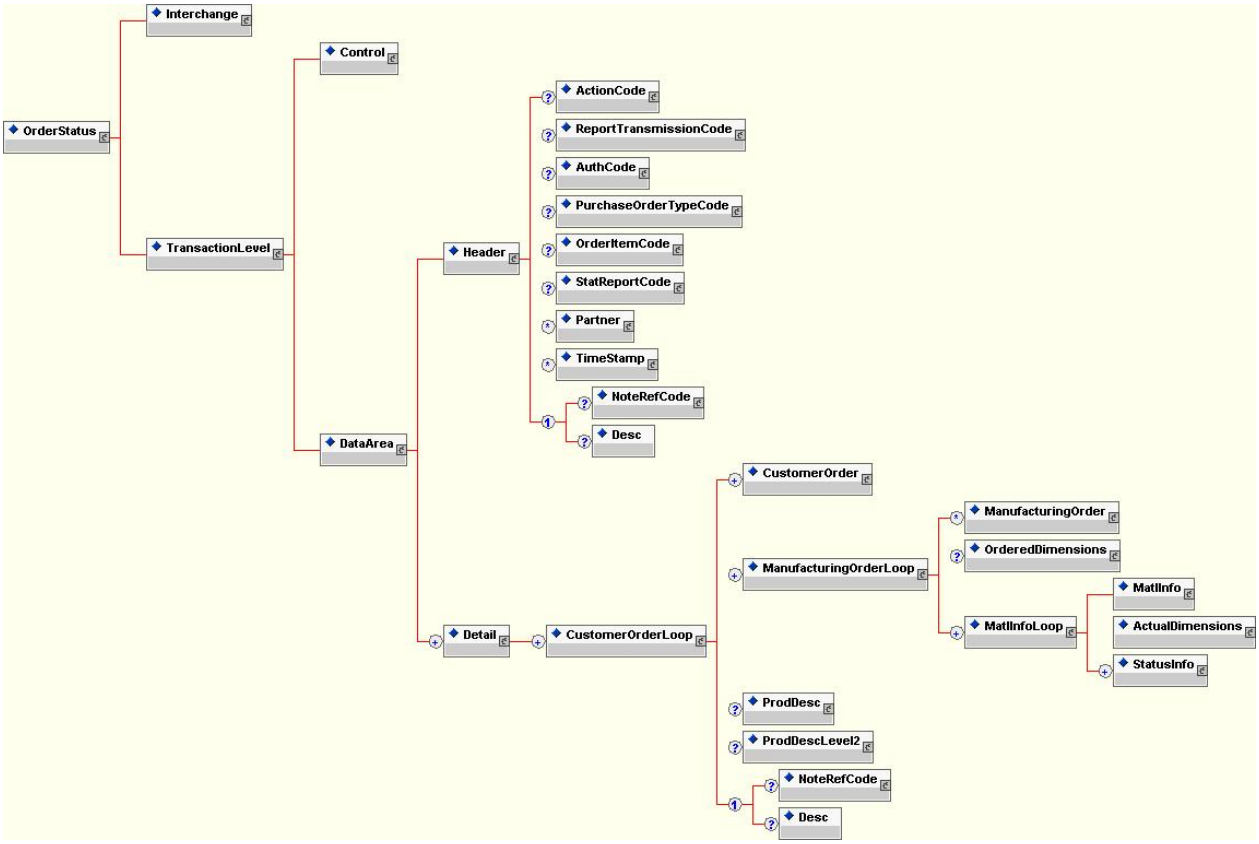
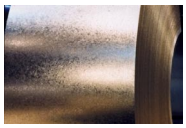
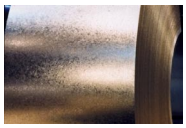


Figure 2



isXML DTD

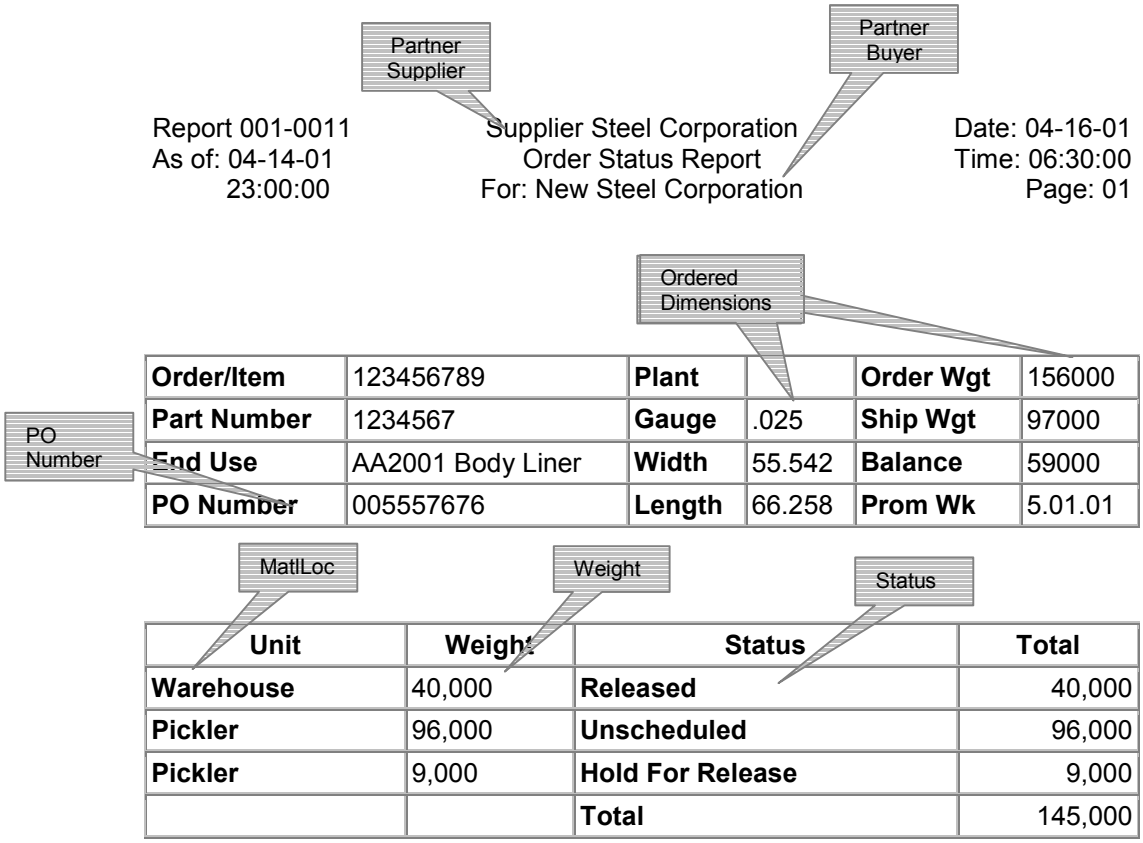
```
<?xml version="1.0" encoding="UTF-8"?>
<!ENTITY % classcommon.dtd SYSTEM "classcommon.dtd">
%classcommon.dtd;
<!ELEMENT OrderStatus (Interchange, TransactionLevel)>
<!-- Document Definition has envelope information and transaction information -->
<!ELEMENT TransactionLevel (Control, DataArea)>
<!ELEMENT DataArea (Header, Detail+)>
<!ELEMENT Detail (CustomerOrderLoop+)>
<!ELEMENT CustomerOrderLoop (CustomerOrder+, ManufacturingOrderLoop+, ProdDesc?,
ProdDescLevel2?, Note*)>
<!ELEMENT ManufacturingOrderLoop (ManufacturingOrder*, OrderedDimensions?, MatlInfoLoop+)>
<!ELEMENT OrderedDimensions (%Dimension;)>
<!ELEMENT MatlInfoLoop (MatlInfo, ActualDimensions, StatusInfo+)>
<!ELEMENT ActualDimensions (%Dimension;)>
```



Examples

The following are examples of the actual order status 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

Example: Source Document



Report 001-0011
As of: 04-14-01 23:00:00

Supplier Steel Corporation
Order Status Report
For: New Steel Corporation

Date: 04-16-01
Time: 06:30:00
Page: 01

Order/Item	123456789	**Plant**		**Order Wgt**	156000
Part Number	1234567	**Gauge**	.025	**Ship Wgt**	97000
End Use	AA2001 Body Liner	**Width**	55.542	**Balance**	59000
PO Number	005557676	**Length**	66.258	**Prom Wk**	5.01.01

Unit	Weight	Status	Total
Warehouse	40,000	**Released**	40,000
Pickler	96,000	**Unscheduled**	96,000
Pickler	9,000	**Hold For Release**	9,000
		Total	145,000

Example: Machine-Based Version

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE OrderStatus SYSTEM "OrderStatus.dtd">
<OrderStatus>
    <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>005557676</PurchaseOrderNum>
                        <TimeStamp TimeStampType="Promise">
                            <Date>2001.05.01</Date>
                        </TimeStamp>
                        <Partner PartnerType="Supplier">
                            <Name>New Steel Corp</Name>
                            <Addr1>Any Street</Addr1>
                            <CityName>Any Town</CityName>
                            <PostalCode>99999</PostalCode>
                            <CountryCode>
                                <Desc>USA</Desc>
                            </CountryCode>
                        </Partner>
                        <Partner PartnerType="Buyer">
                            <Name>Buyer of Steel Corp</Name>
                            <IdCodeQual>
                                <AgencyQualCode>AX</AgencyQualCode>
                                <TableNum>66</TableNum>
                                <CodeValue>91</CodeValue>
                                <Desc>Assigned by Seller or Seller's Agent</Desc>
                            </IdCodeQual>
                            <IdCode>123456789</IdCode>
                            <Addr1>Any Other Street</Addr1>
                            <CityName>Any OtherTown</CityName>
                            <PostalCode>12456</PostalCode>
```

PO Number

Partner Supplier

Partner Buyer

Example: Machine-Based Version (con't)

```
            <CountryCode>
                <Desc>USA</Desc>
            </CountryCode>
        </Partner>
        <PartName>1234567</PartName>
        <EndUse>AA201 Body Liner</EndUse>
    </CustomerOrder>
    <ManufacturingOrderLoop>
        <OrderedDimensions>
            <Len>
                <MeasValue>66.258</MeasValue>
                <UnitOrBasisForMeasCode>
                    <AgencyQualCode>AX</AgencyQualCode>
                    <TableNum>355</TableNum>
                    <CodeValue>LF</CodeValue>
                    <Desc>LINEAL FEET</Desc>
                </UnitOrBasisForMeasCode>
            </Len>
            <Thk>
                <MeasValue>.025</MeasValue>
                <UnitOrBasisForMeasCode>
                    <AgencyQualCode>AX</AgencyQualCode>
                    <TableNum>355</TableNum>
                    <CodeValue>IN</CodeValue>
                    <Desc>INCH</Desc>
                </UnitOrBasisForMeasCode>
            </Thk>
            <Width>
                <MeasValue>.55.542</MeasValue>
                <UnitOrBasisForMeasCode>
                    <AgencyQualCode>AX</AgencyQualCode>
                    <TableNum>355</TableNum>
                    <CodeValue>IN</CodeValue>
                    <Desc>INCH</Desc>
                </UnitOrBasisForMeasCode>
            </Width>
            <Weight>
                <MeasValue>156000</MeasValue>
                <UnitOrBasisForMeasCode>
                    <AgencyQualCode>AX</AgencyQualCode>
                    <TableNum>355</TableNum>
                    <CodeValue>LB</CodeValue>
                    <Desc>POUNDS</Desc>
                </UnitOrBasisForMeasCode>
            </Weight>
        </OrderedDimensions>
        <MatlInfoLoop>
            <MatlInfo>
                <MatlLoc>Warehouse</MatlLoc>
            </MatlInfo>
```

Ordered Dimensions

MatlLoc

Weight

Example: Machine-Based Version (con't)

```
<ActualDimensions>
        <Weight>
            <MeasValue>40,000</MeasValue>
            <UnitOrBasisForMeasCode>
                <AgencyQualCode>AX</AgencyQualCode>
                <TableNum>355</TableNum>
                <CodeValue>LB</CodeValue>
                <Desc>POUNDS</Desc>
            </UnitOrBasisForMeasCode>
        </Weight>
    </ActualDimensions>
    <StatusInfo>
        <Status StatusType="Processor">
            <AgencyQualCode>ST</AgencyQualCode>
            <TableNum>70</TableNum>
            <CodeValue>R</CodeValue>
            <Desc>RELEASED</Desc>
        </Status>
        <TimeStamp TimeStampType="ProcessorStatus">
            <Date>2001.4.17</Date>
        </TimeStamp>
    </StatusInfo>
</MatlInfoLoop>
<MatlInfoLoop>
    <MatlInfo>
        <MatlLoc>Pickler</MatlLoc>
    </MatlInfo>
    <ActualDimensions>
        <Weight>
            <MeasValue>96,000</MeasValue>
            <UnitOrBasisForMeasCode>
                <AgencyQualCode>AX</AgencyQualCode>
                <TableNum>355</TableNum>
                <CodeValue>LB</CodeValue>
                <Desc>POUNDS</Desc>
            </UnitOrBasisForMeasCode>
        </Weight>
    </ActualDimensions>
    <StatusInfo>
        <Status StatusType="Processor">
            <AgencyQualCode>ST</AgencyQualCode>
            <TableNum>70</TableNum>
            <CodeValue/>
            <Desc>UNSCHEDULED</Desc>
        </Status>
        <TimeStamp TimeStampType="ProcessorStatus">
            <Date>2001.4.17</Date>
        </TimeStamp>
    </StatusInfo>
</MatlInfoLoop>
```

Status

Example: Machine-Based Version (con't)

```
                    <MatlInfoLoop>
                        <MatlInfo>
                            <MatlLoc>Pickler</MatlLoc>
                        </MatlInfo>
                        <ActualDimensions>
                            <Weight>
                                <MeasValue>9,000</MeasValue>
                                <UnitOrBasisForMeasCode>
                                    <AgencyQualCode>AX</AgencyQualCode>
                                    <TableNum>355</TableNum>
                                    <CodeValue>LB</CodeValue>
                                    <Desc>POUNDS</Desc>
                                </UnitOrBasisForMeasCode>
                            </Weight>
                        </ActualDimensions>
                        <StatusInfo>
                            <Status StatusType="Processor">
                                <AgencyQualCode>ST</AgencyQualCode>
                                <TableNum>70</TableNum>
                                <CodeValue>3</CodeValue>
                                <Desc>HOLD FOR RELEASE</Desc>
                            </Status>
                            <TimeStamp TimeStampType="ProcessorStatus">
                                <Date>2001.4.17</Date>
                            </TimeStamp>
                        </StatusInfo>
                    </MatlInfoLoop>
                </ManufacturingOrderLoop>
            </CustomerOrderLoop>
        </Detail>
    </DataArea>
</TransactionLevel>
</OrderStatus>
```

Example: Text-Based Version

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE OrderStatus SYSTEM "OrderStatus.dtd">
<OrderStatus>
    <Interchange/>
    <TransactionLevel>
        <Control/>
        <DataArea>
            <Header>
                <ActionCode>
                    <Desc>Send</Desc>
                </ActionCode>
                <ReportTransmissionCode>
                    <Desc>Electronic Mail</Desc>
                </ReportTransmissionCode>
            </Header>
            <Detail>
                <CustomerOrderLoop>
                    <CustomerOrder>
                        <PurchaseOrderNum>005557676</PurchaseOrderNum>
                        <TimeStamp TimeStampType="Promise">
                            <Date>2001.05.01</Date>
                        </TimeStamp>
                        <Partner PartnerType="Supplier">
                            <Name>New Steel Corp</Name>
                            <Addr1>Any Street</Addr1>
                            <CityName>Any Town</CityName>
                            <PostalCode>99999</PostalCode>
                            <CountryCode>
                                <Desc>USA</Desc>
                            </CountryCode>
                        </Partner>
                        <Partner PartnerType="Buyer">
                            <Name>Buyer of Steel Corp</Name>
                            <IdCodeQual>
                                <Desc>Assigned by Seller or Seller's Agent</Desc>
                            </IdCodeQual>
                            <IdCode>123456789</IdCode>
                            <Addr1>Any Other Street</Addr1>
                            <CityName>Any OtherTown</CityName>
                            <PostalCode>12456</PostalCode>
                            <CountryCode>
                                <Desc>USA</Desc>
                            </CountryCode>
                        </Partner>
                        <PartName>1234567</PartName>
                        <EndUse>AA201 Body Liner</EndUse>
                    </CustomerOrder>
                    <ManufacturingOrderLoop>
                        <OrderedDimensions>
```

PO Number

Partner Supplier

Partner Buyer

Ordered Dimensions

Example: Text-Based Version (con't)

```
        <Len>
            <MeasValue>66.258</MeasValue>
            <UnitOrBasisForMeasCode>
                <Desc>LINEAL FEET</Desc>
            </UnitOrBasisForMeasCode>
        </Len>
        <Thk>
            <MeasValue>.025</MeasValue>
            <UnitOrBasisForMeasCode>
                <Desc>INCH</Desc>
            </UnitOrBasisForMeasCode>
        </Thk>
        <Width>
            <MeasValue>.55.542</MeasValue>
            <UnitOrBasisForMeasCode>
                <Desc>INCH</Desc>
            </UnitOrBasisForMeasCode>
        </Width>
        <Weight>
            <MeasValue>156000</MeasValue>
            <UnitOrBasisForMeasCode>
                <Desc>POUNDS</Desc>
            </UnitOrBasisForMeasCode>
        </Weight>
    </OrderedDimensions>
    <MatlInfoLoop>
        <MatlInfo>
            <MatlLoc>Warehouse</MatlLoc>
        </MatlInfo>
        <ActualDimensions>
            <Weight>
                <MeasValue>40,000</MeasValue>
                <UnitOrBasisForMeasCode>
                    <Desc>POUNDS</Desc>
                </UnitOrBasisForMeasCode>
            </Weight>
        </ActualDimensions>
        <StatusInfo>
            <Status StatusType="Processor">
                <Desc>RELEASED</Desc>
            </Status>
            <TimeStamp TimeStampType="ProcessorStatus">
                <Date>2001.4.17</Date>
            </TimeStamp>
        </StatusInfo>
    </MatlInfoLoop>
    <MatlInfoLoop>
        <MatlInfo>
            <MatlLoc>Pickler</MatlLoc>
        </MatlInfo>
```

MatlLoc

Weight

Status

Example: Text-Based Version (con't)

```
                        <ActualDimensions>
                            <Weight>
                                <MeasValue>96,000</MeasValue>
                                <UnitOrBasisForMeasCode>
                                    <Desc>POUNDS</Desc>
                                </UnitOrBasisForMeasCode>
                            </Weight>
                        </ActualDimensions>
                        <StatusInfo>
                            <Status StatusType="Processor">
                                <Desc>UNSCHEDULED</Desc>
                            </Status>
                            <TimeStamp TimeStampType="ProcessorStatus">
                                <Date>2001.4.17</Date>
                            </TimeStamp>
                        </StatusInfo>
                    </MatlInfoLoop>
                    <MatlInfoLoop>
                        <MatlInfo>
                            <MatlLoc>Pickler</MatlLoc>
                        </MatlInfo>
                        <ActualDimensions>
                            <Weight>
                                <MeasValue>9,000</MeasValue>
                                <UnitOrBasisForMeasCode>
                                    <Desc>POUNDS</Desc>
                                </UnitOrBasisForMeasCode>
                            </Weight>
                        </ActualDimensions>
                        <StatusInfo>
                            <Status StatusType="Processor">
                                <Desc>HOLD FOR RELEASE</Desc>
                            </Status>
                            <TimeStamp TimeStampType="ProcessorStatus">
                                <Date>2001.4.17</Date>
                            </TimeStamp>
                        </StatusInfo>
                    </MatlInfoLoop>
                </ManufacturingOrderLoop>
            </CustomerOrderLoop>
        </Detail>
    </DataArea>
</TransactionLevel>
</OrderStatus>
```

Appendices