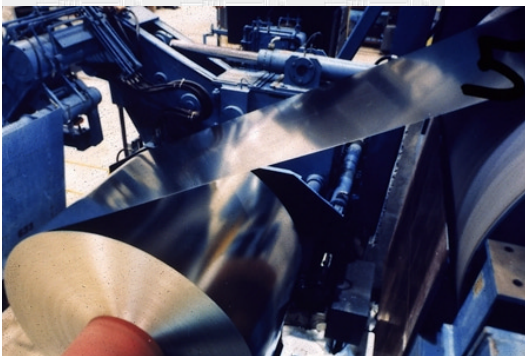


isXML: Overview

An Industry Document Guideline for Metal Transactions

American Iron & Steel Institute

April 2001



DRAFT – Release 0.1



Published / Revised

3/8/2002

Printed
04/23/2002



Table of Contents

Topic	Page
Overview	2
Background.....	2
Objectives	3
WorkGroup.....	6
Classes	8
Descriptions	8
Class Element Mapping.....	10
Noteworthy Classes	27
Class - Code.....	28
Class - Measurement.....	29
Class - Note.....	33
Class – Partner.....	34
Class - StatusInfo	37
Class - TimeStamp	39
‘Common’ DTD.....	41
Why?.....	41
Common DTD Detail.....	42
Data Dictionary.....	50
Interpreting the Data Dictionary	50
Dictionary - isXML Tag Sort	51
Dictionary - Data Element Sort.....	67
FAQ	83
Appendices	85



Overview

Background

The steel industry uses a variety of transactions documents and formats in transmitting information among customers, outside processors, and internal steel company functions. Among these are purchase orders, tracking documents, shipping documents, and invoices, each of which contain terms used broadly and throughout the industry.

Several years ago, with the growing need to electronically transmit information, an increase in the variety of forms and terminology being used for EDI exchange resulted in the steel industry developing a standard using X.12. Rather than each company, customer group, or supply chain partner developing its own "language", the industry agreed on X.12 based standards that could be applied by all parties. These standards enabled a seamless, industry-wide set of forms, documents, and terminology that continues to serve the industry well.

The development of Internet based marketplaces for steel and the likely rise in the number of transactions being processed over the Internet forces the industry to once again develop standards or guidelines for document formats and terms. Further, the number of participants processing transactions over the internet will likely be far greater than the number of participants using EDI, making it that much more important for the industry to develop guidelines.

One technology for enabling the electronic communication of industry transactions over the Internet is XML (extensible mark-up language). Many different non-steel groups are currently working on or monitoring standards development based on XML. Among them are customer groups such as AIAG and cross-industry groups such as ebXML.



Objectives

Mission

The mission of the AISI XML Workgroup is to develop an XML-based standard specification, which can be used to support Steel Industry business processes.

Workgroup Objectives

The primary objectives of the group are to:

1. Educate the membership,
2. Promote standardization
3. Reduce development and maintenance costs
 - a. Aid in application to XML mapping
 - b. Minimize custom trading partner 'mapping'
 - c. Defend investment in EDI
4. Ensure a convergence path for intra and cross-industry initiatives.

Deliverables – Phase 0001

1. Steel industry data dictionary
2. First level schemas – DTDs
3. Element mapping document

Group 1 – Priority Documents

1. Planning Schedule / Material Release
2. Ship Notice
3. Inventory Advice
4. Receiving Advice
5. Test Report
6. Order Status
7. Order
 - a. Work Order
 - b. Vendor Order
 - c. Customer Purchase Order



Full Cycle Transaction flow

The majority of electronic communications utilized by the Steel Industry are represented in the graphic below.

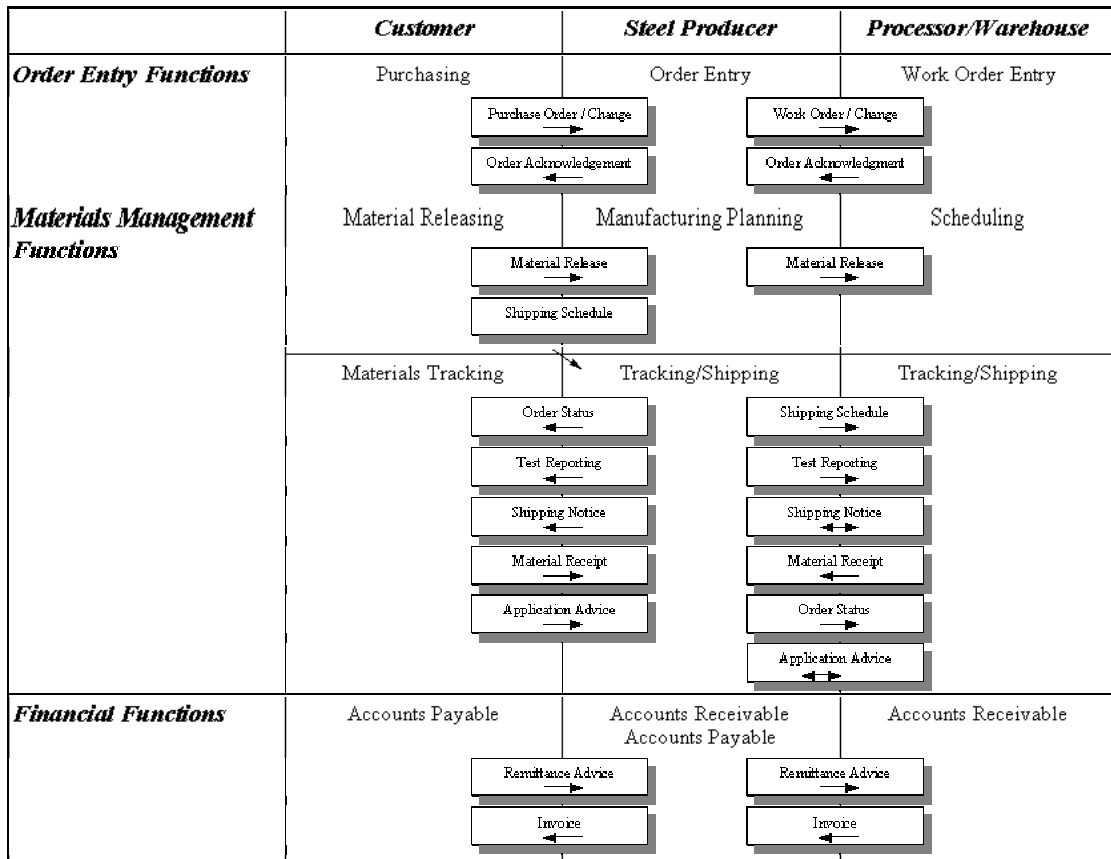


Figure 1



Transaction Listing – Group 1 priority documents highlighted in yellow

1. Order Entry
 - 1.1. Purchase Order / Acknowledgement – 3 cuts
 - 1.2. Purchase Order Change / Acknowledgement
 - 1.3. Request for Quotation
 - 1.4. Response to Request for Quotation
2. Materials Management
 - 2.1. Releasing
 - 2.1.1. Material Release
 - 2.1.2. Product Activity Data
 - 2.1.3. Shipping Schedule
 - 2.2. Material Tracking
 - 2.2.1. Order Status
 - 2.2.2. Inventory Inquiry / Advice
 - 2.2.3. Report of Test Results
 - 2.2.4. Receiving Advice
 - 2.2.5. Product Transfer and Resale
 - 2.2.6. Ship Notice
 - 2.2.7. Shipment Information
 - 2.2.8. Rail Advance Interchange Consist
 - 2.2.9. Production Schedule
 - 2.2.10. Claims
3. Financial Functions
 - 3.1. Invoice
 - 3.2. Freight Invoice
 - 3.3. Payment Order / Remittance Advice
 - 3.4. Financial Information Reporting
 - 3.5. Debit Authorization
4. Miscellaneous
 - 4.1. Application Advice
 - 4.2. Text Message



WorkGroup

In April of year 2000, a proposal was made to the AISI to create a workgroup to develop XML guidelines for industry use. The **business drivers** for this activity include the following: (1) B2B e-Commerce requires internet standard protocols and (2) a reliance on the internet for business communications requires industry standard formats.

The proposed approach is based on: (1) a joint initiative of existing AISI technology groups; (2) reviewing the direction, approach, and processes of industry related efforts; and (3) ensuring alignment with related groups.

The AISI's **organizational strategy** was based on leveraging existing IT groups within the AISI. Workgroup composition was drawn from (1) the AISI Subcommittee on Systems and Information Technology and (2) the Systems Group of the AISI's Outside Processor Committee. During the phase 1 development cycle, participants included representatives from the following companies:

AK Steel	Bethlehem Steel	Cargill Steel
Cleveland-Cliffs	Dofasco	eSteel
Gallatin Steel	Georgetown Steel	Hatch Beddows
Ipsco	Ispat	LTV
MetalSite	National Steel	Stelco
TRW	UEC	U.S.Steel

General **methodology**:

- Map transaction data requirements
- Grouped like elements together as 'classes' or common components
- Develop a document hierarchical structure



The group focused on descriptions of the 'payload' section of XML-formatted messages. Message routing structures are not currently a part of these guidelines.

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

isXML DTD

1. Interchange level
2. Transaction level
 - 2.1. Control
 - 2.2. Data Area
 - 2.2.1. Header
 - 2.2.2. Detail



Classes

Descriptions

The following is a proposed listing of the various classes that can be associated to the Steel AISI isXML messages. Each message can be comprised of one or more classes, with possible multiple occurrences of a class or classes. The full Data Dictionary can be found in

CLASS	CLASS DEFINITION
Allowance	Pricing allowances
CarrierRouting	Components used to describe carrier and routing info.
CoatingInfo	Components used to describe coating specifications/detail
Code	Table code group. Used to describe codified data elements.
ContactInfo	Personal contact methods
Control	Transaction control - part of every transaction
CustomerOrder	Components used to describe the customer PO
CustomerOrderLine	Components used to describe the customer PO line
DateTime	Set of components used to describe any date/time element.
DefectInfo	Damage or defect component data elements
Dimension	Components used to describe order or material dimensions
Forecast	Data elements used to communicate shipping and/or production forecast detail
FunctionalGroup	Transaction grouping and control, enveloping structure
Interchange	Communication control, enveloping structure
Invoice	Invoice components
ManufacturingOrder	Components used to describe a manufacturing order
MarkPackLoad	Components used to describe marking, packaging, and loading instructions
MatlInfo	Material identification and description elements
Measurement	Set of components used to describe a measurement data element.
Note	Components used to identify text data
Organization	Set of components used to describe an organization/partner.
Person	Set of components used to identify a contact.
Pricing	Pricing components
ProcessInfo	Components used to describe process information.
ProdDesc	Steel product description elements



CLASS	CLASS DEFINITION
ProdDescLevel2	Steel product description elements for level 2 reporting
Schedule	Data elements used to communicate planning or shipping schedules.
ShipInfo	Data elements used to describe a shipping event
StatusInfo	Components used to describe status or condition
TaxInfo	Organization tax info
Terms	Billing terms.
TestInfo	Components used to describe test result or sample data
VendorOrder	Components used to describe a vendor PO
VendorOrderLine	Components used to describe a vendor PO line
WorkOrder	Components used to describe a facility-level set of manufacturing and processing instructions



Class Element Mapping

(The following tables have been sorted by isXML Tag within Class Member for ease of finding elements.)

- **Class - Allowance**

Class - Member	Data Element	isXML Tag	Attribute	Definer	Agny	ANSI Table	AISI Table
Allowance	Allowance or Charge Code	<AllowOrChargeCode>		Code	AX	340	
Allowance	Allowance or Charge Method of Handling Code	<AllowOrChargeHandling>		Code	AX	331	
Allowance	Allowance or Charge Indicator	<AllowOrChargeInd>		Code	AX	248	
Allowance	Allowance or Charge Percent Qualifier	<AllowOrChargePct>		Code			
Allowance	Allowances and Charges	<AllowOrChargeQty>			AX	339	

- **Class - Carrier Routing**

Class - Member	Data Element	isXML Tag	Attribute	Definer	Agny	ANSI Table	AISI Table
CarrierRouting	Equipment Description Code	<EquipDescCode>		Code	AX	40	
CarrierRouting	Equipment Initial	<EquipInitial>			AX	206	
CarrierRouting	Equipment Number	<EquipNum>			AX	207	
CarrierRouting	Equipment Type	<EquipType>		Code	AX	98	
CarrierRouting	FOB Shipping Point Cd	<FobShipPoint>		Code			
CarrierRouting	Carrier	<Partner>	Carrier	Organization			
CarrierRouting	Rail Car Owner	<Partner>	RailCarOwner	Organization			
CarrierRouting	Routing	<Routing>			AX	387	
CarrierRouting	Routing Sequence Code	<RoutingSeqCode>		Code	AX	133	
CarrierRouting	SCAC	<StdCarrierAlphaCode>		Code	AX,ST	140	71
CarrierRouting	Vehicle Identity	<VehicleIdNum>			AX	539	



Steel Industry XML Project
Release 0.1 (Draft)
Overview

• **Class – Coating Info**

Class - Member	Data Element	isXML Tag	Attribute	Definer	Agny	ANSI Table	AISI Table
CoatingInfo	Coating Code	<CoatCode>	Code				
CoatingInfo	Coating Name	<CoatName>					
CoatingInfo	Coating Specs	<CoatSpec>					
CoatingInfo	Coating Supplier	<CoatSupplier>					
CoatingInfo	Coating Surface	<CoatSurface>					
CoatingInfo	Coating System	<CoatSystem>					
CoatingInfo	Coating Type	<CoatType>	Code	ST		17	
CoatingInfo	Coating Value	<CoatValue>	Measurement				
CoatingInfo	Coating Weight	<CoatWeight>	Measurement				
CoatingInfo	Color Code	<ColorCode>	Code	AX	397		
CoatingInfo	Coating Layer	<Layer>					
CoatingInfo	Pre-Painted - Organic	<OrganicCoat>		ST		17H	
CoatingInfo	Pre-Painted - Pretreatment	<Pretreat>		ST		17E	
CoatingInfo	Pre-Painted - Primer	<Primer>		ST		17F	
CoatingInfo	Pre-Painted - Topcoat	<Topcoat>		ST		17G	

• **Class - Code**

Class - Member	Data Element	isXML Tag	Attribute	Definer	Agny	ANSI Table	AISI Table
Code	Agency Identifier	<AgencyQualCode>			AX	559	
Code	Table Number	<TableNum>					
Code	Code Value	<CodeValue>					
Code	Description	<Desc>			AX	352	



Steel Industry XML Project Release 0.1 (Draft) Overview

- **Class - Controls**

Class - Member	Data Element	isXML Tag	Attribute	Definer	Agny	ANSI Table	AISI Table
Control	Transaction Set Control Number	<TranSetControlNum>			AX	329	
Control	Transaction Set Purpose	<TranSetPurposeCode>		Code	AX	353	
Control	Report Type Code	<ReportTypeCode>		Code	AX	755	
Control	Reference Number	<RefId>			AX	127	
Control	Transaction Date/Time	<TimeStamp>	Transaction	Date/Time	AX	374	

- **Class - Customer Order**

Class - Member	Data Element	isXML Tag	Attribute	Definer	Agny	ANSI Table	AISI Table
CustomerOrder	Purchase Order Number	<PurchaseOrderNum>	Customer Order Num		AX	324	
Customer Order	Third Party Purchase Order Number	<PurchaseOrderNum>	Third Party Purchase Order Num		AX	324	
CustomerOrder	Purchase Order Date	<TimeStamp>	PurchaseOrder	Date/Time	AX	323	
CustomerOrder	Customer PO Revision	<PurchaseOrderRevision>					
CustomerOrder	Change Reason Code	<ChangeReasonCode>		Code	AX	371	
CustomerOrder	Release Number	<RelNum>			AX	328	
CustomerOrder	Contract Number	<ContractNum>			AX	367	
CustomerOrder	Bill-to	<Partner>	BillTo	Organization			
CustomerOrder	Certificate Compliance Receiver	<Partner>	CertReceiver	Organization			
CustomerOrder	Inspection Report Receiver	<Partner>	InspectReceiver	Organization			
CustomerOrder	Test Report Receiver	<Partner>	TestReceiver	Organization			
CustomerOrder	Customer Part Number	<PartNum>					
CustomerOrder	Engineering Change Level	<EngChangeLevel>					
CustomerOrder	Customer Part Name	<PartName>			AX	557	
CustomerOrder	Model Year	<ModelYear>					
CustomerOrder	End Use	<EndUse>					
CustomerOrder	Class of Trade Code	<ClassOfTradeCode>		Code	AX	687	

Classes...



Steel Industry XML Project
Release 0.1 (Draft)
Overview



**Steel Industry XML Project
Release 0.1 (Draft)
Overview**

- **Class - Customer Order Line**

Class - Member	Data Element	isXML Tag	Definer	Agy	ANSI Table	AISI Table
CustomerOrderLine	Product Service ID	<ProdServiceID>	Code	AX	235	
CustomerOrderLine	Purchase Order Item Number	<PurchaseOrderItem>				

- **Class - Date Time**

Class - Member	Data Element	isXML Tag	Definer	Agy	ANSI Table	AISI Table
DateTime	Date	<Date>		AX	373	
DateTime	Date Qualifier	<DateTimeQual>	Code	AX	374	
DateTime	Time	<Time>		AX	337	
DateTime	Time Code	<TimeCode>	Code	AX	623	

- **Class - Defect Info**

Class - Member	Data Element	isXML Tag	Definer	Agy	ANSI Table	AISI Table
DefectInfo	Damage Fault	<DamageFaultCode>	Code	ST		73
DefectInfo	Damage Reason Code	<DamageReasonCode>	Code	AX	853	
DefectInfo	Damage Severity Code	<DamageSeverityCode>	Code	AX	541	
DefectInfo	Damage Code	<DamageTypeCode>	Code	AX,ST	540	72
DefectInfo	Damage Date	<TimeStamp>	Date			



**Steel Industry XML Project
Release 0.1 (Draft)
Overview**

- **Class - Dimension**

Class - Member	Data Element	isXML Tag	Attribute	Definer	Agy	ANSI Table	AISI Table
Dimension	Edge Designation	<EdgeDesignation>		Code	ST		22
Dimension	Gain Loss Indicator	<GainLossInd>		Measurement			
Dimension	ID (Inside Diameter)	<InsideDiam>		Measurement			
Dimension	Length	<Len>		Measurement	AX	82	
Dimension	OD (Outside Diameter)	<OutsideDiam>		Measurement			
Dimension	Quantity	<Qty>		Measurement	AX	380	
Dimension	Scale Indicator	<ScaleInd>		Measurement			
Dimension	Thickness	<Thk>		Measurement			
Dimension	Weight	<Weight>		Measurement	AX	81	
Dimension	Width	<Width>		Measurement	AX	189	

- **Class - Forecast**

Class - Member	Data Element	isXML Tag	Attribute	Definer	Agy	ANSI Table	AISI Table
Forecast	Forecast Quantity	<ForecastQty>		Measurement			
Forecast	Forecast Qualifier	<ForecastQual>		Code	AX	680	
Forecast	Forecast Date	<TimeStamp>	Forecast	DateTime			
Forecast	Forecast Timing Qualifier	<TimingQual>		Code	AX	681	

- **Class - Functional Group**

Class - Member	Data Element	isXML Tag	Attribute	Definer	Agy	ANSI Table	AISI Table
FunctionalGroup	Application Receivers Code	<AppReceiversCode>			AX	124	
FunctionalGroup	Application Senders Code	<AppSendersCode>			AX	142	
FunctionalGroup	Group Control Number	<GrpControlNum>			AX	28	
FunctionalGroup	Responsible Agency Code	<ResponsibleAgency Code>		Code	AX	455	
FunctionalGroup	Version Number	<VersionNum>					



Steel Industry XML Project Release 0.1 (Draft) Overview

- **Class - Header**

Class - Member	Data Element	isXML Tag	Attribute	Definer	Agny	ANSI Table	AISI Table
Header	Action Code	<ActionCode>		Code	AX	306	
Header	Authorization Code	<AuthCode>		Code	AX	672	
Header	Order Item Code	<OrderItemCode>		Code	AX	847	
Header	Buyer	<Partner>	Buyer	Organization			
Header	Certifier	<Partner>	Certifier	Organization			
Header	Customer	<Partner>	Customer	Organization			
Header	Inspection Agency	<Partner>	Inspector	Organization			
Header	Outside Processor	<Partner>	Processor	Organization			
Header	Material Release Issuer	<Partner>	ReleaseIssuer	Organization			
Header	Ship-from	<Partner>	ShipFrom	Organization			
Header	Ship-to	<Partner>	ShipTo	Organization			
Header	Sold-to	<Partner>	SoldTo	Organization			
Header	Supplier/Manufacturer	<Partner>	Supplier	Organization			
Header	Testing Agency	<Partner>	TestAgency	Organization			
Header	Vendor	<Partner>	Vendor	Organization			
Header	Warehouse	<Partner>	Warehouse	Organization			
Header	Purchase Order Type Code	<PurchaseOrderTypeCode>		Code	AX	92	
Header	Report Transmission Code	<ReportTransmissionCode>		Code	AX	756	
Header	Status Report Code	<StatReportCode>		Code	AX	850	
Header	Inventory Snapshot Date	<TimeStamp>	Inventory	Date Time			
Header	Release Create Date	<TimeStamp>	ReleaseCreate	Date Time			
Header	Release End Date	<TimeStamp>	ReleaseEnd	Date Time			
Header	Release Start Date	<TimeStamp>	ReleaseStart	Date Time			



**Steel Industry XML Project
Release 0.1 (Draft)
Overview**

- **Class - Interchange**

Class - Member	Data Element	isXML Tag	Attribute	Definer	Agny Table	ANSI Table	AISI Table
Interchange	Acknowledgement Requested	<AckRequested>		Code	AX	I13	
Interchange	Interchange Control Number	<InterchangeControlNum>			AX	I12	
Interchange	Interchange Date/Time	<InterchangeDateTime>		Date Time	AX	I08	
Interchange	Interchange ID Qualifier	<InterchangeIDQual>		Code	AX	I05	
Interchange	Interchange Receiver ID	<InterchangeReceiverID>			AX	I07	
Interchange	Interchange Sender ID	<InterchangeSenderID>			AX	I06	
Interchange	Security Information	<SecurityInfo>			AX	I04	
Interchange	Security Information Qualifier	<SecurityInfoQual>		Code	AX	I03	
Interchange	Test Indicator	<UsagInd>		Code	AX	I14	

- **Class - Invoice**

Class - Member	Data Element	isXML Tag	Attribute	Definer	Agny Table	ANSI Table	AISI Table
Invoice	Invoice Number	<InvoiceNum>			AX	76	
Invoice	Invoice Format	<InvoiceTypeCode>		Code	AX	1019	
Invoice	Quantity Invoiced	<QtyInvoiced>		Measurement	AX	358	
Invoice	Invoice Total Amount	<TotalInvoiceAmt>			AX	361	

- **Class – Manufacturing Order**

Class - Member	Data Element	isXML Tag	Attribute	Definer	Agny Table	ANSI Table	AISI Table
ManufacturingOrder	Manufacturer's Part Number	<ManufacturerPartNum>					
ManufacturingOrder	Mill Order Line	<MillOrderItem>					
ManufacturingOrder	Mill Order	<MillOrderNum>					
ManufacturingOrder	Manufacturing Plant	<Partner>	ManufacturingPlant	Organization			
ManufacturingOrder	Promise Date	<TimeStamp>	Promise	Date Time			
ManufacturingOrder	Revised Promise Date	<TimeStamp>	RevPromise	Date Time			
ManufacturingOrder	TMW Factor	<TmwFactor>					
ManufacturingOrder	TMW Formula	<TmwFormula>		Code	ST		74

Classes...



**Steel Industry XML Project
Release 0.1 (Draft)
Overview**

• **Class - MarkPackLoad**

Class - Member	Data Element	isXML Tag	Attribute	Definer	Agy	ANSI Table	AISI Table
MarkPackLoad	Packaging Code	<PackagingCode>		Code	AX	103	
MarkPackLoad	Mark	<MarkCodeType>		Code	AX	1304	
MarkPackLoad	Packaging Description	<PackagingDescCode>		Code	AX	754	
MarkPackLoad	Load	<LoadCode>		Code	AX	1042	
MarkPackLoad	Unit Load Option Code	<UnitLoadOptionCode>		Code	AX	400	

• **Class - MatlInfo**

Class - Member	Data Element	isXML Tag	Attribute	Definer	Agy	ANSI Table	AISI Table
MatlInfo	Material Identification - Producer	<MatlId>	Producer				
MatlInfo	Material Identification - OP	<MatlId>	Processor				
MatlInfo	Material Identification - OP Prior	<MatlId>	Prior				
MatlInfo	Material Identification - Receiver	<MatlId>	Receiver				
MatlInfo	Material Identification - Bundle	<MatlId>	Bundle				
MatlInfo	Material Identification - Bar Code	<MatlId>	BarCd				
MatlInfo	Material Identification - Tested	<MatlId>	Tested				
MatlInfo	Lot Number	<LotNum>					
MatlInfo	Sub-Lot Number	<SubLotNum>					
MatlInfo	Heat Number	<HeatNum>					
MatlInfo	Claim Number	<ClaimNum>					
MatlInfo	Material Location	<MatlLoc>					
MatlInfo	Returnable Container	<ReturnContainer>					



**Steel Industry XML Project
Release 0.1 (Draft)
Overview**

• **Class - Measurement**

Class - Member	Data Element	isXML Tag	Attribute	Definer	Agny Table	ANSI Table	AISI Table
Measurement	Measurement ID Code	<MeasRefIdCode>		Code	AX 737		
Measurement	Measurement Qualifier	<MeasQual>		Code	AX 738		
Measurement	Measurement Value	<MeasValue>			AX 739		
Measurement	Unit or Basis of Measurement	<UnitOrBasisForMeasCode>		Code	AX 355		
Measurement	Range Minimum	<RangeMin>			AX 740		
Measurement	Range Maximum	<RangeMax>			AX 741		
Measurement	Measurement Significance Code	<MeasSignificanceCode>		Code	AX 935		
Measurement	Measurement Attribute Code	<MeasAttributeCode>		Code	AX 936		
Measurement	Surface Layer/Position Code	<SurfaceLayerPosCode>		Code	AX 752		
Measurement	Measurement Method or Device	<MeasMethodOrDev>		Code	AX 137		

• **Class - Note**

Class - Member	Data Element	isXML Tag	Attribute	Definer	Agny Table	ANSI Table	AISI Table
Note	Note Reference Code	<NoteRefCode>		Code	AX 363		
Note	Note	<Desc>			AX 352		

• **Class - Organization**

Class - Member	Data Element	isXML Tag	Attribute	Definer	Agny Table	ANSI Table	AISI Table
Organization	Entity Identifier Code	<EntityIdCode>		Code	AX 98		
Organization	Name	<Name>			AX 93		
Organization	Identification Code Qualifier	<IdCodeQual>			AX 66		
Organization	Identification Code	<IdCode>		Code	AX 67		
Organization	Address - 1	<Addr1>					
Organization	Address - 2	<Addr2>					
Organization	City Name	<CityName>				19	
Organization	State or Province Code	<StateOrProvinceCode>		Code	AX 156		
Organization	Postal Code	<PostalCode>			AX 116		
Organization	Country Code	<CountryCode>		Code	AX 26		

Classes...



**Steel Industry XML Project
Release 0.1 (Draft)
Overview**

- **Class - Person**

Class - Member	Data Element	isXML Tag	Attribute	Definer	Agny	ANSI Table	AISI Table
Person	Contact Identifier	<ContactFunctionCode>		Code	AX	366	
Person	Name – Prefix	<PrefixName>					
Person	Name – First	<FirstName>					
Person	Name – Middle	<MiddleName>					
Person	Name – Last	<LastName>					
Person	Name – Suffix	<SuffixName>					
Person	Title	<Title>					
Person	Contact Code - Phone	<PhoneNum>					
Person	Contact Code - Extension	<Extension>					
Person	Contact Code - Fax	<FaxNum>					
Person	Contact Code - Email	<EmailAddress>					

- **Class - Pricing**

Class - Member	Data Element	isXML Tag	Attribute	Definer	Agny	ANSI Table	AISI Table
Pricing	Price Identifier Code	<PriceIdCode>		Code	AX	236	
Pricing	Pricing Unit	<PriceUnit>		Code	ST		62
Pricing	Price Unit of Measure	<PriceUnitOfMeas>		Code	ST		24
Pricing	Price	<UnitPrice>			AX	212	
Pricing	Rate	<Rate>			AX	118	
Pricing	Price Multiplier Qualifier	<PriceMultiplier>		Code	AX	648	

- **Class - ProcessInfo**

Class - Member	Data Element	isXML Tag	Attribute	Definer	Agny	ANSI Table	AISI Table
ProcessInfo	Production Unit	<Facility>		Code			
ProcessInfo	Process Code	<Process>		Code	ST		66
ProcessInfo	Sequence	<ProcessSequence>					
ProcessInfo	Process Date	<TimeStamp>	Process	Date/Time			



Steel Industry XML Project
Release 0.1 (Draft)
Overview

• **Class - ProdDesc**

Class - Member	Data Element	isXML Tag	Attribute	Definer	Agny	ANSI Table	AISI Table
ProdDesc	Product Form	<ProdForm>		Code			
ProdDesc	Product Description Code	<ProdDescCode>		Code	AX	751	
ProdDesc	Quality	<Quality>		Code	ST		13
ProdDesc	Grade	<Grade>		Code			
ProdDesc	Major Grade	<MajorGrade>		Code	ST		10
ProdDesc	Specification Number	<Spec>					
ProdDesc	Finish or Surface Roughness	<Finish>		Code	ST		14A
ProdDesc	Product Characteristic Code	<ProdCharCode>		Code	ST		8
ProdDesc	Sub-Product	<SubProdCode>					
ProdDesc	Sub-Product, Surface Application	<SubProdSurface>			ST		9C
ProdDesc	Solidification	<Solidification>			ST		12D
ProdDesc	Mechanical Requirements	<MechRequirements>					
ProdDesc	Grinding/Conditioning	<Grinding>					
ProdDesc	Slitting, Splitting, Cutting	<SlitSplitCut>		Code	ST		20A
ProdDesc	Chemical Surface Treatment	<ChemTreat>					
ProdDesc	Flatness / Shape	<Shape>			ST		14B
ProdDesc	Deoxidation / LMF	<Deoxidation>			ST		12C
ProdDesc	Temper	<Temper>			ST		16
ProdDesc	Heat Treat / Anneal	<HeatTreat>			ST		15
ProdDesc	Degas	<Degas>			ST		12B
ProdDesc	Welding	<Weld>			ST		23A
ProdDesc	Inspection Instructions	<InspectInstructions>					
ProdDesc	Product Requirements	<ProdRequirements>			ST		32A
ProdDesc	Oil - Edges / ID / OD	<Oiling>			ST		18C
ProdDesc	Steel Melting	<Melting>			ST		12A
ProdDesc	Winding / Surface Orientation	<Winding>		Code	ST		20B



- **Class – ProdDescLevel2**

Class - Member	Data Element	isXML Tag	Attribute	Definer	Agny	ANSI Table	AISI Table
ProdDescLevel2	Product/Item Description - Product (Level 2)	<ProdCode2>					
ProdDescLevel2	Substrate Width Level 2	<WithLevel2>					
ProdDescLevel2	Substrate Thickness Level 2	<ThkLevel2>					
ProdDescLevel2	Temper Parameters Level 2	<TemperLevel2>					
ProdDescLevel2	Product/Item Desc - Chemical Coating (Level 2)	<ChemCoat2>					
ProdDescLevel2	Product/Item Description - Oiling (Level 2)	<Oiling2>					
ProdDescLevel2	Product/Item Description - Mill Grade (Level 2)	<Grade2>					

- **Class - Schedule**

Class - Member	Data Element	isXML Tag	Attribute	Definer	Agny	ANSI Table	AISI Table
Schedule	Schedule Type	<SchType>		Code	AX	675	
Schedule	Planning Schedule Type	<PlanningSchTypeCode>		Code	AX	783	
Schedule	Ship/Delivery Pattern TimeCode	<ShipDeliveryPatternTimeCode>		Code	AX	679	
Schedule	Ship/Delivery or Calendar Pattern	<ShipDeliveryOrCalendarPatternCode>		Code	AX	678	
Schedule	Schedule Quantity Qualifier	<SchQtyQual>		Code	AX	676	
Schedule	Delivery Code	<ShipDeliveryCode>		Code			
Schedule	Requested Ship Date	<TimeStamp>	RequestShip	Date/Time			
Schedule	Requested Ship Weight	<RequestShipWeight>		Measurement			



Steel Industry XML Project Release 0.1 (Draft) Overview

• Class - ShipInfo

Class - Member	Data Element	isXML Tag	Attribute	Definer	Agny	ANSI Table	AISI Table
ShipInfo	Shipper Number (SID)	<ShipId>			AX	396	
ShipInfo	Load Weight Master	<ShipWeightMaster>		Measurement			
ShipInfo	Shipment Timestamp	<TimeStamp>	Shipment	Date Time			
ShipInfo	Bill of Lading	<BillOfLading>					
ShipInfo	Master Bill of Lading	<MasterBillOfLading>					
ShipInfo	Appointment Number	<ApptNum>					
ShipInfo	Ship Mode	<ShipMode>		Code	ST		26
ShipInfo	Shipment Method of Payment	<ShipMethodOfPayment>		Code	AX,ST	146	59
ShipInfo	Shipment Nature	<ShipQual>		Code	AX,ST	147	63
ShipInfo	Load Weight Gross	<ShipWeightGross>		Measurement			
ShipInfo	Bill of Lading Count	<LadingCount>					
ShipInfo	Weight Shipped	<ShipWeight>		Measurement			
ShipInfo	Shipped Quantity	<ShipQty>		Measurement			
ShipInfo	Dunnage - Chargeable	<DunnageCharge>		Measurement			
ShipInfo	Dunnage - Non-Chargeable	<DunnageNonCharge>		Measurement			
ShipInfo	Appointment Timestamp	<TimeStamp>	Appointment	Date Time			

• Class - StatusInfo

Class - Member	Data Element	isXML Tag	Attribute	Definer	Agny	ANSI Table	AISI Table
StatusInfo	Material Classification	<MatlClass>		Code			
StatusInfo	Status - OP	<Status>	Processor	Code	ST		70
StatusInfo	Status - Commercial	<Status>	Commercial	Code	ST		69
StatusInfo	Status - Metallurgical	<Status>	Metallurgical	Code	ST		68
StatusInfo	Order Status	<StatCode>	Order	Code	AX	368	
StatusInfo	Shipment Status	<StatCode>	Shipment	Code	AX	157	
StatusInfo	Material Classification Date	<TimeStamp>	Classification	Date Time			
StatusInfo	Status Date - Commercial	<TimeStamp>	Commercial	Date Time			
StatusInfo	Status Date - Metallurgical	<TimeStamp>	Metallurgical	Date Time			
StatusInfo	Status Date - OP	<TimeStamp>	Processor	Date Time			

Classes...



- **Class - TaxInfo**

Class - Member	Data Element	isXML Tag	Attribute	Definer	Agny Table	ANSI Table	AISI Table
TaxInfo	Tax ID Number	<TaxIDNum>			AX	325	
TaxInfo	Tax Exempt Code	<TaxExemptCode>		Code	AX	441	

- **Class - Terms**

Class - Member	Data Element	isXML Tag	Attribute	Definer	Agny Table	ANSI Table	AISI Table
Terms	Terms Net Days	<TermsNetDays>			AX	386	
Terms	Payment Method Code	<PaymentMethodCode>		Code	AX	107	
Terms	Currency Code	<CurrencyCode>		Code	AX	100	
Terms	Terms Deferred Due Date	<TimeStamp>	TermsDeferredDue	Date Time	AX	388	
Terms	Deferred Amount Due	<DeferredAmtDue>			AX	389	
Terms	Day of Month	<DayOfMonth>					
Terms	Percent of Invoice Payable	<PctInvoicePayable>					
Terms	Payment Terms	<PaymentTerms>		Code	ST		60
Terms	Terms Net Due Date	<TimeStamp>	TermsNetDue	Date Time	AX	446	
Terms	Terms Discount Percent	<TermsDiscountPct>		Code	AX	338	
Terms	Terms Discount Due Date	<TimeStamp>	TermsDiscountDue	Date Time	AX	370	
Terms	Terms Discount Days Due	<TermsDiscountDaysDue>		Code	AX	351	
Terms	Terms Discount Amount	<TermsDiscountAmt>			AX	362	
Terms	Terms Basis Date Code	<TermsBasisDateCode>		Code	AX	333	
Terms	Terms Type Code	<TermsTypeCode>		Code	AX	336	



Steel Industry XML Project
Release 0.1 (Draft)
Overview

- **Class - TestInfo**

Class - Member	Data Element	isXML Tag	Attribute	Definer	Agny	ANSI Table	AISI Table
TestInfo	Test Class	<TestClass>		Code			
TestInfo	Test Type	<TestTypeCode>		Code	ST	1607	32
TestInfo	Test Identification Number	<TestId>					
TestInfo	Test Result	<TestResult>					
TestInfo	Test Date	<TimeStamp>	Test	Date/Time			
TestInfo	Testing Equipment Number	<TestEquipment>					
TestInfo	Cut Number	<CutNum>					
TestInfo	Sample Frequency	<SampleFreq>		Code		942	
TestInfo	Sample Description Code	<SampleDescCode>		Code		943	
TestInfo	Sample Direction	<SampleDirectionCode>		Code	AX	944	
TestInfo	Sample Location	<SampleLoc>			AX		
TestInfo	Sample Population	<SamplePopulation>					
TestInfo	Sample Process Status Code	<SampleProcessStatCode>		Code	AX	939	
TestInfo	Sample Subgroup	<SampleSubGrp>					
TestInfo	Sample Selection Method	<SampleSelMethod>		Code		940	
TestInfo	Sample Size	<SampleSize>					
TestInfo	Sample Position Code	<SamplePosCode>		Code		945	



**Steel Industry XML Project
Release 0.1 (Draft)
Overview**

• **Class – VendorOrder**

Class - Member	Data Element	isXML Tag	Attribute	Definer	Agny Table	ANSI Table	AISI Table
VendorOrder	Vendor Order Number	<VendorOrderNum>			AX	424	
VendorOrder	Vendor Release Number	<VendorRelNum>					
VendorOrder	Vendor Purchase Order Revision Number	<VendorOrderRevision>					
VendorOrder	Vendor Purchase Order Date	<TimeStamp>	Vendor	Date Time			
VendorOrder	Quotation Date	<TimeStamp>	Quotation	Date Time			
VendorOrder	Account Number	<AccountNum>					
VendorOrder	Quantity Ordered	<QtyOrder>		Measurement			
VendorOrder	Total Ordered Price	<OrdPrice>					

• **Class - VendorOrderLine**

Class - Member	Data Element	isXML Tag	Attribute	Definer	Agny Table	ANSI Table	AISI Table
VendorOrderLine	Vendor Order Item	<VendorOrderItem>					
VendorOrderLine	Product Description	<ProdDesc>					
VendorOrderLine	Vendor Part Number	<VendorPartNum>					
VendorOrderLine	Catalog Number	<CatalogNum>			AX	684	
VendorOrderLine	Item Quantity	<VendorItemQty>		Measurement			

• **Class - WorkOrder**

Class - Member	Data Element	isXML Tag	Attribute	Definer	Agny Table	ANSI Table	AISI Table
WorkOrder	Work Order Number	<WorkOrderNum>					
WorkOrder	Work Order Change	<WorkOrderRevision>					
WorkOrder	Work Order Release	<WorkOrderRelNum>					
WorkOrder	Work Order Date	<TimeStamp>	WorkOrder	Date Time			
WorkOrder	Work Order Change Date	<TimeStamp>	WorkOrder Change	Date Time			

Classes...



Noteworthy Classes



Class - Code

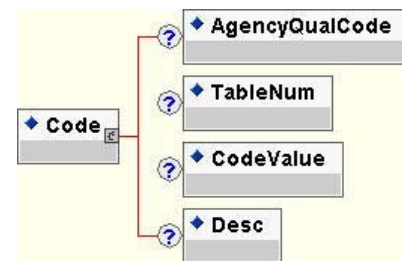
Class Member	Data Element	isXML Tag	Attribute	Definer	Agny	ANSI Table	AISI Table
Code	Agency Identifier	<AgencyQualCode>			AX	559	
Code	Table Number	<TableNum>					
Code	Code Value	<CodeValue>					
Code	Description	<Desc>			AX	352	

The Code Entity allows the flexibility of using coded information from a table to communicate. These tables can be those that are created by a standards organization, like DISA, or one that is defined within an internal system. The Code Entity is defined as follows:

1. The AgencyQualCode is the owner of the table (AISI = ST, DISA = AX, etc.).
2. The TableNum is the unique identifier of the table as defined by the owner of the table. (For example, the AISI table for Material Classification is table number 67.)
3. The CodeValue is defined by the owner of the table and it is the Coded Value of the English that is being communicated.
4. Desc is the English that is associated to the CodeValue. (For example, the Desc would be Prime for the Code Value of 1 in the Material Classification table.)

The following example demonstrates how the 'Code' entity is implemented to report the English value Prime that has a CodeValue of 1 in the AISI table number 67.

```
<Code>  
  <AgencyQualCode>ST</AgencyQualCode>  
  <TableNum>67</TableNum>  
  <CodeValue>1</CodeValue>  
  <Desc>PRIME</Desc>  
</Code>
```





Class - Measurement

Class Member	Data Element	isXML Tag	Attribute	Definer	Agny	ANSI Table	AISI Table
Measurement	Measurement ID Code	<MeasRefIdCode>		Code	AX	737	
Measurement	Measurement Qualifier	<MeasQual>		Code	AX	738	
Measurement	Measurement Value	<MeasValue>			AX	739	
Measurement	Unit or Basis of Measurement	<UnitOrBasisForMeasCode>		Code	AX	355	
Measurement	Range Minimum	<RangeMin>			AX	740	
Measurement	Range Maximum	<RangeMax>			AX	741	
Measurement	Measurement Significance Code	<MeasSignificanceCode>		Code	AX	935	
Measurement	Measurement Attribute Code	<MeasAttributeCode>		Code	AX	936	
Measurement	Surface Layer/Position Code	<SurfaceLayerPosCode>		Code	AX	752	

The Measurement entity is defined as follows:

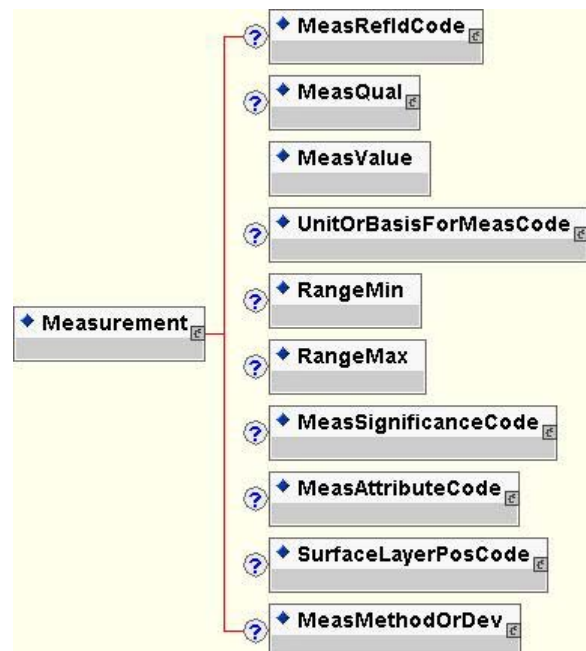
1. The MeasRefIdCode is a "Code" that describes a broad category to which a measurement applies.
2. The MeasQual is a "Code" that describes the specific product or process characteristic to which a measurement applies.
3. The MeasValue is the actual number value.
4. The UnitOrBasisForMeasCode is a "Code" that describes the units in which a value is being expressed.
5. The RangeMin is the Minimum Range Value associated with this measurement.
6. The RangeMax is the Maximum Range Value associated with this measurement.
7. The MeasSignificanceCode is a "Code" that is used to benchmark, qualify, or further define a measurement value.
8. The MeasAttributeCode is a "Code" that is used to express an attribute response when a numeric measurement value cannot be determined.
9. The SurfaceLayerPosCode is a "Code" that indicates the product surface, layer, or position being described.
10. The MeasMethodOrDev is a "Code" that is used to describe the method or device used to record the measurement.

The following example uses 'Measurement' entity to communicate coil weight as the Ordered Weight per coil of 29,049 pounds.

```

<Measurement>
  <MeasRefIdCode>
    <AgencyQualCode>AX</AgencyQualCode>
    <TableNum>737</TableNum>
    <CodeValue>OD</CodeValue>
    <Desc>ORDERED DIMENSIONS</Desc>
  </MeasRefIdCode>
  <MeasQual>
    <AgencyQualCode>AX</AgencyQualCode>
    <TableNum>738</TableNum>
    <CodeValue>U</CodeValue>
    <Desc>WEIGHT PER UNIT</Desc>
  </MeasQual>
  <MeasValue>29049</MeasValue>
  <UnitOrBasisForMeasCode>
    <AgencyQualCode>AX</AgencyQualCode>
    <TableNum>355</TableNum>
    <CodeValue>LB</CodeValue>
    <Desc>POUND</Desc>
  </UnitOrBasisForMeasCode>
</Measurement>

```





The following example uses the Measurement entity to communicate a Chemistry test of Calcium.

```
<Measurement>
  <MeasRefIdCode>
    <AgencyQualCode>AX</AgencyQualCode>
    <TableNum>737</TableNum>
    <CodeValue>CH</CodeValue>
    <Desc>CHEMISTRY</Desc>
  </MeasRefIdCode>
  <MeasQual>
    <AgencyQualCode>AX</AgencyQualCode>
    <TableNum>738</TableNum>
    <CodeValue>ZCA</CodeValue>
    <Desc>CALCIUM</Desc>
  </MeasQual>
  <MeasValue>0.0010</MeasValue>
  <UnitOrBasisForMeasCode>
    <AgencyQualCode>AX</AgencyQualCode>
    <TableNum>355</TableNum>
    <CodeValue>P1</CodeValue>
    <Desc>PERCENT</Desc>
  </UnitOrBasisForMeasCode>
</Measurement>
```



Class - Dimension

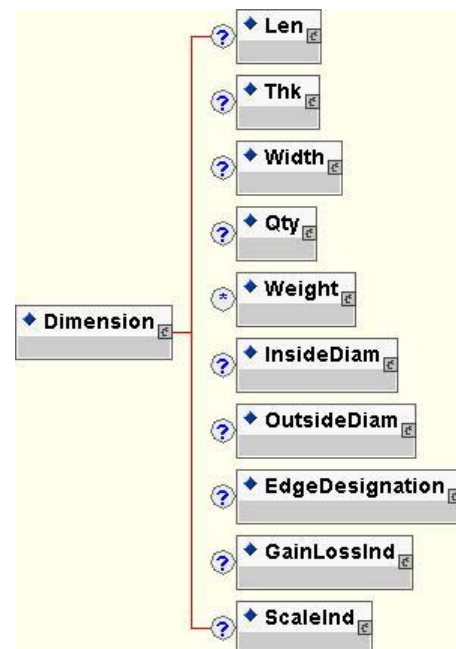
Class Member	Data Element	isXML Tag	Attribute	Definer	Agny	ANSI Table	AISI Table
Dimension	Edge Designation	<EdgeDesignation>		Code	ST		22
Dimension	Gain Loss Indicator	<GainLossInd>		Measurement			
Dimension	ID (Inside Diameter)	<InsideDiam>		Measurement			
Dimension	Length	<Len>		Measurement	AX	82	
Dimension	OD (Outside Diameter)	<OutsideDiam>		Measurement			
Dimension	Quantity	<Qty>		Measurement	AX	380	
Dimension	Scale Indicator	<ScaleInd>		Measurement			
Dimension	Thickness	<Thk>		Measurement			
Dimension	Weight	<Weight>		Measurement	AX	81	
Dimension	Width	<Width>		Measurement	AX	189	

Dimension is used to define the attributes of material.

1. Len is the length of the material, defined as a "Measurement".
2. Thk is the thickness of the material, defined as a "Measurement".
3. Width is the width of the material, defined as a "Measurement".
4. Qty is the quantity of the material, defined as a "Measurement".
5. Weight is the weight of the material, defined as a "Measurement".
6. Thk is the thickness of the material, defined as a "Measurement".
7. InsideDiam is the inside diameter, defined as a "Measurement".
8. OutsideDiam is the outside diameter, defined as a "Measurement".
9. EdgeDesignation is defined as a "Code".
10. GainLossInd shows whether the weight difference is a gain or a loss and is defined as a "Measurement".
11. ScaleInd shows whether the material has been scale weighed and is defined as a "Measurement".

The following is an example of material that is 5865 Lineal Feet, .0473 Inches thick, 40.270 Inches wide that weighs 41220 pounds with an inside diameter of 24 inches and an outside diameter of 58.223 inches with a mill edge.

```
<Dimension>
  <Len>
    <MeasValue>5865</MeasValue>
    <UnitOrBasisForMeasCode>
      <AgencyQualCode>ST</AgencyQualCode>
      <TableNum>24</TableNum>
      <CodeValue>12</CodeValue>
      <Desc>LINEAL FEET</Desc>
    </UnitOrBasisForMeasCode>
  </Len>
  <Thk>
    <MeasValue>.0473</MeasValue>
    <UnitOrBasisForMeasCode>
      <AgencyQualCode>AX</AgencyQualCode>
      <TableNum>355</TableNum>
      <CodeValue>IN</CodeValue>
      <Desc>INCH</Desc>
    </UnitOrBasisForMeasCode>
  </Thk>
  <Width>
    <MeasValue>40.270</MeasValue>
    <UnitOrBasisForMeasCode>
      <AgencyQualCode>AX</AgencyQualCode>
      <TableNum>355</TableNum>
      <CodeValue>IN</CodeValue>
      <Desc>INCH</Desc>
    </UnitOrBasisForMeasCode>
  </Width>
  <Weight>
    <MeasValue>41220</MeasValue>
    <UnitOrBasisForMeasCode>
      <AgencyQualCode>AX</AgencyQualCode>
      <TableNum>81</TableNum>
      <CodeValue>LB</CodeValue>
      <Desc>POUNDS</Desc>
    </UnitOrBasisForMeasCode>
  </Weight>
  <InsideDiam>
    <MeasValue>24</MeasValue>
    <UnitOrBasisForMeasCode>
      <AgencyQualCode>AX</AgencyQualCode>
      <TableNum>355</TableNum>
      <CodeValue>IN</CodeValue>
      <Desc>INCH</Desc>
    </UnitOrBasisForMeasCode>
  </InsideDiam>
  <OutsideDiam>
    <MeasValue>58.223</MeasValue>
    <UnitOrBasisForMeasCode>
      <AgencyQualCode>AX</AgencyQualCode>
      <TableNum>355</TableNum>
      <CodeValue>IN</CodeValue>
      <Desc>INCH</Desc>
    </UnitOrBasisForMeasCode>
  </OutsideDiam>
  <EdgeDesignation>
    <CodeValue>M</CodeValue>
    <Desc>MILL</Desc>
  </EdgeDesignation>
  <GainLossInd>
    <CodeValue>0</CodeValue>
    <Desc>NONE</Desc>
  </GainLossInd>
  <ScaleInd>
    <CodeValue>0</CodeValue>
    <Desc>NONE</Desc>
  </ScaleInd>
</Dimension>
```





```
</Width>
<Weight>
  <MeasValue>41220</MeasValue>
  <UnitOrBasisForMeasCode>
    <AgencyQualCode>AX</AgencyQualCode>
    <TableNum>355</TableNum>
    <CodeValue>LB</CodeValue>
    <Desc>POUNDS</Desc>
  </UnitOrBasisForMeasCode>
</Weight>
<InsideDiam>
  <MeasValue>24</MeasValue>
  <UnitOrBasisForMeasCode>
    <AgencyQualCode>AX</AgencyQualCode>
    <TableNum>355</TableNum>
    <CodeValue>IN</CodeValue>
    <Desc>INCH</Desc>
  </UnitOrBasisForMeasCode>
</InsideDiam>
<OutsideDiam>
  <MeasValue>58.223</MeasValue>
  <UnitOrBasisForMeasCode>
    <AgencyQualCode>AX</AgencyQualCode>
    <TableNum>355</TableNum>
    <CodeValue>IN</CodeValue>
    <Desc>INCH</Desc>
  </UnitOrBasisForMeasCode>
</OutsideDiam>
<EdgeDesignation>
  <AgencyQualCode>ST</AgencyQualCode>
  <TableNum>22</TableNum>
  <CodeValue>34</CodeValue>
  <Desc>MILL EDGE</Desc>
</EdgeDesignation>
</Dimension>
```



Class - Note

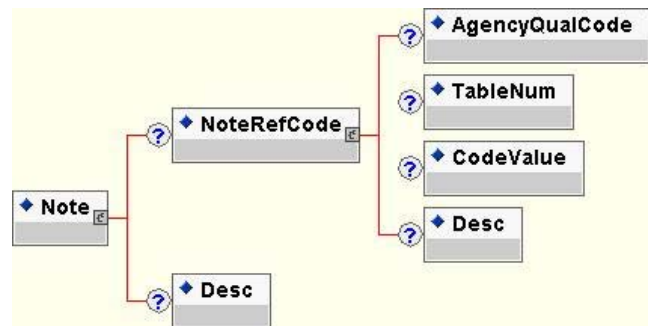
Class Member	Data Element	isXML Tag	Attribute	Definer	Agny	ANSI Table	AISI Table
Note	Note Reference Code	<NoteRefCode>		Code	AX	363	
Note	Note	<Desc>			AX	352	

Note is used to communicate miscellaneous information.

1. NoteRefCode is a "Code" that is used to define the type of data that follows.
2. Desc holds the Note text.

The following is an example of Order Instructions that have been placed in a note section.

```
<Note>  
  <NoteRefCode>  
    <AgencyQualCode>AX</AgencyQualCode>  
    <TableNum>363</TableNum>  
    <CodeValue>ORI</CodeValue>  
    <Desc>Order Instructions</Desc>  
  </NoteRefCode>  
  <Desc>Please confirm this order by sending an xml  
document back to the buyer as listed above. </Desc>  
</Note>
```





Class – Partner

The Partner class is redefined using the classes Organization and Person. Organization is used to define the company, and person defines contacts within the company.

• **Class - Organization**

Class Member	Data Element	isXML Tag	Attribute	Definer	Agy	ANSI Table	AISI Table
Organization	Entity Identifier Code	<EntityIdCode>		Code	AX	98	
Organization	Name	<Name>			AX	93	
Organization	Identification Code Qualifier	<IdCodeQual>		Code	AX	66	
Organization	Identification Code	<IdCode>			AX	67	
Organization	Address – 1	<Addr1>					
Organization	Address – 2	<Addr2>					
Organization	City Name	<CityName>				19	
Organization	State or Province Code	<StateOrProvinceCode>		Code	AX	156	
Organization	Postal Code	<PostalCode>			AX	116	
Organization	Country Code	<CountryCode>		Code	AX	26	

• **Class - Person**

Class Member	Data Element	isXML Tag	Attribute	Definer	Agy	ANSI Table	AISI Table
Person	Contact Identifier	<ContactFunctionCode>		Code	AX	366	
Person	Name – Prefix	<PrefixName>					
Person	Name – First	<FirstName>					
Person	Name – Middle	<MiddleName>					
Person	Name – Last	<LastName>					
Person	Name – Suffix	<SuffixName>					
Person	Title	<Title>					
Person	Contact Code - Phone	<PhoneNum>					
Person	Contact Code - Extension	<Extension>					
Person	Contact Code - Fax	<FaxNum>					
Person	Contact Code - Email	<EmailAddress>					

Partner is used to implement the Organization and Person to define a company and the contacts that are within.

1. The Partner Type attribute is an enumerated list of typical partner types. If the partner type that is being defined is not a part of the enumerated list, use "Other", and the type can be defined further in the EntityIdCode.
2. The EntityIdCode is a "Code" that identifies an organizational entity, physical location, or individual
3. The Name is the name of the company.
4. The IdCodeQual is a "Code" that is used to define an IdCode for the company
5. The IdCode is used to define the company (for example, DUNS Number)
6. Addr1 and Addr2 are used to define the actual address of the company
7. CityName is a "Code" used to define the City in which the company resides.
8. StateOrProvinceCode is a "Code" used to define the State in which the company resides.
9. PostalCode is used to define the Zip or Postal Code of the company.
10. CountryCode is a "Code" used to define the Country in which the company resides.
11. ContactFunctionCode is a "Code" used to define the type of contact that follows
12. PrefixName, FirstName, MiddleName, LastName, SuffixName and Title are used to provide a name for the contact.
13. PhoneNum, Extension, FaxNum and EmailAddress are used as ways to contact the person described above.



The following is a list of the attributes for Partner:

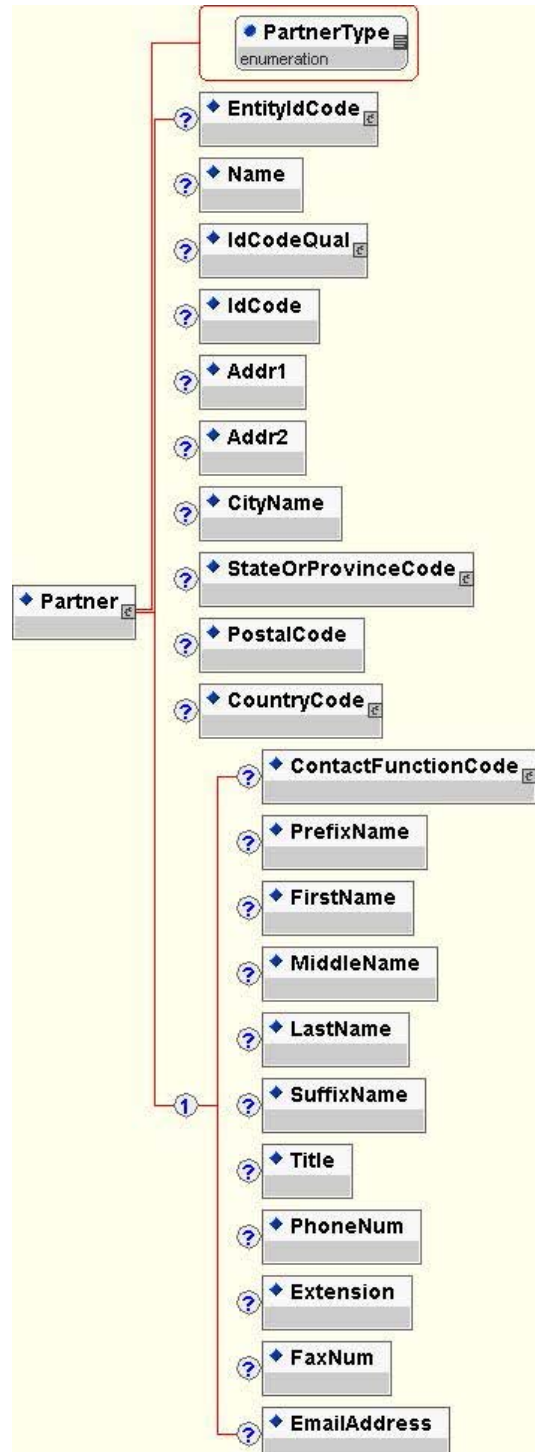
BillTo, Buyer, Carrier, Certifier, CertReceiver, Customer, Inspector, InspectReceiver, Inventory, ManufacturingPlant, Processor, RailCarOwner, ReleaseIssuer, ShipFrom, ShipTo, SoldTo, Supplier, TestReceiver, Vendor, Warehouse, TestAgency, Other

The following example communicates information about Building Company. Building Company, in this example, is a Buyer, which has a DUNS Number of 123456789, and resides at 111 Any Street, Building One, in AnyTown, USA.

```
<Partner PartnerType="Buyer">
  <Name>Building Company</Name>
  <IdCodeQual>
    <AgencyQualCode>AX</AgencyQualCode>
    <TableNum>66</TableNum>
    <CodeValue>1</CodeValue>
    <Desc>D-U-N-S Number</Desc>
  </IdCodeQual>
  <IdCode>123456789</IdCode>
  <Addr1>111 Any Street</Addr1>
  <Addr2>Building One</Addr2>
  <CityName>Any Town</CityName>
  <PostalCode>12345</PostalCode>
  <CountryCode>
    <Desc>USA</Desc>
  </CountryCode>
</Partner>
```

The following example communicates information about Parent Company ABCD. Parent Company ABCD, in this example, is a Parent Company, which has a DUNS Number of 987654321. There are two contacts listed for this company, one in Accounts Receivable, and one in Accounts Payable.

```
<Partner PartnerType="Other">
  <EntityIdCode>
    <AgencyQualCode>AX</AgencyQualCode>
    <TableNum>98</TableNum>
    <CodeValue>B4</CodeValue>
    <Desc>Parent Company</Desc>
  </EntityIdCode>
  <Name>Parent Company ABCD</Name>
  <IdCodeQual>
    <AgencyQualCode>AX</AgencyQualCode>
    <TableNum>66</TableNum>
    <CodeValue>1</CodeValue>
    <Desc>D-U-N-S Number</Desc>
  </IdCodeQual>
  <IdCode>987654321</IdCode>
  <Addr1>1 Parent Company Street</Addr1>
  <Addr2>Building 1A</Addr2>
  <CityName>Parent Town</CityName>
  <StateOrProvinceCode>
    <Desc>Parent State</Desc>
  </StateOrProvinceCode>
  <PostalCode>45678</PostalCode>
  <CountryCode>
    <Desc>USA</Desc>
  </CountryCode>
  <ContactFunctionCode>
    <AgencyQualCode>AX</AgencyQualCode>
```





```
<TableNum>366</TableNum>
<CodeValue>AP</CodeValue>
<Desc>Accounts Payable Department</Desc>
</ContactFunctionCode>
<PrefixName>Mr</PrefixName>
<FirstName>George</FirstName>
<LastName>Jones</LastName>
<Title>Manager</Title>
<PhoneNum>000-000-0000</PhoneNum>
<Extension>0000</Extension>
<FaxNum>111-111-1111</FaxNum>
<EmailAddress>GJones@parentco.com</EmailAddress>
<ContactFunctionCode>
  <AgencyQualCode>AX</AgencyQualCode>
  <TableNum>366</TableNum>
  <CodeValue>AR</CodeValue>
  <Desc>Accounts Receivable Department</Desc>
</ContactFunctionCode>
<PrefixName>Mr</PrefixName>
<FirstName>Jim</FirstName>
<LastName>Jones</LastName>
<Title>Manager</Title>
<PhoneNum>000-000-0000</PhoneNum>
<Extension>0044</Extension>
<FaxNum>111-111-1144</FaxNum>
<EmailAddress>JJones@parentco.com</EmailAddress>
</Partner>
```



Class - StatusInfo

Class Member	Data Element	isXML Tag	Attribute	Definer	Agny	ANSI Table	AISI Table
StatusInfo	Material Classification	<MatlClass>		Code			
StatusInfo	Status - OP	<Status>	Processor	Code	ST		70
StatusInfo	Status - Commercial	<Status>	Commercial	Code	ST		69
StatusInfo	Status - Metallurgical	<Status>	Metallurgical	Code	ST		68
StatusInfo	Order Status	<StatCode>	Order	Code	AX	368	
StatusInfo	Shipment Status	<StatCode>	Shipment	Code	AX	157	
StatusInfo	Material Classification Date	<TimeStamp>	Classification	DateTime			
StatusInfo	Status Date - Commercial	<TimeStamp>	Commercial	DateTime			
StatusInfo	Status Date - Metallurgical	<TimeStamp>	Metallurgical	DateTime			
StatusInfo	Status Date - OP	<TimeStamp>	Processor	DateTime			

StatusInfo is used to communicate status information.

1. MatlClass is the classification of the material.
2. Status is a "Code" value that also has an enumerated list of types of status that can be referenced.
3. StatCode is a "Code" value that also has an enumerated list of types of status that can be referenced.
4. TimeStamp is a "DateTime" value that also has an enumerated list of types of times to communicate.
5. NoteRefCode and Desc are both part of the "Note" entity. This allows the passing of additional information with status.

The following is a list of the attributes for Status:
Processor, Commercial, Metallurgical.

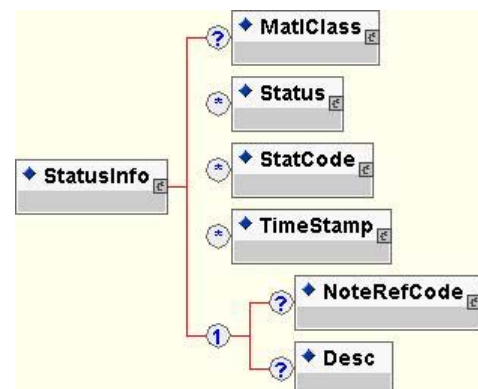
The following is a list of the attributes for StatCode:
Order, Shipment.

The following is a list of the attributes for TimeStamp:
Activity, Appointment, Classification, CommercialStatus, Damage, Delivery, Forecast, Inventory, MetallurgicaStatus, Process, ProcessorStatus, Promise, PurchaseOrder, Quotation, Receipt, ReleaseCreate, ReleaseEnd, ReleaseStart, RequestShip, RevPromise, Shipment, TermsDeferredDue, TermsNetDue, TermsDiscountDue, Test, Transaction, Vendor, WorkOrder, WorkOrderChange, Other

The following is an example of the status that would be sent for Prime Material that is Ready to Ship. The classification happened on 4/10/2001 and the status was updated at the processor on 4/17/2001.

```
<StatusInfo>
  <MatlClass>
    <AgencyQualCode>ST</AgencyQualCode>
    <TableNum>67</TableNum>
    <CodeValue>1</CodeValue>
    <Desc>PRIME</Desc>
  </MatlClass>
  <Status StatusType="Processor">
    <AgencyQualCode>ST</AgencyQualCode>
    <TableNum>70</TableNum>
    <CodeValue>1</CodeValue>
    <Desc>READY TO SHIP</Desc>
  </Status>
  <TimeStamp TimeStampType="Classification">
    <Date>2001.04.10</Date>
    <Time>10:02:00</Time>
    <TimeCode>
      <AgencyQualCode>AX</AgencyQualCode>
      <TableNum>623</TableNum>
      <CodeValue>ES</CodeValue>
    </TimeCode>
  </TimeStamp>
  <NoteRefCode>
    <NoteRefCode>
      <NoteRefCode>
        <Desc>

```





```
<Desc>Eastern Standard Time</Desc>
</TimeCode>
</TimeStamp>
<TimeStamp TimeStampType="ProcessorStatus">
  <Date>2001.04.17</Date>
  <Time>10:05:00</Time>
  <TimeCode>
    <AgencyQualCode>AX</AgencyQualCode>
    <TableNum>623</TableNum>
    <CodeValue>ES</CodeValue>
    <Desc>Eastern Standard Time</Desc>
  </TimeCode>
</TimeStamp>
</StatusInfo>
```



Class - TimeStamp

TimeStamp is redefined using the DateTime Class to communicate Date and Time information.

• **Class - Date Time**

Class Member	Data Element	isXML Tag	Attribute	Definer	Agny	ANSI Table	AISI Table
DateTime	Date	<Date>			AX	373	
DateTime	Date Qualifier	<DateTimeQual>		Code	AX	374	
DateTime	Time	<Time>			AX	337	
DateTime	Time Code	<TimeCode>		Code	AX	623	

TimeStamp is used to communicate a date and time a specific event occurred.

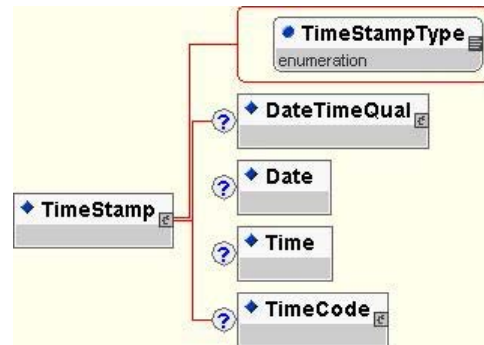
1. TimeStampType is an enumerated list of typical Date Times that are communicated.
2. DateTimeQual is used to further define the type of DateTime.
3. Date is the actual date in YYYY.MM.DD format
4. Time is the actual time that the event occurred (If available), in HH:MM:SS format.
5. TimeCode is a Code identifying the time. Per ISO, may be expressed as time zone or by + or - in hours relative to UTC.

The following is a list of the attributes for TimeStamp:

Activity, Appointment, Classification, CommercialStatus, Damage, Delivery, Forecast, Inventory, MetallurgicalStatus, Process, ProcessorStatus, Promise, PurchaseOrder, Quotation, Receipt, ReleaseCreate, ReleaseEnd, ReleaseStart, RequestShip, RevPromise, Shipment, TermsDeferredDue, TermsNetDue, TermsDiscountDue, Test, Transaction, Vendor, WorkOrder, WorkOrderChange, Other

The following example shows an Activity DateTime.

```
<TimeStamp TimeStampType="Activity">
  <Date>2001.4.17</Date>
  <Time>9:00:00</Time>
  <TimeCode>
    <AgencyQualCode>AX</AgencyQualCode>
    <TableNum>623</TableNum>
    <CodeValue>ES</CodeValue>
    <Desc>Eastern Standard Time</Desc>
  </TimeCode>
</TimeStamp>
```



The following example shows a Manufacture DateTime.

```
<TimeStamp TimeStampType="Other">
  <DateTimeQual>
    <AgencyQualCode>AX</AgencyQualCode>
    <TableNum>374</TableNum>
    <CodeValue>094</CodeValue>
    <Desc>Manufacture</Desc>
  </DateTimeQual>
  <Date>2001.4.11</Date>
  <Time>8:58:22</Time>
  <TimeCode>
    <AgencyQualCode>AX</AgencyQualCode>
    <TableNum>623</TableNum>
    <CodeValue>ES</CodeValue>
    <Desc>Eastern Standard Time</Desc>
  </TimeCode>
</TimeStamp>
```




'Common' DTD

Why?

The classcommon.dtd was created as a repository of class definitions. By putting all of the class definitions into one dtd, the individual company maintenance will be reduced as well as create a common place for these definitions. Each individual document (ex. Order Status) will have it's own dtd which will inherit from classcommon.dtd and describe the relationship between these classes.



Common DTD Detail

```
<?xml version="1.0" encoding="UTF-8"?>
<ELEMENT commonElements (commonElementDtdForAisi)>
<ELEMENT commonElementDtdForAisi (#PCDATA)>
<!-- Document Definition has envelope information and transaction information -->
<!-- Beginning of Code Definition-->
<ENTITY % Code "(AgencyQualCode?, TableNum?, CodeValue?, Desc?)">
<ELEMENT AgencyQualCode (#PCDATA)>
<ELEMENT TableNum (#PCDATA)>
<ELEMENT CodeValue (#PCDATA)>
<ELEMENT Desc (#PCDATA)>
<!-- End of Code Definition-->
<!-- Beginning of DateTime Definition -->
<ENTITY % DateTime "(DateTimeQual?, Date?, Time?, TimeCode?)">
<ELEMENT DateTimeQual (%Code;)>
<ELEMENT Date (#PCDATA)>
<!-- MM.DD.CCYY-->
<ELEMENT Time (#PCDATA)>
<!-- HH.MM.SS -->
<ELEMENT TimeCode (%Code;)>
<!-- End of DateTime Definition-->
<!-- Beginning of Measurement Definition-->
<ENTITY % Measurement "(MeasRefIdCode?, MeasQual?, MeasValue, UnitOrBasisForMeasCode?, RangeMin?,
RangeMax?, MeasSignificanceCode?, MeasAttributeCode?, SurfaceLayerPosCode?, MeasMethodOrDev?)">
<ELEMENT MeasRefIdCode (%Code;)>
<ELEMENT MeasQual (%Code;)>
<ELEMENT MeasValue (#PCDATA)>
<ELEMENT UnitOrBasisForMeasCode (%Code;)>
<ELEMENT RangeMin (#PCDATA)>
<ELEMENT RangeMax (#PCDATA)>
<ELEMENT MeasSignificanceCode (%Code;)>
<ELEMENT MeasAttributeCode (%Code;)>
<ELEMENT SurfaceLayerPosCode (%Code;)>
<ELEMENT MeasMethodOrDev (%Code;)>
<!-- End of Measurement Definition-->
<!-- Beginning of Organization Definition-->
<ENTITY % Organization "(EntityIdCode?, Name?, IdCodeQual?, IdCode?, Addr1?, Addr2?, CityName?,
StateOrProvinceCode?, PostalCode?, CountryCode?, %Person;*)">
<ELEMENT EntityIdCode (%Code;)>
<ELEMENT Name (#PCDATA)>
<ELEMENT IdCodeQual (%Code;)>
<ELEMENT IdCode (#PCDATA)>
<ELEMENT Addr1 (#PCDATA)>
<ELEMENT Addr2 (#PCDATA)>
<ELEMENT CityName (#PCDATA)>
<ELEMENT StateOrProvinceCode (%Code;)>
<ELEMENT PostalCode (#PCDATA)>
<ELEMENT CountryCode (%Code;)>
<!-- End of organization Definition-->
<!-- Beginning of Person Definition-->
<ENTITY % Person "(ContactFunctionCode?, PrefixName?, FirstName?, MiddleName?, LastName?, SuffixName?,
Title?, PhoneNum?, Extension?, FaxNum?, EmailAddress?)">
<ELEMENT ContactFunctionCode (%Code;)>
<ELEMENT PrefixName (#PCDATA)>
<ELEMENT FirstName (#PCDATA)>
```



```
<!ELEMENT MiddleName (#PCDATA)>
<!ELEMENT LastName (#PCDATA)>
<!ELEMENT SuffixName (#PCDATA)>
<!ELEMENT Title (#PCDATA)>
<!ELEMENT PhoneNum (#PCDATA)>
<!ELEMENT Extension (#PCDATA)>
<!ELEMENT FaxNum (#PCDATA)>
<!ELEMENT EmailAddress (#PCDATA)>
<!-- End of person Definition-->
<!-- Beginning of Partner Definition -->
<!ELEMENT Partner (%Organization;)>
<!ATTLIST Partner
    PartnerType (Carrier | RailCarOwner | BillTo | CertReceiver | InspectReceiver | TestReceiver | Supplier |
    Customer | Processor | Warehouse | ShipFrom | ShipTo | SoldTo | Vendor | Buyer | ReleaseIssuer | Certifier |
    Inspector | TestAgency | Inventory | ManufacturingPlant | Other) #REQUIRED
>
<!-- End of Partner Definition -->
<!-- Beginning of TimeStamp Definition -->
<!ELEMENT TimeStamp (%DateTime;)>
<!ATTLIST TimeStamp
    TimeStampType (Transaction | PurchaseOrder | Damage | Forecast | Inventory | ReleaseCreate | ReleaseEnd |
    ReleaseStart | Promise | RevPromise | Process | RequestShip | Shipment | Appointment | Classification | Commercial
    | Metallurgical | Processor | TermsDeferredDue | TermsNetDue | TermsDiscountDue | Test | Vendor | Quotation |
    WorkOrder | WorkOrderChange | Delivery | Activity | Receipt | Other) #REQUIRED
>
<!-- End of TimeStamp Definition -->
<!-- Beginning of Note Definition-->
<!ELEMENT Note (NoteRefCode?, Desc?)>
<!ELEMENT NoteRefCode (%Code;)>
<!-- End of Note Definition-->
<!-- Beginning of Allowance Definition-->
<!ELEMENT Allowance (AllowOrChargeInd?, AllowOrChargeQty?, AllowOrChargeCode?, AllowOrChargeHandling?,
    AllowOrChargePct?, Note*)>
<!ELEMENT AllowOrChargeInd (%Code;)>
<!ELEMENT AllowOrChargeQty (#PCDATA)>
<!ELEMENT AllowOrChargeCode (%Code;)>
<!ELEMENT AllowOrChargeHandling (%Code;)>
<!ELEMENT AllowOrChargePct (%Code;)>
<!-- End of Allowance Definition-->
<!-- Beginning of CarrierRouting Definition -->
<!ELEMENT CarrierRouting (Partner?, StdCarrierAlphaCode?, EquipInitial?, VehicleIdNum?, EquipType?, Routing?,
    RoutingSeqCode?, EquipNum?, EquipDescCode?, FobShipPoint?, Note*)>
<!-- The attribute list for Partner in CarrierRouting should be Carrier and RailCarOwner -->
<!ELEMENT StdCarrierAlphaCode (%Code;)>
<!ELEMENT EquipInitial (#PCDATA)>
<!ELEMENT VehicleIdNum (#PCDATA)>
<!ELEMENT EquipType (%Code;)>
<!ELEMENT Routing (#PCDATA)>
<!ELEMENT RoutingSeqCode (%Code;)>
<!ELEMENT EquipNum (#PCDATA)>
<!ELEMENT EquipDescCode (%Code;)>
<!ELEMENT FobShipPoint (%Code;)>
<!-- End of CarrierRoutingDefinition -->
<!-- Beginning of CoatingInfo Definition -->
<!ELEMENT CoatingInfo (CoatSupplier?, CoatSystem?, CoatType?, CoatSpec?, CoatCode?, CoatSurface?, Layer?,
    ColorCode?, CoatValue?, CoatWeight?, OrganicCoat?, Primer?, TopCoat?, CoatName?, Pretreat?, Note*)>
<!ELEMENT CoatSupplier (#PCDATA)>
<!ELEMENT CoatSystem (#PCDATA)>
```



```
<!ELEMENT CoatType (%Code;)>
<!ELEMENT CoatSpec (#PCDATA)>
<!ELEMENT CoatCode (%Code;)>
<!ELEMENT CoatSurface (#PCDATA)>
<!ELEMENT Layer (#PCDATA)>
<!ELEMENT ColorCode (%Code;)>
<!ELEMENT CoatValue (%Measurement;)>
<!ELEMENT CoatWeight (%Measurement;)>
<!ELEMENT OrganicCoat (#PCDATA)>
<!ELEMENT Primer (#PCDATA)>
<!ELEMENT TopCoat (#PCDATA)>
<!ELEMENT CoatName (#PCDATA)>
<!ELEMENT Pretreat (#PCDATA)>
<!-- End fo CoatingInfo Definition -->
<!-- Beginning of Control Definition -->
<!ELEMENT Control (TranSetControlNum?, TranSetPurposeCode?, ReportTypeCode?, Refld?, TimeStamp?,
Note*)>
<!ELEMENT TranSetControlNum (#PCDATA)>
<!ELEMENT TranSetPurposeCode (%Code;)>
<!ELEMENT ReportTypeCode (%Code;)>
<!ELEMENT Refld (#PCDATA)>
<!-- End of Control Definition -->
<!-- Beginning of the DefectInfo Definition -->
<!ELEMENT DefectInfo (DamageTypeCode?, DamageReasonCode?, DamageFaultCode?, DamageSeverityCode?,
TimeStamp?, Note*)>
<!ELEMENT DamageTypeCode (%Code;)>
<!ELEMENT DamageReasonCode (%Code;)>
<!ELEMENT DamageFaultCode (%Code;)>
<!ELEMENT DamageSeverityCode (%Code;)>
<!-- Use the attribute Damage for TimeStamp -->
<!-- End of the DefectInfo Definition -->
<!-- Beginning of the Dimension Definition -->
<ENTITY % Dimension "(Len?, Thk?, Width?, Qty?, Weight*, InsideDiam?, OutsideDiam?, EdgeDesignation?,
GainLossInd?, ScaleInd?)">
<!ELEMENT Len (%Measurement;)>
<!ELEMENT Thk (%Measurement;)>
<!ELEMENT Width (%Measurement;)>
<!ELEMENT Qty (%Measurement;)>
<!ELEMENT Weight (%Measurement;)>
<!ELEMENT InsideDiam (%Measurement;)>
<!ELEMENT OutsideDiam (%Measurement;)>
<!ELEMENT EdgeDesignation (%Code;)>
<!ELEMENT GainLossInd (%Measurement;)>
<!ELEMENT ScaleInd (%Measurement;)>
<!-- End of Dimension Definition -->
<!-- Beginning of Forecast Definition -->
<!ELEMENT Forecast (TimeStamp?, TimingQual?, ForecastQual?, ForecastQty?, Note*)>
<!-- Use the attribute Forecast for TimeStamp-->
<!ELEMENT TimingQual (%Code;)>
<!ELEMENT ForecastQual (%Code;)>
<!ELEMENT ForecastQty (%Measurement;)>
<!-- End of Forecast Definition -->
<!-- Beginning of FunctionalGroup Definition -->
<!ELEMENT FunctionalGroup (AppSendersCode?, AppReceiversCode?, GrpControlNum?,
ResponsibleAgencyCode?, VersionNum?)>
<!ELEMENT AppSendersCode (#PCDATA)>
<!ELEMENT AppReceiversCode (#PCDATA)>
<!ELEMENT GrpControlNum (#PCDATA)>
```



```
<!ELEMENT ResponsibleAgencyCode (%Code;)>
<!ELEMENT VersionNum (#PCDATA)>
<!-- End of FuncationGroup Definition -->
<!-- Beginning of Header Definition -->
<!ELEMENT Header (ActionCode?, ReportTransmissionCode?, AuthCode?, PurchaseOrderTypeCode?,
OrderItemCode?, StatReportCode?, Partner*, TimeStamp*, Note*)>
<!ELEMENT ActionCode (%Code;)>
<!ELEMENT ReportTransmissionCode (%Code;)>
<!ELEMENT AuthCode (%Code;)>
<!ELEMENT PurchaseOrderTypeCode (%Code;)>
<!ELEMENT OrderItemCode (%Code;)>
<!ELEMENT StatReportCode (%Code;)>
<!-- Use the attributes Supplier, Customer, Processor, Warehouse, ShipFrom, ShipTo, SoldTo, Vendor, Buyer,
ReleaseIssuer, Certifier, Inspector, TestAgency for Partner -->
<!-- Use the attributes Inventory, ReleaseCreate, ReleaseEnd, ReleaseStart for TimeStamp -->
<!-- End of Header Definition -->
<!-- Beginning of Interchange Definition -->
<!ELEMENT Interchange (SecurityInfoQual?, SecurityInfo?, InterchangeIdQual?, InterchangeSenderId?,
InterchangeReceiverId?, InterchangeDateTime?, InterchangeControlNum?, AckRequested?, UsageInd?, Note*)>
<!ELEMENT SecurityInfoQual (%Code;)>
<!ELEMENT SecurityInfo (#PCDATA)>
<!ELEMENT InterchangeIdQual (%Code;)>
<!ELEMENT InterchangeSenderId (#PCDATA)>
<!ELEMENT InterchangeReceiverId (#PCDATA)>
<!ELEMENT InterchangeDateTime (%DateTime;)>
<!ELEMENT InterchangeControlNum (#PCDATA)>
<!ELEMENT AckRequested (%Code;)>
<!ELEMENT UsageInd (%Code;)>
<!-- End of Interchange Definition -->
<!-- Beginning of Invoice Definition -->
<!ELEMENT Invoice (InvoiceNum?, InvoiceTypeCode?, TotalInvoiceAmt?, QtyInvoiced?, Note*)>
<!ELEMENT InvoiceNum (#PCDATA)>
<!ELEMENT InvoiceTypeCode (%Code;)>
<!ELEMENT TotalInvoiceAmt (#PCDATA)>
<!ELEMENT QtyInvoiced (#PCDATA)>
<!-- End of Invoice Definition -->
<!-- Beginning of TaxInfo Definition -->
<!ELEMENT TaxInfo (TaxIdNum?, TaxExemptCode?, Note*)>
<!ELEMENT TaxIdNum (#PCDATA)>
<!ELEMENT TaxExemptCode (%Code;)>
<!-- End of TaxInfo Definition -->
<!-- Beginning of Terms Definition -->
<!ELEMENT Terms (TermsNetDays?, PaymentMethodCode?, CurrencyCode?, TimeStamp?, DeferredAmtDue?,
DayOfMonth?, PctInvoicePayable?, PaymentTerms?, TermsDiscountPct?, TermsDiscountDaysDue?,
TermsDiscountAmt?, TermsBasisDateCode?, TermsTypeCode?, Note*)>
<!ELEMENT TermsNetDays (#PCDATA)>
<!ELEMENT PaymentMethodCode (%Code;)>
<!ELEMENT CurrencyCode (%Code;)>
<!-- Use the attributes TermsDeferredDue, TermsNetDue, TermsDiscountDue for the TimeStamp -->
<!ELEMENT DeferredAmtDue (#PCDATA)>
<!ELEMENT DayOfMonth (#PCDATA)>
<!ELEMENT PctInvoicePayable (#PCDATA)>
<!ELEMENT PaymentTerms (%Code;)>
<!ELEMENT TermsDiscountPct (%Code;)>
<!ELEMENT TermsDiscountDaysDue (%Code;)>
<!ELEMENT TermsDiscountAmt (#PCDATA)>
<!ELEMENT TermsBasisDateCode (%Code;)>
<!ELEMENT TermsTypeCode (%Code;)>
```



```
<!-- End of Terms Definition -->
<!-- Beginning of TestInfo Definition -->
<ELEMENT TestInfo (TestClass?, TestTypeCode?, TestId?, TestResult?, TimeStamp?, TestEquip?, CutNum?,
SampleFreq?, SampleDescCode?, SampleDirectionCode?, SampleLoc?, SamplePopulation?,
SampleProcessStatCode?, SampleSubGrp?, SampleSelMethod?, SampleSize?, SamplePosCode?,
ActualTestResults+, Note*)>
<ELEMENT TestClass (%Code;)>
<ELEMENT TestTypeCode (%Code;)>
<ELEMENT TestId (#PCDATA)>
<ELEMENT TestResult (#PCDATA)>
<!-- Use the attribute Test for the TimeStamp -->
<ELEMENT TestEquip (#PCDATA)>
<ELEMENT CutNum (#PCDATA)>
<ELEMENT SampleFreq (%Code;)>
<ELEMENT SampleDescCode (%Code;)>
<ELEMENT SampleDirectionCode (%Code;)>
<ELEMENT SampleLoc (#PCDATA)>
<ELEMENT SamplePopulation (#PCDATA)>
<ELEMENT SampleProcessStatCode (%Code;)>
<ELEMENT SampleSubGrp (#PCDATA)>
<ELEMENT SampleSelMethod (%Code;)>
<ELEMENT SampleSize (#PCDATA)>
<ELEMENT SamplePosCode (%Code;)>
<ELEMENT ActualTestResults (%Measurement;)>
<!-- End of the TestInfo Definition -->
<!-- Beginning of MarkPackLoad Definition -->
<ELEMENT MarkPackLoad (PackagingCode?, MarkCodeType?, PackagingDescCode?, LoadCode?,
UnitLoadOptionCode?, Note*)>
<ELEMENT PackagingCode (%Code;)>
<ELEMENT MarkCodeType (%Code;)>
<ELEMENT PackagingDescCode (%Code;)>
<ELEMENT LoadCode (%Code;)>
<ELEMENT UnitLoadOptionCode (%Code;)>
<!-- End of the MarkPackLoad Definition -->
<!-- Beginning of the Pricing Definition -->
<ELEMENT Pricing (PriceIdCode?, PriceUnit?, PriceUnitOfMeas?, UnitPrice?, Rate?, PriceMultiplier?, Note*)>
<ELEMENT PriceIdCode (%Code;)>
<ELEMENT PriceUnit (%Code;)>
<ELEMENT PriceUnitOfMeas (%Code;)>
<ELEMENT UnitPrice (#PCDATA)>
<ELEMENT Rate (#PCDATA)>
<ELEMENT PriceMultiplier (%Code;)>
<!-- End of Pricing Definition -->
<!-- Beginning of ProcessInfo Definition -->
<ELEMENT ProcessInfo (Facility?, Process?, ProcessSequence?, TimeStamp?, CoatingInfo?, Note*)>
<ELEMENT Facility (%Code;)>
<ELEMENT Process (%Code;)>
<ELEMENT ProcessSequence (#PCDATA)>
<!-- Use the attribute Process for the TimeStamp -->
<!-- End of the ProcessInfo Definition -->
<!-- Beginning of the ProdDesc Definition -->
<ELEMENT ProdDesc (ProdForm?, ProdDescCode?, Quality?, Grade?, MajorGrade?, Spec?, Finish?,
ProdCharCode?, SubProdCode?, SubProdSurface?, Solidification?, MechRequirements?, Grinding?, SlitSplitCut?,
ChemTreat?, Shape?, Deoxidation?, Temper?, HeatTreat?, Degas?, Weld?, InspectInstructions?,
ProdRequirements?, Oiling?, Melting?, Winding?, ProdDescLevel2?, Note*)>
<ELEMENT ProdForm (%Code;)>
<ELEMENT ProdDescCode (%Code;)>
<ELEMENT Quality (%Code;)>
```



```
<!ELEMENT Grade (%Code;)>
<!ELEMENT MajorGrade (%Code;)>
<!ELEMENT Spec (#PCDATA)>
<!ELEMENT Finish (%Code;)>
<!ELEMENT ProdCharCode (%Code;)>
<!ELEMENT SubProdCode (#PCDATA)>
<!ELEMENT SubProdSurface (#PCDATA)>
<!ELEMENT Solidification (#PCDATA)>
<!ELEMENT MechRequirements (#PCDATA)>
<!ELEMENT Grinding (#PCDATA)>
<!ELEMENT SlitSplitCut (%Code;)>
<!ELEMENT ChemTreat (#PCDATA)>
<!ELEMENT Shape (#PCDATA)>
<!ELEMENT Deoxidation (#PCDATA)>
<!ELEMENT Temper (#PCDATA)>
<!ELEMENT HeatTreat (#PCDATA)>
<!ELEMENT Degas (#PCDATA)>
<!ELEMENT Weld (#PCDATA)>
<!ELEMENT InspectInstructions (#PCDATA)>
<!ELEMENT ProdRequirements (#PCDATA)>
<!ELEMENT Oiling (#PCDATA)>
<!ELEMENT Melting (#PCDATA)>
<!ELEMENT Winding (%Code;)>
<!-- End of ProdDesc Definition -->
<!-- Beginning of ProdDescLevel2 Defiintion -->
<!ELEMENT ProdDescLevel2 (ProdCode2?, WidthLevel2?, ThkLevel2?, TemperLevel2?, ChemCoat2?, Oiling2?,
Grade2?, Note*)>
<!ELEMENT ProdCode2 (#PCDATA)>
<!ELEMENT WidthLevel2 (#PCDATA)>
<!ELEMENT ThkLevel2 (#PCDATA)>
<!ELEMENT TemperLevel2 (#PCDATA)>
<!ELEMENT ChemCoat2 (#PCDATA)>
<!ELEMENT Oiling2 (#PCDATA)>
<!ELEMENT Grade2 (#PCDATA)>
<!-- End of ProdDescLevel2 Definition -->
<!-- Beginning of Schedule Definition -->
<!ELEMENT Schedule (SchType?, PlanningSchTypeCode?, ShipDeliveryPatternTimeCode?,
ShipDeliveryOrCalendarPatternCode?, SchQtyQual?, ShipDeliveryCode?, TimeStamp?, RequestShipWeight?,
Note*)>
<!ELEMENT SchType (%Code;)>
<!ELEMENT PlanningSchTypeCode (%Code;)>
<!ELEMENT ShipDeliveryPatternTimeCode (%Code;)>
<!ELEMENT ShipDeliveryOrCalendarPatternCode (%Code;)>
<!ELEMENT SchQtyQual (%Code;)>
<!ELEMENT ShipDeliveryCode (%Code;)>
<!ELEMENT RequestShipWeight (%Measurement;)>
<!-- Use the attribute RequestShip for the TimeStamp-->
<!-- End of Schedule Definition -->
<!-- Beginning of the ShipInfo Definition -->
<!ELEMENT ShipInfo (ShipId?, ShipWeightMaster?, TimeStamp?, BillOfLading?, MasterBillOfLading?, ApptNum?,
ShipMode?, ShipMethodOfPayment?, ShipQual?, ShipWeightGross?, LadingCount?, ShipWeight?, ShipQty?,
DunnageCharge?, DunnageNonCharge?, Note*)>
<!ELEMENT ShipId (#PCDATA)>
<!ELEMENT ShipWeightMaster (%Measurement;)>
<!-- Use the attribute Shipment and Appointment for the TimeStamp -->
<!ELEMENT BillOfLading (#PCDATA)>
<!ELEMENT MasterBillOfLading (#PCDATA)>
<!ELEMENT ApptNum (#PCDATA)>
```



```
<!ELEMENT ShipMode (%Code;)>
<!ELEMENT ShipMethodOfPayment (%Code;)>
<!ELEMENT ShipQual (%Code;)>
<!ELEMENT ShipWeightGross (%Measurement;)>
<!ELEMENT LadingCount (#PCDATA)>
<!ELEMENT ShipWeight (%Measurement;)>
<!ELEMENT ShipQty (%Measurement;)>
<!ELEMENT DunnageCharge (%Measurement;)>
<!ELEMENT DunnageNonCharge (%Measurement;)>
<!-- Endof the ShipInfo Definition -->
<!-- Beginning of the StatusInfo Definition -->
<!ELEMENT StatusInfo (MatlClass?, Status*, StatCode*, TimeStamp*, Note*)>
<!ELEMENT MatlClass (%Code;)>
<!ELEMENT Status (%Code;)>
<!ATTLIST Status
  StatusType (Processor | Commercial | Metallurgical) #REQUIRED
>
<!ELEMENT StatCode (%Code;)>
<!ATTLIST StatCode
  StatCodeType (Order | Shipment) #REQUIRED
>
<!-- Use the attributes Classification, Commercial, Metallurgical, and Process for the TimeStamp-->
<!-- End of the StatusInfo Definition -->
<!-- Beginning of Test Request Definition -->
<!ELEMENT TestRequest (TestingNotes*)>
<!ELEMENT TestingNotes (Note*)>
<!-- End of the Test Request Definition -->
<!-- Beginning of the MatlInfo Definition -->
<!ELEMENT MatlInfo (MatlId+, LotNum?, SubLotNum?, HeatNum?, ClaimNum?, MatlLoc?, ReturnContainer?,
Note*)>
<!ELEMENT MatlId (#PCDATA)>
<!ATTLIST MatlId
  MatlIdType (Producer | Processor | Prior | Receiver | Bundle | BarCd | Tested) #REQUIRED
>
<!ELEMENT LotNum (#PCDATA)>
<!ELEMENT SubLotNum (#PCDATA)>
<!ELEMENT HeatNum (#PCDATA)>
<!ELEMENT ClaimNum (#PCDATA)>
<!ELEMENT MatlLoc (#PCDATA)>
<!ELEMENT ReturnContainer (#PCDATA)>
<!-- End of MatlInfo Definition -->
<!-- Beginning of Customer Order Definition -->
<!ELEMENT CustomerOrder (PurchaseOrderNum?, TimeStamp?, PurchaseOrderRevision?, ChangeReasonCode?,
RelNum?, ContractNum?, Partner*, EngChangeLevel?, PartName?, ModelYear?, EndUse?, ClassOfTradeCode?,
Note*)>
<!ELEMENT PurchaseOrderNum (#PCDATA)>
<!ATTLIST PurchaseOrderNum
  PurchaseOrderNumType (CustomerOrderNum | ThirdPartyPurchaseOrderNum) #REQUIRED
>
<!-- Use the attribute PurchaseOrder for TimeStamp -->
<!ELEMENT PurchaseOrderRevision (#PCDATA)>
<!ELEMENT ChangeReasonCode (#PCDATA)>
<!ELEMENT RelNum (#PCDATA)>
<!ELEMENT ContractNum (#PCDATA)>
<!-- Use the attributes BillTo, CertReceiver, InspectReceiver or TestReceiver for Partner -->
<!ELEMENT EngChangeLevel (#PCDATA)>
<!ELEMENT PartName (#PCDATA)>
<!ELEMENT ModelYear (#PCDATA)>
```



```
<!ELEMENT EndUse (#PCDATA)>
<!ELEMENT ClassOfTradeCode (%Code;)>
<!ELEMENT CustomerOrderLine (PurchaseOrderItem?, ProdServiceId?, Note*)>
<!ELEMENT PurchaseOrderItem (#PCDATA)>
<!ELEMENT ProdServiceId (#PCDATA)>
<!-- End of Customer Order Definition -->
<!-- Beginning of the WorkOrder Definition -->
<!ELEMENT WorkOrder (WorkOrderNum?, WorkOrderRevision?, WorkOrderRelNum?, TimeStamp?, Note*)>
<!ELEMENT WorkOrderNum (#PCDATA)>
<!ELEMENT WorkOrderRevision (#PCDATA)>
<!ELEMENT WorkOrderRelNum (#PCDATA)>
<!-- Use the attributes WorkOrder and WorkOrderchange for the TimeStamp -->
<!-- End of the WorkOrder Definition -->
<!-- Beginning of ManufacturingOrder Definition -->
<!ELEMENT ManufacturingOrder (MillOrderNum?, MillOrderItem?, Partner*, TimeStamp*, ManufacturerPartNum?,
TmwFactor?, TmwFormula?, Note*)>
<!ELEMENT MillOrderNum (#PCDATA)>
<!ELEMENT MillOrderItem (#PCDATA)>
<!-- Use the attribute ManufacturingPlant for Partner -->
<!-- Use the attributes Promise and RevPromise for TimeStamp -->
<!ELEMENT ManufacturerPartNum (#PCDATA)>
<!ELEMENT TmwFactor (#PCDATA)>
<!ELEMENT TmwFormula (%Code;)>
<!-- End of ManufacturingOrder Definition -->
<!-- Beginning of the VendorOrder Definition -->
<!ELEMENT VendorOrder (VendorOrderNum?, VendorRelNum?, VendorOrderRevision?, TimeStamp?,
AccountNum?, QtyOrder?, OrdPrice?, Note*)>
<!ELEMENT VendorOrderNum (#PCDATA)>
<!ELEMENT VendorRelNum (#PCDATA)>
<!ELEMENT VendorOrderRevision (#PCDATA)>
<!-- Use the attribute Vendor, Quotation for the TimeStamp -->
<!ELEMENT AccountNum (#PCDATA)>
<!ELEMENT QtyOrder (%Measurement;)>
<!ELEMENT OrdPrice (#PCDATA)>
<!-- End of the VendorOrder Definition -->
<!-- Beginning of the VendorOrderLine Definition -->
<!ELEMENT VendorOrderLine (VendorOrderItem?, VendorProdDesc?, VendorPartNum?, CatalogNum?,
VendorItemQty?, Note*)>
<!ELEMENT VendorProdDesc (#PCDATA)>
<!ELEMENT VendorOrderItem (#PCDATA)>
<!ELEMENT VendorPartNum (#PCDATA)>
<!ELEMENT CatalogNum (#PCDATA)>
<!ELEMENT VendorItemQty (%Measurement;)>
<!-- End of the VendrOrderLine Definition -->
```



Data Dictionary

Interpreting the Data Dictionary

Dictionary label summary:

1. Data Element
 - 1.1. the AISI industry data element name
2. XML Tag
 - 2.1. isXML tag name. Tag assignment based on routines used by 'XML Magic' where applicable.
3. Attribute
 - 3.1. Data element attribute where appropriate
4. Class Referenced
 - 4.1. Class name used to 'define' a data element. 'Code' or 'DateTime' for example.
5. Definition
 - 5.1. Data element definition.
6. Table Agency
 - 6.1. The agency responsible for 'owning' the table used for 'Code' elements. 'AX' refers to the agency 'DISA'. 'AI' refers to 'AISI' owned tables.
7. ANSI Table
 - 7.1. ANSI table number
8. AISI Table
 - 8.1. AISI table number



Steel Industry XML Project Phase 0001 (Proposal) Overview

Dictionary - isXML Tag Sort

The following table has been sorted by the isXML Tag name for ease of finding XML elements.

Data Element	XML Tag	Attribute	Class - Referenced	Definition	Tble Agny	ANSI Table	AISI Table
Account Number	<AccountNum>			Account number.			
Acknowledgement Requested	<AckRequested>		Code	Indicator to denote a functional acknowledgement is requested	AX	I13	
Action Code	<ActionCode>		Code	Code to identify what action to take with respect to the sent document	AX	306	
Address - 1	<Addr1>			Address line 1			
Address - 2	<Addr2>			Address line 2			
Agency Identifier	<AgencyQualCode>			Code identifying the agency assigning the code values. 'DISA' vs 'AISI'-owned tables for example.	AX	559	
Allowance or Charge Code	<AllowOrChargeCode>		Code	Allowance or charge code.	AX	340	
Allowance or Charge Method of Handling Code	<AllowOrChargeHandling>		Code	Code for allowance or charge handling	AX	331	
Allowance or Charge Indicator	<AllowOrChargeInd>		Code	Code which indicates an allowance or charge for the specified services.	AX	248	
Allowance or Charge Percent Qualifier	<AllowOrChargePct>		Code	Allowance or charge percent qualifier			
Allowances and Charges Application Receivers Code	<AllowOrChargeQty>			The debit or credit used to specify allowances and charges or services.	AX	339	
Application Senders Code	<AppReceiversCode>			Message receiver code, GS (application) level	AX	124	
Appointment Number	<AppSendersCode>			Message sender code, GS (application) level	AX	142	
Authorization Code	<AppNum>			An appointment number assigned to the shipment by the receiving location.			
Bill of Lading	<AuthCode>		Code	Authorization code for material release schedules.	AX	672	
	<BillOfLading>			A unique number which identifies the record of the shipment. The outside processor bill of lading number.			



Steel Industry XML Project Phase 0001 (Proposal) Overview

Data Element	XML Tag	Attribute	Class - Referenced	Definition	Tble Agny	ANSI Table	AISI Table
Catalog Number	<CatalogNum>			Catalog number	AX	684	
Change Reason Code	<ChangeReasonCode>		Code	Purchase Order change reason.	AX	371	
Product/Item Desc - Chemical Coating (Level 2)	<ChemCoat2>			Level 2 Chemical Coating requirements			
Chemical Surface Treatment	<ChemTreat>			Chemical surface treatment.			
City Name	<CityName>			Entity city - name		19	
Claim Number	<ClaimNum>			Assigned by metal producer to returned material.	AX		
Class of Trade Code	<ClassOfTradeCode>		Code	Code indicating class of trade	AX	687	
Coating Code	<CoatCode>		Code	Code assigned by the coating supplier			
Coating Name	<CoatName>			Coating color or name as known by the coating supplier			
Coating Specs	<CoatSpec>			Coating specifications for the work order including coating systems, surface, layer and weight (see AISI coating specifications).			
Coating Supplier	<CoatSupplier>			Coating supplier or manufacturer			
Coating Surface	<CoatSurface>			Surface coating code			
Coating System	<CoatSystem>			Coating system name as known to the supplier			
Coating Type	<CoatType>		Code	Coating 'type' code.	ST		17
Coating Value	<CoatValue>		Measurement	Value of coating materials (typically weight)			
Coating Weight	<CoatWeight>		Measurement	Weight of paint or coating used on the production discharge.			
Code Value	<CodeValue>			Code value from industry or agency table.			
Color Code	<ColorCode>		Code	The code value for the color	AX	397	
Contact Identifier	<ContactFunctionCode>		Code	Contact function code which identifies the major duty or responsibility of named person.	AX	366	
Contract Number	<ContractNum>			Contract number. Could refer to freight or Processor contracts.	AX	367	
Country Code	<CountryCode>		Code	Country identification code	AX	26	
Currency Code	<CurrencyCode>		Code	Currency type: US, Canadian, or Mexican.	AX	100	
Cut Number	<CutNum>			Test sample 'cut'			
Damage Fault	<DamageFaultCode>		Code	Material damage fault code.	ST		73



Steel Industry XML Project Phase 0001 (Proposal) Overview

Data Element	XML Tag	Attribute	Class - Referenced	Definition	Table Agny	ANSI Table	AISI Table
Damage Reason Code	<DamageReasonCode>		Code	Code identifying the specific reason for the exception condition	AX	853	
Damage Severity Code	<DamageSeverityCode>		Code	Material damage code	AX	541	
Damage Code	<DamageTypeCode>		Code	Material damage code	AX,ST	540	72
Date	<Date>			Date as expressed as CCYYMMDD.	AX	373	
Date Qualifier	<DateTimeQual>		Code	Code specifying the type of date or time, or both.	AX	374	
Day of Month	<DayOfMonth>			Day of month payable.			
Deferred Amount Due	<DeferredAmtDue>			Deferred amount due.	AX	389	
Degas	<Degas>			Degas	ST		12B
Deoxidation / LMF	<Deoxidation>			Deoxidation/LMF	ST		12C
Description	<Desc>			The description, definition, or explanation associated with a code value.	AX	352	
Note	<Desc>			Notes or special instructions. Data should be transmitted via appropriate machine processable segments. If the NTE segment is used, it should be placed immediately following the beginning segment for each transaction for header notes.	AX	352	
Dunnage - Chargeable	<DunnageCharge>		Measurement	The chargeable dunnage associated with the shipment			
Dunnage - Non-Chargeable	<DunnageNonCharge>		Measurement	The dunnage associated with the shipment which is non-chargeable			
Edge Designation	<EdgeDesignation>		Code	Edge Designation	ST		22
Contact Code - Email	<EmailAddress>			Contact Email address			
End Use	<EndUse>			The 'end use' is the customer's end use or application.			
Engineering Change Level	<EngChangeLevel>			The engineering change level as assigned by the ultimate customer. A component of the part number.			
Entity Identifier Code	<EntityIdCode>		Code	Code identifying an organizational entity, physical location, or individual	AX	98	



Steel Industry XML Project Phase 0001 (Proposal) Overview

Data Element	XML Tag	Attribute	Class - Referenced	Definition	Table Agny	ANSI Table	AISI Table
Equipment Description Code	<EquipDescCode>		Code	Equipment description	AX	40	
Equipment Initial	<EquipInitial>			Equipment initial	AX	206	
Equipment Number	<EquipNum>			Equipment number	AX	207	
Equipment Type	<EquipType>		Code	Type of equipment used.	AX	98	
Contact Code - Extension	<Extension>			Contact phone extension			
Production Unit	<Facility>		Code	Code to identify production unit			
Contact Code - Fax	<FaxNum>			Contact Fax			
Finish or Surface Roughness	<Finish>		Code	Finish or surface roughness.	ST		14A
Name - First	<FirstName>			Contact first name			
FOB Shipping Point Cd	<FobShipPoint>		Code	The internal FOB shipping point code.			
Forecast Quantity	<ForecastQty>		Measurement	Quantity forecasted			
Forecast Qualifier	<ForecastQual>		Code	Code specifying the sender's confidence level of forecast data.	AX	680	
Gain Loss Indicator	<GainLossInd>		Measurement	Gain or loss indicator for weight correction			
Grade	<Grade>		Code	The metals producer grade code.			
Product/Item Description - Mill Grade (Level 2)	<Grade2>			Level 2 Grade			
Grinding/Conditioning	<Grinding>			Grinding / conditioning			
Group Control Number	<GrpControlNum>			Transaction group (GS) level control number	AX	28	
Heat Number	<HeatNum>			Identifies the heat from which metal was melted. May be required in the Purchase Order transaction sets (850/860/855/865) where work orders are created for specific purchased or applied material.			
Heat Treat / Anneal	<HeatTreat>			Heat treat/anneal	ST		15
Identification Code	<IdCode>			Code used to identify an entity.	AX	67	
Identification Code Qualifier	<IdCodeQual>		Code	Code designating the system/method of code structure used for identification. Code to specify duns number, etc.	AX	66	
ID (Inside Diameter)	<InsideDiam>		Measurement	The inside diameter of a coil.			



Steel Industry XML Project Phase 0001 (Proposal) Overview

Data Element	XML Tag	Attribute	Class - Referenced	Definition	Tble Agny	ANSI Table	AISI Table
Inspection Instructions	<InspectInstructions>			Designates the quality level: e.g. surface or shape requirements.			
Interchange Control Number	<InterchangeControlNum>			Message control number at interchange level	AX	I12	
Interchange Date/Time	<InterchangeDate/Time>		Date/Time	Message timestamp	AX	I08	
Interchange ID Qualifier	<InterchangeIdQual>		Code	Qualifier to specify the method used to identify message sender/receiver	AX	I05	
Interchange Receiver ID	<InterchangeReceiverId>			Message receiver identification	AX	I07	
Interchange Sender ID	<InterchangeSenderId>			Message sender identification	AX	I06	
Invoice Number	<InvoiceNum>			Invoice identifying number as assigned by the issuer.	AX	76	
Invoice Format	<InvoiceTypeCode>		Code	Invoice type code, format	AX	I019	
Bill of Lading Count	<LadingCount>			Number of BOLs for a specific shipment			
Name - Last	<LastName>			Contact last name			
Coating Layer	<Layer>			Coating layer designation. Top, bottom, relative position			
Length	<Len>		Measurement	The length of the material. Type of length, unit of measure, ranges are noted in the measurement entity.	AX	82	
Load	<LoadCode>		Code	Standard loading descriptions and special instructions.	AX	I042	
Lot Number	<LotNum>			Manufacturer's lot number			
Major Grade	<MajorGrade>		Code	Major grade	ST		10
Manufacturer's Part Number	<ManufacturerPartNum>			A codification which may be assigned by the metal producer to the material type or part.			
Mark	<MarkCodeType>		Code	The marking that is to be on the product for shipping - part of mark-pack-load	AX	I304	
Master Bill of Lading	<MasterBillOfLading>			The master load number for combination loads which refers to the total vehicle movement and serves to link the individual bills of lading or shipper number.			
Material Classification	<MatlClass>		Code	The AISI value for material condition.			



Steel Industry XML Project Phase 0001 (Proposal) Overview

Data Element	XML Tag	Attribute	Class - Referenced	Definition	Tble Agny	ANSI Table	AISI Table
Material Identification - Bar Code	<MatlId>	BarCd		Serial number required to be printed on the bar-coded tag.			
Material Identification - Bundle ID	<MatlId>	Bundle		Bundled lift identity			
Material Identification - OP	<MatlId>	Processor		Outside processor current material identification			
Material Identification - OP Prior	<MatlId>	Prior		Outside processor prior material identification			
Material Identification - Producer	<MatlId>	Producer		Steel producer material identification			
Material Identification - Receiver	<MatlId>	Receiver		Material ID requested by the receiving facility - i.e. - Kanban numbers			
Material Identification - Tested	<MatlId>	Tested		Identify of material tested			
Material Location	<MatlLoc>			Current facility or location of material			
Measurement Attribute Code	<MeasAttributeCode>		Code	Measurement Attribute	AX	936	
Measurement Method or Device	<MeasMethodOrDev>		Code	Measurement Method or Device	AX	1373	
Measurement Qualifier	<MeasQual>		Code	Code identifying a specific product or process characteristic to which a measurement applies.	AX	738	
Measurement ID Code	<MeasRefIdCode>		Code	Code identifying the broad category to which a measurement applies.	AX	737	
Measurement Significance Code	<MeasSignificanceCode>		Code	Code used to benchmark, qualify, or further define a measurement value	AX	935	
Measurement Value	<MeasValue>			Measurement value. The actual measurement - 'weight' for example.	AX	739	
Mechanical Requirements	<MechRequirements>			Mechanical requirements			
Steel Melting	<Melting>			Steel melting	ST		12A
Name - Middle	<MiddleName>			Contact middle name			
Mill Order Line	<MillOrderItem>			Order Number Line			
Mill Order	<MillOrderNum>			Order number			
Model Year	<ModelYear>			Manufacturing model year			



Steel Industry XML Project Phase 0001 (Proposal) Overview

Data Element	XML Tag	Attribute	Class - Referenced	Definition	Tble Agny	ANSI Table	AISI Table
Name	<Name>			The name associated with an organization. For example: Consignee, Shipper, Ship-to, Supplier/Manufacturer, Warehouse, Processor	AX	93	
Note Reference Code	<NoteRefCode>		Code	Qualify note function.	AX	363	
Oil - Edges / ID / OD	<Oiling>			Oil edges, id/od. Lubrication	ST		18C
Product/Item Description - Oiling (Level 2)	<Oiling2>			Level 2 Oiling			
Order Item Code	<OrderItemCode>		Code	A code identifying a group of orders and items (i.e. - 'PP' selected orders)	AX	847	
Total Ordered Price	<OrdPrice>			Order price			
Pre-Painted / - Organic	<OrganicCoat>			Organic coating requirement.	ST		17H
OD (Outside Diameter)	<OutsideDiam>		Measurement	The outside diameter of a coil.			
Packaging Code	<PackagingCode>		Code	Packaging Code	AX	103	
Packaging Description	<PackagingDescCode>		Code	Packaging information including standard packaging descriptions and instructions.	AX	754	
Customer Part Name	<PartName>			Part Name	AX	557	
Bill-to	<Partner>	BillTo	Organization	The 'bill-to' party.			
Buyer	<Partner>	Buyer	Organization	Buyer of material.			
Carrier	<Partner>	Carrier	Organization	Includes the SCAC or rail code and standard carrier name.			
Certificate Compliance Receiver	<Partner>	CertReceiver	Organization	Party to receive testing certificates of compliance			
Certifier	<Partner>	Certifier	Organization	Test certifier			
Customer	<Partner>	Customer	Organization	Name and address of the ultimate customer.			
Inspection Agency	<Partner>	Inspector	Organization	Testing Labs			
Inspection Report Receiver	<Partner>	InspectReceiver	Organization	Party to receive inspection reports			
Manufacturing Plant	<Partner>	Manufacturing Plant	Organization	Manufacturing plant.			
Material Release Issuer	<Partner>	ReleaseIssuer	Organization	Issuer of the material release.			
Outside Processor	<Partner>	Processor	Organization	The outside processing facility.			
Rail Car Owner	<Partner>	RailCarOwner	Organization	Rail Car Owner			
Ship-from	<Partner>	ShipFrom	Organization	Ship-From address			



Steel Industry XML Project Phase 0001 (Proposal) Overview

Data Element	XML Tag	Attribute	Class - Referenced	Definition	Tble Agny	ANSI Table	AISI Table
Ship-to	<Partner>	ShipTo	Organization	The 'ship-to' name and address of the next destination or the customer receiving point.			
Sold-to	<Partner>	SoldTo	Organization	The 'sold-to' name and address			
Supplier/Manufacturer	<Partner>	Supplier	Organization	The base metal supplier or manufacturer of goods.			
Test Report Receiver	<Partner>	TestReceiver	Organization	Receiver of the Test Report			
Testing Agency	<Partner>	TestAgency	Organization	Outside company which performs testing for a manufacturer			
Vendor	<Partner>	Vendor	Organization	Vendor name, address			
Warehouse	<Partner>	Warehouse	Organization	The warehouse or storage facility at which material is being stored.			
Customer Part Number	<PartNum>			The part number ordered by the end customer. There may be multiple part numbers per customer P.O. item, and release.			
Payment Method Code	<PaymentMethodCode>		Code	Payment method code.	AX	107	
Payment Terms	<PaymentTerms>		Code	The credit terms for paying the issuer's invoice.	ST		60
Percent of Invoice Payable	<PctInvoicePayable>			The percent of the invoice payable.			
Contact Code - Phone	<PhoneNum>			Contact Phone			
Planning Schedule Type	<PlanningSchTypeCode>		Code	Code identifying the type of planning schedule used.	AX	783	
Postal Code	<PostalCode>			Zip Code or Postal Code	AX	116	
Name - Prefix	<PrefixName>			Contact name prefix			
Pre-Painted / - Pretreatment	<Pretreat>			Pretreatment coating requirement	ST		17E
Price Identifier Code	<PriceIdCode>		Code	Price identifier code. Code identifying the pricing specification.	AX	236	
Price Multiplier Qualifier	<PriceMultiplier>		Code	Price multiplier qualifier	AX	648	
Pricing Unit	<PriceUnit>		Code	The associated pricing unit (i.e. CWT, ton, HR, etc.) for each price component	ST		62
Price Unit of Measure	<PriceUnitOfMeas>		Code	The pricing unit of measure for which the invoice amount was or is to be derived.	ST		24
Pre-Painted / - Primer	<Primer>			Primer coating requirement.	ST		17F



Steel Industry XML Project Phase 0001 (Proposal) Overview

Data Element	XML Tag	Attribute	Class - Referenced	Definition	Tble Agny	ANSI Table	AISI Table
Process Code	<Process>		Code	Each process to be performed by the processor is identified by a process code from industry table 66. If multiple processes are to be performed, then multiple process codes are assigned to the work order and are listed in the expected sequence.	ST		66
Sequence	<ProcessSequence>			The sequence of the production (last, next, cnt)			
Product Characteristic Code	<ProdCharCode>		Code	Product/Process characteristic code.	ST		8
Product/Item Description - Product (Level 2)	<ProdCode2>			Level 2 product description			
Product Description	<ProdDesc>			Free-form description of the product description			
Product Description Code	<ProdDescCode>		Code	Data element 751 Product characteristic from Industry code list	AX	751	
Product Form	<ProdForm>		Code	Product form			
Product Requirements	<ProdRequirements>			Product requirements	ST		32A
Product Service ID	<ProdServiceID>		Code	Code identifying the type of product or service.	AX	235	
Purchase Order Item Number	<PurchaseOrderItem>			Purchase Order item number			
Customer Purchase Order Number	<PurchaseOrderNum>	Customer Purchase Order Num		Identifying number for Purchase Order assigned by the orderer/purchaser	AX	324	
Third Party Purchase Order Number	<PurchaseOrderNum>	Third Party Purchase Order Num		Identifying number for Purchase Order assigned by the orderer/purchaser	AX	324	
Customer PO Revision	<PurchaseOrderRevision>			Customer PO Revision Number			
Purchase Order Type Code	<PurchaseOrderTypeCode>		Code	Purchase order type code	AX	92	
Quantity	<Qty>		Measurement	Quantity or material. The type of quantity and UOM are reported in related measurement elements.	AX	380	
Quantity Invoiced	<QtyInvoiced>		Measurement	Quantity invoiced	AX	358	
Quantity Ordered	<QtyOrder>		Measurement	Ordered quantity			
Quality	<Quality>		Code	Quality code.	ST		13



Steel Industry XML Project Phase 0001 (Proposal) Overview

Data Element	XML Tag	Attribute	Class - Referenced	Definition	Table Agny	ANSI Table	AISI Table
Range Maximum	<RangeMax>			One of the components of the measurement entity - the maximum range value associated with a measurement.	AX	741	
Range Minimum	<RangeMin>			One of the components of the measurement entity - the minimum range value associated with a measurement.	AX	740	
Rate	<Rate>			Rate	AX	118	
Reference Number	<RefId>			A unique identifying number for each transaction. Content varies with document type.	AX	127	
Release Number	<RelNum>			The release number against the purchase order. Could refer to either the Customer Release Number or the Mill Release Number.	AX	328	
Report Transmission Code	<ReportTransmissionCode>		Code	Code defining the timing, transmission method or format by which reports are to be sent.	AX	756	
Report Type Code	<ReportTypeCode>		Code	Code indicating the title or contents of a document, report, or supporting item.	AX	755	
Requested Ship Weight	<RequestShipWeight>		Measurement	Shipping schedule weight			
Responsible Agency Code	<ResponsibleAgencyCode>		Code	Agency which owns/issues the XML standard (AISI = 'ST')	AX	455	
Returnable Container	<ReturnContainer>			The identity of the container in which parts or pieces are shipped.			
Routing	<Routing>			Routing instructions for material transfers from the processor to a specified 'ship-to'.	AX	387	
Routing Sequence Code	<RoutingSeqCode>		Code	Shipment routing sequence code.	AX	133	
Sample Description Code	<SampleDescCode>		Code	Sample description		943	
Sample Direction	<SampleDirectionCode>		Code	Code specifying the direction in which the sample was collected or tested.	AX	944	
Sample Frequency	<SampleFreq>		Code	Code for test sample frequency		942	
Sample Location	<SampleLoc>			Code specifying the location, within the specimen, from the sample was taken.	AX		
Sample Population	<SamplePopulation>			Sample population			
Sample Position Code	<SamplePosCode>		Code	Sample position code.		945	



Steel Industry XML Project Phase 0001 (Proposal) Overview

Data Element	XML Tag	Attribute	Class - Referenced	Definition	Tble Agny	ANSI Table	AISI Table
Sample Process Status Code	<SampleProcessStatCode>		Code	Code specifying the stage in the product development cycle at which the specimen was selected for testing.	AX	939	
Sample Selection Method	<SampleSelMethod>		Code	Sample method.		940	
Sample Size	<SampleSize>			Sample size			
Sample Subgroup	<SampleSubGrip>			Sample subgroup			
Scale Indicator	<ScaleInd>		Measurement	Indicator denoting that material has been scale weighed			
Schedule Quantity Qualifier	<SchQtyQual>		Code	Type of quantities used for defining a schedule or forecast	AX	676	
Schedule Type	<SchType>		Code	Code identifying the type of dates used when defining a shipping or delivery time in a schedule or forecast.	AX	675	
Security Information	<SecurityInfo>			Security information, password	AX	104	
Security Information Qualifier	<SecurityInfoQual>		Code	Security information qualifier	AX	103	
Flatness / Shape	<Shape>			Flatness or Shape	ST		14B
Delivery Code	<ShipDeliveryCode>		Code	Code which specifies routing shipment and delivery pattern			
Ship/Delivery or Calendar Pattern	<ShipDeliveryOrCalendarPatternCode>		Code	Code which specifies the routine shipments, deliveries, or calendar pattern.	AX	678	
Ship/Delivery Pattern TimeCode	<ShipDeliveryPatternTimeCode>		Code	Code which specifies the time for routine shipments or deliveries.	AX	679	
Shipper Number (SID)	<ShipId>			The shipment identification number as assigned by the metal producer. Ship notice or manifest number.			
Shipment Method of Payment	<ShipMethodOfPayment>		Code	Code identifying freight method of payment. Transportation liability.	AX,ST	146	59
Ship Mode	<ShipMode>		Code	Indicates the ship mode to be used (i.e. barge, rail, truck, etc.).	ST		26
Shipped Quantity	<ShipQty>		Measurement	shipment quantity			
Shipment Nature	<ShipQual>		Code	Shipment nature, shipment qualifier.	AX,ST	147	63
Weight Shipped	<ShipWeight>		Measurement	Total shipment weight.			



Steel Industry XML Project Phase 0001 (Proposal) Overview

Data Element	XML Tag	Attribute	Class - Referenced	Definition	Table Agny	ANSI Table	AISI Table
Load Weight Gross	<ShipWeightGross>		Measurement	Gross weight of load - sum of lift weights, chargeable & non-chargeable dunnage			
Load Weight Master	<ShipWeightMaster>		Measurement	Master load weight.			
Slitting, Splitting, Cutting	<SlitSplitCut>		Code	Slitting, splitting, cutting requirements.	ST		20A
Solidification	<Solidification>			Solidification	ST		12D
Specification Number	<Spec>			Specification number			
Order Status	<StatCode>	Order	Code	Code indicating the status of an order.	AX	368	
Shipment Status	<StatCode>	Shipment	Code	Code indicating the status of a shipment.	AX	157	
State or Province Code	<StateOrProvinceCode>		Code	State code, province code	AX	156	
Status Report Code	<StatReportCode>		Code	Status report code (?)	AX	850	
Status - Commercial	<Status>	Commercial	Code	The commercial status code for the material. Assigned from AISI industry table 69.	ST		69
Status - Metallurgical	<Status>	Metallurgical	Code	Metallurgical status code	ST		68
Status - OP	<Status>	Processor	Code	The outside processor status code for the material. Assigned from AISI industry table 70.	ST		70
SCAC	<StdCarrierAlphaCode>			Standard Carrier Alpha Code- The carrier code assigned to the trucking company moving material.	AX,ST	140	71
Sub-Lot Number	<SubLotNum>			Sub-Lot Number			
Sub-Product	<SubProdCode>			Sub product			
Sub-Product, Surface Application	<SubProdSurface>			Sub product surface application	ST		9C
Name - Suffix	<SuffixName>			Contact name suffix (Jr, etc.)			
Surface Layer/Position Code	<SurfaceLayerPosCode>		Code	Code indicating the product surface, layer, or position being described	AX	752	
Table Number	<TableNum>			An industry or agency table number which houses code values for data element.			
Tax Exempt Code	<TaxExemptCode>		Code	Tax exemption code assigned by purchaser.	AX	441	
Tax ID Number	<TaxIDNum>			Tax ID assigned by purchaser.	AX	325	
Temper	<Temper>			Temper	ST		16
Temper Parameters Level 2	<TemperLevel2>			Temper parameters level 2			
Terms Basis Date Code	<TermsBasisDateCode>		Code	Terms basis date code	AX	333	



Steel Industry XML Project Phase 0001 (Proposal) Overview

Data Element	XML Tag	Attribute	Class - Referenced	Definition	Tble Agny	ANSI Table	AISI Table
Terms Discount Amount	<TermsDiscountAmt>			Terms discount amount	AX	362	
Terms Discount Days Due	<TermsDiscountDaysDue>		Code	Terms discount days due	AX	351	
Terms Discount Percent	<TermsDiscountPct>		Code	Terms discount percent	AX	338	
Terms Net Days	<TermsNetDays>			Terms net days	AX	386	
Terms Type Code	<TermsTypeCode>		Code	Terms type code	AX	336	
Test Class	<TestClass>		Code	General classification of test (physical, etc.)			
Testing Equipment Number	<TestEquipment>			Identification number for testing equipment			
Test Identification Number	<TestId>			Test ID Number			
Test Result	<TestResult>			Test results			
Test Type	<TestTypeCode>		Code	Required test type code	ST	1607	32
Thickness	<Thk>		Measurement	Gauge or thickness of material. Type and uom for thickness are noted in related 'measurement' data elements.			
Substrate Thickness Level 2	<ThkLevel2>			Incoming substrate thickness level 2			
Time	<Time>			Time expressed in 24-hour clock time as HHMM or HHMMSS.	AX	337	
Time Code	<TimeCode>		Code	Code identifying the time. Per ISO, may be expressed as time zone or by + or - in hours relative to UTC.	AX	623	
Activity Date	<TimeStamp>	Activity	DateTime	The date/time the activity being reported occurred.			
Appointment Timestamp	<TimeStamp>	Appointment	DateTime	The appointment timestamp assigned to the shipment by the receiving location.			
Damage Date	<TimeStamp>	Damage	DateTime	Date damage reported/occurred.			
Forecast Date	<TimeStamp>	Forecast	DateTime	The date of the Forecast			
Inventory Snapshot Date	<TimeStamp>	Inventory	DateTime	Date/Time the inventory snapshot was taken			
Material Classification Date	<TimeStamp>	Classification	DateTime	Date material condition was assigned.			
Process Date	<TimeStamp>	Process	DateTime	Process date/time.			
Promise Date	<TimeStamp>	Promise	DateTime	Date the product is promised			
Purchase Order Date	<TimeStamp>	PurchaseOrder	DateTime	PO Date	AX	323	
Quotation Date	<TimeStamp>	Quotation	DateTime	Quotation date.			
Release Create Date	<TimeStamp>	ReleaseCreate	DateTime	Date a material release was created.			



Steel Industry XML Project Phase 0001 (Proposal) Overview

Data Element	XML Tag	Attribute	Class - Referenced	Definition	Tble Agny	ANSI Table	AISI Table
Release End Date	<TimeStamp>	ReleaseEnd	DateTime	Ending date for material release schedule.			
Release Start Date	<TimeStamp>	ReleaseStart	DateTime	Starting date for material release schedule.			
Requested Ship Date	<TimeStamp>	RequestShip	DateTime				
Revised Promise Date	<TimeStamp>	RevPromise	DateTime	The revised promise date			
Shipment Timestamp	<TimeStamp>	Shipment	DateTime	Shipment date & Time.			
Status Date - Commercial	<TimeStamp>	Commercial	DateTime	The date the current commercial status code was assigned.			
Status Date - Metallurgical	<TimeStamp>	Metallurgical	DateTime	Date of metallurgical status assignment			
Status Date - OP	<TimeStamp>	Processor	DateTime	The date the current outside processor status value was assigned.			
Terms Deferred Due Date	<TimeStamp>	TermsDeferredDue	DateTime	Terms Deferred Due Date	AX	388	
Terms Discount Due Date	<TimeStamp>	TermsDiscountDue	DateTime	Terms discount due date	AX	370	
Terms Net Due Date	<TimeStamp>	TermsNetDue	DateTime	Terms net due date	AX	446	
Test Date	<TimeStamp>	Test	DateTime	Date test was taken			
Transaction Date/Time	<TimeStamp>	Transaction	DateTime	Transaction control date	AX	374	
Vendor Purchase Order Date	<TimeStamp>	Vendor	DateTime	Vendor's purchase order date			
Work Order Change Date	<TimeStamp>	WorkOrderChange	DateTime	Each work order revision is assigned a revision date and time. Not used in the 850 - Purchase Order transaction.			
Work Order Date	<TimeStamp>	WorkOrder	DateTime	Date the work order was issued to the supplier			
Forecast Timing Qualifier Title	<TimingQual> <Title>		Code	Code specifying the interval grouping of the forecast.	AX	681	
TMW Factor	<TmwFactor>			Contact title			
TMW Formula	<TmwFormula>			The factor used by a processor to calculate the theoretical weight of material.			
Pre-Painted / - Topcoat	<Topcoat>		Code	The formula to be used to calculate theoretical weight.	ST		74
				Topcoat coating requirement	ST		17G



Steel Industry XML Project Phase 0001 (Proposal) Overview

Data Element	XML Tag	Attribute	Class - Referenced	Definition	Tble Agny	ANSI Table	AISI Table
Invoice Total Amount	<TotalInvoiceAmt>			Amount of invoice (including charges, less allowances) before terms discount (if the discount is applicable).	AX	361	
Transaction Set Control Number	<TranSetControlNum>			Transaction set control number - individual document level	AX	329	
Transaction Set Purpose	<TranSetPurposeCode>		Code	Code identifying purpose of transaction set (original,change, etc.)	AX	353	
Unit Load Option Code	<UnitLoadOptionCode>		Code	Code identifying loading or unloading a shipment	AX	400	
Unit or Basis of Measurement	<UnitOrBasisForMeasCode>		Code	Unit of measure or basis, code specifying the units in which a value is being expressed	AX	355	
Price	<UnitPrice>			The expected or actual price for processing, by component (i.e. base price, small coil extra, etc.)	AX	212	
Test Indicator	<UsagInd>		Code	Indicator to describe usage of message (normally test vs. production)	AX	I14	
Vehicle Identity	<VehicleIdNum>			Vehicle identification number	AX	539	
Item Quantity	<VendorItemQty>		Measurement	Vendor order item quantity			
Vendor Order Item	<VendorOrderItem>			Vendor order item number			
Vendor Order Number	<VendorOrderNum>			Vendor order number	AX	424	
Vendor Purchase Order Revision Number	<VendorOrderRevision>			Vendor purchase order revision number.			
Vendor Part Number	<VendorPartNum>			Vendor part number.			
Vendor Release Number	<VendorRelNum>			Vendor purchase order release number.			
Version Number	<VersionNum>			Industry standard version number			
Weight	<Weight>		Measurement	The weight of the material. The type of weight (actual, TMW, etc.) and unit of measure are expressed in the related 'Measurement' data elements.	AX	81	
Welding	<Weld>			Weld acceptability.	ST		23A
Width	<Width>		Measurement	The width of the material. The type of width and uom are reported in the related 'measurement' data elements.	AX	189	



Steel Industry XML Project Phase 0001 (Proposal) Overview

Data Element	XML Tag	Attribute	Class - Referenced	Definition	Tble Agny	ANSI Table	AISI Table
Winding / Surface Orientation	<Winding>		Code	Winding/piling of surface A unique number that identifies the record containing ship to or end use information and processing instructions. A work order may be issued each time a processor is requested to process material for a "dressed" sales order. Some Metals Producers also require a "blanket" purchase order which is issued for the processor each year (Blanket Work Order). May be referred to as a "Work Sheet Number" for spot orders. Expresses a contractual obligation to processor. See preface of 850 transaction for more detailed usage.	ST		20B
Work Order Number	<WorkOrderNum>						
Work Order Release	<WorkOrderRelNum>						
Work Order Change	<WorkOrderRevision>						
Substrate Width Level 2	<WithLevel2>						



Steel Industry XML Project Phase 0001 (Proposal) Overview

Dictionary - Data Element Sort

The following table has been sorted by the Data Element name for ease of finding elements.

Data Element	XML Tag	Attribute	Class - Referenced	Definition	Table Agny	ANSI Table	AISI Table
Account Number	<AccountNum>			Account number.			
Acknowledgement Requested	<AckRequested>		Code	Indicator to denote a functional acknowledgement is requested	AX	I13	
Action Code	<ActionCode>		Code	Code to identify what action to take with respect to the sent document	AX	306	
Activity Date	<TimeStamp>	Activity	Date Time	The date/time the activity being reported occurred.			
Address - 1	<Addr1>			Address line 1			
Address - 2	<Addr2>			Address line 2			
Agency Identifier	<AgencyQualCode>			Code identifying the agency assigning the code values. 'DISA' vs 'AISI'-owned tables for example.	AX	559	
Allowance or Charge Code	<AllowOrChargeCode>		Code	Allowance or charge code.	AX	340	
Allowance or Charge Indicator	<AllowOrChargeInd>		Code	Code which indicates an allowance or charge for the specified services.	AX	248	
Allowance or Charge Method of Handling Code	<AllowOrChargeHandling>		Code	Code for allowance or charge handling	AX	331	
Allowance or Charge Percent Qualifier	<AllowOrChargePct>		Code	Allowance or charge percent qualifier			
Allowances and Charges	<AllowOrChargeQty>			The debit or credit used to specify allowances and charges or services.	AX	339	
Application Receivers Code	<AppReceiversCode>			Message receiver code, GS (application) level	AX	124	
Application Senders Code	<AppSendersCode>			Message sender code, GS (application) level	AX	142	
Appointment Number	<ApprNum>			An appointment number assigned to the shipment by the receiving location.			
Appointment Timestamp	<TimeStamp>	Appointment	Date Time	The appointment timestamp assigned to the shipment by the receiving location.			



Steel Industry XML Project Phase 0001 (Proposal) Overview

Data Element	XML Tag	Attribute	Class - Referenced	Definition	Table Agny	ANSI Table	AISI Table
Authorization Code	<AuthCode>		Code	Authorization code for material release schedules.	AX	672	
Bill of Lading	<BillOfLading>			A unique number which identifies the record of the shipment. The outside processor bill of lading number.			
Bill of Lading Count	<LadingCount>			Number of BOLs for a specific shipment			
Bill-to	<Partner>	BillTo	Organization	The 'bill-to' party.			
Buyer	<Partner>	Buyer	Organization	Buyer of material.			
Carrier	<Partner>	Carrier	Organization	Includes the SCAC or rail code and standard carrier name.			
Catalog Number	<CatalogNum>			Catalog number	AX	684	
Certificate Compliance Receiver	<Partner>	CertReceiver	Organization	Party to receive testing certificates of compliance			
Certifier	<Partner>	Certifier	Organization	Test certifier			
Change Reason Code	<ChangeReasonCode>		Code	Purchase Order change reason.	AX	371	
Chemical Surface Treatment	<ChemTreat>			Chemical surface treatment.			
City Name	<CityName>			Entity city - name		19	
Claim Number	<ClaimNum>			Assigned by metal producer to returned material.	AX		
Class of Trade Code	<ClassOfTradeCode>		Code	Code indicating class of trade	AX	687	
Coating Code	<CoatCode>		Code	Code assigned by the coating supplier			
Coating Layer	<Layer>			Coating layer designation. Top, bottom, relative position			
Coating Name	<CoatName>			Coating color or name as known by the coating supplier			
Coating Specs	<CoatSpec>			Coating specifications for the work order including coating systems, surface, layer and weight (see AISI coating specifications).			
Coating Supplier	<CoatSupplier>			Coating supplier or manufacturer			
Coating Surface	<CoatSurface>			Surface coating code			
Coating System	<CoatSystem>			Coating system name as known to the supplier			



Steel Industry XML Project Phase 0001 (Proposal) Overview

Data Element	XML Tag	Attribute	Class - Referenced	Definition	Table Agny	ANSI Table	AISI Table
Coating Type	<CoatType>		Code	Coating 'type' code.	ST		17
Coating Value	<CoatValue>		Measurement	Value of coating materials (typically weight)			
Coating Weight	<CoatWeight>		Measurement	Weight of paint or coating used on the production discharge.			
Code Value	<CodeValue>			Code value from industry or agency table.			
Color Code	<ColorCode>		Code	The code value for the color	AX	397	
Contact Code - Email	<EmailAddress>			Contact Email address			
Contact Code - Extension	<Extension>			Contact phone extension			
Contact Code - Fax	<FaxNum>			Contact Fax			
Contact Code - Phone	<PhoneNum>			Contact Phone			
Contact Identifier	<ContactFunctionCode>		Code	Contact function code which identifies the major duty or responsibility of named person.	AX	366	
Contract Number	<ContractNum>			Contract number. Could refer to freight or Processor contracts.	AX	367	
Country Code	<CountryCode>		Code	Country identification code	AX	26	
Currency Code	<CurrencyCode>		Code	Currency type: US, Canadian, or Mexican.	AX	100	
Customer	<Partner>	Customer	Organization	Name and address of the ultimate customer.			
Customer Part Name	<PartName>			Part Name	AX	557	
Customer Part Number	<PartNum>			The part number ordered by the end customer. There may be multiple part numbers per customer P.O. item, and release.			
Customer Purchase Order Number	<PurchaseOrderNum>	Customer Purchase Order Num		Identifying number for Purchase Order assigned by the orderer/purchaser	AX	324	
Customer PO Revision	<PurchaseOrderRevision>			Customer PO Revision Number			
Cut Number	<CutNum>			Test sample 'cut'			
Damage Code	<DamageTypeCode>		Code	Material damage code	AX,ST	540	72
Damage Date	<TimeStamp>	Damage	Date Time	Date damage reported/occurred.			
Damage Fault	<DamageFaultCode>		Code	Material damage fault code.	ST		73
Damage Reason Code	<DamageReasonCode>		Code	Code identifying the specific reason for the exception condition	AX	853	
Damage Severity Code	<DamageSeverityCode>		Code	Material damage code	AX	541	
Date	<Date>			Date as expressed as CCYYMMDD.	AX	373	



Steel Industry XML Project Phase 0001 (Proposal) Overview

Data Element	XML Tag	Attribute	Class - Referenced	Definition	Table Agny	ANSI Table	AISI Table
Date Qualifier	<DateTimeQual>		Code	Code specifying the type of date or time, or both.	AX	374	
Day of Month	<DayOfMonth>			Day of month payable.			
Deferred Amount Due	<DeferredAmtDue>			Deferred amount due.	AX	389	
Degas	<Degas>			Degas	ST		12B
Delivery Code	<ShipDeliveryCode>		Code	Code which specifies routing shipment and delivery pattern			
Deoxidation / LMF	<Deoxidation>			Deoxidation/LMF	ST		12C
Description	<Desc>			The description, definition, or explanation associated with a code value.	AX	352	
Dunnage - Chargeable	<DunnageCharge>		Measurement	The chargeable dunnage associated with the shipment			
Dunnage - Non-Chargeable	<DunnageNonCharge>		Measurement	The dunnage associated with the shipment which is non-chargeable			
Edge Designation	<EdgeDesignation>		Code	Edge Designation	ST		22
End Use	<EndUse>			The 'end use' is the customer's end use or application.			
Engineering Change Level	<EngChangeLevel>			The engineering change level as assigned by the ultimate customer. A component of the part number.			
Entity Identifier Code	<EntityIdCode>		Code	Code identifying an organizational entity, physical location, or individual	AX	98	
Equipment Description Code	<EquipDescCode>		Code	Equipment description	AX	40	
Equipment Initial	<EquipInitial>			Equipment initial	AX	206	
Equipment Number	<EquipNum>			Equipment number	AX	207	
Equipment Type	<EquipType>		Code	Type of equipment used.	AX	98	
Finish or Surface Roughness	<Finish>		Code	Finish or surface roughness.	ST		14A
Flatness / Shape	<Shape>			Flatness or Shape	ST		14B
FOB Shipping Point Cd	<FobShipPoint>		Code	The internal FOB shipping point code.			
Forecast Date	<TimeStamp>	Forecast	Date Time	The date of the Forecast			



Steel Industry XML Project Phase 0001 (Proposal) Overview

Data Element	XML Tag	Attribute	Class - Referenced	Definition	Table Agny	ANSI Table	AISI Table
Forecast Qualifier	<ForecastQual>		Code	Code specifying the sender's confidence level of forecast data.	AX	680	
Forecast Quantity	<ForecastQty>		Measurement	Quantity forecasted			
Forecast Timing Qualifier	<TimingQual>		Code	Code specifying the interval grouping of the forecast.	AX	681	
Gain Loss Indicator	<GainLossInd>		Measurement	Gain or loss indicator for weight correction			
Grade	<Grade>		Code	The metals producer grade code.			
Grinding/Conditioning	<Grinding>			Grinding / conditioning			
Group Control Number	<GrpControlNum>			Transaction group (GS) level control number	AX	28	
Heat Number	<HeatNum>			Identifies the heat from which metal was melted. May be required in the Purchase Order transaction sets (850/860/855/865) where work orders are created for specific purchased or applied material.			
Heat Treat / Anneal	<HeatTreat>			Heat treat/anneal	ST		15
ID (Inside Diameter)	<InsideDiam>		Measurement	The inside diameter of a coil.			
Identification Code	<IdCode>			Code used to identify an entity.	AX	67	
Identification Code Qualifier	<IdCodeQual>		Code	Code designating the system/method of code structure used for identification. Code to specify duns number, etc.	AX	66	
Inspection Agency	<Partner>	Inspector	Organization	Testing Labs			
Inspection Instructions	<InspectInstructions>			Designates the quality level; e.g. surface or shape requirements.			
Inspection Report Receiver	<Partner>	InspectReceiver	Organization	Party to receive inspection reports			
Interchange Control Number	<InterchangeControlNum>			Message control number at interchange level	AX	I12	
Interchange Date/Time	<InterchangeDate Time>	Interchange	Date Time	Message timestamp	AX	I08	
Interchange ID Qualifier	<InterchangeIdQual>		Code	Qualifier to specify the method used to identify message sender/receiver	AX	I05	
Interchange Receiver ID	<InterchangeReceiverId>			Message receiver identification	AX	I07	
Interchange Sender ID	<InterchangeSenderId>			Message sender identification	AX	I06	
Inventory Snapshot Date	<TimeStamp>	Inventory	Date Time	Date/Time the inventory snapshot was taken			
Invoice Format	<InvoiceTypeCode>		Code	Invoice type code, format	AX	1019	



Steel Industry XML Project Phase 0001 (Proposal) Overview

Data Element	XML Tag	Attribute	Class - Referenced	Definition	Table Agny	ANSI Table	AISI Table
Invoice Number	<InvoiceNum>			Invoice identifying number as assigned by the issuer.	AX	76	
Invoice Total Amount	<TotalInvoiceAmt>			Amount of invoice (including charges, less allowances) before terms discount (if the discount is applicable).	AX	361	
Item Quantity	<VendorItemQty>		Measurement	Vendor order item quantity			
Length	<Len>		Measurement	The length of the material. Type of length, unit of measure, ranges are noted in the measurement entity.	AX	82	
Load	<LoadCode>		Code	Standard loading descriptions and special instructions.	AX	1042	
Load Weight Gross	<ShipWeightGross>		Measurement	Gross weight of load - sum of lift weights, chargeable & non-chargeable dunnage			
Load Weight Master	<ShipWeightMaster>		Measurement	Master load weight.			
Lot Number	<LotNum>			Manufacturer's lot number			
Major Grade	<MajorGrade>		Code	Major grade	ST		10
Manufacturer's Part Number	<ManufacturerPartNum>			A codification which may be assigned by the metal producer to the material type or part.			
Manufacturing Plant	<Partner>	Manufacturing Plant	Organization	Manufacturing plant.			
Mark	<MarkCode Type>		Code	The marking that is to be on the product for shipping - part of mark-pack-load	AX	1304	
Master Bill of Lading	<MasterBillOfLading>			The master load number for combination loads which refers to the total vehicle movement and serves to link the individual bills of lading or shipper number.			
Material Classification	<MatlClass>		Code	The AISI value for material condition.			
Material Classification Date	<TimeStamp>	Classification	Date Time	Date material condition was assigned.			
Material Identification - Bar Code	<MatlId>	BarCd		Serial number required to be printed on the bar-coded tag.			
Material Identification - Bundle ID	<MatlId>	Bundle		Bundled lift identity			
Material Identification - OP	<MatlId>	Processor		Outside processor current material identification			



Steel Industry XML Project Phase 0001 (Proposal) Overview

Data Element	XML Tag	Attribute	Class - Referenced	Definition	Table Agny	ANSI Table	AISI Table
Material Identification - OP Prior	<MatId>	Prior		Outside processor prior material identification			
Material Identification - Producer	<MatId>	Producer		Steel producer material identification			
Material Identification - Receiver	<MatId>	Receiver		Material ID requested by the receiving facility - i.e. - Kanban numbers			
Material Identification - Tested	<MatId>	Tested		Identify of material tested			
Material Location	<MatLoc>			Current facility or location of material			
Material Release Issuer	<Partner>	ReleaseIssuer	Organization	Issuer of the material release.			
Measurement Attribute Code	<MeasAttributeCode>		Code	Measurement Attribute	AX	936	
Measurement ID Code	<MeasRefIdCode>		Code	Code identifying the broad category to which a measurement applies.	AX	737	
Measurement Method or Device	<MeasMethodOrDev>		Code	Measurement Method or Device	AX	1373	
Measurement Qualifier	<MeasQual>		Code	Code identifying a specific product or process characteristic to which a measurement applies.	AX	738	
Measurement Significance Code	<MeasSignificanceCode>		Code	Code used to benchmark, qualify, or further define a measurement value	AX	935	
Measurement Value	<MeasValue>			Measurement value. The actual measurement - 'weight' for example.	AX	739	
Mechanical Requirements	<MechRequirements>			Mechanical requirements			
Mill Order	<MillOrderNum>			Order number			
Mill Order Line	<MillOrderItem>			Order Number Line			
Model Year	<ModelYear>			Manufacturing model year			
Name	<Name>			The name associated with an organization. For example: Consignee, Shipper, Ship-to, Supplier/Manufacturer, Warehouse, Processor	AX	93	
Name - First	<FirstName>			Contact first name			
Name - Last	<LastName>			Contact last name			
Name - Middle	<MiddleName>			Contact middle name			



Steel Industry XML Project Phase 0001 (Proposal) Overview

Data Element	XML Tag	Attribute	Class - Referenced	Definition	Table Agny	ANSI Table	ANSI Table
Name - Prefix	<PrefixName>			Contact name prefix			
Name - Suffix	<SuffixName>			Contact name suffix (Jr, etc.)			
Note	<Desc>			Notes or special instructions. Data should be transmitted via appropriate machine processable segments. If the NTE segment is used, it should be placed immediately following the beginning segment for each transaction for header notes.	AX	352	
Note Reference Code	<NoteRefCode>		Code	Qualify note function.	AX	363	
OD (Outside Diameter)	<OutsideDiam>		Measurement	The outside diameter of a coil.			
Oil - Edges / ID / OD	<Oiling>			Oil edges, id/od. Lubrication	ST		18C
Order Item Code	<OrderItemCode>		Code	A code identifying a group of orders and items (i.e. 'PP' selected orders)	AX	847	
Order Status	<StatCode>	Order	Code	Code indicating the status of a order.	AX	368	
Outside Processor	<Partner>	Processor	Organization	The outside processing facility.			
Packaging Code	<PackagingCode>		Code	Packaging Code	AX	103	
Packaging Description	<PackagingDescCode>		Code	Packaging information including standard packaging descriptions and instructions.	AX	754	
Payment Method Code	<PaymentMethodCode>		Code	Payment method code.	AX	107	
Payment Terms	<PaymentTerms>		Code	The credit terms for paying the issuer's invoice.	ST		60
Percent of Invoice Payable	<PctInvoicePayable>			The percent of the invoice payable.			
Planning Schedule Type	<PlanningSchTypeCode>		Code	Code identifying the type of planning schedule used.	AX	783	
Postal Code	<PostalCode>			Zip Code or Postal Code	AX	116	
Pre-Painted / - Organic	<OrganicCoat>			Organic coating requirement.	ST		17H
Pre-Painted / - Pretreatment	<Pretreat>			Pretreatment coating requirement	ST		17E
Pre-Painted / - Primer	<Primer>			Primer coating requirement.	ST		17F
Pre-Painted / - Topcoat	<Topcoat>			Topcoat coating requirement	ST		17G
Price	<UnitPrice>			The expected or actual price for processing, by component (i.e. base price, small coil extra, etc.)	AX	212	



Steel Industry XML Project Phase 0001 (Proposal) Overview

Data Element	XML Tag	Attribute	Class - Referenced	Definition	Table Agny	ANSI Table	AISI Table
Price Identifier Code	<PriceIdCode>		Code	Price identifier code. Code identifying the pricing specification.	AX	236	
Price Multiplier Qualifier	<PriceMultiplier>		Code	Price multiplier qualifier	AX	648	
Price Unit of Measure	<PriceUnitOfMeas>		Code	The pricing unit of measure for which the invoice amount was or is to be derived.	ST		24
Pricing Unit	<PriceUnit>		Code	The associated pricing unit (i.e. CWT, ton, HR, etc.) for each price component	ST		62
Process Code	<Process>		Code	Each process to be performed by the processor is identified by a process code from industry table 66. If multiple processes are to be performed, then multiple process codes are assigned to the work order and are listed in the expected sequence.	ST		66
Process Date	<TimeStamp>	Process	Date/Time	Process date/time.			
Product Characteristic Code	<ProdCharCode>		Code	Product/Process characteristic code.	ST		8
Product Description	<ProdDesc>			Free-form description of the product			
Product Description Code	<ProdDescCode>		Code	Data element 751 Product characteristic from Industry code list	AX	751	
Product Form	<ProdForm>		Code	Product form			
Product Requirements	<ProdRequirements>			Product requirements	ST		32A
Product Service ID	<ProdServiceID>		Code	Code identifying the type of product or service.	AX	235	
Product/Item Desc - Chemical Coating (Level 2)	<ChemCoat2>			Level 2 Chemical Coating requirements			
Product/Item Description - Mill Grade (Level 2)	<Grade2>			Level 2 Grade			
Product/Item Description - Oiling (Level 2)	<Oiling2>			Level 2 Oiling			
Product/Item Description - Product (Level 2)	<ProdCode2>			Level 2 product description			
Production Unit	<Facility>		Code	Code to identify production unit			
Promise Date	<TimeStamp>	Promise	Date/Time	Date the product is promised			



Steel Industry XML Project Phase 0001 (Proposal) Overview

Data Element	XML Tag	Attribute	Class - Referenced	Definition	Table Agny	ANSI Table	AISI Table
Purchase Order Date	<TimeStamp>	PurchaseOrder	Date Time	PO Date	AX	323	
Purchase Order Item Number	<PurchaseOrderItem>			Purchase Order item number			
Purchase Order Type Code	<PurchaseOrderTypeCode>		Code	Purchase order type code	AX	92	
Quality	<Quality>		Code	Quality code.	ST		13
Quantity	<Qty>		Measurement	Quantity or material. The type of quantity and UOM are reported in related measurement elements.	AX	380	
Quantity Invoiced	<QtyInvoiced>		Measurement	Quantity invoiced	AX	358	
Quantity Ordered	<QtyOrder>		Measurement	Ordered quantity			
Quotation Date	<TimeStamp>	Quotation	Date Time	Quotation date.			
Rail Car Owner	<Partner>	RailCarOwner	Organization	Rail Car Owner			
Range Maximum	<RangeMax>			One of the components of the measurement entity - the maximum range value associated with a measurement.	AX	741	
Range Minimum	<RangeMin>			One of the components of the measurement entity - the minimum range value associated with a measurement.	AX	740	
Rate	<Rate>			Rate	AX	118	
Reference Number	<RefId>			A unique identifying number for each transaction. Content varies with document type.	AX	127	
Release Create Date	<TimeStamp>	ReleaseCreate	Date Time	Date a material release was created.			
Release End Date	<TimeStamp>	ReleaseEnd	Date Time	Ending date for material release schedule.			
Release Number	<RelNum>			The release number against the purchase order. Could refer to either the Customer Release Number or the Mill Release Number.	AX	328	
Release Start Date	<TimeStamp>	ReleaseStart	Date Time	Starting date for material release schedule.			
Report Transmission Code	<ReportTransmissionCode>		Code	Code defining the timing, transmission method or format by which reports are to be sent.	AX	756	
Report Type Code	<ReportTypeCode>		Code	Code indicating the title or contents of a document, report, or supporting item.	AX	755	



Steel Industry XML Project Phase 0001 (Proposal) Overview

Data Element	XML Tag	Attribute	Class - Referenced	Definition	Table Agny	ANSI Table	AISI Table
Requested Ship Date	<TimeStamp>	RequestShip	Date/Time				
Requested Ship Weight	<RequestShipWeight>		Measurement	Shipping schedule weight			
Responsible Agency Code	<ResponsibleAgencyCode>		Code	Agency which owns/issues the XML standard (AISI = 'ST')	AX	455	
Returnable Container	<ReturnContainer>			The identity of the container in which parts or pieces are shipped.			
Revised Promise Date	<TimeStamp>	RevPromise	Date/Time	The revised promise date			
Routing	<Routing>			Routing instructions for material transfers from the processor to a specified 'ship-to'.	AX	387	
Routing Sequence Code	<RoutingSeqCode>		Code	Shipment routing sequence code.	AX	133	
Sample Description Code	<SampleDescCode>		Code	Sample description		943	
Sample Direction	<SampleDirectionCode>		Code	Code specifying the direction in which the sample was collected or tested.	AX	944	
Sample Frequency	<SampleFreq>		Code	Code for test sample frequency		942	
Sample Location	<SampleLoc>			Code specifying the location, within the specimen, from the sample was taken.	AX		
Sample Population	<SamplePopulation>			Sample population			
Sample Position Code	<SamplePosCode>		Code	Sample position code.		945	
Sample Process Status Code	<SampleProcessStatCode>		Code	Code specifying the stage in the product development cycle at which the specimen was selected for testing.	AX	939	
Sample Selection Method	<SampleSelMethod>		Code	Sample method.		940	
Sample Size	<SampleSize>			Sample size			
Sample Subgroup	<SampleSubGrp>			Sample subgroup			
SCAC	<StdCarrierAlphaCode>		Code	Standard Carrier Alpha Code- The carrier code assigned to the trucking company moving material.	AX,ST	140	71
Scale Indicator	<ScaleInd>		Measurement	Indicator denoting that material has been scale weighed			
Schedule Quantity Qualifier	<SchQtyQual>		Code	Type of quantities used for defining a schedule or forecast	AX	676	



Steel Industry XML Project Phase 0001 (Proposal) Overview

Data Element	XML Tag	Attribute	Class - Referenced	Definition	Table Agny	ANSI Table	AISI Table
Schedule Type	<SchType>		Code	Code identifying the type of dates used when defining a shipping or delivery time in a schedule or forecast.	AX	675	
Security Information	<SecurityInfo>			Security information, password	AX	104	
Security Information Qualifier	<SecurityInfoQual>		Code	Security information qualifier	AX	103	
Sequence	<ProcessSequence>			The sequence of the production (last, next, cnt)			
Ship Mode	<ShipMode>		Code	Indicates the ship mode to be used (i.e. barge, rail, truck, etc.).	ST		26
Ship/Delivery or Calendar Pattern	<ShipDeliveryOrCalendarPatternCode>		Code	Code which specifies the routine shipments, deliveries, or calendar pattern.	AX	678	
Ship/Delivery Pattern TimeCode	<ShipDeliveryPatternTimeCode>		Code	Code which specifies the time for routine shipments or deliveries.	AX	679	
Ship-from	<Partner>	ShipFrom	Organization	Ship-From address			
Shipment Method of Payment	<ShipMethodOfPayment>		Code	Code identifying freight method of payment. Transportation liability.	AX,ST	146	59
Shipment Nature	<ShipQual>		Code	Shipment nature, shipment qualifier.	AX,ST	147	63
Shipment Status	<StatCode>	Shipment	Code	Code indicating the status of a shipment.	AX	157	
Shipment Timestamp	<TimeStamp>	Shipment	Date Time	Shipment date & Time.			
Shipped Quantity	<ShipQty>		Measurement	shipment quantity			
Shipper Number (SID)	<ShipId>			The shipment identification number as assigned by the metal producer. Ship notice or manifest number.	AX	396	
Ship-to	<Partner>	ShipTo	Organization	The 'ship-to' name and address of the next destination or the customer receiving point.			
Slitting, Splitting, Cutting	<SlitSplitCut>		Code	Slitting, splitting, cutting requirements.	ST		20A
Sold-to	<Partner>	SoldTo	Organization	The 'sold-to' name and address			
Solidification	<Solidification>			Solidification	ST		12D
Specification Number	<Spec>			Specification number			
State or Province Code	<StateOrProvinceCode>		Code	State code, province code	AX	156	
Status - Commercial	<Status>	Commercial	Code	The commercial status code for the material. Assigned from AISI industry table 69.	ST		69



Steel Industry XML Project Phase 0001 (Proposal) Overview

Data Element	XML Tag	Attribute	Class - Referenced	Definition	Table Agny	ANSI Table	AISI Table
Status - Metallurgical	<Status>	Metallurgical	Code	Metallurgical status code	ST		68
Status - OP	<Status>	Processor	Code	The outside processor status code for the material. Assigned from AISI industry table 70.	ST		70
Status Date - Commercial	<TimeStamp>	Commercial	Date Time	The date the current commercial status code was assigned.			
Status Date - Metallurgical	<TimeStamp>	Metallurgical	Date Time	Date of metallurgical status assignment			
Status Date - OP	<TimeStamp>	Processor	Date Time	The date the current outside processor status value was assigned.			
Status Report Code	<StatReportCode>		Code	Status report code (?)	AX	850	
Steel Melting	<Melting>			Steel melting	ST		12A
Sub-Lot Number	<SubLotNum>			Sub-Lot Number			
Sub-Product	<SubProdCode>			Sub product			
Sub-Product, Surface Application	<SubProdSurface>			Sub product surface application	ST		9C
Substrate Thickness Level 2	<ThkLevel2>			Incoming substrate thickness level 2			
Substrate Width Level 2	<WithLevel2>			Incoming substrate width level 2			
Supplier/Manufacturer	<Partner>	Supplier	Organization	The base metal supplier or manufacturer of goods.			
Surface Layer/Position Code	<SurfaceLayerPosCode>		Code	Code indicating the product surface, layer, or position being described	AX	752	
Table Number	<TableNum>			An industry or agency table number which houses code values for data element.			
Tax Exempt Code	<TaxExemptCode>		Code	Tax exemption code assigned by purchaser.	AX	441	
Tax ID Number	<TaxIdNum>			Tax ID assigned by purchaser.	AX	325	
Temper	<Temper>			Temper	ST		16
Temper Parameters Level 2	<TemperLevel2>			Temper parameters level 2			
Terms Basis Date Code	<TermsBasisDateCode>		Code	Terms basis date code	AX	333	
Terms Deferred Due Date	<TimeStamp>	TermsDeferred Due	Date Time	Terms Deferred Due Date	AX	388	
Terms Discount Amount	<TermsDiscountAmt>			Terms discount amount	AX	362	



Steel Industry XML Project Phase 0001 (Proposal) Overview

Data Element	XML Tag	Attribute	Class - Referenced	Definition	Table Agny	ANSI Table	AISI Table
Terms Discount Days Due	<TermsDiscountDaysDue>		Code	Terms discount days due	AX	351	
Terms Discount Due Date	<TimeStamp>	TermsDiscountDue	Date Time	Terms discount due date	AX	370	
Terms Discount Percent	<TermsDiscountPct>		Code	Terms discount percent	AX	338	
Terms Net Days	<TermsNetDays>			Terms net days	AX	386	
Terms Net Due Date	<TimeStamp>	TermsNetDue	Date Time	Terms net due date	AX	446	
Terms Type Code	<TermsTypeCode>		Code	Terms type code	AX	336	
Test Class	<TestClass>		Code	General classification of test (physical, etc.)			
Test Date	<TimeStamp>		Date Time	Date test was taken			
Test Identification Number	<TestId>	Test		Test ID Number			
Test Indicator	<Usagelnd>		Code	Indicator to describe usage of message (normally test vs. production)	AX	I14	
Test Report Receiver	<Partner>	TestReceiver	Organization	Receiver of the Test Report			
Test Result	<TestResult>			Test results			
Test Type	<TestTypeCode>		Code	Required test type code	ST	1607	32
Testing Agency	<Partner>	TestAgency	Organization	Outside company which performs testing for a manufacturer			
Testing Equipment Number	<TestEquipment>			Identification number for testing equipment			
Thickness	<Thk>		Measurement	Gauge or thickness of material. Type and uom for thickness are noted in related 'measurement' data elements.			
Third Party Purchase Order Number	<PurchaseOrderNum>	ThirdPartyPurchaseOrderNum		Third Party Purchase Order Number	AX	324	
Time	<Time>			Time expressed in 24-hour clock time as HHMM or HHMMSS.	AX	337	
Time Code	<TimeCode>		Code	Code identifying the time. Per ISO, may be expressed as time zone or by + or - in hours relative to UTC.	AX	623	
Title	<Title>			Contact title			
TMW Factor	<TmwFactor>			The factor used by a processor to calculate the theoretical weight of material.			
TMW Formula	<TmwFormula>		Code	The formula to be used to calculate theoretical weight.	ST		74



Steel Industry XML Project Phase 0001 (Proposal) Overview

Data Element	XML Tag	Attribute	Class - Referenced	Definition	Table Agny	ANSI Table	ANSI Table
Total Ordered Price	<OrdPrice>			Order price			
Transaction Date/Time	<TimeStamp>	Transaction	Date/Time	Transaction control date	AX	374	
Transaction Set Control Number	<TranSetControlNum>			Transaction set control number - individual document level	AX	329	
Transaction Set Purpose	<TranSetPurposeCode>		Code	Code identifying purpose of transaction set (original,change, etc.)	AX	353	
Unit Load Option Code	<UnitLoadOptionCode>		Code	Code identifying loading or unloading a shipment	AX	400	
Unit or Basis of Measurement	<UnitOrBasisForMeasCode>		Code	Unit of measure or basis, code specifying the units in which a value is being expressed	AX	355	
Vehicle Identity	<VehicleIdNum>			Vehicle identification number	AX	539	
Vendor	<Partner>	Vendor	Organization	Vendor name, address			
Vendor Order Item	<VendorOrderItem>			Vendor order item number			
Vendor Order Number	<VendorOrderNum>			Vendor order number	AX	424	
Vendor Part Number	<VendorPartNum>			Vendor part number.			
Vendor Purchase Order Date	<TimeStamp>	Vendor	Date/Time	Vendor's purchase order date			
Vendor Purchase Order Revision Number	<VendorOrderRevision>			Vendor purchase order revision number.			
Vendor Release Number	<VendorRelNum>			Vendor purchase order release number.			
Version Number	<VersionNum>			Industry standard version number			
Warehouse	<Partner>	Warehouse	Organization	The warehouse or storage facility at which material is being stored.			
Weight	<Weight>		Measurement	The weight of the material. The type of weight (actual, TMW, etc.) and unit of measure are expressed in the related 'Measurement' data elements.	AX	81	
Weight Shipped	<ShipWeight>		Measurement	Total shipment weight.			
Welding	<Weid>			Weld acceptability.	ST		23A
Width	<Width>		Measurement	The width of the material. The type of width and uom are reported in the related 'measurement' data elements.	AX	189	



Steel Industry XML Project Phase 0001 (Proposal) Overview

Data Element	XML Tag	Attribute	Class - Referenced	Definition	Table Agny	ANSI Table	AISI Table
Winding / Surface Orientation	<Winding>		Code	Winding/piling of surface	ST		20B
Work Order Change	<WorkOrderRevision>			Work order revision number used for control purposes. Not used in the 850 -Purchase Order transaction. P.O revision number.			
Work Order Change Date	<TimeStamp>	WorkOrderChange	Date Time	Each work order revision is assigned a revision date and time. Not used in the 850 -Purchase Order transaction.			
Work Order Date	<TimeStamp>	WorkOrder	Date Time	Date the work order was issued to the supplier			
Work Order Number	<WorkOrderNum>			A unique number that identifies the record containing ship to or end use information and processing instructions. A work order may be issued each time a processor is requested to process material for a "dressed" sales order. Some Metals Producers also require a "blanket" purchase order which is issued for the processor each year (Blanket Work Order). May be referred to as a "Work Sheet Number" for spot orders. Expresses a contractual obligation to processor. See preface of 850 transaction for more detailed usage.			
Work Order Release	<WorkOrderRelNum>			A release issued against a work order.			



FAQ

1. How do I reference a Code Field?

A Code field is used to define a value in a table. In the classcommon.dtd the field UnitOrBasisForMeasCode is defined as `<!ELEMENT UnitOrBasisForMeasCode (%Code;)>`. When implemented in an xml document it would appear as follows:

```
<UnitOrBasisForMeasCode>
  <AgencyQualCode>AX</AgencyQualCode>
  <TableNum>355</TableNum>
  <CodeValue>LB</CodeValue>
  <Desc>POUNDS</Desc>
</UnitOrBasisForMeasCode>
```

[See Code in the Noteworthy Classes for further definition.](#)

2. How do I reference a Measurement Field?

A measurement field is used to specify physical measurements or counts. In the classcommon.dtd the field Len is defined as `<!ELEMENT Len (%Measurement;)>`. When implemented in an xml document it would appear as follows:

```
<Len>
  <MeasValue>5865</MeasValue>
  <UnitOrBasisForMeasCode>
    <AgencyQualCode>ST</AgencyQualCode>
    <TableNum>24</TableNum>
    <CodeValue>12</CodeValue>
    <Desc>LINEAL FEET</Desc>
  </UnitOrBasisForMeasCode>
</Len>
```

[See Measurement in the Noteworthy Classes for further definition.](#)

3. How do I reference a Partner Field?

A partner is used to define an organization, and contacts within that organization. There is an attribute called partnertype that can be used to define the type of organization. See the Partner definition in the Overview document for a full list of the available attributes.

When implemented in an xml document, it would appear as follows:

```
<Partner PartnerType="Supplier">
  <Name>Parent Company ABCD</Name>
  <IdCodeQual>
    <Desc>D-U-N-S Number</Desc>
  </IdCodeQual>
  <IdCode>987654321</IdCode>
  <Addr1>1 Parent Company Street</Addr1>
  <Addr2>Building 1A</Addr2>
  <CityName>Parent Town</CityName>
  <StateOrProvinceCode>
    <Desc>Parent State</Desc>
```



```
</StateOrProvinceCode>
<PostalCode>45678</PostalCode>
<CountryCode>
  <Desc>USA</Desc>
</CountryCode>
<ContactFunctionCode>
  <Desc>Accounts Payable Department</Desc>
</ContactFunctionCode>
<PrefixName>Mr</PrefixName>
<FirstName>George</FirstName>
<LastName>Jones</LastName>
<Title>Manager</Title>
<PhoneNum>000-000-0000</PhoneNum>
<Extension>0000</Extension>
<FaxNum>111-111-1111</FaxNum>
<EmailAddress>GJones@parentco.com</EmailAddress>
</Partner>
```

[See Partner in the Noteworthy Classes for further definition.](#)

4. What is the difference between an Attribute and an Element?

Attributes are name/value pairs that are associated with an element. An element in xml is a tag (ex. <FaxNum>).

5. Attribute vs. Element?

Attributes were used where a list was involved. There are only a couple of places that attributes are used: in Partner to define what type of partner is being defined, in StatusInfo to define what type of status is being communicated and in TimeStamp to define what type of time is being sent.

6. How can I make this easy – No Codes?

To allow for flexibility and ease of use, when referring to an element that has been redefined as a %Code, none of the elements are required. This will allow the user to refer to information on a table by using the AgencyQualCode, TableNum and CodeValue, or allow the user to send only the English description in the element Desc.

7. What are the “?”, “*”, “+” symbols in the DTD’s?

The “?” means that the previous element can occur 0 or 1 time in the resulting XML document.

The “*” means that the previous element can occur 0 to n times in the resulting XML document.

The “+” means that the previous element can occur 1 to n times in the resulting XML document.

If there is no symbol following an element, it must occur exactly 1 time in the resulting XML document.



Appendices