

830 Planning Schedule with Release Capability

Functional Group ID=**PS**

Introduction:

This ANSI X.12 Version 004010 Standard contains the format and establishes the data contents of the Planning Schedule with Release Capability Transaction Set (830) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used to provide for customary and established business practice relative to the transfer of forecasting/material release information between organizations. The planning schedule transaction may be used in various ways or in a combination of ways, such as: (1) a simple forecast; (2) a forecast with the buyer's authorization for the seller to commit to resources, such as labor or material; (3) a forecast that is also used as an order release mechanism, containing such elements as resource authorizations, period-to-date cumulative quantities, and specific ship/delivery patterns for requirements that have been represented in "buckets," such as weekly, monthly, or quarterly.

Heading:

	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max.Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
M	010	ST	Transaction Set Header	M	1		
M	020	BFR	Beginning Segment for Planning Schedule	M	1		
			LOOP ID - N1			200	
M	230	N1	Name	M	1		

Detail:

	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max.Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
			LOOP ID - LIN			>1	
M	010	LIN	Item Identification	M	1		
M	020	UIT	Unit Detail	M	1		
	130	PRS	Part Release Status	O	1		
	140	REF	Reference Identification	O	12		
	150	PER	Administrative Communications Contact	O	3		
	230	ATH	Resource Authorization	O	20		
			LOOP ID - SDP			260	
	450	SDP	Ship/Delivery Pattern	O	1		
	460	FST	Forecast Schedule	O	260		
			LOOP ID - SHP			25	
	470	SHP	Shipped/Received Information	O	1		
	480	REF	Reference Identification	O	5		

Summary:

	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max.Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
	010	CTT	Transaction Totals	O	1		n1
M	020	SE	Transaction Set Trailer	M	1		

Transaction Set Notes

1. Number of line items (CTT01) is the accumulation of the number of LIN segments. If used, hash total (CTT02) is the sum of the values of the quantities (FST01) for each FST segment.

Segment: **ST** Transaction Set Header
Position: 010
Loop:
Level: Heading
Usage: Mandatory
Max Use: 1
Purpose: To indicate the start of a transaction set and to assign a control number
Syntax Notes:
Semantic Notes: 1 The transaction set identifier (ST01) is used by the translation routines of the interchange partners to select the appropriate transaction set definition (e.g., 810 selects the Invoice Transaction Set).
Comments:

Data Element Summary				
	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	ST01	143	Transaction Set Identifier Code Code uniquely identifying a Transaction Set 830 Transaction Set	M ID 3/3
			Refer to 004010 Data Element Dictionary for acceptable code values.	
M	ST02	329	Transaction Set Control Number Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set Number Assigned by Sender	M AN 4/9

Segment:	BFR Beginning Segment for Planning Schedule
Position:	020
Loop:	
Level:	Heading
Usage:	Mandatory
Max Use:	1
Purpose:	To indicate the beginning of a planning schedule transaction set; whether a ship or delivery based forecast; and related forecast envelope dates
Syntax Notes:	1 At least one of BFR02 or BFR03 is required.
Semantic Notes:	1 If BFR01 contains the value "04" (Net Change), BFR09 is required. 2 BFR02 is the identifying number for a forecast assigned by the orderer/purchaser. 3 BFR06 is the forecast horizon start date: The date when the forecast horizon (envelope) begins. 4 BFR07 is the forecast horizon end date: The date when the forecast horizon (envelope) ends. 5 BFR08 is the date forecast generated: The date the forecast data was generated. 6 BFR09 is the date forecast updated: The date the forecast was updated with "net change" data. (Used only when data element 353 in BFR01 contains the value "04", meaning net change.)
Comments:	
Notes:	BOSCH Purpose: Indicate to Supplier that this is a "Replacement Document" which supercedes previously issued material releases, is "Delivery Based" and contains forecast quantities which are "Discrete".

Data Element Summary				
	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	BFR01	353	Transaction Set Purpose Code Code identifying purpose of transaction set Always "05" indicating a "Replacement Document" Refer to 004010 Data Element Dictionary for acceptable code values.	M ID 2/2
M	BFR03	328	Release Number Number identifying a release against a Purchase Order previously placed by the parties involved in the transaction A constructed value in the format of CCYYWW used to identify this weekly cycle of the material release process.	M AN 1/30
M	BFR04	675	Schedule Type Qualifier Code identifying the type of dates used when defining a shipping or delivery time in a schedule or forecast Always "DL" indicating a "Delivery Based" schedule. Refer to 004010 Data Element Dictionary for acceptable code values.	M ID 2/2
M	BFR05	676	Schedule Quantity Qualifier Code identifying the type of quantities used when defining a schedule or forecast Always "A" indicating "Discrete" forecast quantities. Refer to 004010 Data Element Dictionary for acceptable code values.	M ID 1/1
M	BFR06	373	Date Date expressed as CCYYMMDD "Forecast Horizon Start Date" on the first FST segment in this material release.	M DT 8/8
	BFR07	373	Date Date expressed as CCYYMMDD "Forecast Horizon End Date" on the last FST segment in this material release.	O DT 8/8
M	BFR08	373	Date Date expressed as CCYYMMDD Date when this material release was "Created".	M DT 8/8

Segment: **N1** Name
Position: 230
Loop: N1 Mandatory
Level: Heading
Usage: Mandatory
Max Use: 1
Purpose: To identify a party by type of organization, name, and code
Syntax Notes: 1 At least one of N102 or N103 is required.
2 If either N103 or N104 is present, then the other is required.
Semantic Notes:
Comments: 1 This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.
2 N105 and N106 further define the type of entity in N101.
Notes: BOSCH Purpose: Provide one N1 segment identifying the Bosch Plant issuing the material release, one N1 segment to identifying the Supplier receiving the material release, and one N1 segment to identifying the Ship-to location of the material release.

Data Element Summary			
Ref.	Data	Name	Attributes
Des.	Element		
M	N101	98 Entity Identifier Code	M ID 2/3
		Code identifying an organizational entity, a physical location, property or an individual	
		"MI" indicates a Bosch Plant	
		"SU" indicates a Supplier	
		"ST" indicates a Ship-to Bosch Plant	
		Refer to 004010 Data Element Dictionary for acceptable code values.	
N102	93	Name	X AN 1/60
		Free-form name	
		Name of Bosch Plant or Supplier as indicated in N101	
		CHANGE: was type "AN" 1/35.	
N103	66	Identification Code Qualifier	X ID 1/2
		Code designating the system/method of code structure used for Identification Code (67)	
		Always "1" for DUNS Number. Note: DUNS Numbers for most Bosch plants contain a suffix character of "S".	
		Refer to 004010 Data Element Dictionary for acceptable code values.	
N104	67	Identification Code	X AN 2/80
		Code identifying a party or other code	
		DUNS Number of entity indicated in N101. When N101 is a value of "MI" or "ST", the DUNS Number indicates a specific Bosch Plant as follows:	
		BJKC is 199201120S	
		Clarksville is 603548645S	
		Gallatin is 131052888S	
		Johnson City is 098070360S	
		San Louis Potosi is 820046613S	
		St. Joseph is 141261651S	
		Sumter is 024844094S	
		Albion is 809500267	
		Anderson is 144845757	
		Appian Way is 188243620	
		Charleston is 065055766	
		El Paso is 133272877	
		Juarez is 811963602	

Toluca	is 810248898
Laredo	is 049008055
Aguascalientes	is 812047470

Segment:	LIN	Item Identification
Position:	010	
Loop:	LIN	Mandatory
Level:	Detail	
Usage:	Mandatory	
Max Use:	1	
Purpose:	To specify basic item identification data	
Syntax Notes:	1 If either LIN04 or LIN05 is present, then the other is required. 2 If either LIN06 or LIN07 is present, then the other is required. 3 If either LIN08 or LIN09 is present, then the other is required. 4 If either LIN10 or LIN11 is present, then the other is required. 5 If either LIN12 or LIN13 is present, then the other is required. 6 If either LIN14 or LIN15 is present, then the other is required. 7 If either LIN16 or LIN17 is present, then the other is required. 8 If either LIN18 or LIN19 is present, then the other is required. 9 If either LIN20 or LIN21 is present, then the other is required. 10 If either LIN22 or LIN23 is present, then the other is required. 11 If either LIN24 or LIN25 is present, then the other is required. 12 If either LIN26 or LIN27 is present, then the other is required. 13 If either LIN28 or LIN29 is present, then the other is required. 14 If either LIN30 or LIN31 is present, then the other is required.	
Semantic Notes:	1 LIN01 is the line item identification	
Comments:	1 See the Data Dictionary for a complete list of IDs. 2 LIN02 through LIN31 provide for fifteen different product/service IDs for each item. For example: Case, Color, Drawing No., U.P.C. No., ISBN No., Model No., or SKU.	
Notes:	BOSCH Purpose: Indicates to the Supplier the Bosch Part Number and Scheduling Agreement covered by this material release.	

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	LIN02	235	Product/Service ID Qualifier Code identifying the type/source of the descriptive number used in Product/Service ID (234) Always "BP" indicating a buyer(Bosch) part number. Refer to 004010 Data Element Dictionary for acceptable code values.	M ID 2/2
M	LIN03	234	Product/Service ID Identifying number for a product or service Buyer's(Bosch) part number.	M AN 1/48
	LIN06	235	Product/Service ID Qualifier Code identifying the type/source of the descriptive number used in Product/Service ID (234) "DR" indicating a Bosch Drawing Revision number. Refer to 004010 Data Element Dictionary for acceptable code values.	X ID 2/2
	LIN07	234	Product/Service ID Identifying number for a product or service Bosch Drawing Revision number.	X AN 1/48
	LIN08	235	Product/Service ID Qualifier Code identifying the type/source of the descriptive number used in Product/Service ID (234) Always "PO" indicating a Bosch Scheduling Agreement number. Refer to 004010 Data Element Dictionary for acceptable code values.	X ID 2/2
	LIN09	234	Product/Service ID Identifying number for a product or service	X AN 1/48

Bosch Scheduling Agreement number.

Segment:	UIT Unit Detail
Position:	020
Loop:	LIN Mandatory
Level:	Detail
Usage:	Mandatory
Max Use:	1
Purpose:	To specify item unit data
Syntax Notes:	1 If UIT03 is present, then UIT02 is required.
Semantic Notes:	
Comments:	
Notes:	BOSCH Purpose: Indicate to Supplier the unit of measure used when forecasting quantities.

Data Element Summary				
	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	UIT01	C001	Composite Unit of Measure	M
			To identify a composite unit of measure (See Figures Appendix for examples of use)	
			"PC" for a sales unit of "Pieces".	
			"EA" for a sales unit of "Each".	
M	C00101	355	Unit or Basis for Measurement Code	M ID 2/2
			Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken	
			Refer to 004010 Data Element Dictionary for acceptable code values.	

Segment: **PRS** Part Release Status
Position: 130
Loop: LIN Mandatory
Level: Detail
Usage: Optional
Max Use: 1
Purpose: To indicate the status of the part being ordered or forecast with respect to this material release or planning document

Syntax Notes:
Semantic Notes:
Comments:

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	PRS01	682	Part Release Status Code	M ID 1/2
Code identifying the status of the specific part number being released or forecast or being used in an engineering change Refer to 004010 Data Element Dictionary for acceptable code values.				

Segment: **REF** **Reference Identification**
Position: 140
Loop: LIN Mandatory
Level: Detail
Usage: Optional
Max Use: 12
Purpose: To specify identifying information
Syntax Notes:

- 1 At least one of REF02 or REF03 is required.
- 2 If either C04003 or C04004 is present, then the other is required.
- 3 If either C04005 or C04006 is present, then the other is required.

Semantic Notes:

- 1 REF04 contains data relating to the value cited in REF02.

Comments:

Data Element Summary				
	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification	
			"DK" indicating a Bosch Dock Code.	
			Refer to 004010 Data Element Dictionary for acceptable code values.	
	REF02	127	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	
			Bosch Dock Code Location.	

Segment:	PER Administrative Communications Contact
Position:	150
Loop:	LIN Mandatory
Level:	Detail
Usage:	Optional
Max Use:	3
Purpose:	To identify a person or office to whom administrative communications should be directed
Syntax Notes:	1 If either PER03 or PER04 is present, then the other is required. 2 If either PER05 or PER06 is present, then the other is required. 3 If either PER07 or PER08 is present, then the other is required.
Semantic Notes:	
Comments:	
Notes:	BOSCH Purpose: Provide Supplier with identity of a Bosch Department or Person to contact regarding this material release.

Data Element Summary				
	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	PER01	366	Contact Function Code	M ID 2/2
			Code identifying the major duty or responsibility of the person or group named "BD" indicates that the PER segment identifies a "Department" as the contact. "EX" indicates that the PER segment identifies a "Person" as the contact. Refer to 004010 Data Element Dictionary for acceptable code values.	
	PER02	93	Name	O AN 1/60
			Free-form name Department or Person as indicated by PER01.	
	PER03	365	Communication Number Qualifier	X ID 2/2
			Code identifying the type of communication number Used only when contact indicated in PER01 is a person. Then always "TE" to indicate telephone number. Refer to 004010 Data Element Dictionary for acceptable code values.	
	PER04	364	Communication Number	X AN 1/80
			Complete communications number including country or area code when applicable Used only when contact indicated in PER01 is a person. Then value is the telephone number of the contact person.	

Segment: **ATH** Resource Authorization
Position: 230
Loop: LIN Mandatory
Level: Detail
Usage: Optional
Max Use: 20
Purpose: To specify resource authorizations (i.e., finished labor, material, etc.) in the planning schedule

Syntax Notes:
1 At least one of ATH02 or ATH03 is required.
2 If ATH03 is present, then ATH05 is required.
3 If ATH04 is present, then ATH05 is required.

Semantic Notes:
1 ATH02 is the resource authorization through date: The date through which the buyer authorizes the seller to commit the resource defined in element ATH01.
2 ATH03 is the current cumulative requirements quantity: The cumulative quantity that has been authorized to date from the cumulative start date (ATH05) through the resource authorization through date (ATH02).
3 ATH05 is the cumulative start date: The date where the cumulative quantity count starts. This date might be the start date of a contract period, a calendar or fiscal year, or other.

Comments:
1 It is imperative that negotiations defining financial commitment have previously occurred and are agreed to by both buyer and seller.
2 ATH04 is the maximum cumulative requirements quantity: The maximum cumulative quantity that has been authorized to date from the cumulative start date (ATH05) through the resource authorization through date (ATH02). This is a high water mark. If the forecast decreases, the current cumulative requirements quantity also decreases, but the maximum cumulative requirements quantity does not decrease.

Notes: BOSCH Purpose: Indicate to Supplier, using cumulative quantities, current authorization for fabrication and raw material purchases for this part and required delivery of this part to the Bosch Plant issuing this release.

Data Element Summary

Ref.	Data	Name	Attributes
Des.	Element		
M	ATH01	672 Resource Authorization Code	M ID 2/2
		Code identifying the resource which the buyer is authorizing the seller to commit to	
		"PQ" indicates "Cumulative Quantity Required" at the issuing Bosch plant prior to the date (FST04) on the first FST segment included in this material release.	
		"FI" indicates "Cumulative Fabrication Quantity Authorized" or "Finished Goods" depending on the Bosch plant. "Cumulative Fabrication Quantity Authorized" by the issuing Bosch plant calculated by adding quantities in the first five (5) FST segments of this material release to the quantity located in the ATH segment qualified by "PQ".	
		"MT" indicates "Cumulative Raw Material Quantity Authorized" or "Material" depending on the Bosch plant. "Cumulative Raw Material Quantity Authorized" by the issuing Bosch plant calculated by adding quantities in the first nine (9) FST segments of this material release to quantity located in the ATH segment that is qualified by "PQ".	
		Refer to 004010 Data Element Dictionary for acceptable code values.	
	ATH02	373 Date	X DT 8/8
		Date expressed as CCYYMMDD	
		The Monday date of the first week forecasted by this material release which is the "Forecast Horizon" start date or the Date through which "FI" and "MT" cum.	
	ATH03	380 Quantity	X R 1/15

ATH05	373	Numeric value of quantity	
		The "Cumulative Quantity" as indicated by the qualifier located in ATH01.	
		Date	X DT 8/8
		Date expressed as CCYYMMDD	
		Date indicates the start date for cumulative quantities located in ATH03 and is the date that the scheduling agreement covering this part number became valid.	

Segment:	SDP	Ship/Delivery Pattern
Position:	450	
Loop:	SDP	Optional
Level:	Detail	
Usage:	Optional	
Max Use:	1	
Purpose:	To identify specific ship/delivery requirements	
Syntax Notes:		
Semantic Notes:		
Comments:	<p>1 The intent of this segment is to define the routine ship or delivery patterns, as required, when order quantities are in "buckets", such as weekly, monthly. Ship/delivery patterns eliminate the need to transmit discrete quantities and dates for each required shipment or delivery. It is assumed that a "bucketed" quantity is to be divided equally by the ship/delivery pattern. For example, a weekly quantity of 100 with a delivery pattern of Monday and Wednesday would result in 50 to be delivered on Monday and 50 to be delivered on Wednesday.</p>	
Notes:	BOSCH Purpose: Indicate to Supplier that for this material release the delivery pattern is "Monday to Friday" or the timing is "As Directed".	

Data Element Summary				
	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	SDP01	678	Ship/Delivery or Calendar Pattern Code	M ID 1/2
			Code which specifies the routine shipments, deliveries, or calendar pattern	
			"A" indicating Shipment/Delivery Pattern of "Monday to Friday".	
			"N" indicating Shipment/Delivery Timing of "As Directed".	
			Refer to 004010 Data Element Dictionary for acceptable code values.	
M	SDP02	679	Ship/Delivery Pattern Time Code	M ID 1/1
			Code which specifies the time for routine shipments or deliveries	
			Always "F" indicating Shipment/Delivery Timing of "As Directed".	
			Refer to 004010 Data Element Dictionary for acceptable code values.	

Segment:	FST Forecast Schedule
Position:	460
Loop:	SDP Optional
Level:	Detail
Usage:	Optional
Max Use:	260
Purpose:	To specify the forecasted dates and quantities
Syntax Notes:	<ol style="list-style-type: none"> 1 If either FST06 or FST07 is present, then the other is required. 2 If either FST08 or FST09 is present, then the other is required.
Semantic Notes:	<ol style="list-style-type: none"> 1 If FST03 equals "F" (indicating flexible interval), then FST04 and FST05 are required. FST04 would be used for the start date of the flexible interval and FST05 would be used for the end date of the flexible interval.
Comments:	<ol style="list-style-type: none"> 1 As qualified by FST02 and FST03, FST04 represents either a discrete forecast date, the first date of a forecasted bucket (weekly, monthly, quarterly, etc.) or the start date of a flexible interval. 2 FST06 qualifies the time in FST07. The purpose of the FST07 element is to express the specific time of day in a 24-hour clock to satisfy "just-in-time" requirements. As an alternative, the ship/delivery pattern segment (SDP) may be used to define an approximate time, such as a.m. or p.m.
Notes:	BOSCH Purpose: Indicate to Suppliers the forecasted order quantities for a part with the forecasted quantities differentiated as "Firm" or "Planned" quantities.

Data Element Summary				
	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	FST01	380	Quantity Numeric value of quantity Forecast quantity for this part number for the week indicated by date in FST04.	M R 1/15
M	FST02	680	Forecast Qualifier Code specifying the sender's confidence level of the forecast data or an action associated with a forecast "C" indicates "Firm Quantities". "D" indicates "Planned Quantities". Refer to 004010 Data Element Dictionary for acceptable code values.	M ID 1/1
M	FST03	681	Forecast Timing Qualifier Code specifying interval grouping of the forecast "W" indicating "Weekly" forecasts. Refer to 004010 Data Element Dictionary for acceptable code values.	M ID 1/1
M	FST04	373	Date Date expressed as CCYYMMDD Value is the date of the Monday of the "Week" to which the forecast applies.	M DT 8/8
	FST08	128	Reference Identification Qualifier Code qualifying the Reference Identification "DO" indicates Delivery Order Number Refer to 004010 Data Element Dictionary for acceptable code values.	X ID 2/3
	FST09	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier Bosch's Reference Number	X AN 1/30

Segment:	SHP Shipped/Received Information
Position:	470
Loop:	SHP Optional
Level:	Detail
Usage:	Optional
Max Use:	1
Purpose:	To specify shipment and/or receipt information
Syntax Notes:	<ol style="list-style-type: none"> 1 If SHP01 is present, then SHP02 is required. 2 If SHP03 is present, then at least one of SHP04 or SHP05 is required. 3 If SHP04 is present, then SHP03 is required. 4 If SHP05 is present, then SHP03 is required.
Semantic Notes:	<ol style="list-style-type: none"> 1 SHP04 is the date shipped, delivered, received, or the cumulative quantity start date (as qualified by SHP03). 2 SHP06 is the cumulative quantity end date.
Comments:	<ol style="list-style-type: none"> 1 The SHP segment is used to communicate shipment, delivery, or receipt information and may include discrete or cumulative quantities, dates, and times. 2 If SHP01 equals "02", "07", "08", "09", or "10" (indicating cumulative quantities), then SHP04 and SHP06 are required to identify the start and end dates of the quantity count.
Notes:	BOSCH Purpose: Provide Supplier with (1) cumulative quantity information about shipments received from the Supplier by the issuing Bosch Plant as of the date this material release was created, (2) provide specific information about the last four (4) shipments received from the Supplier by the issuing Bosch Plant including date and "Discrete" quantities for individual shipments and (3) provide a discrete quantity indicating a "Past Due" amount as determined by systems supporting the issuing Bosch plant.

Data Element Summary

<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
SHP01	673	Quantity Qualifier	O ID 2/2
		Code specifying the type of quantity	
		Value of "01" indicates a "Discrete" quantity in SHP02. With this qualifier, the SHP segment is used to convey "Date and Discrete Quantity" information for up to the last four (4) shipments received.	
		Value of "02" indicates a "Cumulative" quantity in SHP02. With this qualifier, the SHP segment is used to convey the "Cumulative Quantity" received since the scheduling agreement became valid. This cumulative quantity includes all quantities on SHP segments qualified with "01" in SHP01 that were sent with this material release.	
		Value of "64" indicates a Discrete "Past Due" quantity in SHP02. With this qualifier, the SHP segment conveys to the Supplier the quantity of this part number that is "Over Due" as of the date this release was created. NOTE: The quantity in SHP02 associated with this qualifier will always be "Zero" or a "Positive" number and never a "Negative" number.	
		NOTE: It is the Supplier's responsibility to manage "In-Transit" amounts as part of reconciling "Required" and "Past Due" amounts.	
		Refer to 004010 Data Element Dictionary for acceptable code values.	
SHP02	380	Quantity	X R 1/15
		Numeric value of quantity	
		Value is a cumulative or discrete quantity as indicated by qualifier in SHP01.	
SHP03	374	Date/Time Qualifier	X ID 3/3
		Code specifying type of date or time, or both date and time	
		Value of "050" indicates Date "Received"	
		Value of "051" indicates "Cumulative Start Date"	
		and is used with SHP segments qualified by SHP01 values of "01" or	

"02".

Value of "600" indicates an "As Of" Date and is used with the SHP segment qualified by a SHP01 value of "64". Indicates the date when the "Past Due" calculation was performed.

Refer to 004010 Data Element Dictionary for acceptable code values.

SHP04 373 Date X DT 8/8

Date expressed as CCYYMMDD

For "01" as the SHP01 qualifier value, this date indicates the "Received Date" of the "Discrete Quantity" of the individual Shipment identified by this SHP segment.

For "02" as the SHP01 qualifier value, this date indicates the "Start Date" for the current "Cumulative Quantities" being tracked which is the same as the start date when the scheduling agreement became valid.

SHP06 373 Date O DT 8/8

Date expressed as CCYYMMDD

Used only when SHP01 is "02" to indicate the "Forecast Horizon Start" date.

Segment: **REF** **Reference Identification**
Position: 480
Loop: SHP Optional
Level: Detail
Usage: Optional
Max Use: 5
Purpose: To specify identifying information
Syntax Notes:

- 1 At least one of REF02 or REF03 is required.
- 2 If either C04003 or C04004 is present, then the other is required.
- 3 If either C04005 or C04006 is present, then the other is required.

Semantic Notes:

- 1 REF04 contains data relating to the value cited in REF02.

Comments:
Notes: BOSCH Purpose: Indicate to Suppliers the ASN/shipper number.

Data Element Summary				
	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification "SI" indicate to Suppliers a "Shipper Number". Refer to 004010 Data Element Dictionary for acceptable code values.	
	REF02	127	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier Indicate to Suppliers the ASN/Shipper Number.	

Segment: **CTT** Transaction Totals
Position: 010
Loop:
Level: Summary
Usage: Optional
Max Use: 1
Purpose: To transmit a hash total for a specific element in the transaction set
Syntax Notes: 1 If either CTT03 or CTT04 is present, then the other is required.
2 If either CTT05 or CTT06 is present, then the other is required.
Semantic Notes:
Comments: 1 This segment is intended to provide hash totals to validate transaction completeness and correctness.

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	CTT01	354	Number of Line Items	M N0 1/6
			Total number of line items in the transaction set	

Segment: **SE** Transaction Set Trailer
Position: 020
Loop:
Level: Summary
Usage: Mandatory
Max Use: 1
Purpose: To indicate the end of the transaction set and provide the count of the transmitted segments (including the beginning (ST) and ending (SE) segments)
Syntax Notes:
Semantic Notes:
Comments: 1 SE is the last segment of each transaction set.

Data Element Summary			
	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u> <u>Attributes</u>
M	SE01	96	Number of Included Segments M N0 1/10 Total number of segments included in a transaction set including ST and SE segments
M	SE02	329	Transaction Set Control Number M AN 4/9 Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set