

Benteler Automotive  
**Electronic Data Interchange Specifications**  
**Transaction 830**

Version 2.2  
MAR 19, 2009

## **Changes from Version 2.1 – 2.2**

- 1. Added element 12 and 13 to the LIN segment**
- 2. Updated the example**
- 3. Removed Contact and VAN information**
- 4. Add Benteler Mexico Plant codes**

# Benteler Automotive

## 830 Planning Schedule with Release Capability

Functional Group ID=**PS**

### Introduction:

This Draft Standard for Trial Use 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. The order release forecast may also contain all data related to purchase orders, as required, because the order release capability eliminates the need for discrete generation of purchase orders.

### Heading:

<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max.Use</u>	<u>Loop Repeat</u>
010	ST	Transaction Set Header	M	1	
020	BFR	Beginning Segment for Planning Schedule	M	1	
LOOP ID - N1					200
230	N1	Name	M	1	
250	N3	Address Information	O	2	
260	N4	Geographic Location	O	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>
LOOP ID - LIN					>1
010	LIN	Item Identification	M	1	
020	UIT	Unit Detail	M	1	
230	ATH	Resource Authorization	M	20	
LOOP ID - FST					>1
460	FST	Forecast Schedule	M	1	
LOOP ID - SHP					25
470	SHP	Shipped/Received Information	M	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>
010	CTT	Transaction Totals	M	1	
020	SE	Transaction Set Trailer	M	1	

**Segment:** **ISA** Interchange Control Header  
**Position:** 005  
**Loop:**  
**Level:** Heading  
**Usage:** Mandatory  
**Max Use:** 1  
**Purpose:** To start and identify an interchange of zero or more functional groups and interchange-related control segments  
**Example:** ISA~00~ ~00~ ~01~112836044 ~01~115310336 ~021105~0832~U~00400~000000168~0~P~<\*

#### Data Element Summary

<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
ISA01	I01	<b>Authorization Information Qualifier</b> Use "00"	M ID 2/2
ISA02	I02	<b>Authorization Information</b> Use Ten Spaces	M AN 10/10
ISA03	I03	<b>Security Information Qualifier</b> Use "00"	M ID 2/2
ISA04	I04	<b>Security Information</b> Use Ten Spaces	M AN 10/10
ISA05	I05	<b>Interchange ID Qualifier</b> Use "01" or other applicable codes	M ID 2/2
ISA06	I06	<b>Interchange Sender ID</b> DUNS Number. Left Justify, Space Fill	M AN 15/15
ISA07	I05	<b>Interchange ID Qualifier</b> Use "01" or other applicable codes	M ID 2/2
ISA08	I07	<b>Interchange Receiver ID</b> DUNS Number. Left Justify, Space Fill	M AN 15/15
ISA09	I08	<b>Interchange Date</b> Date of Creation	M DT 6/6
ISA10	I09	<b>Interchange Time</b> Time Of Creation	M TM 4/4
ISA11	I10	<b>Interchange Control Standards Identifier</b> Use "U" for U.S.	M ID 1/1
ISA12	I11	<b>Interchange Control Version Number</b> Use "00401"	M ID 5/5
ISA13	I12	<b>Interchange Control Number</b> A control number assigned by the interchange sender	M N0 9/9
ISA14	I13	<b>Acknowledgment Requested</b> Use "0" for no Ack. Req., Use "1" for Ack. Req	M ID 1/1
ISA15	I14	<b>Usage Indicator</b> Use "T" For Test or "P" For Production Refer to 004010 Data Element Dictionary for acceptable code values.	M ID 1/1
ISA16	I15	<b>Component Element Separator</b> Type is not applicable; the component element separator is a delimiter and not a data element; this field provides the delimiter used to separate component data elements within a composite data structure; this value must be different than the data element separator and the segment terminator	M AN 1/1

**Segment:** **GS** Functional Group Header  
**Position:** 007  
**Loop:**  
**Level:** Heading  
**Usage:** Mandatory  
**Max Use:** 1  
**Purpose:** To indicate the beginning of a functional group and to provide control information  
**Syntax Notes:**  
**Semantic Notes:** 1 GS04 is the group date.  
3 r GS06 in this header must be identical to the same data element in the associated functional group trailer, GE02.  
**Example:** GS~PS~112836044~115310336~20021105~0832~159~X~004010\*

**Data Element Summary**

<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
<u>Des.</u>	<u>Element</u>		
GS01	479	<b>Functional Identifier Code</b> Use "PS" for Planning Schedule	M ID 2/2
GS02	142	<b>Application Sender's Code</b> Use Duns Number	M AN 2/15
GS03	124	<b>Application Receiver's Code</b> Use Duns Number	M AN 2/15
GS04	373	<b>Date</b> Creation Date	M DT 8/8
GS05	337	<b>Time</b> Creation Time	M TM 4/8
GS06	28	<b>Group Control Number</b> Start with 1 and increment by 1 for each subsequent GS Segment	M N0 1/9
GS07	455	<b>Responsible Agency Code</b> Use "X"	M ID 1/2
GS08	480	<b>Version / Release / Industry Identifier Code</b> Use "004010"	M AN 6/6

**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  
**Comments:**  
**Example:** ST~830~0001\*

**Data Element Summary**

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

**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  
**Comments:**  
**Example:** BFR~00~20021105083244~DL~A~20021105~20021105~~5500000821\*

**Data Element Summary**

<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
BFR01	353	<b>Transaction Set Purpose Code</b> Use "00" For Original	M ID 2/2
BFR02	127	<b>Reference Identification</b> Reference information.	O AN 1/30
BFR04	675	<b>Schedule Type Qualifier</b> Benteler uses Ship Dates Refer to FST04	M ID 2/2
BFR05	676	<b>Schedule Quantity Qualifier</b> Use "A" For Actual Discrete Quantities	M ID 1/1
BFR06	373	<b>Date</b> Date expressed as CCYYMMDD	M DT 8/8
BFR08	373	<b>Date</b> Date expressed as CCYYMMDD	M DT 8/8
BFR11	324	<b>Purchase Order Number</b> Identifying number for Purchase Order assigned by the orderer/purchaser	M AN 10/10

**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  
**Comments:**  
**Example:** N1~ST~Kalamazoo Plant~98~0445\*

Data Element Summary			
Ref.	Data		
<u>Des.</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>
N101	98	Entity Identifier Code Use "ST" For Ship To	M ID 2/3
N102	93	Name Free-form name	M AN 1/60
N103	66	Identification Code Qualifier Use "98" For (Benteler Plant Code)	M ID 2/2
N104	67	Identification Code The Benteler Plant Code, Defined as Follows 0440 - Corporate 0442 - Hall Street Plant 0443 - Hagen Drive Plant 0444 - Clay Avenue Plant 0445 - Kalamazoo Plant 0446 - Goshen Plant 0447 - Fort Wayne Operations 0449 - Opelika Plant 0470 - Windsor Plant 0471 - Brampton Plant 0585 - Hermosillo 0586 - Puebla 0587 - Saltillo	M AN 4/4

### 1<sup>st</sup> Occurrence of the N1 Loop



**Segment:** **N3** Address Information  
**Position:** 250  
**Loop:** N1 Mandatory  
**Level:** Heading  
**Usage:** Optional  
**Max Use:** 2  
**Purpose:** To specify the location of the named party  
**Comments:**  
**Example:** N3~9000 East Michigan\*

**Data Element Summary**

<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
N301	166	Address Information Address information	M AN 1/55
N302	166	Address Information Address information	O AN 1/55

**Segment:** **N4** Geographic Location  
**Position:** 260  
**Loop:** N1 Mandatory  
**Level:** Heading  
**Usage:** Optional  
**Max Use:** 1  
**Purpose:** To specify the geographic place of the named party  
**Example:** N4~Galesburg~MI~49053~US\*

**Data Element Summary**

<b>Ref.</b>	<b>Data</b>	<b>Name</b>	<b>Attributes</b>
<b>Des.</b>	<b>Element</b>		
N401	19	City Name Free-form text for city name	M AN 2/30
N402	156	State or Province Code Code (Standard State/Province) as defined by appropriate government agency	M ID 2/2
N403	116	Postal Code Code defining international postal zone code excluding punctuation and blanks (zip code for United States)	M ID 3/15
N404	26	Country Code Code identifying the country	M ID 2/3

**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  
**Example:** N1~SU~16~115310336\*

**Data Element Summary**

<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
N101	98	<b>Entity Identifier Code</b> Use "SU" For Supplier	M ID 2/3
N103	66	<b>Identification Code Qualifier</b> Use "16" (DUNS Number)	M ID 2/2
N104	67	<b>Identification Code</b> The Supplier DUNS number.	M AN 4/4

**2<sup>nd</sup> Occurrence of the N1 Loop**

**Segment:** **LIN** Item Identification  
**Position:** 010  
**Loop:** LIN Mandatory  
**Level:** Detail  
**Usage:** Mandatory  
**Max Use:** 1  
**Purpose:** To specify basic item identification data  
**Example:** LIN~~BP~16482~EC~F~PL~10~PO~5500000821~RN~64~PD~~60758-AD GM-

15874928\*

**Data Element Summary**

<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
<u>Des.</u>	<u>Element</u>		
LIN02	235	<b>Product/Service ID Qualifier</b> Use "BP" (Buyer's Part Number)	M ID 2/2
LIN03	234	<b>Product/Service ID</b> Benteler Material Number	M AN 1/18
LIN04	235	<b>Product/Service ID Qualifier</b> Use "EC" (Engineering Change Level)	M ID 2/2
LIN05	234	<b>Product/Service ID</b> Benteler Engineering Change Level	M AN 1/2
LIN06	235	<b>Product/Service ID Qualifier</b> Use "PL" (Purchase Order Line Number)	M ID 2/2
LIN07	234	<b>Product/Service ID</b> Purchase Order Line Number <i>(Must be returned on 856)</i>	M AN 1/5
LIN08	235	<b>Product/Service ID Qualifier</b> Use "PO" (Purchase Order Number)	M ID 2/2
LIN09	234	<b>Product/Service ID</b> Number used to uniquely identify the Benteler Purchasing Document	M AN 1/10
LIN10	235	<b>Product/Service ID Qualifier</b> Use "RN" (Release Number)	M ID 2/2
LIN11	234	<b>Product/Service ID</b> Release Number of the Purchasing Document	M AN 1/9
LIN12	235	<b>Product/Service ID Qualifier</b> Use "PD" (Part Description)	O ID 2/2
LIN13	234	<b>Product/Service ID</b> Additional Part Description	O AN 1/22

**Segment:** **UIT** Unit Detail  
**Position:** 020  
**Loop:** LIN Mandatory  
**Level:** Detail  
**Usage:** Mandatory  
**Max Use:** 1  
**Purpose:** To specify item unit data  
**Comments:**  
**Example:** UIT~PC\*

**Data Element Summary**

<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
UIT01	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	

**Segment:** **ATH** Resource Authorization  
**Position:** 230  
**Loop:** LIN Mandatory  
**Level:** Detail  
**Usage:** Mandatory  
**Max Use:** 20  
**Purpose:** To specify resource authorizations (i.e., finished labor, material, etc.) in the planning schedule  
**Example:** ATH~FI~20021119\*  
 ATH~MT~20021203\*

**Data Element Summary**

<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
ATH01	672	Resource Authorization Code Code identifying the resource which the buyer is authorizing the seller to commit to. Code Definition FI - Finished (Labor, Material, and Overhead/Burden) MT - Material	M ID 2/2
ATH02	373	Date Date expressed as CCYYMMDD	M DT 8/8

**Segment:** **FST** Forecast Schedule  
**Position:** 460  
**Loop:** FST Mandatory  
**Level:** Detail  
**Usage:** Mandatory  
**Max Use:** >1  
**Purpose:** To specify the forecasted dates and quantities  
**Comments:** 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.  
**Example:** FST~8100~D~W~20021104\*

**Data Element Summary**

<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
FST01	380	Quantity Numeric value of quantity	M R 1/15
FST02	680	Forecast Qualifier Code specifying the sender's confidence level of the forecast data or an action associated with a forecast C - Firm D - Planning	M ID 1/1
FST03	681	Forecast Timing Qualifier Code specifying interval grouping of the forecast D - Discrete W - Weekly Bucket	M ID 1/1
FST04	373	Date Date expressed as CCYYMMDD (Ship Date)	M DT 8/8

**Segment:** **SHP** Shipped/Received Information  
**Position:** 470  
**Loop:** SHP Optional  
**Level:** Detail  
**Usage:** Mandatory  
**Max Use:** 1  
**Purpose:** To specify shipment and/or receipt information  
**Comments:** 1 The SHP segment is used to communicate shipment, delivery, or receipt information and may include discrete or cumulative quantities, dates, and times.  
**Example:** SHP~01~5400~050~20021104\*

**Data Element Summary**

<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
SHP01	673	<b>Quantity Qualifier</b> Code specifying the type of quantity 01 - Discrete Quantity 02 - Cumulative Quantity	M ID 2/2
SHP02	380	<b>Quantity</b> Numeric value of quantity	M R 1/15
SHP03	374	<b>Date/Time Qualifier</b> Use " 050" Receipt	M ID 3/3
SHP04	373	<b>Date</b> Date Received/Cumulative Start Date Format: CCYYMMDD	M DT 8/8



**Segment:** **REF** Reference Identification  
**Position:** 480  
**Loop:** SHP Optional  
**Level:** Detail  
**Usage:** Mandatory  
**Max Use:** 5  
**Purpose:** To specify identifying information  
**Comments:**  
**Example:** REF~SI~V7054944\*

**Data Element Summary**

<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
REF01	128	Reference Identification Qualifier Use "SI" For Shipper Number	M ID 2/3
REF02	127	Reference Identification Shipper Number	M AN 1/30

**Segment:** **CTT** Transaction Totals  
**Position:** 010  
**Loop:**  
**Level:** Summary  
**Usage:** Mandatory  
**Max Use:** 1  
**Purpose:** To transmit a hash total for a specific element in the transaction set  
**Example:** CTT~2\*

**Data Element Summary**

<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
<b>CTT01</b>	<b>354</b>	<b>Number of Line Items</b> Total Number of LIN Segments	<b>M N0 1/6</b>

**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)  
**Comments:** 1 SE is the last segment of each transaction set.  
**Example:** SE~36~0001\*

#### Data Element Summary

<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
SE01	96	Number of Included Segments Total number of segments included in a transaction set including ST and SE segments	M N0 1/10
SE02	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	M AN 4/9

**Segment:** **GE** Functional Group Trailer  
**Position:** 030  
**Loop:**  
**Level:** Summary  
**Usage:** Optional  
**Max Use:** 1  
**Purpose:** To indicate the end of a functional group and to provide control information  
**Syntax Notes:**  
**Semantic Notes:** 1 The data interchange control number GE02 in this trailer must be identical to the same data element in the associated functional group header, GS06.  
**Example:** GE~1~159\*

**Data Element Summary**

<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
GE01	97	<b>Number of Transaction Sets Included</b> Total number of transaction sets included in the functional group or interchange (transmission) group terminated by the trailer containing this data element	<b>M N0 1/6</b>
GE02	28	<b>Group Control Number</b> Assigned number originated and maintained by the sender	<b>M N0 1/9</b>

**Segment:** **IEA** Interchange Control Trailer  
**Position:** 040  
**Loop:**  
**Level:** Summary  
**Usage:** Optional  
**Max Use:** 1  
**Purpose:** To define the end of an interchange of zero or more functional groups and interchange-related control segments

**Syntax Notes:**

**Semantic Notes:**

**Example:** IEA~1~000000168\*

#### Data Element Summary

<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
IEA01	I16	Number of Included Functional Groups	M N0 1/5
		A count of the number of functional groups included in an interchange	
IEA02	I12	Interchange Control Number	M N0 9/9
		A control number assigned by the interchange sender	

# SAMPLE 830 EDI

ISA~00~ ~00~ ~01~112836044 ~01~115310336 ~021105~0832~U~00400~000000168~0~P~<\*  
GS~PS~112836044~115310336~20021105~0832~159~X~004010\*  
ST~830~0001\*  
BFR~00~20021105083244~DL~A~20021105~20021105~5500000821\*  
N1~ST~Kalamazoo Plant~98~0445\*  
N3~9000 East Michigan\*  
N4~Galesburg~MI~49053~US\*  
N1~SU~16~115310336\*  
LIN~BP~16482~EC~F~PL~10~PO~5500000821~RN~64\*  
UIT~PC\*  
ATH~FI~20021119\*  
ATH~MT~20021203\*  
FST~8100~D~W~20021104\*  
FST~16200~D~W~20021111\*  
FST~16200~D~W~20021118\*  
FST~13500~D~W~20021125\*  
FST~16200~D~W~20021202\*  
FST~16200~D~W~20021209\*  
FST~56701~D~W~20030324\*  
SHP~01~5400~050~20021104\*  
REF~SI~V7054944\*  
SHP~02~631800~050~20021104\*  
LIN~BP~17643~EC~H~PL~20~PO~5500000821~RN~62~PD~60758~AD GM-15874928\*  
UIT~PC\*  
ATH~FI~20021119\*  
ATH~MT~20021203\*  
FST~5600~D~W~20021104\*  
FST~28000~D~W~20021111\*  
FST~30800~D~W~20021118\*  
FST~30800~D~W~20021125\*  
FST~30800~D~W~20021202\*  
FST~36400~D~W~20021209\*  
FST~30800~D~W~20021216\*  
SHP~01~8400~050~20021104\*  
REF~SI~V7054944\*  
SHP~02~1218000~050~20021104\*  
CTT~2\*  
SE~36~0001\*  
GE~1~159\*  
IEA~1~000000168\*