


# ThyssenKrupp Presta Danville, LLC



## EDI Implementation Guidelines for 830 Planning Schedule with Release Capability ANSI X-12 version/release 004010

# 830 Planning Schedule with Release Capability

Functional Group ID=**PS**

## Introduction:

This standard provides the format and establishes the data contents of a planning schedule with release capability transaction set. The planning schedule with release capability transaction set provides 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:

TK-PD Requirement	Pos. No.	Seg. ID	Name	Req. Des.	Max.Use	Loop Repeat	Notes and Comments
M	010	ST	Transaction Set Header	M	1		
M	020	BFR	Beginning Segment for Planning Schedule	M	1		

## Detail:

TK-PD Requirement	Pos. No.	Seg. ID	Name	Req. Des.	Max.Use	Loop Repeat	Notes and Comments
			LOOP ID - LIN			10000	
M	010	LIN	Item Identification	M	1		
M	020	UIT	Unit Detail	M	1		
			LOOP ID - N1			200	
Must Use	210	N1	Name	O	1		
			LOOP ID - SDP			260	
Must Use	290	SDP	Ship/Delivery Pattern	O	1		
Must Use	300	FST	Forecast Schedule	O	260		
Must Use	320	ATH	Resource Authorization	O	20		
			LOOP ID - SHP			25	
Must Use	330	SHP	Shipped/Received Information	O	1		

## Summary:

TK-PD Requirement	Pos. No.	Seg. ID	Name	Req. Des.	Max.Use	Loop Repeat	Notes and Comments
M	010	CTT	Transaction Totals	M	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.

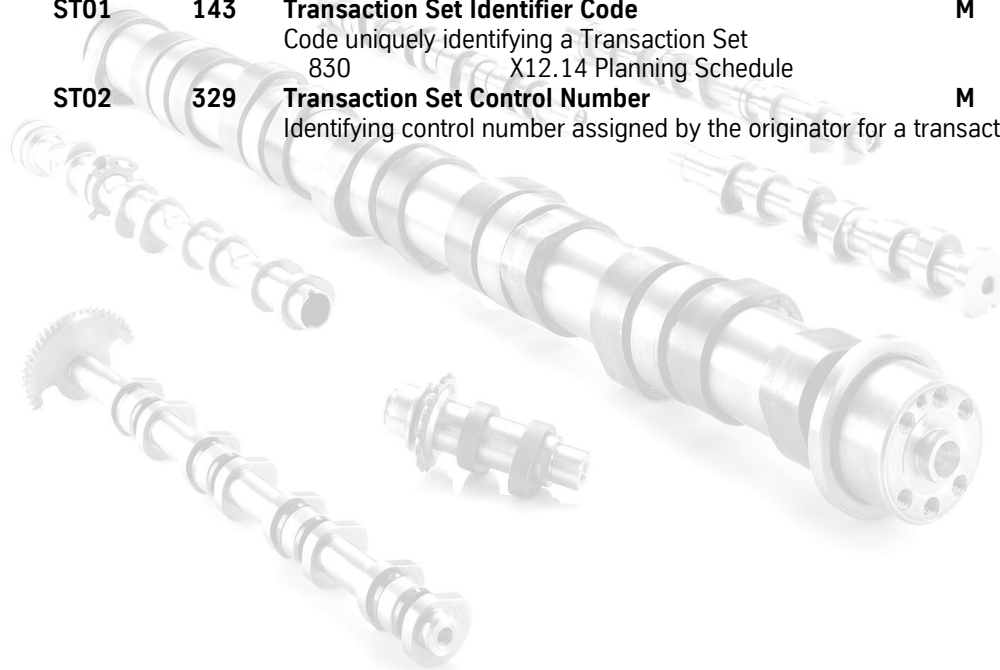


# ThyssenKrupp Presta Camshafts

**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:**  
**Comments:** 1 The transaction set identifier (ST01) is intended for use by the translation routines of the interchange partners to select the appropriate transaction set definition (e.g., 810 selects the invoice transaction set).

### Data Element Summary

TK-PD Requirement	Ref. Des.	Data Element	Name	Attributes
M	ST01	143	<b>Transaction Set Identifier Code</b> Code uniquely identifying a Transaction Set 830 X12.14 Planning Schedule	M ID 3/3
M	ST02	329	<b>Transaction Set Control Number</b> Identifying control number assigned by the originator for a transaction set.	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:**  
**Comments:**

- 1 If BFR01 equals "04" (Net Change) - BFR09 is required.
- 2 BFR02 is the identifying number for a forecast assigned by the orderer/purchaser.
- 3 BFR06 - Forecast Horizon Start Date: The date when the forecast horizon (envelope) begins.
- 4 BFR07 - Forecast Horizon End Date: The date when the forecast horizon (envelope) ends.
- 5 BFR08 - Date Forecast Generated: The date the forecast data was generated.

**Data Element Summary**

TK-PD Requirement	Ref. Des.	Data Element	Name	Attributes
M	BFR01	353	<b>Transaction Set Purpose Code</b> Code identifying purpose of transaction set 05 Replace	M ID 2/2
M	BFR02	127	<b>Reference Number</b> Reference number or identification number as defined for a particular Transaction Set, or as specified by the Reference Number Qualifier.	C AN 1/30
M	BFR03	328	<b>Release Number</b> Number identifying a release against a Purchase Order previously placed by the parties involved in the transaction	C AN 1/30
M	BFR04	675	<b>Schedule Type Qualifier</b> Code identifying the type of dates used when defining a shipping or delivery time in a schedule or forecast DL Delivery Based Note: all dates in the release are for arrival at TK-PDI dock dates.	M ID 2/2
M	BFR05	676	<b>Schedule Quantity Qualifier</b> Code identifying the type of quantities used when defining a schedule or forecast A Actual Discrete Quantities	M ID 1/1
M	BFR06	373	<b>Horizon Start Date</b> Date (YYMMDD)	M DT 6/6
M	BFR07	373	<b>Horizon End Date</b> Date (YYMMDD)	M DT 6/6
M	BFR08	373	<b>Creation Date</b> Date (YYMMDD)	M DT 6/6



# ThyssenKrupp Presta Camshafts

**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 LIN04 is present, then LIN05 is required.
- 2 If LIN06 is present, then LIN07 is required.

**Semantic Notes:**  
**Comments:**

- 1 See the Data Dictionary for a complete list of ID's.
- 2 LIN01 is the line item identification
- 3 LIN02 through LIN31 provide for fifteen (15) different product/service ID's for each item. For Example: Case, Color, Drawing No., UPC No., ISBN No., Model No., SKU.

### Data Element Summary

TK-PD Requirement	Ref. Des.	Data Element	Name	Attributes
X	LIN01	350	<b>Assigned Identification</b> Alphanumeric characters assigned for differentiation within a transaction set	O AN 1/6
M	LIN02	235	<b>Product/Service ID Qualifier</b> Code identifying the type/source of the descriptive number used in Product/Service ID (234) BP Buyer's Part Number	M ID 2/2
M	LIN03	234	<b>Product/Service ID</b> Identifying number for a product or service	M AN 1/30
M	LIN04	235	<b>Product/Service ID Qualifier</b> Code identifying the type/source of the descriptive number used in Product/Service ID (234) PO Purchase Order Number	O ID 2/2
M	LIN05	234	<b>Product/Service ID</b> Identifying number for a product or service	C AN 1/30
M	LIN06	235	<b>Product/Service ID Qualifier</b> Code identifying the type/source of the descriptive number used in Product/Service ID (234) PL Purchaser's Order Line Number	O ID 2/2
M	LIN07	234	<b>Product/Service ID</b> Identifying number for a product or service	C AN 1/30
M	LIN08	235	<b>Product/Service ID Qualifier</b> Code identifying the type/source of the descriptive number used in Product/Service ID (234) DR Drawing Revision Number	O ID 2/2
M	LIN09	234	<b>Product/Service ID</b> Identifying number for a product or service The Buyer's ZG Drawing Revision number NOTE: If no revision level enter "NONE"	C AN 1/30

**Segment:** UIT Unit Detail  
**Position:** 020  
**Loop:** LIN Mandatory  
**Level:** Detail  
**Usage:** Mandatory  
**Max Use:** 1  
**Purpose:** To specify item unit data  
**Syntax Notes:**  
**Semantic Notes:**  
**Comments:**

**Data Element Summary**

TK-PD	Ref.	Data	Name	Attributes
<u>Requirement</u>	<u>Des.</u>	<u>Element</u>		
M	UIT01	355	<b>Unit or Basis for Measurement Code</b> Code identifying the basic unit of measurement. Use MTN (Metric Ton) for Steel/Long Tube Planning Schedules. Use PC (Pieces) for all other components unless specific UOM is given	M ID 2/2
			MTN Metric Ton PC Piece	

**Segment:** N1 Name  
**Position:** 210  
**Loop:** N1 Optional (Must Use)  
**Level:** Detail  
**Usage:** Optional (Must Use)  
**Max Use:** 1  
**Purpose:** To identify a party by type of organization, name, and code  
**Syntax Notes:**

- At least one of N102 or N103 is required.
- If either N103 or N104 is present, then the other is required.

**Semantic Notes:**  
**Comments:**

- 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.

**Data Element Summary**

TK-PD	Ref.	Data	Name	Attributes
<u>Requirement</u>	<u>Des.</u>	<u>Element</u>		
M	N101	98	<b>Entity Identifier Code</b> Code identifying an organizational entity or a physical location. SF Ship From ST Ship To	M ID 2/2
X	N102	93	<b>Name</b> Free-form name	C AN 1/35
>>	N103	66	<b>Identification Code Qualifier</b> Code designating the system/method of code structure used for Identification Code (67) 1 Dun and Bradstreet (Credit Reporting) (DUNS)	C ID 1/2
>>	N104	67	<b>Identification Code</b> Code identifying a party. DUNS number of the plant receiving material. ThyssenKrupp Presta Danville, LLC 779941397 – Danville, IL USA	C ID 2/17





# ThyssenKrupp Presta Camshafts

**Segment:** **SDP** Ship/Delivery Pattern  
**Position:** 290  
**Loop:** SDP Optional (Must Use)  
**Level:** Detail  
**Usage:** Optional (Must Use)  
**Max Use:** 1  
**Purpose:** To identify specific ship/delivery requirements  
**Syntax Notes:**  
**Semantic Notes:**  
**Comments:**

- 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.

TK-PD Requirement	Ref. Des.	Data Element	Name	Attributes
M	SDP01	678	<b>Ship/Delivery or Calendar Pattern Code</b> Code which specifies the days for routine shipments or deliveries. Y None (Also Used to Cancel or Override a Previous Pattern)	M ID 1/2
M	SDP02	679	<b>Ship/Delivery Pattern Time Code</b> Code which specifies the time for routine shipments or deliveries. Y None (Also Used to Cancel or Override a Previous Pattern)	M ID 1/1



# ThyssenKrupp Presta Camshafts

**Segment:** **FST** Forecast Schedule  
**Position:** 300  
**Loop:** SDP Optional (Must Use)  
**Level:** Detail  
**Usage:** Optional (Must Use)  
**Max Use:** 260  
**Purpose:** To specify the forecasted dates and quantities  
**Syntax Notes:**  
**Semantic Notes:**  
**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.
- 2 If FST03 - "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.

Data Element Summary					
TK-PD	Ref.	Data	Name	Attributes	
Requirement	Des.	Element			
M	FST01	380	<b>Quantity</b> Numeric value of quantity	M	R 1/10
M	FST02	680	<b>Forecast Qualifier</b> Code specifying the sender's confidence level of the forecast data. C Firm D Planning	M	ID 1/1
M	FST03	681	<b>Forecast Timing Qualifier</b> Code specifying interval grouping of the forecast D Discrete (due on date of release schedule line) W Weekly Bucket (Monday through Sunday)	M	ID 1/1
M	FST04	373	<b>Delivery Date</b> Date (YYMMDD)	M	DT 6/6



**Segment:** **ATH** Resource Authorization  
**Position:** 320  
**Loop:** LIN Mandatory  
**Level:** Detail  
**Usage:** Optional (Must Use)  
**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:**
- Comments:**
- 1 It is imperative that negotiations defining financial commitment have previously occurred and are agreed to by both buyer and seller.
  - 2 ATH02 - Resource Authorization Thru-Date: The date through which the buyer authorizes the seller to commit the resource defined in element ATH01.
  - 3 ATH03 - Current Cumulative Requirements Quantity: The cumulative quantity that has been authorized to-date from the cumulative start-date (ATH05) through the resource authorization thru-date (ATH02).
  - 4 ATH04 - Maximum Cumulative Requirements Quantity: The maximum cumulative quantity that has been authorized to-date from the cumulative start-date (ATH05) through the resource authorization thru-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.
  - 5 ATH05 - 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.

**Data Element Summary**

TK-PD Requirement	Ref. Des.	Data Element	Name	Attributes
M	ATH01	672	<b>Resource Authorization Code</b> Code identifying the resource which the buyer is authorizing the seller to commit to FI Finished (Labor, Material, and Overhead/Burden) MT Material PQ Cumulative Quantity Required Prior to First Schedule Period	M ID 2/2
NOTE: for TK-PD purposes FI considered firm zone, MT considered forecast trade-off zone				
M	ATH02	373	<b>Date</b> Date (YYMMDD) Date authorized for resource authorization as shown in ATH01	C DT 6/6
M	ATH03	380	<b>Quantity</b> Numeric value of quantity Cumulative due on authorized dates as shown in ATH02	C R 1/10
X	ATH04	380	<b>Quantity</b> Numeric value of quantity Total Cumulative ordered with current schedule at time of release	O R 1/10
>>	ATH05	373	<b>Cumulative Period Start Date</b> Date (YYMMDD) The beginning date for current cumulative tracking If the cumulative is reset annually this date will change on the date of reset..	C DT 6/6

- Segment:** **SHP** Shipped/Received Information
- Position:** 330
- Loop:** SHP Optional (Must Use)
- Level:** Detail
- Usage:** Mandatory
- Max Use:** 1
- Purpose:** To specify shipment and/or receipt information
- Syntax Notes:**
- 1 If SHP01 is present, then SHP02 is required.
  - 2 If SHP03 is present, then SHP04 is required.
- Semantic Notes:**
- Comments:**
- 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 = "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.
  - 3 SHP04 - The date shipped, delivered, received, or the cumulative quantity start date (as qualified by SHP03).
  - 4 SHP06 - The cumulative quantity end date.

**Data Element Summary**

TK-PD Requirement	Ref. Des.	Data Element	Name	Attributes
M	SHP01	673	<b>Quantity Qualifier</b> Code specifying the type of quantity 02 Cumulative Quantity	O ID 2/2
M	SHP02	380	<b>Quantity</b> Numeric value of quantity Cumulative quantity of the last shipment received.	C R 1/10
M	SHP03	374	<b>Date/Time Qualifier</b> Code specifying type of date or time, or both date and time 050 Received	M ID 3/3
M	SHP04	373	<b>Start Receipt Date</b> Date (YYMMDD) Date of first received qty included in cumulative of SHP02	C DT 6/6
X	SHP05	337	<b>Time</b> Time expressed in 24-hour clock time (HHMMSS) (Time range: 000000 through 235959)	O TM 4/4
M	SHP06	373	<b>End Receipt Date</b> Date (YYMMDD) Date of last received qty included in cumulative of SHP02	C DT 6/6

**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  
**Syntax Notes:** 1 If CTT03 is present, then CTT04 is required.  
 2 If CTT05 is present, then CTT06 is required.  
**Semantic Notes:**  
**Comments:** 1 This segment is intended to provide hash totals to validate transaction completeness and correctness.

**Data Element Summary**

TK-PD	Ref.	Data	Name	Attributes
<u>Requirement</u>	<u>Des.</u>	<u>Element</u>		
M	CTT01	354	<b>Number of Line Items</b> Total number of line items in the transaction set	M NO 1/6

**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**

TK-PD	Ref.	Data	Name	Attributes
<u>Requirement</u>	<u>Des.</u>	<u>Element</u>		
M	SE01	96	<b>Number of Included Segments</b> Total number of segments included in a transaction set including ST and SE segments	M NO 1/6
M	SE02	329	<b>Transaction Set Control Number</b> Identifying control number assigned by the originator for a transaction set.	M AN 4/9

## Sample Data

ST\*830\*912354  
 BFR\*05\*2\*1\*DL\*A\*100228\*100628\*100205  
 LIN\*\*BP\*558998\*PO\*5550000412\*PL\*00010\*DR\*NONE  
 UIT\*PC  
 N1\*SF\*\*1\*555555555  
 N1\*ST\*\*1\*779941397  
 SDP\*Y\*Y  
 FST\*2000\*C\*D\*100210  
 FST\*2000\*C\*D\*100217  
 FST\*2000\*C\*D\*100226  
 FST\*2000\*C\*D\*100305  
 FST\*2000\*D\*D\*100312  
 FST\*2000\*D\*D\*100319  
 FST\*2000\*D\*D\*100326  
 FST\*2000\*D\*D\*100402  
 FST\*2000\*D\*D\*100409  
 FST\*2000\*D\*D\*100416  
 FST\*2000\*D\*D\*100423  
 FST\*2000\*D\*D\*100430  
 FST\*2000\*D\*D\*100507  
 FST\*2000\*D\*D\*100514  
 FST\*2000\*D\*D\*100521  
 FST\*2000\*D\*D\*100528  
 FST\*2000\*D\*D\*100604  
 FST\*2000\*D\*D\*100611  
 FST\*2000\*D\*D\*100618  
 FST\*2000\*D\*D\*100625  
 ATH\*PQ\*100201\*4000\*\*100129  
 ATH\*FI\*100305\*12000\*\*100129  
 ATH\*MT\*100604\*38000\*\*100129  
 SHP\*02\*4000\*050\*100129\*\*100201  
 CTT\*1  
 SE\*33\*0100

