

# GBR Systems Corp.

10/9/2007

## 420 & 438 Engineering Values List

Number	Value	Description
01	20	<b>“Acc Feed Settle Time” (Range: 0 &gt; 9995, Inc: 5)</b> Time(msec) after trail edge of last page passes Accumulator stack sensor into Accumulator until Accumulator clutch is fired.
02	40	<b>“Acc Dump Done Time” (Range: 0 &gt; 9995, Inc: 5)</b> Advance Feed ON: Time(msec) from “Accumulator is going to dump” until next feed is started. A short value advance feeds, before the pack moves from the Accumulator. A longer time allows pack movement detected at the Accumulator presence sensor to start the next pack feed. Higher is safer, lower is faster, but assumes pack leaves Accumulator. Advance Feed OFF: Time(msec) from pack movement at the detected at the Accumulator presence sensor to start the next pack feed.
03	150	<b>“Bar Read Time” (Range: 0 &gt; 9995, Inc: 5)</b> Time(msec) waiting for reader response.
04	250	<b>“Folder Exit Time” (Straight Conveyor Only) (Range: 0 &gt; 9995, Inc: 5)</b> Time(msec) allowed for pack to reach the folder exit sensor.
05	150	<b>“Line Read Time” (Range: 0 &gt; 9995, Inc: 5)</b> Time(msec) waiting for reader response.
06	10	<b>“Xcvy Dump To Acc Dump Time” (Range: 0 &gt; 9995, Inc: 5)</b> Time(msec) from “Xcvy is going to move” until next Accum dump is started.
07	100	<b>“Xcvy Clutch On Time” (Range: 0 &gt; 9995, Inc: 5)</b> Time(msec) Xcvy clutch is on adjusted for number of stations. Adjust up/down to place the last pack at the Xcvy exit.
08	300	<b>“Xcvy Into Station 1 Time” (Range: 0 &gt; 9995, Inc: 5)</b>
09	50	<b>“Xcvy Outof Station 1 Time” (Range: 0 &gt; 9995, Inc: 5)</b>
10	400	<b>“Folder Start To Conveyor Time” (Range: 0 &gt; 9995, Inc: 5)</b> Should be greater than Eng Value 04, Folder Exit Time when Exit Type is Conveyor and not in test.
11	0	<b>“Test Console Switch” (Range: 0 &gt; 1, Inc: 1)</b> 0 = turns off diagnostics only used in debug mode.
12	1	<b>“Language Select” (Range: 1 &gt; 2, Inc: 1)</b> 1 = English. 2 = English
13	0	<b>“Xcvy Package InOut Counter” (Range: 0 &gt; 9995, Inc: 5)</b> Max Number of packages expected in Xcvy. 0 disables this check.
14	150	<b>“Acc Dump Clutch On Time” (Range: 0 &gt; 9995, Inc: 5)</b> Constant value Accumulator clutch is on adjusted for speed. Adjust up so pack fully exits. Adjust down if next pack is partially pulled under rollers.
15	5	<b>“TouchScreen X Correction” (Range: -60 &gt; 60, Inc: 1)</b> Constant value for touch sensing. Adjust up to move sense right. Adjust down to move sense left.
16	-10	<b>“TouchScreen Y Correction” (Range: -60 &gt; 60, Inc: 1)</b> Constant value for touch sensing. Adjust down to move sense up. Adjust up to move sense down

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17	20000	<b>“Paper Demand Time” (Range: 0 &gt; 60000, Inc: 500)</b> Time(msec) waiting for paper stack switch in feeder to be satisfied by infeed.
18	3	<b>“Max Xcvy Stations” (Range: 2 &gt; 6, Inc: 1)</b> Max Number of package positions in Xcvy “2-6”.
19	0	<b>“Test ExitComm Test List Switch” (Range: 0 &gt; 255, Inc: 1)</b> 0 = No extra ExitComm (Comm3) list messages. 1 = Extra ExitComm list messages, times in msec, Demand time, receive character (for Sure-Feed). Bit level assignment: (D7 D6 D5 D4 D3 D2 D1 D0. D7 > D1 = unassigned D0 = ExitComm messages
20	0	<b>“Exit Demand Switch” (Range: 0 &gt; 1, Inc: 1)</b> Applies to Hopper Fill and Conveyor. 0 = No Exit Demand required. 1 = Exit Demand required (for Conveyor for Sure-Feed).
21	215	<b>“Exit Demand Time Out” (Range: 0 &gt; 999, Inc: 1)</b> Default 60 = 60 seconds to shut down on no demand. Range 0 to 999 seconds.
22	3000	<b>“Xcvy Jam At Out Time” (Range: 0 &gt; 9000, Inc: 10)</b> Default 3000 = 3000 msec to pass pack through exit sensor. Range 0 to 9000 msec.
23	350	<b>“Xcvy Jam At In Time” (Range: 0 &gt; 9000, Inc: 10)</b> Default 500 = 500 msec to pass from folder to in sensor. Range 0 to 9000 msec.
24	250	<b>“Feed to Accum Time” (Range: 0 &gt; 5000, Inc: 10)</b> Default 170 = 170 msec for the lead edge of paper fed at the feed sensor to the lead edge entering the accumulator. Range 0 to 5000 msec.
25	1	<b>“Advance Feed Switch” (Range: 0 &gt; 1, Inc: 1)</b> 1=ON, allows the next pack to be started when the Accumulator is supposed to dump plus the Accumulator Dump Time. 0=OFF, starts the next pack after Accumulator Presence Sensor is cleared plus the Accumulator Dump Time. When EV #25 is set to “1”, EV's #1,2,23,24 should be adjusted as close to numbers on the right of “→” to obtain optimal performance. These values may vary depending on type and weight of paper being processed, environmental conditions, and system tolerances.
26	1	<b>“Comm Hardware Type” (Range: 0 &gt; 1, Inc: 1)</b> 0 = Ziatech, 1 = WinSystems.
27	4444	<b>“Eng Values Password” (Range: 0 &gt; 9999, Inc: 1)</b> 4444 = Default(9561 is backup).
28	1	<b>“Eng Values Enable Password” (Range: 0 &gt; 1, Inc: 1)</b> 1 = Enable(Default), 0 = Disable. This enables or disables password to access Engineering Values.
29	3	<b>“Max. Exit Demand power On Cycles” (Range:0 &gt; 99, Inc: 1)</b> 3 = Default. Number of inserter demand cycles before 438 outputs a package.

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30	2	<b>“Bar Read Commport” (Cycle Machine Power) (Range: 1 &gt; 2, Inc: 1)</b> 1 = Commport on CPU-PCB. 2 = (Default) Commport on Serial Expansion PCB.
31	700	<b>“System ON/OFF Time Cycles”. (Range: 500 &gt; 700, Inc: 5)</b> 700 = Default. Debounce time in msec to acknowledge cycling of POWER ON Button Presses from OFF to ON, ON to OFF.
32	100	<b>“Straight Conveyor Table ON Time” (Range: 5 &gt; 500, Inc: 5)</b> Default – 100. Time in milliseconds for conveyor table ON time for each pack out of folder.
33	2	<b>“Number of Double Detect Sample Counts” (Range: 1 &gt; 4, Inc: 1)</b> Default = 2. Number of Double Detect Sample Counts per sheet fed. 20msec sample rate.
34	0	<b>“This EV intentionally left blank” (Range: 0 &gt; 1, Inc: 1)</b> (Maximum Sheets Allowed to Accumulate moved to “Accumulator Setup” in version 26412.051).
35	80	<b>“Feed Control Brake Delay Time” (Range: 0 &gt; 160, Inc: 10)</b> Default = 130 msec. Allows the page trail to leave the singulator before the feed brake is applied. Delay calculation based on sheet length, speed, and this constant.
36	100	<b>“Exit Comm Recvd Ack Time” (Range: 0 &gt; 500, Inc: 10)</b> Default = 100msec. In Tampa 1 only, if no Ack Response is received the machine errors out and resets the comm. To try transmit again. (See EV#37 for retries.) If set to =0 there is no Exit Comm Rcvd Ack Timer check and no machine error
37	0	<b>“Exit comm. Xmit Retries” (Range: 0 &gt; 2, Inc: 1)</b> 1 + Default. In Tampa 1 only, if no Ack Response is received defined in EV#36, a retry is initiated and sends a duplicate serial string. A range of 0->2 retries can be indicated before the machine stops and displays the error: “Exit Comm: No Message Response (E20801)”. (See EV#36 for time setting). If set to =0, no retries are initiated and if an Ack Response is not received in the allotted time (EV#36), an error is generated.
38	2	<b>“Barcode Reader (1=AS 30+, 2=MS911. 3=DL2031)” (Range: 1 &gt; 3, Inc: 1)</b> Default = 2. Will select the Start and Stop protocol for either an Accusort Model 30+ or a microscan MS911. 1 = Accusort Model 30+ Bar Read Start Serial Trigger = “S” Bar Read End Serial Trigger = “E” 2 = (Default) Microscan MS911 Bar Read Start Serial Trigger = “<S>” Bar Read End Serial Trigger = “<J>” 3 = DataLogic 2031 Bar Read Start Serial Trigger = “S” Bar Read End Serial Trigger = “E”
39	0	<b>“Bad pack, Retain Selects? (1=Yes, 0=no)” (Range: 0 &gt; 1, Inc: 1), Default = 0)</b> 0 = Default. Normal operation. Upon Bad Pack, select and envelope bits are set to zero. 1 = Upon Bad Pack, select and envelope bits are retained.

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40	1	<p><b>“Electronics? (1 = New, 0 = Old)” (Range: 0 &gt; 1, Inc: 1, Default = 1)</b>                      1 = Default. Enables I/O configuration for new modular electronics.                      0 = Enables I/O for classic 420 two rack electronics.</p>
41	0	<p><b>“Sequential Stop Cycles (0=Off)” (Range: 0 &gt; 99, Inc: 1, Default = 0)</b>                      0 = Default. Normal operation.                      1 – 99 = Demand cycles after package leaves transfer conveyor that I/O point 0:16 “Inserter Stop” is asserted upon the occurrence of a Sequential Stop command.</p>
42	70	<p><b>“Max. pages in track 1 – 200” (Range: 1 &gt; 200, Inc: 1, Default = 70)</b>                      Used with Flat Feeder configuration. Limits maximum pages that can be accumulated in a track section.</p>
43	0	<p><b>“Feed Sensor interrupt (1=ON, 0+OFF)” (Range: 0 &gt; 1, Inc: 1, Default = 0)</b>                      0 = Default. Utilizes poling method for input.                      1 = Utilizes interrupt method for input.</p>
44	1	<p><b>“Accum Pack Bad: Set Pack After Bad Also” (Range: 0 &gt; 1, Inc: 1, Default = 1)</b>                      1 = Default. Upon occurrence of a bad pack, the next pack processed is tagged as bad also until a good pack is processed.                      0 = Next pack, if no error in normal processing, is not tagged as a bad pack.</p>
45	1	<p><b>“Accum Pack has Single: Set Pack Bad” (Range: 0 &gt; 1, Inc: 1, Default = 1)</b>                      1 = Default. Upon a single cycle accumulation of a pack in the accumulator, the pack processed is tagged as bad.                      0 = pack is not tagged as a bad pack.</p>
46	1	<p><b>“Accum Pack Bad: Set Previous Pack Bad Also” (Range: 0 &gt; 1, Inc: 1, Default = 1)</b>                      1 = Default. Upon occurrence of a bad pack, the previous pack processed is tagged as bad pack also. (pack in Xfer conveyor).                      0 = Previous pack, if no error in normal processing, is not tagged as a bad pack.</p>
47	0	<p><b>“Flap Detect IO Inversion (1=Invert, 0+Normal)” (Range: 0 &gt; 1, Inc: 1, Default = 0)</b>                      0 = Default. Normal operation.                      1 = Logic inversion for the signal. (Incserco mailcrafter).</p>
48	0	<p><b>“Intrack Sns Method (0=Normal, 1=Subset-pause)” (Range: 0 &gt; 1, Inc: 1, Default = 0)</b>                      0 = Default. Normal operation.                      1 = Support for Subset-Pause operation utilizing both Transfer Conveyor out Sensor and Intrack/Open Feed Sensor to track folded subsets in same track.</p>

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49	0	<p><b>“Accum pack Bad: Set Divert By Read Bit” (Range: 0 &gt; 1, Inc:1, Default = 0)</b>                      0 = Default. Normal operation.                      1 = Sets Divert by Read bit if the pack is not valid.</p>
50	0	<p><b>“ReadLess Read Mode” (Range: 0 &gt; 1, Inc: 1, Default = 0)</b>                      0 = Default. Normal operation.                      1 = Special error recovery routine when using Demand Feed type “Read first” in barcode for FPF-35.</p>
51	1	<p><b>“First pack Dumped Error Enable” (Range: 0 &gt; 1, Inc: 1, Default = 1)</b>                      1 = Default. Normal operation.                      0 = Disables setting bad pack on first pack processed after startup or purge.</p>
52	1	<p><b>“Feed &amp; Accum pack Error Enable” (Range: 0 &gt; 1, Inc:1,Default = 1)</b>                      1 = Default. Normal operation.                      0 = Disable setting bad pack on Feeder or Accum. Errors.</p>
53	0	<p><b>“Inserter Error Pause mode Switch” (Range: 0 &gt; 7, Inc: 1, Default = 0)</b>                      0 = Default. Normal operation                      1 = Pulse I/O (1:16) upon a read or processing error.                      2 = Pulse I/O (1:16) upon a Demand Feed occurrence while accumulating a package.                      3 = combines functions 1 &amp; 2                      4 = Steady state on I/O (1:16) upon a Demand Feed occurrence while accumulating a package.                      5 = combines functions 1 &amp; 4                        6 = Illegal combination.                        7 = Illegal combination.</p>