Totally Integrated	
Automation Portal	

conveyor-push-sort / PLC_1 [CPU 1214C AC/DC/Rly] / Program blocks

FC_Conveyor [FC1]

FC_Conveyor	Properties				
General					
Name	FC_Conveyor	Number	1	Туре	FC
Language	LAD	Numbering	Automatic		
Information					
Title		Author		Comment	
Family		Version	0.1	User-defined	
				ID	

FC_Conveyor						
lame	Data type	Default value	Comment			
Input						
Output						
InOut						
▼ Temp						
i	Int					
err	Int					
CurrentTime	DTL					
YEAR	UInt					
MONTH	USInt					
DAY	USInt					
WEEKDAY	USInt					
HOUR	USInt					
MINUTE	USInt					
SECOND	USInt					
NANOSECOND	UDInt					
Constant						
▼ Return						
FC_Conveyor	Void					

Network 1:

Track items

```
0001 IF "DB ItemTracking".UntrackedItems > 0 THEN
        FOR #i := 0 TO 5 DO
0002
0003
             IF NOT "DB ItemTracking".ItemList[#i].Active THEN
0004
                 "DB ItemTracking".ItemList[#i].Active := TRUE;
0005
                 "DB ItemTracking".UntrackedItems := "DB ItemTracking".UntrackedI-
     tems - 1;
0006
             END IF;
0007
0008
             // If more items remain untracked, continue filling slots
             IF "DB ItemTracking".UntrackedItems = 0 THEN
0009
                 EXIT;
0010
0011
             END IF;
0012
        END FOR;
0013 END IF;
0014
```

```
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```

Network 2:

Push items that approach pusher based on travel time

```
0001 #err := RD SYS T("DB ItemTracking".CurrentTime);
0002
0003 "DB ItemTracking".DeltaTime := T DIFF(IN1:="DB ItemTracking".Current-
     Time, IN2:="DB ItemTracking".PrevScanTime);
0004 "DB ItemTracking".PrevScanTime := "DB ItemTracking".CurrentTime;
0005
0006 IF "M1 ConveyorMove" THEN
        FOR #i := 0 TO 5 DO
0007
0008
             IF "DB ItemTracking".ItemList[#i].Active THEN
0009
0010
                 "DB ItemTracking".ItemList[#i].AccumulatedTime :=
0011
                 "DB ItemTracking".ItemList[#i].AccumulatedTime + "DB ItemTrack-
     ing".DeltaTime;
0012
0013
                 IF "DB ItemTracking".ItemList[#i].AccumulatedTime >= "DB Item-
     Tracking". ThresholdTime THEN
                     "M Push" := TRUE;
0014
                     "DB ItemTracking".ItemList[#i].Active := FALSE;
0015
0016
                     "DB ItemTracking".ItemList[#i].AccumulatedTime := T#0s;
0017
                 END IF;
0018
             END IF;
0019
         END FOR;
0020 END IF;
0021
```

Network 3:

```
%DB1
                                                "IEC_Timer_0_DB"
                  %10.5
                                                                      %Q0.5
                                                      TP
%M11.4
                "B3_Pusher
                                                                    "Y2_Pusher
"M Push"
                Retracted'
                                                     Time
                                                                     Extend"
 +
                                                                       ( )-
                                                 · IN
                                                           0.
                                        T#0.2s — PT
                                                           ET — T#0ms
                                                                     %M11.4
                                                                     "M_Push"
                                                                       -(R)-
```

Network 4:

