

Totally Integrated Automation Portal		
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WORKS / PLC\_1 [CPU 1214C DC/DC/DC] / Program blocks

Main [OB1]

Main Properties

General

Name	Main	Number	1	Type	OB	Language	LAD
Numbering	automatic						

Information

Title	"Main Program Sweep (Cycle)"	Author		Comment		Family	
Version	0.1	User-defined ID					

Main

Name	Data type	Default value	Comment
▼ Input			
Initial_Call	Bool		Initial call of this OB
Remanence	Bool		=True, if remanent data are available
Temp			
Constant			

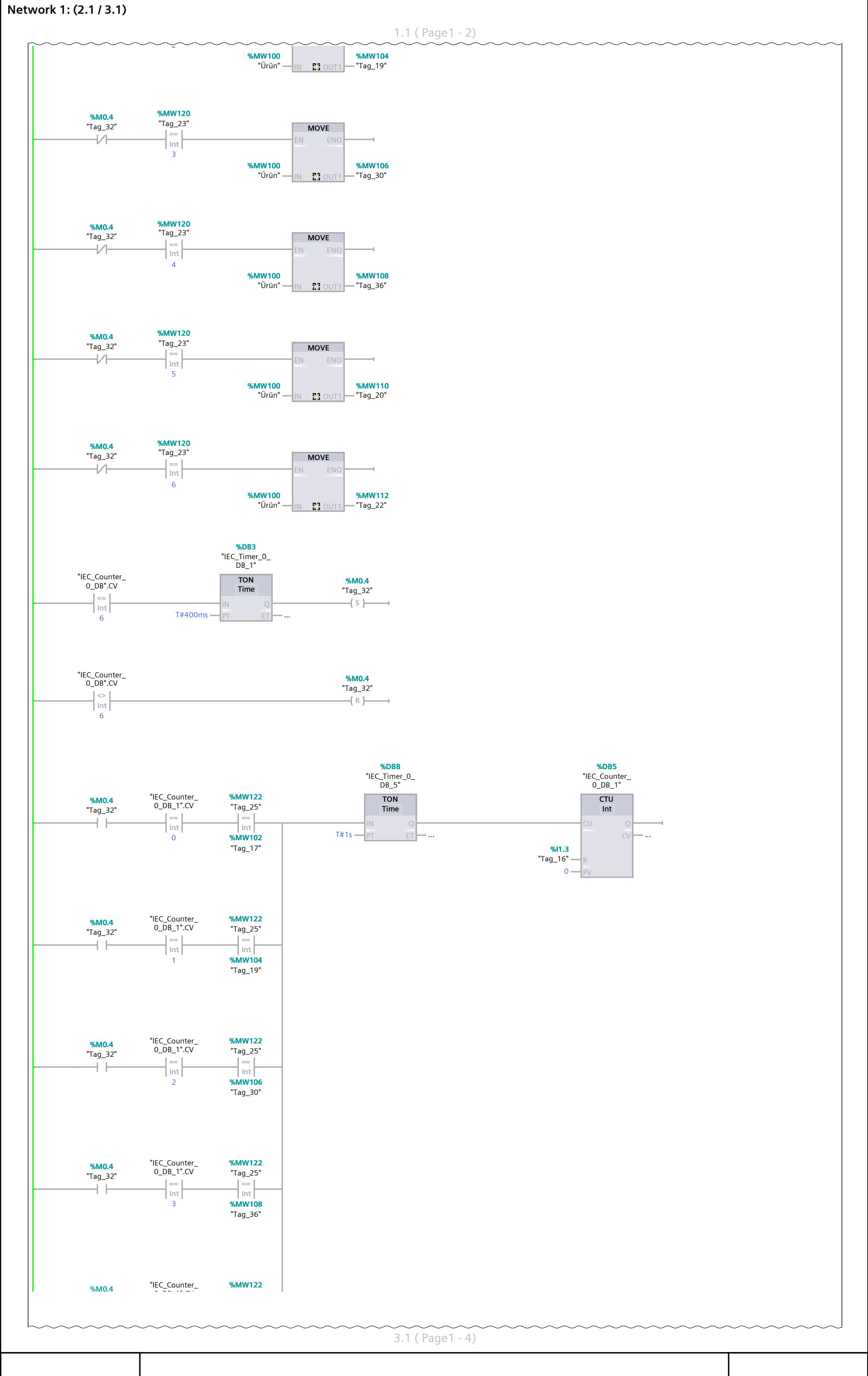
Network 1:

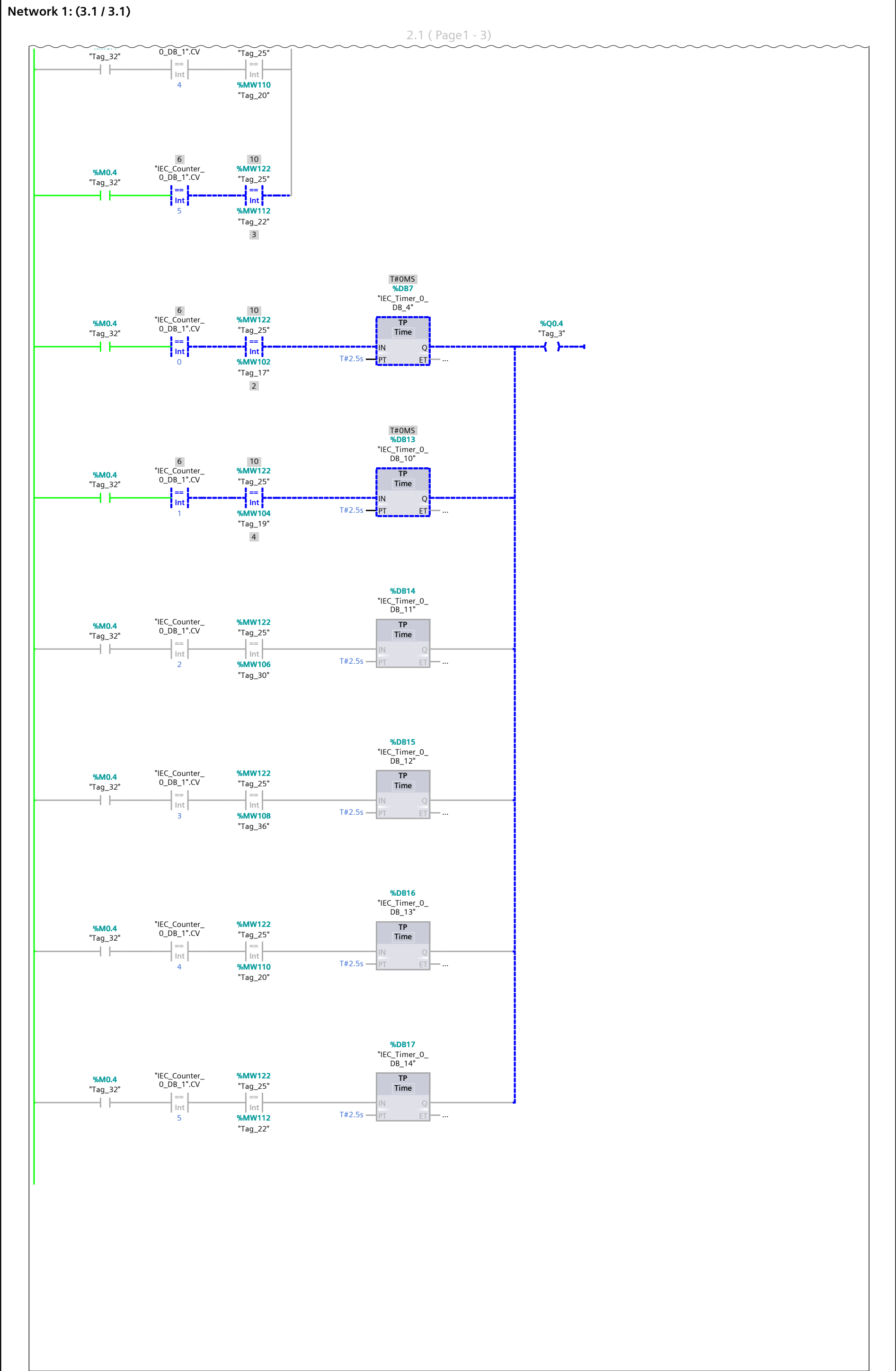
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Network 1: (1.1 / 3.1)

The diagram illustrates a PLC network with the following components and logic:

- Inputs:** %I1.3 ("Tag\_16"), %Q0.5 ("Tag\_8"), %I1.4 ("Light Barrier"), %Q0.5 ("Tag\_8"), %I1.5 ("Reflective"), %I0.7 ("Inductive"), %I1.4 ("Light Barrier"), %M0.4 ("Tag\_32"), %I1.4 ("Light Barrier"), %I1.5 ("Reflective"), %I0.7 ("Inductive").
- Outputs:** %MW122 ("Tag\_25"), %MW100 ("Ürün"), %Q0.5 ("Tag\_8"), %MW122 ("Tag\_25"), %MW100 ("Ürün"), %MW122 ("Tag\_25"), %MW100 ("Ürün"), %MW122 ("Tag\_25"), %MW100 ("Ürün"), %MW122 ("Tag\_25"), %MW122 ("Tag\_25"), %MW120 ("Tag\_23"), %MW102 ("Tag\_17").
- Timers:** %DB6 ("IEC\_Timer\_0\_DB\_3"), %DB1 ("IEC\_Timer\_0\_DB"), %DB4 ("IEC\_Timer\_0\_DB\_2"), %DB2 ("IEC\_Counter\_0\_DB").
- Instructions:** MOVE, TON (Time On Delay), TP (Time Pulse), CTU (Counter Up), and logic involving EN, ENO, IN, OUT1, OUT2, Q, ET, PT, PV, CU, CV, R, and PV.
- Logic:** The network contains several logic blocks. The first block is a MOVE instruction with IN=10, OUT1=%MW122, and OUT2=%MW100. The second block is a TON instruction with IN=%Q0.5, PT=T#1.5s, and OUT1=%MW122. The third block is a TP instruction with IN=%I1.4, PT=T#0.5s, and OUT1=%Q0.5. The fourth block is a MOVE instruction with IN=2, OUT1=%MW100. The fifth block is a MOVE instruction with IN=3, OUT1=%MW100. The sixth block is a MOVE instruction with IN=4, OUT1=%MW100. The seventh block is a MOVE instruction with IN=2, OUT1=%MW122. The eighth block is a MOVE instruction with IN=3, OUT1=%MW122. The ninth block is a TON instruction with IN=%I1.4, PT=T#0.2s, and OUT1=%I0.7. The tenth block is a CTU instruction with IN=%I1.4, OUT1=%MW120, and OUT2=%MW102. The eleventh block is a MOVE instruction with IN=%MW100, OUT1=%MW102. The twelfth block is a MOVE instruction with IN=%MW100, OUT1=%MW102.





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Symbol	Address	Type	Comment
"IEC_Counter_0_DB".CV		Int	
"IEC_Counter_0_DB_1".CV		Int	
"Inductive"	%I0.7	Bool	
"Light Barrier"	%I1.4	Bool	
"Reflective"	%I1.5	Bool	
"Tag_3"	%Q0.4	Bool	
"Tag_8"	%Q0.5	Bool	
"Tag_16"	%I1.3	Bool	
"Tag_17"	%MW102	Int	
"Tag_19"	%MW104	Int	
"Tag_20"	%MW110	Int	
"Tag_22"	%MW112	Int	
"Tag_23"	%MW120	Int	
"Tag_25"	%MW122	Int	
"Tag_30"	%MW106	Int	
"Tag_32"	%M0.4	Bool	
"Tag_36"	%MW108	Int	
"Ürün"	%MW100	Int	Metal

Network 2:

Symbol	Address	Type	Comment
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Network 3:

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The diagram illustrates a PLC control system with the following components and logic:

- Inputs:** %I0.0 (Tag\_37), %I0.1 (Tag\_7), %I0.2 (Tag\_12), %I0.3 (Tag\_11), %I0.5 (Tag\_40), %I0.6 (Tag\_38), %I1.3 (Tag\_16).
- Outputs:** %Q0.0 (Tag\_4), %Q0.1 (Tag\_6), %Q0.2 (Tag\_9), %Q0.3 (Tag\_1).
- Timers:**
  - %DB18 (IEC\_Timer\_0\_DB\_9):** TON Time, PT = T#0.5s. Triggered by %I0.0 (NO), %I0.1 (NC), %I0.6 (NC). Output %Q0.0 (NO).
  - %DB9 (IEC\_Timer\_0\_DB\_6):** TON Time, PT = T#1s. Triggered by %M0.5 (NC), %I0.3 (NO), %I0.6 (NO). Output %Q0.2 (NO).
  - %DB10 (IEC\_Timer\_0\_DB\_7):** TON Time, PT = T#1s. Triggered by %M0.5 (NO), %I0.2 (NO), %I0.6 (NO). Output %Q0.3 (NO).
- Counter:**
  - %DB11 (IEC\_Counter\_0\_DB\_2):** CTU Int. CU input from %I0.0 (NO). R input from %I1.3 (NO). PV set to 0. Output Q and CV are shown.
- Interlocking Logic:**
  - A reset coil (R) for %M0.5 (Tag\_40) is controlled by %Q0.3 (Tag\_1) (NO).
  - A set coil (S) for %M0.5 (Tag\_40) is controlled by a timer T#5s (PT) which is triggered by the CV of the counter (IEC\_Counter\_0\_DB\_2.CV) via an equals comparison (==) with a value of 3.
  - Additional logic involves %I1.3 (Tag\_16) and %Q0.1 (Tag\_6) in the output sequence.

Symbol	Address	Type	Comment
"IEC_Counter_0_DB_2".CV		Int	
"Tag_1"	%Q0.3	Bool	
"Tag_4"	%Q0.0	Bool	
"Tag_6"	%Q0.1	Bool	
"Tag_7"	%I0.1	Bool	
"Tag_9"	%Q0.2	Bool	
"Tag_11"	%I0.3	Bool	
"Tag_12"	%I0.2	Bool	
"Tag_16"	%I1.3	Bool	
"Tag_37"	%I0.0	Bool	
"Tag_38"	%I0.6	Bool	
"Tag_39"	%I0.5	Bool	
"Tag_40"	%M0.5	Bool	