Totally Inte									
Shelfs [FE	_								
General									
Name Numbering	Shelfs Automatic	Numb	er 21		Туре	FB	Lang	juage	SCL
Information									
Γitle		Autho	r		Comment		Fam	ily	
Version	0.1	User-d ID	efined				,		
Name		Data type	Default value	Retain			isible in Setpoint	Supervi-	Comment

ie	Data type	Default value	Retain	Accessible	Writ \	/isible in	Setpoint	Supervi	- Comment
				from HMI/OPC UA/Web API	able I	HMI engi- neering		sion	
Input				-		-			
Put_in		false	Non-retain	True	True		False		
Take_out		false	Non-retain	True	True		False		
Empty_storage		false	Non-retain	True	True		False		
Selected_shelves	Int	0	Non-retain	True	True	rue	False		
Output									
error	Bool	false	Non-retain	True	True		False		
Next filled shelves	Int	0	Non-retain	True	True	Γrue	False		
shelves_empty	Bool	false	Non-retain	True	True	Γrue	False		
InOut									
Static									
▼ shelves	Array[099] of Bool		Non-retain	False	False	alse	False		
shelves[0]		false	Non-retain	False	False	alse	False		
shelves[1]	Bool	false	Non-retain	False	False	alse	False		
shelves[2]	Bool	false	Non-retain	False	False	alse	False		
shelves[3]	Bool	false	Non-retain	False	False	alse	False		
shelves[4]		false	Non-retain	False	False		False		
shelves[5]		false	Non-retain	False	False		False		
shelves[6]		false	Non-retain	False	False		False		
shelves[7]	Bool	false	Non-retain	False	False	alse	False		
shelves[8]	Bool	false	Non-retain	False	False	alse	False		
shelves[9]	Bool	false	Non-retain	False	False	alse	False		
shelves[10]	Bool	false	Non-retain	False	False	alse	False		
shelves[11]	Bool	false	Non-retain	False	False	alse	False		
shelves[12]	Bool	false	Non-retain	False	False	alse	False		
shelves[13]	Bool	false	Non-retain	False	False	alse	False		
shelves[14]	Bool	false	Non-retain	False	False	alse	False		
shelves[15]	Bool	false	Non-retain	False	False	alse	False		
shelves[16]	Bool	false	Non-retain	False	False	alse	False		
shelves[17]	Bool	false	Non-retain	False	False	alse	False		
shelves[18]	Bool	false	Non-retain	False	False I	alse	False		
shelves[19]	Bool	false	Non-retain	False	False	alse	False		
shelves[20]	Bool	false	Non-retain	False	False I	alse	False		
shelves[21]	Bool	false	Non-retain	False	False	alse	False		
shelves[22]	Bool	false	Non-retain	False	False	alse	False		
shelves[23]	Bool	false	Non-retain	False	False	alse	False		
shelves[24]	Bool	false	Non-retain	False	False	alse	False		
shelves[25]	Bool	false	Non-retain	False	False	alse	False		
shelves[26]	Bool	false	Non-retain	False	False	alse	False		
shelves[27]	Bool	false	Non-retain	False	False	alse	False		
shelves[28]		false	Non-retain	False	False		False		
shelves[29]	Bool	false	Non-retain	False	False		False		
shelves[30]		false	Non-retain	False	False		False		
shelves[31]		false	Non-retain	False	False		False		
shelves[32]		false	Non-retain	False	False		False		
shelves[33]		false	Non-retain	False	False		False		
shelves[34]		false	Non-retain	False	False		False		
shelves[35]		false	Non-retain	False	False		False		
shelves[36]		false	Non-retain	False	False		False		
shelves[37]		false	Non-retain	False	False		False		
shelves[38]		false	Non-retain	False	False		False		
shelves[39]		false	Non-retain	False	False		False		
shelves[40]		false	Non-retain	False	False		False		
shelves[41]		false	Non-retain	False	False		False		
shelves[42]		false	Non-retain	False	False		False		
shelves[43]		false	Non-retain	False	False		False		
shelves[44]		false	Non-retain	False	False		False		
shelves[45]		false	Non-retain	False	False		False		
shelves[46]		false	Non-retain	False	False		False		
shelves[47]		false	Non-retain	False	False		False		
shelves[48]	Bool	false	Non-retain	False	False	alse	False		

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ame	Data type	Default value	Retain	from HMI/OPC UA/Web API	Writ Visible in able HMI engi- fro neering m HMI/ OPC UA/ Web API		sion	Comment
shelves[49]	Bool	false	Non-retain	False	False False	False		
shelves[50]	Bool	false	Non-retain	False	False False	False		
shelves[51]	Bool	false	Non-retain	False	False False	False		
shelves[52]	Bool	false	Non-retain	False	False False	False		
shelves[53]	Bool	false	Non-retain	False	False False	False		
shelves[54]	Bool	false	Non-retain	False	False False	False		
shelves[55]	Bool	false	Non-retain	False	False False	False		
shelves[56]	Bool	false	Non-retain	False	False False	False		
shelves[57]	Bool	false	Non-retain	False	False False	False		
shelves[58]	Bool	false	Non-retain	False	False False	False		
shelves[59]	Bool	false	Non-retain	False	False False	False		
shelves[60]	Bool	false	Non-retain	False	False False	False		
shelves[61]	Bool	false	Non-retain	False	False False	False		
shelves[62]	Bool	false	Non-retain	False	False False	False		
shelves[63]	Bool	false	Non-retain	False	False False	False		
shelves[64]	Bool	false	Non-retain	False	False False	False		
shelves[65]	Bool	false	Non-retain	False	False False	False		
shelves[66]	Bool	false	Non-retain	False	False False	False		
shelves[67]	Bool	false	Non-retain	False	False False	False		
shelves[68]	Bool	false	Non-retain	False	False False	False		
shelves[69]	Bool	false	Non-retain	False	False False	False		
shelves[70]	Bool	false	Non-retain	False	False False	False		
shelves[71]	Bool	false	Non-retain	False	False False	False		
shelves[72]	Bool	false	Non-retain	False	False False	False		
shelves[73]	Bool	false	Non-retain	False	False False	False		
shelves[74]	Bool	false	Non-retain	False	False False	False		
shelves[75]	Bool	false	Non-retain	False	False False	False		
shelves[76]	Bool	false	Non-retain	False	False False	False		
shelves[77]	Bool	false	Non-retain	False	False False	False		
shelves[78]	Bool	false	Non-retain	False	False False	False		
shelves[79]	Bool	false	Non-retain	False	False False	False		
shelves[80]	Bool	false	Non-retain	False	False False	False		
shelves[81]	Bool	false	Non-retain	False	False False	False		
shelves[82]	Bool	false	Non-retain	False	False False	False		
shelves[83]	Bool	false	Non-retain	False	False False	False		
shelves[84]	Bool	false	Non-retain	False	False False	False		
shelves[85]	Bool	false	Non-retain	False	False False	False		
shelves[86]	Bool	false	Non-retain	False	False False	False		
shelves[87]	Bool	false	Non-retain	False	False False	False		
shelves[88]	Bool	false	Non-retain	False	False False	False		
shelves[89]	Bool	false	Non-retain	False	False False	False		
shelves[90]	Bool	false	Non-retain	False	False False	False		
shelves[91]	Bool	false	Non-retain	False	False False	False		
shelves[92]	Bool	false	Non-retain	False	False False	False		
shelves[93]	Bool	false	Non-retain	False	False False	False		
shelves[94]	Bool	false	Non-retain	False	False False	False		
shelves[95]	Bool	false	Non-retain	False	False False	False		
shelves[96]	Bool	false	Non-retain	False	False False	False		
shelves[97]	Bool	false	Non-retain	False	False False	False		
shelves[98]	Bool	false	Non-retain	False	False False	False		
shelves[99]	Bool	false	Non-retain	False	False False	False		
Temp								
<u> </u>	Int							
counter_temp	Int							

```
0001 IF #Put_in AND NOT #Take_out THEN
0002 #shelves[#Selected_shelves] := true;
0003 ELSIF #Take_out AND NOT #Put_in THEN
0004 #shelves[#Selected_shelves] := false;
0005 ELSIF #Put_in AND #Take_out THEN
0006 #error := true;
0007 END_IF;
0008
0009 // Empty storage code
0010 IF #Empty_storage THEN
0011 FOR #counter_temp := 0 TO 99 DO
         #shelves[#counter_temp] := false;
0012
0013 END FOR;
0014 END_IF;
0015
0016 // Reset counter_temp before searching for the next filled shelf
0017 #counter_temp := #Selected_shelves + 1; // Start searching from the shelf after the selected one
0018 #"Next filled shelves" := #Selected_shelves; // Initialize to -1 to indicate 'not found'
0019
0020 WHILE #counter_temp < 100 DO
0021 IF #shelves[#counter_temp] THEN
        #"Next filled shelves" := #counter_temp;
0022
```

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```
D023 EXIT; // Exit the loop as we found a filled shelf

D024 END_IF;

C025 #counter_temp := #counter_temp + 1; // Increment counter

END_WHILE;

C027

C128 // Check if no filled shelves were found

C139 IF #"Next filled shelves" = -1 THEN

C130 #shelves_empty := TRUE;

C131 ELSIF #Put_in THEN

C132 CHAPTER

C133 END_IF;

C134 CHAPTER

C136 CHAPTER

C137 CHAPTER

C138 CHAPTER

C
```

Symbol	Address	Туре	Comment
#"Next filled shelves"		Int	
#counter_temp		Int	
#Empty_storage		Bool	
#error		Bool	
#Put_in		Bool	
#Selected_shelves		Int	
#shelves[*]		Bool	
#shelves_empty		Bool	
#Take_out		Bool	