

Inspection Field Size at 40 cm View Distance

View object size y (µm)	Square. leg length (cm) contrast		View object size y (µm)	Square. leg length (cm) contrast	
	Good	Bad		Good	Bad
0 ≤ y < 117	invisible		293 ≤ y < 303	7.1	5.3
117 ≤ y < 120	2.7	invisible	303 ≤ y < 312	7.4	5.6
120 ≤ y < 122	3.0		312 ≤ y < 320	7.7	5.8
122 ≤ y < 125	3.3		320 ≤ y < 325	8.1	6.1
125 ≤ y < 128	3.7		325 ≤ y < 336	8.5	6.4
128 ≤ y < 131	4.3		336 ≤ y < 344	9.0	6.8
131 ≤ y < 134	4.5		344 ≤ y < 349	9.3	7.0
134 ≤ y < 139	4.7		349 ≤ y < 357	9.8	7.4
139 ≤ y < 157	5.0		357 ≤ y < 365	10.4	7.8
157 ≤ y < 211	5.2		365 ≤ y < 374	10.8	8.1
211 ≤ y < 229	5.4		4.1	374 ≤ y < 379	11.3
229 ≤ y < 245	5.6	4.2	379 ≤ y < 384	11.9	8.9
245 ≤ y < 266	5.9	4.4	384 ≤ y < 386	12.5	9.4
266 ≤ y < 277	6.2	4.7	386 ≤ y < 392	13.1	9.8
277 ≤ y < 285	6.5	4.9	392 ≤ y < 395	13.7	10.3
285 ≤ y < 293	6.7	5.0	395 ≤ y < 398	15.1	11.3
			y ≥ 398	18.4	13.8

Contrast Classes		G = Good contrast B = Bad contrast														
No.	Hue	Number of color as in vertical column														
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	violet	-	B	B	B	G	G	G	G	G	G	G	B	B	G	B
2	indigo	B	-	B	B	B	G	G	G	G	G	G	B	B	G	B
3	blue	B	B	-	B	B	G	G	G	G	G	G	B	B	G	B
4	bluish-green	B	B	B	-	B	B	G	G	G	G	G	B	B	G	B
5	green	G	B	B	B	-	B	G	G	G	G	G	G	G	G	B
6	greenish-yellow	G	G	G	B	B	-	B	G	G	G	G	G	G	G	B
7	yellowish-green	G	G	G	G	G	B	-	B	B	B	G	G	G	G	G
8	yellow	G	G	G	G	G	G	B	-	B	B	G	G	G	B	G
9	yellowish-orange	G	G	G	G	G	G	B	B	-	B	B	G	G	G	G
10	orange	G	G	G	G	G	G	B	B	B	-	B	G	G	G	G
11	reddish-orange	G	G	G	G	G	G	G	G	B	B	-	B	B	G	G
12	red	B	B	B	B	G	G	G	G	G	G	B	-	B	G	B
13	reddish-violet	B	B	B	B	G	G	G	G	G	B	B	-	G	B	B
14	white	G	G	G	G	G	G	G	B	G	G	G	G	-	G	G
15	black	B	B	B	B	B	B	G	G	G	G	B	B	G	-	-

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MTM-VI

Time Units

TMU	sec.	min.	hr
1	0,036	0,0006	0,00001
27,8	1		
1 666,7		1	
100 000			1

If training in MTM for Visual Inspection is lacking
 usage of this table leads to wrong results.

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Eye Focus		EA
<u>Largest view distance (cm)</u> Smallest view distance (cm)	Code	TMU
1.02 < S ≤ 1.5	EA1	5.8
1.5 < S ≤ 2.0	EA2	8.4
S > 2.0	EA3	10.0

Group View Objects		GS	
Arrangement	Number of view objects	Code	TMU
orderly or familiar	1 - 2	GS0	0.0
	3 - 6	GS1	0.3
	7 - 9	GS2	0.7
	10 - 12	GS3	1.8
random	3	GS4	1.8
	4 - 6	GS5	3.2
random with ambient effect	3	GS6	5.1
	4 - 6	GS7	8.3

Eye Shift		BV
Distance between view points at normal view distance (cm)	Code	TMU
0 < A ≤ 7	BV1	0.8
7 < A ≤ 15	BV2	1.3
15 < A ≤ 29	BV3	2.3
A > 29	BV4	6.7

Mental Processes		MP			
		Number of actions			
		2	3 - 4	5 - 6	> 6
Defect probability per inspection interval	Code	1	2	3	4
	TMU				
0 % ≤ H ≤ 10 %	MPA.	3.9	4.7	5.7	6.5
10 % < H ≤ 25 %	MPB.	4.3	5.9	7.5	8.5
25 % < H ≤ 50 %	MPC.	5.3	7.5	10.1	11.7
50 % < H ≤ 100 %	MPD.	5.9	8.7	11.9	13.9
supplementary value for view object size < 211 μm	MPE	0.6			