



## Marking times (reference value) for marking unit 314

### Scribe- and dot matrix marking

The following max. marking cycle times were achieved with a marking unit 314 with marking controller EK2-Box.

<b>Figure set A:</b>	<b>Figure set B:</b>	<b>Figure set C:</b>
DIN 1451 or OCR-A <b>Scribe marking</b>	HS (High speed = slightly angled figure design) <b>Scribe marking</b>	7 x 5 (dot matrix) <b>Dot matrix marking</b>

Font height	1,8 mm			2 mm			2,5 mm			3 mm			4 mm			5 mm			6 mm			7 mm					
	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C			
Figure set	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
2 figures	0,68	0,57	0,79	0,70	0,57	0,81	0,73	0,59	0,84	0,79	0,65	0,92	0,87	0,73	0,93	0,93	0,81	1,04	1,06	0,89	1,13	1,07	0,96	1,26			
5 figures	1,32	1,07	1,62	1,32	1,15	1,71	1,54	1,23	1,73	1,56	1,38	1,84	1,81	1,60	2,16	1,99	1,73	2,26	2,21	1,84	2,51	2,40	2,10	2,68			
10 figures	2,35	2,01	3,15	2,41	2,06	3,29	2,74	2,32	3,49	2,99	2,58	3,77	3,43	2,94	4,24	3,83	3,37	4,64	4,27	3,72	5,07	4,68	4,13	5,36			
15 figures single-spaced	3,41	2,93	4,64	3,54	3,10	4,69	3,90	3,35	5,02	4,24	3,63	5,46	4,94	4,30	6,11	5,56	4,83	6,67	6,20	5,35	7,40	6,91	6,00	7,87			
30 figures single-spaced	6,59	5,63	8,93	6,89	5,88	9,43	7,62	6,50	9,98	8,33	7,20	10,82															
40 figures single-spaced	8,65	7,39	11,84	9,04	7,83	12,48	10,12	8,70	13,22																		
Max. figures / second	4,62	5,41	3,38	4,42	5,11	3,21	3,95	4,60	3,03	3,62	4,19	2,80	3,10	3,60	2,47	2,76	3,20	2,26	2,44	2,72	2,04	2,10	2,56	1,92			

Testing environment:

Marking heads	Distance (in mm)	Marking pressure (in bar)	Material
Figure set A + B: R16 (FH 1,8 – 3,0); R20 (FH 4,0 – 7,9) Figure set C: PD20L	0,5 1 (1,8 – 3 FH) & 3 (4 – 7 FH)	3,0	steel panel 1mm

Information:

All descriptions are purely marking times –in-feed movements of the marking unit or marking head as well as intermediate movements and movements towards the marking position or return to Home position are not included. Possibly these values cannot be achieved because of the font parameters, distance of the needle and/or large marking depth. The marking times are reference values. Binding time specifications are only made by marking trial with an original workpiece. The marking speed can have a significant impact on the marking. The quality of the marking depends also on the built-in situation, rigidity of the marking unit parts, marking position, workpiece geometry and surface of the workpiece.