

PRODUCT INFORMATION FOR AMF-MARKER



The AMF-Marker is a high quality marking tool for CNC machines that can permanently mark surfaces.

TORQUES

If the tool will be seated in a Weldon tool holder, the following torques must be complied with:

	MSL, MS	MM
Clamping screw M6	0.9 Nm	1.8 Nm
Clamping screw M8	1.2 Nm	2.3 Nm
Clamping screw M10	1.5 Nm	2.9 Nm
Clamping screw M12	1.8 Nm	3.5 Nm

MXL: Marker Extra Large

ML: Marker Large

MM: Marker Medium

MS: Marker Small

MSL: Marker Slimline

SETTING RECOMMENDATIONS FOR AMF-MARKERS

Material group	Font size [mm]	Font width	Body	Needle	Needle pressure setting (adjusting ring or adjusting screw) [mm]	Machine spindle infeed [mm]	Feed rate [mm/min.]	Speed [rpm.]	External cooling
- Low-carbon steels - Soft plastics - Aluminium**	< 2	narrow	MS, MSL	90R03Ex00	2	-0.2	max.	min.	helpful
	2 - 4	medium	MS, MSL	90R05Ex00	2	-0.2	max.	min.	helpful
	4 - 6	medium	MM	90R10Ex00	4	-0.3	max.	min.	helpful
	> 6	wide	MM	90R10Ex01	4	-0.3	300	3,000	required
- Low-to-medium-carbon machining steels - Harder plastics - Aluminium**	< 2	narrow	MM, MS, MSL	90R05Ex00	4	-0.3	max.	min.	helpful
	2 - 4	medium	MM	90R10Ex00	6	-0.4	max.	min.	helpful
	4 - 6	medium	MM, ML	90R10Ex00	MM: 6, ML: 4	-0.5	max.	min.	helpful
	> 6	wide	MM, ML	90R10Ex01	MM: 7, ML: 5	-0.5	500	5,000	required
- Structural steels and low-alloy. medium-to-high carbon steels - Low alloy stainless steels	< 2	narrow	MM, MS, MSL	90R05Ex00	8	-0.5	max.	min.	-
	2 - 4	medium	ML, MM, MS, MSL	90R05Ex00	ML: 6, Others: 8	-0.5	max.	min.	-
	4 - 6	medium	ML, MM, MS, MSL	90R05Ex00 90R10Ex00	ML: 6, Others: 8	-0.5	max.	min.	-
	> 6	wide	MM, ML	90R10Ex01 90R10Ex02	MM: 9, Large: 7	-0.5	500	5,000	helpful
- Hart-to-cut tool steels - High alloy stainless steels - Cast steel	< 2	narrow	ML	90R05Ex00	10	-0.5 to -1.0	max.	min.	-
	2 - 4	medium	ML	90R05Ex00 90R10Ex00	90R05Ex00: 10 90R10Ex00: 12	-0.5 to -1.0	max.	min.	-
	4 - 6	medium	ML, MXL	90R10Ex01 90R10Ex02	ML: 12, MXL: 10	-0.5 to -1.0	700	7,000	helpful
	> 6	wide	ML, MXL	90R10Ex02 90R10Ex03	ML 12, MXL: 10	-0.5 to -1.0	700	7,000	helpful
- Alloyed cast steel	< 2	narrow	MXL	90R05Ex00	12	-0.5 to -1.5	max.	min.	-
	2 - 4	medium	MXL	90R05Ex00 90R10Ex00	90R05Ex00: 12 90R10Ex00: 15	-0.5 to -1.5	max.	min.	-
	4 - 6	medium	MXL	90R10Ex01 90R10Ex02	15	-0.5 to -1.5	700	7,000	helpful
	> 6	wide	MXL	90R10Ex02 90R10Ex03	15	-0.5 to -1.5	700	7,000	helpful

* Please view the selection of tools and specified parameters as orientation for a first setting. Additional adjustments might make sense, depending on use or material.

** For soft aluminium, we generally recommend use of a Marker Medium with needle 90R10Ex00. The parameters „infeed“, „feed rate“, „needle pressure“, etc. can be taken from the table.

OPTIMISATION OF LABELLING

Marking	Cause	Remedy	Marking	Cause	Remedy
The text is unclear or misshapen	Machine cannot follow the programmed contour	Reduce feed rate	Burr on the marking line	Needle pressure setting (adjusting ring or adjusting screw) too high	Reduce needle pressure
	The needle is not properly secured in the Marker	Insert needle into the Marker with AMF pliers while turning and pressing until the marking of the needle is no longer visible		Machine spindle infeed is too great during marking	Reduce machine spindle infeed
	The selected spindle speed is too low -> with eccentric needle	Increase number of rotation			