

CASSETTE BUFFER MAGAZINE

HYDRAULIC CLAMPING SYSTEM

„ZERO-POINT“ CLAMPING SYSTEM

CLAMPING AND FIXTURE SYSTEMS



TOGGLE CLAMPS,
MANUAL AND PNEUMATIC

VACUUM CLAMPING
TECHNOLOGY

MECHANICAL CLAMPING
ELEMENTS

GRIPPER



CLAMPING. SCREWING. LOCKING.

ANDREAS MAIER GmbH & Co. KG
 Waiblinger Straße 116 · D-70734 Fellbach
 Postfach 1760 · D-70707 Fellbach
 Phone: +49 711 5766-0
 Fax: +49 711 575725
 E-mail: amf@amf.de
 Internet: www.amf.de

Cat. order no. 515429 · € 2,40

WE GENERATE EXCITEMENT

Since its founding by Andreas Maier in 1890, our company has lived through many exciting times. Today we are the leading manufacturer in Europe, supplying over 5,000 different products from the fields of clamping, hand tools and locks. With this extensive product range we can meet all of our customers' needs and requirements. But providing optimal quality means meeting the challenges at all levels: Expert consultation, modern team organisation, individual solutions (including special developments), flexibility in response to changing conditions, etc. And we ourselves find this so exciting that we look forward every day to shaping the market together with our employees and our customers – both now and in the future. That is something you can count on.

COMPANY HISTORY

- 1890** Company founded as a lock manufacturer by Andreas Maier.
- 1920** Product range extended to include spanners.
- 1928** Production line assembly of „Fellbach locks“.
- 1951** AMF introduces clamping elements and diversifies into workpiece and tool clamping technology.
- 1965** Toggle clamps extend the AMF product range. AMF catalogues are now printed in ten languages.
- 1975** Further specialisation into hydraulic clamping technology.
- 1982** Clamping and fixture systems round off AMF's clamping expertise.
- 1996** AMF team organisation in all sectors of the business. Quality management with certification to ISO 9001.
- 2001** AMF Service Guarantee for all products.
- 2004** Introduction of the ZPS zero-point clamping system.
- 2007** The magnetic clamping technology extends the AMF product range.
- 2009** Development and marketing of AMF Vacuum clamping technology
- 2012** Marking and cleaning tools included in the AMF product range.

WE GENERATE EXCITEMENT - ON YOUR MOBILE DEVICE TOO

The "Clamping technology APP" offers you an overview of AMF's exciting clamping product range. No matter whether mechanical, pneumatic, hydraulic or magnetic clamping technology, as well as vacuum and zero point clamping systems - all the products are presented in detail in this APP, and you can see the numerous application options of AMF clamping technology at a glance.

All products can be downloaded as 2D and 3D CAD models, and be conveniently imported into all standard CAD programs.

Also stay up-to-date and read our news and PDF catalogues on your mobile device.

Test it now by downloading our clamping technology APP free-of-charge from the Apple App Store or Google Play.



THE CLAMPING TECHNOLOGY APP - FIND PRODUCTS, DOWNLOAD CAD DATA, STAY INFORMED...



MANAGING DIRECTORS

> Johannes Maier
> Volker Göbel



THE AMF SERVICE GUARANTEE

> Assuredly on the way to the top

5 Individual development

And if the product you need doesn't exist? Just ask us: We will find the best solution for you – whether it is a special version or a completely new development.

4 Warranty

We stand by our high quality standards. We handle customer complaints very liberally and without red tape – whenever possible even after the end of the warranty period.

3 Guaranteed quality standard

AMF stands for manufacturing in-house with the utmost care. A tradition we have upheld since 1890 – and naturally for many years now with a modern quality management system to ISO 9001.

2 Short delivery times

AMF's finished goods inventory with over 5,000 items guarantees a delivery readiness of 98%. You can also count on each warehouse item you order being shipped to you on the same day.

1 Service from genuine experts

Different tasks, different solutions. In AMF's professional product range, you can find the right solution quickly and reliably: either from your local dealer or with help from the specialists in our teams. A phone call is all it takes.

E Made in Germany

It goes without saying that our range of products is developed and manufactured by our team of employees in Germany.

PRODUCTS ON THE COVER

AMF-Marker Extra Large No. 1550MXL, page 8 · AMF-Marker Slimline No. 1590MSL, page 12
AMF-Cleaner Stick No. 1520CS, page 25 · AMF-Cleaner Ball No. 1510CBVC, page 23

THE MOST IMPORTANT THING ABOUT „AMF MARKING TOOLS“	4 - 7
--	-------

AMF-MARKER	8 - 12
------------	--------



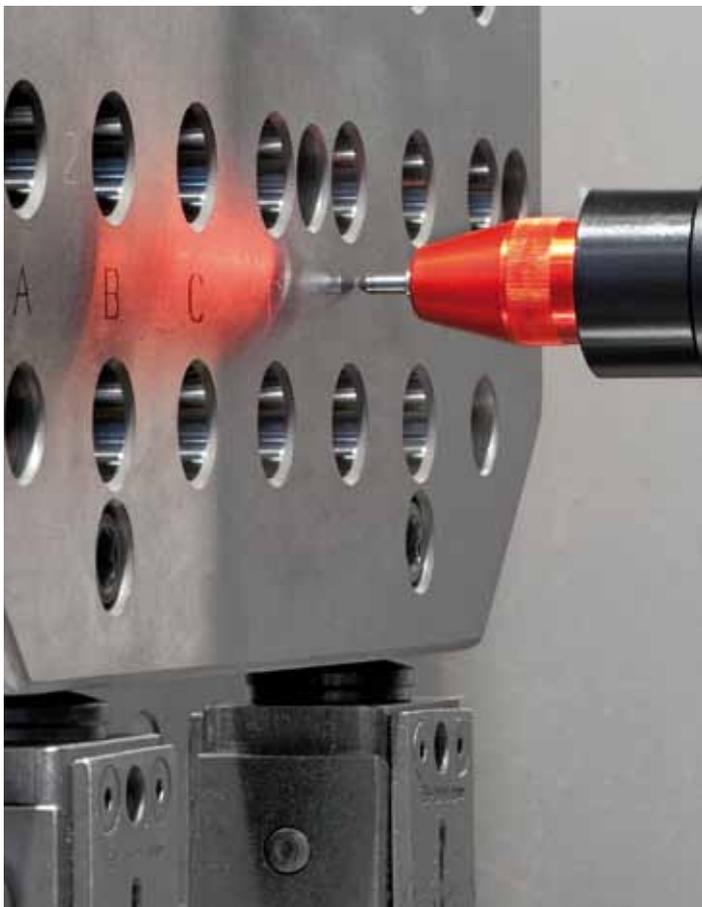
AMF-WRITER	13 - 19
------------	---------



AMF-CLEANER, CLEAN-CASE	20 - 22
-------------------------	---------



AMF-CLEANER, BALL AND STICK DESIGN	23 - 26
------------------------------------	---------

Subject to technical alterations.



SKALENEINSTELLUNG-6 Z--1

BESTELL-NR 17475	AMF-WRITER, EXTRA LARGE,	NADEL 60R10
BESTELL-NR 17418	AMF-WRITER, LARGE,	NADEL 90R10
BESTELL-NR 17426	AMF-WRITER, LARGE,	NADEL 90R05
BESTELL-NR 17434	AMF-WRITER, MEDIUM,	NADEL 90R10
BESTELL-NR 17442	AMF-WRITER, MEDIUM,	NADEL 90R05
BESTELL-NR 17459	AMF-WRITER, SMALL,	NADEL 90R05
BESTELL-NR 17467	AMF-WRITER, SMALL,	NADEL 90R03

AMF MARKING TOOLS

AND YOUR MACHINE WILL MARK ECONOMICALLY.

The AMF-Writers and AMF-Markers are tools for the permanent marking of workpieces. They are preferably clamped in collets and Weldon chucks and mounted in the machine spindle of a CNC machine.

Marking is accomplished through a combination of material compression and displacement, which we call „drumming“. That means, the marking is made using a special needle with an extremely hard ball. The tool works both with and without spindle rotation.

Thanks to the special design and very high quality guides, this tool can provide an even and high-quality marking without height adjustment by the spindle, for smooth and rough surfaces that can be uneven by between 3 and 7 mm. The adaptation to different materials, material hardness and implementation of different marking depths is infinitely adjustable.

This tool is particularly economical thanks to the low acquisition costs, long service life and tremendous time savings.

YOUR BENEFITS AT A GLANCE:

- > the surface is not weakened or damaged, but is compressed and thus strengthened
- > high marking speeds are possible
- > high wear resistance and thus long service life
- > also suitable for thin-walled workpieces
- > no burrs appear on the marking line
- > high-quality type face
- > unevenness of the workpiece is compensated for (see Fig. 1)
- > also suitable for marking round surfaces (up to 15°)
- > depending on the design, it is possible to mark surfaces with a hardness of up to 57 HRC
- > no generation of noise

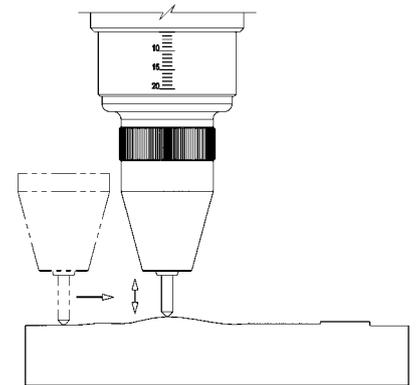


Fig. 1 Uneven workpiece surface

PRODUCT OVERVIEW AMF-MARKER



ARE YOU PRODUCING YET OR STILL LABELLING?

THE CALCULATION IS QUITE SIMPLE!

Through use of the AMF marking tools, you demonstrably reduce your marking time in the machining centre by over 75%.

You avoid long times for marking, and your machine can already work on the next job - so you save money.

Take the time and simply calculate your savings potential with the AMF marking tool.

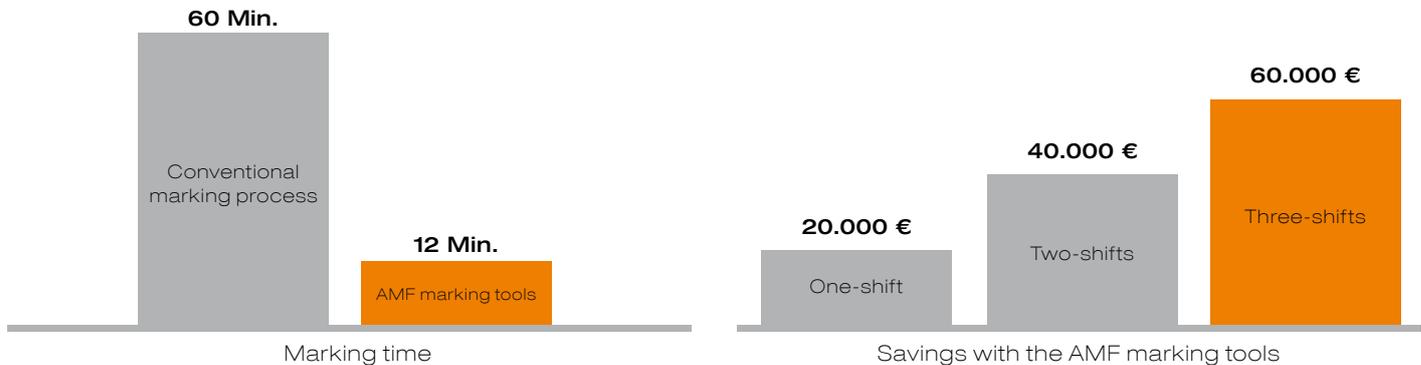
SAMPLE CUSTOMER CALCULATION BEFORE AND AFTER USE OF THE AMF MARKING TOOL:

Procedure	Conventional marking process	Marking with the AMF marking tool
Machine costs (in €/hr)	100	100
Number of markings per shift (8 hr)	60	60
Time per marking procedure (in s)	60	12
Time per marking procedure per shift (in min)	60	12
Costs for marking per shift	100,00 €	20,00 €
Costs for marking per year (250 working days)	25.000,00 €	5.000,00 €
Annual savings per shift	20.000,00 €	

DRASTICALLY REDUCED MARKING TIMES GUARANTEE YOU WILL EXPERIENCE A RAPID RATIONALISATION EFFECT

If previously 60 minutes had to be invested per shift for 60 markings in the machining centre, you reduce the pure marking time to 12 minutes through use of the AMF marking tool. Through the automated exchange of the workpiece and the ability of the tool to mark quickly, you achieve savings consistently.

The savings in our customer example of €60,000 per year, for three-shift production utilisation, guarantees rapid amortisation of the invested amounts of approx. €1,600 for an AMF-Writer Extra Large.

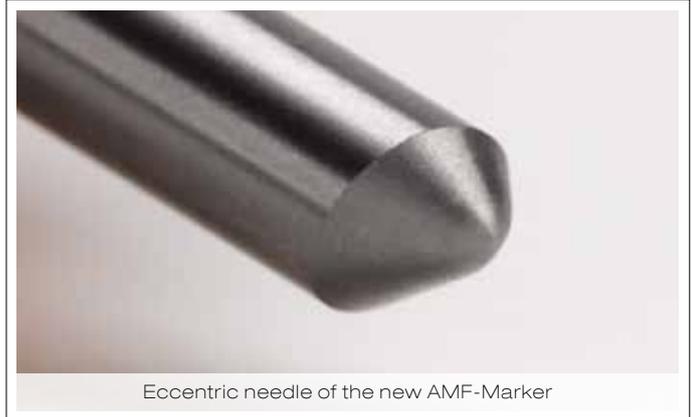


AMF MARKING TOOLS - AND THE PERFECT NEEDLE!

The heart of the AMF tools and the guarantee for a perfect written type face is the elaborately produced needle. This permits marking through a combination of material compression and displacement, which we call „drumming“. That means, the marking is generated by the rounded point, which we also call a „ball“. The optimal radius of these „balls“ varies, depending on the material to be labelled, the breadth and depth of the lines and print size. Therefore, AMF carries several designs of the needle in order to ensure the best marking results.

The design of the needle is classified by the angle, radius and eccentricity of the point. This means that a needle of design 90R10Ex01 has an angle of 90° at the tip of the needle and a radius of 1.0 mm as well as 0.1 mm eccentricity; a needle of design 90R05Ex00 would accordingly have an angle 90°, a radius of 0.5 mm as well as 0.0 mm eccentricity, i.e. it is a centric needle.

We are happy to assist you in the search for the optimal needle for your application.



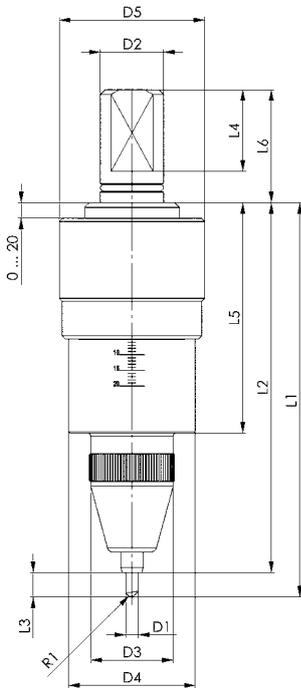
Subject to technical alterations.

No. 1550MXL

AMF Marker Extra Large

Marking tool, suitable for 20 mm collets and Weldon holders (Weldon holders only when using the function check).
Marking needles are not included.

NEW!



Order no.	D1 [mm]	D2 [mm]	D3 [mm]	D4 [mm]	D5 [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	Weight [g]
548180	4	20	26	40	46	125,5	118	7,5	26	74	36	326

Application:

This tool is especially suitable for marking uneven or rough surfaces with a hardness of up to 50 HRC with a large font and wide line thickness. Workpiece unevenness of up to 7 mm is compensated for.

With eccentric needle:

External cooling is recommended during the marking.

The marking speed as well as the spindle speed used can be adapted to the marking according to your own individual wishes and requirements. Select between 3 marking needles: 0.1 mm / 0.2 mm / 0.3 mm eccentricity.

In general: The greater the eccentricity and the higher the spindle speed (or the lower the feed rate), the deeper is the marking.

The following rule of thumb applies for a clean text:

Feed (mm/min) x 10 = Spindle speed (rpm)

With centric needle:

External cooling is not necessary during the marking.

The maximum marking speed: maximum feed rate.

Select between 2 marking needles: 0.5 mm / 1 mm radius at the needle tip (R1).

Features:

The AMF Marker Extra Large has reinforced guides and a broader special needle. The setting is made continuously through a knurled nut and can be determined by means of a 0-20 scale. Due to this setting capability with the knurled nut, the tool is optimally suited for small and medium lot sizes. The tool is held preferably in 20 mm collets or Weldon holders. When using the function check, use of Weldon holders is mandatory.

Advantage:

- Lightning-fast needle change: the marking needle is removed and changed with the aid of a pliers. This is an advantage even when the needle is worn or broken off.
- More distinct marking through use of an eccentric needle: with the AMF Marker you have the ability to select between conventional rolling and rotary swaging. In rotary swaging, the material is compressed, as well as forced sideways, and „swaged“ by the rotation of the marking needle. This requires use of an eccentrically ground needle which, in combination with spindle rotation, creates more distinct marking than conventional rolling.
- Function check for use in automation: An integrated function check makes the AMF Marker suitable for use in automation. The query takes place via a pneumatic dynamic pressure query. For this purpose, the tool machine needs an internal coolant supply (ICS) and freely, acknowledgeable M command.
- Maximum flexibility thanks to lightning-fast changes between various needle types
- Extremely high wear resistance
- Suitable for marking rough and uneven materials
- Easy adjustment by means of a knurled nut (possible also when clamped)

No. 1550MXLN

Marking needle

fits AMF Marker Extra Large No. 1550MXL.

NEW!



Order no.	Needle	D1 [mm]	L1 [mm]	L2 [mm]	R1 [mm]	Weight [g]
550468	MXLN-90R05 Ex00	4	47	0,0	0,5	8
550469	MXLN-90R10 Ex00	4	47	0,0	1,0	8
550470	MXLN-90R10 Ex01	4	47	0,1	1,0	8
550471	MXLN-90R10 Ex02	4	47	0,2	1,0	8
550472	MXLN-90R10 Ex03	4	47	0,3	1,0	8

Features:

Needles for rotary swaging:

MXLN-90R10 Ex01: Radius at the needle tip 1.0 mm, eccentricity 0.1 mm

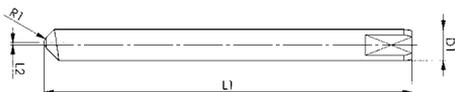
MXLN-90R10 Ex02: Radius at the needle tip 1.0 mm, eccentricity 0.2 mm

MXLN-90R10 Ex03: Radius at the needle tip 1.0 mm, eccentricity 0.3 mm

Needles for rolling:

MXLN-90R10 Ex00: Radius at the needle tip 1.0 mm, eccentricity 0.0 mm

MXLN-90R05 Ex00: Radius at the needle tip 0.5 mm, eccentricity 0.0 mm

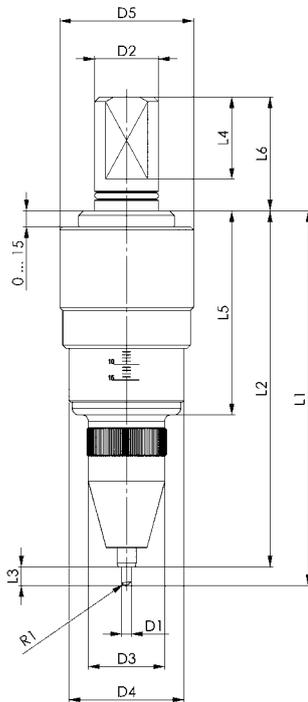


No. 1560ML

AMF Marker Large

Marking tool, suitable for 20 mm collets and Weldon holders (Weldon holders only when using the function check).
Marking needles are not included.

NEW!



Order no.	D1 [mm]	D2 [mm]	D3 [mm]	D4 [mm]	D5 [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	Weight [g]
550223	3	20	24	36	42	119	113	6	26	65	36	263

Application:

This tool is ideal for marking a wide variety of materials such as aluminium, titanium, steel, bronze, copper, brass, plastics etc.
Workpiece unevenness of up to 6 mm is compensated for.

With an eccentric needle:

External cooling is recommended during the marking.
The marking speed as well as the spindle speed used can be adapted to the marking according to your own individual wishes and requirements.
Select between 3 marking needles: 0.1 mm / 0.2 mm / 0.3 mm eccentricity.
In general: The greater the eccentricity and the higher the spindle speed (or the lower the feed rate), the deeper is the marking.
The following rule of thumb applies for a clean text:
Feed (mm/min) x 10 = Spindle speed (rpm)

With centric needle:

External cooling is not necessary during the marking.
The maximum marking speed: maximum feed rate.
Select between 2 marking needles: 0.5 mm / 1 mm radius at the needle tip (R1).
- Needle MLN-90R10 Ex00 is optimal for marking with a large font (font size legible from 5 mm) and wide line thickness on surfaces with a hardness of up to 50 HRC.
- Needle MLN-90R05 Ex00 is optimal for marking with a small font (font size legible from 2.5 mm) and medium, but deeper line thickness on surfaces with a hardness of up to 55 HRC.

Features:

The AMF Marker Large has high-quality guides and a robust special needle. The setting is made continuously through a knurled nut and can be determined by means of a 0-15 scale. Due to this setting capability with the knurled nut, the tool is optimally suited for small and medium lot sizes. The tool is held preferably in 20 mm collets or Weldon holders.
When using the function check, use of Weldon holders is mandatory.

Advantage:

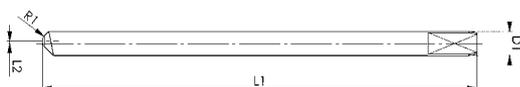
- Lightning-fast needle change: the marking needle is removed and changed with the aid of a pliers. This is an advantage even when the needle is worn or broken off.
- More distinct marking through use of an eccentric needle: with the AMF Marker you have the ability to select between conventional rolling and rotary swaging. In rotary swaging, the material is compressed, as well as forced sideways, and „swaged“ by the rotation of the marking needle. This requires use of an eccentrically ground needle which, in combination with spindle rotation, creates more distinct marking than conventional rolling.
- Function check for use in automation: An integrated function check makes the AMF Marker suitable for use in automation. The query takes place via a pneumatic dynamic pressure query. For this purpose, the tool machine needs an internal coolant supply (ICS) and freely, acknowledgeable M command.
- Maximum flexibility thanks to lightning-fast changes between various needle types
- Extremely high wear resistance
- Suitable for marking a wide variety of materials
- Easy adjustment by means of a knurled nut (possible also when clamped)

No. 1560MLN

Marking needle

fits AMF Marker Large No. 1560ML.

NEW!



Order no.	Needle	D1 [mm]	L1 [mm]	L2 [mm]	R1 [mm]	Weight [g]
550473	MLN-90R05 Ex00	3	53,5	0,0	0,5	5
550474	MLN-90R10 Ex00	3	53,5	0,0	1,0	5
550475	MLN-90R10 Ex01	3	53,5	0,1	1,0	5
550476	MLN-90R10 Ex02	3	53,5	0,2	1,0	5
550477	MLN-90R10 Ex03	3	53,5	0,3	1,0	5

Features:

Needles for rotary swaging:

MLN-90R10 Ex01: Radius at the needle tip 1.0 mm, eccentricity 0.1 mm
MLN-90R10 Ex02: Radius at the needle tip 1.0 mm, eccentricity 0.2 mm
MLN-90R10 Ex03: Radius at the needle tip 1.0 mm, eccentricity 0.3 mm

Needles for rolling:

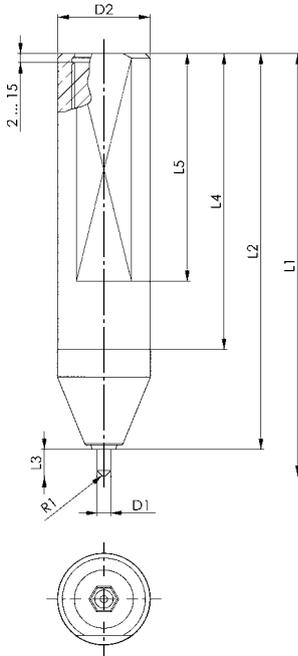
MLN-90R10 Ex00: Radius at the needle tip 1.0 mm, eccentricity 0.0 mm
MLN-90R05 Ex00: Radius at the needle tip 0.5 mm, eccentricity 0.0 mm

No. 1570MM

AMF Marker Medium

Marking tool, suitable for 20 mm collets and Weldon holders.
Marking needles are not included.

NEW!



Order no.	D1 [mm]	D2 [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	Weight [g]
550224	3	20	93	87	6	65	50	78

Application:

The tool is ideal for marking a wide variety of materials such as aluminium, titanium, steel, bronze, copper, brass, plastics etc.

Workpiece unevenness of up to 6 mm is compensated for.

Two needle types are available:

- Needle MMN-90R10 Ex00 is optimal for marking with a large font (font size legible from 5 mm) and wide line thickness on surfaces with a hardness of up to 50 HRC.
 - Needle MMN-90R05 Ex00 is optimal for marking with a small font (font size legible from 2.5 mm) and medium, but deeper line thickness on surfaces with a hardness of up to 55 HRC.
- The maximum marking speed depends on the feed rate of the machine.

Features:

The AMF Marker Medium has high-quality guides and a robust special needle. Setting occurs steplessly via an inside screw, which can be adjusted using a hexagon wrench. Because this tool has to be removed from the holder in order to be set, it is optimally suited for large-scale production. The tool is held preferably in 20 mm collets or Weldon holders.

Advantage:

- Lightning-fast needle change: the marking needle is removed and changed with the aid of a pliers. This is an advantage even when the needle is worn or broken off.
- Maximum flexibility thanks to lightning-fast changes between various needle types
- High wear resistance
- Suitable for marking a wide variety of materials
- Compact design

No. 1570MMN

Marking needle

fits AMF Marker Medium No. 1570MM.

NEW!



Order no.	Needle	D1 [mm]	L1 [mm]	R1 [mm]	Weight [g]
550478	MMN-90R05 Ex00	3	36	0,5	3
550479	MMN-90R10 Ex00	3	36	1,0	3

Advantage:

Needles for rolling:

MMN-90R10 Ex00: Radius at the needle tip 1.0 mm, eccentricity 0.0 mm

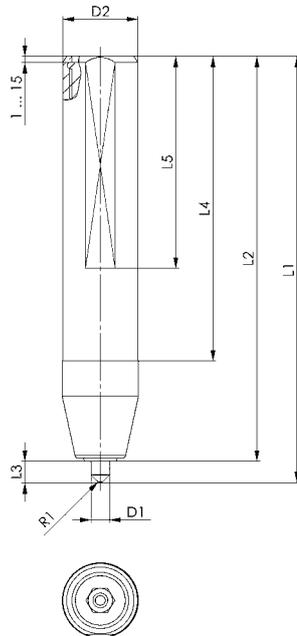
MMN-90R05 Ex00: Radius at the needle tip 0.5 mm, eccentricity 0.0 mm

No. 1580MS

AMF Marker Small

Marking tool, suitable for 12 mm collets and Weldon holders.
Marking needles are not included.

NEW!



Order no.	D1 [mm]	D2 [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	Weight [g]
550225	3	12	69	66	3,5	49	34	21

Application:

The tool is ideal for marking a wide variety of materials such as aluminium, titanium, steel, bronze, copper, brass, plastics etc.

Workpiece unevenness of up to 3 mm is compensated for.

Two needle types are available:

- Needle MSN-90R05 Ex00 is optimal for marking with a small font (font size legible from 2.5 mm) and medium line thickness on surfaces with a hardness of up to 55 HRC.

- Needle MSN-90R03 Ex00 is optimal for marking with a small font (font size legible from 1.5 mm) and small, but deeper line thickness on surfaces with a hardness of up to 57 HRC.

The maximum marking speed depends on the feed rate of the machine.

Features:

The AMF Marker Small has high-quality guides and a robust special needle. Setting occurs steplessly via an inside screw, which can be adjusted using a hexagon wrench. Because this tool has to be removed from the holder in order to be set, it is optimally suited for large-scale production. The tool is preferably received into 12 mm collets or Weldon holders.

Advantage:

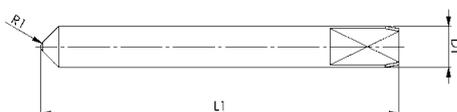
- Lightning-fast needle change: the marking needle is removed and changed with the aid of a pliers. This is an advantage even when the needle is worn or broken off.
- Maximum flexibility thanks to lightning-fast changes between various needle types
- High wear resistance
- Suitable for marking a wide variety of materials
- Very compact design

No. 1580MSN

Marking needle

fits AMF Marker Small No. 1580MS.

NEW!



Order no.	Needle	D1 [mm]	L1 [mm]	R1 [mm]	Weight [g]
550480	MSN-90R05 Ex00	3	36	0,5	2
550481	MSN-90R03 Ex00	3	36	0,3	2

Features:

Needles for rolling:

MSN-90R05 Ex00: Radius at the needle tip 0.5 mm, eccentricity 0.0 mm

MSN-90R03 Ex00: Radius at the needle tip 0.3 mm, eccentricity 0.0 mm

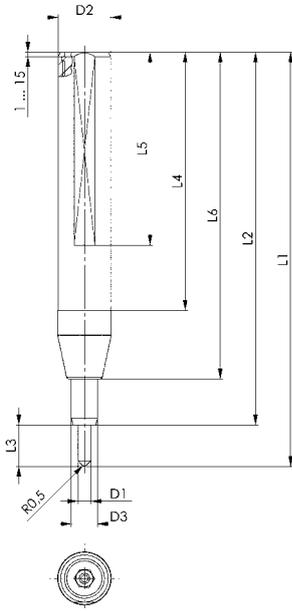
No. 1590MSL

AMF Marker Slimline

Marking tool with long, narrow tip, suitable for 12 mm collets and Weldon holders.

Marking needles are not included.

NEW!



Order no.	D1 [mm]	D2 [mm]	D3 [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	Weight [g]
550226	3	12	6	95	86	9,5	59	44	75	29

Application:

The tool is especially well-suited for marking in a very confined spaces. A wide variety of materials such as aluminium, titanium, steel, bronze, copper, brass, plastics etc. can be marked. Workpiece unevenness of up to 9 mm is compensated for.

Two needle types are available:

- Needle MSLN-90R05 Ex00 is optimal for marking with a small font (font size legible from 2.5 mm) and medium line thickness on surfaces with a hardness of up to 55 HRC.
 - Needle MSLN-90R03 Ex00 is optimal for marking with a small font (font size legible from 1.5 mm) and small, but deeper line thickness on surfaces with a hardness of up to 57 HRC.
- The maximum marking speed depends on the feed rate of the machine.

Features:

The AMF Marker Slimline has high-quality guides and a robust special needle. It has an outstanding narrow tip. Setting occurs steplessly via an inside screw, which can be adjusted using a hexagon wrench. Because this tool has to be removed from the holder in order to be set, it is optimally suited for large-scale production. The tool is preferably received into 12 mm collets or Weldon holders.

Advantage:

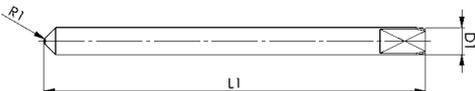
- Lightning-fast needle change: the marking needle is removed and changed with the aid of a needle. This is an advantage even when the needle is worn or broken off.
- Maximum flexibility thanks to lightning-fast changes between various needle types
- High wear resistance
- Suitable for marking a wide variety of materials
- Very compact design
- Long, narrow tip for use in confined spaces (e.g. in grooves)

No. 1590MSLN

Marking needle

fits AMF Marker Slimline No. 1580MSL.

NEW!

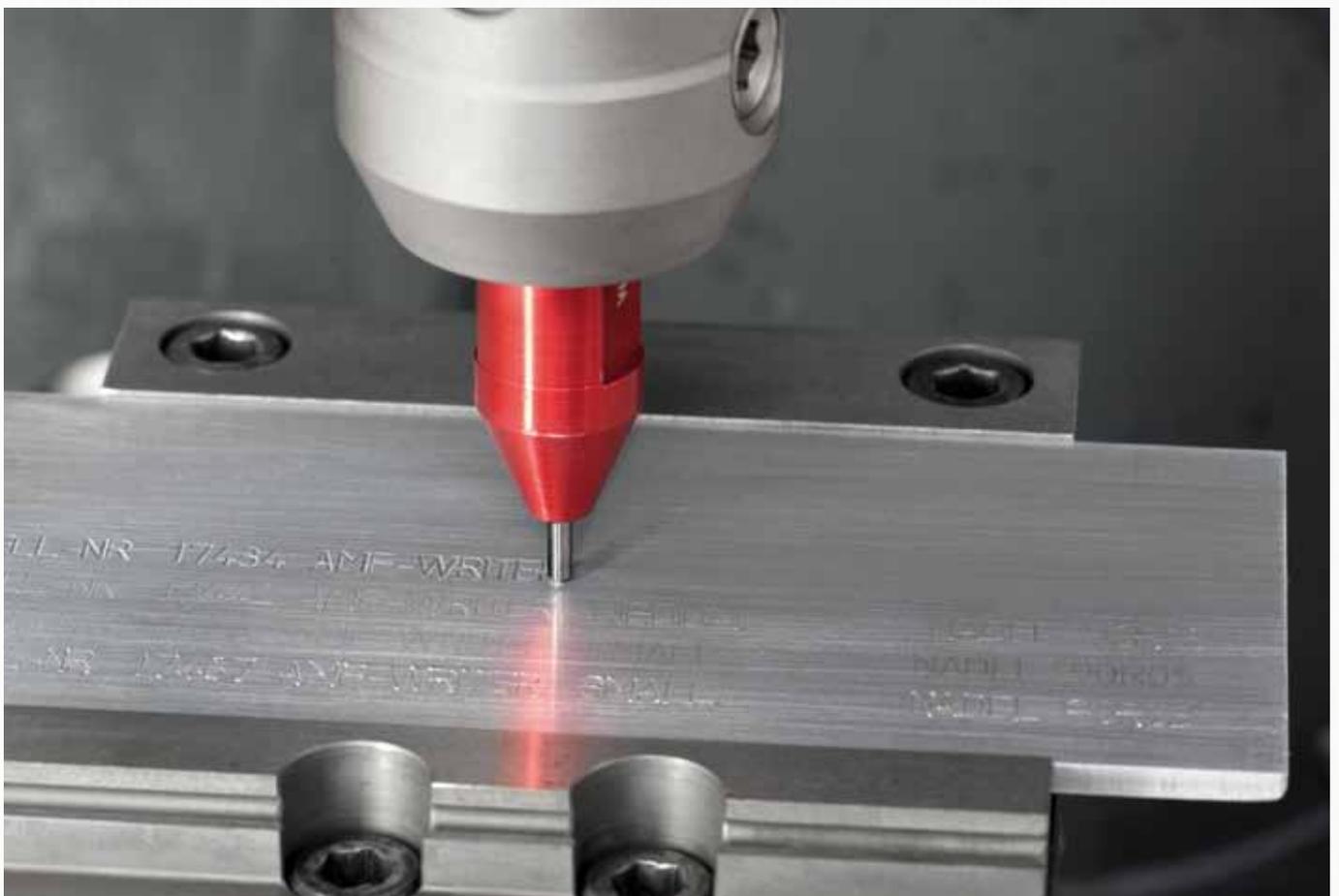


Order no.	Needle	D1 [mm]	L1 [mm]	R1 [mm]	Weight [g]
550482	MSLN-90R05 Ex00	3	42	0,5	4
550483	MSLN-90R03 Ex00	3	42	0,3	4

Features:

Needles for rolling:

MSLN-90R05 Ex00: Radius at the needle tip 0.5 mm, eccentricity 0.0 mm
 MSLN-90R03 Ex00: Radius at the needle tip 0.3 mm, eccentricity 0.0 mm



No. 1400WXL

AMF-Writer Extra Large

Marking tool,
fits 20 mm collets and Weldon holders.

Order no.	Needle	R1 [mm]	Speed [1/min]	Max. marking speed [m/min]	Weight [g]
17475	60R10 Ex00	1,0	0-300	200	318

Application:

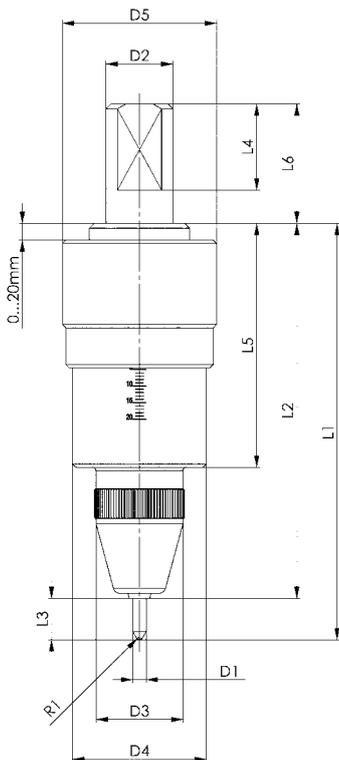
This tool is especially suitable for marking uneven or rough surfaces with a large font (font size legible from 5 mm) and wide line thickness with a hardness of up to 50 HRC. Workpiece unevenness of up to 7 mm is compensated for. The marking speed depends on the feed rate of the machine and is independent of the spindle speed. The workpiece surface can be machined either dry or wet.

Features:

The AMF-Writer Extra Large has reinforced guides and a broader special needle. The setting is made continuously through a knurled nut and can be determined by means of a scale. Due to this setting capability with the knurled nut, the tool is optimally suited for small and medium lot sizes. The tool is held preferably in 20 mm collets or Weldon holders.

Advantage:

- Extremely high wear resistance
- Suitable for marking rough and uneven materials
- Easy adjustment by means of a knurled nut (possible also when clamped)



Dimensions:

Order no.	D1 [mm]	D2 [mm]	D3 [mm]	D4 [mm]	D5 [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]
17475	4	20	26	40	46	126	113	13	26	74	36

No. 1410WL

AMF-Writer Large

Marking tool,
fits 20 mm collets and Weldon holders.

Order no.	Needle	R1 [mm]	Speed [1/min]	Max. marking speed [m/min]	Weight [g]
17418	90R10 Ex00	1,0	0-300	200	243
17426	90R05 Ex00	0,5	0-300	200	243

Application:

The tool is ideal for marking a wide variety of materials such as aluminium, titanium, steel, bronze, copper, brass, plastics etc.

Two needle types are available.

- Needle 90R10 Ex00 is optimal for marking with a large font (font size legible from 5 mm) and wide line thickness on surfaces with a hardness of up to 50 HRC.

- Needle 90R05 Ex00 is optimal for marking with a small font (font size legible from 2.5 mm) and medium, but deeper line thickness on surfaces with a hardness of up to 55 HRC.

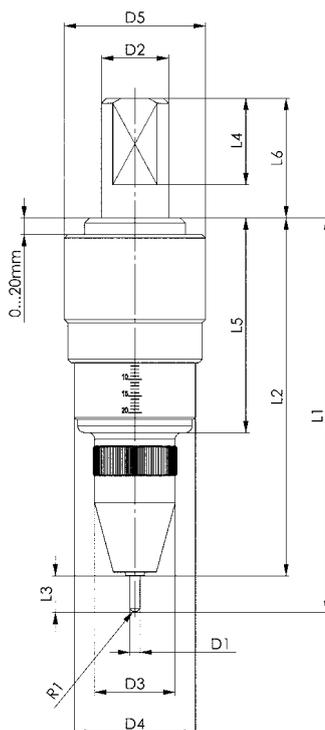
Workpiece unevenness of up to 5 mm is compensated for. The marking speed depends on the feed rate of the machine and is independent of the spindle speed. The workpiece surface can be machined either dry or wet.

Features:

The AMF-Writer Large has high-quality guides and a robust special needle. The setting is made continuously through a knurled nut and can be determined by means of a scale. Due to this setting capability with the knurled nut, the tool is optimally suited for small and medium lot sizes. The tool is held preferably in 20 mm collets or Weldon holders.

Advantage:

- High wear resistance
- Suitable for marking a wide variety of materials
- Easy adjustment by means of a knurled nut (possible also when clamped)



Dimensions:

Order no.	D1 [mm]	D2 [mm]	D3 [mm]	D4 [mm]	D5 [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]
17418	3	20	24	36	42	119	108	11	26	65	36
17426	3	20	24	36	42	119	108	11	26	65	36

No. 1420WM

AMF-Writer Medium

Marking tool,
fits 20 mm collets and Weldon holders.



Order no.	Needle	R1 [mm]	Speed [1/min]	Max. marking speed [m/min]	Weight [g]
17434	90R10 Ex00	1,0	0-300	200	78
17442	90R05 Ex00	0,5	0-300	200	78

Application:

The tool is ideal for marking a wide variety of materials such as aluminium, titanium, steel, bronze, copper, brass, plastics etc.

Two needle types are available.

- Needle 90R10 Ex00 is optimal for marking with a large font (font size legible from 5 mm) and wide line thickness on surfaces with a hardness of up to 50 HRC.
- Needle 90R05 Ex00 is optimal for marking with a small font (font size legible from 2.5 mm) and medium, but deeper line thickness on surfaces with a hardness of up to 55 HRC.

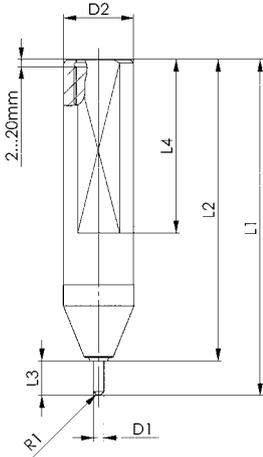
Workpiece unevenness of up to 5 mm is compensated for. The marking speed depends on the feed rate of the machine and is independent of the spindle speed. The workpiece surface can be machined either dry or wet.

Features:

The AMF-Writer Medium has high-quality guides and a robust special needle. Setting occurs steplessly via an inside screw, which can be adjusted using a hexagon wrench. Because this tool has to be removed from the holder in order to be set, it is optimally suited for large-scale production. The tool is held preferably in 20 mm collets or Weldon holders.

Advantage:

- High wear resistance
- Suitable for marking a wide variety of materials
- Compact design



Dimensions:

Order no.	D1 [mm]	D2 [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]
17434	3	20	97	87	10	50
17442	3	20	97	87	10	50

Examples of marking on various materials:

1. stainless steel 2. aluminium 3. plastics

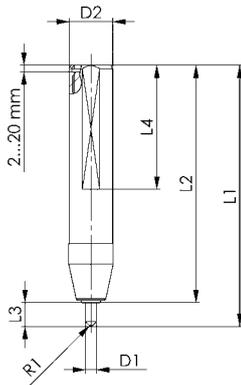


Subject to technical alterations.

No. 1430WS

AMF-Writer Small

Marking tool,
fits 12 mm collets and Weldon holders.



Order no.	Needle	R1 [mm]	Speed [1/min]	Max. marking speed [m/min]	Weight [g]
17459	90R05 Ex00	0,5	0-300	200	24
17467	90R03 Ex00	0,3	0-300	200	24

Application:

The tool is ideal for marking a wide variety of materials such as aluminium, titanium, steel, bronze, copper, brass, plastics etc.

Two needle types are available.

- Needle 90R05 Ex00 is optimal for marking with a small font (font size legible from 2.5 mm) and medium line thickness on surfaces with a hardness of up to 55 HRC.
- Needle 90R03 Ex00 is optimal for marking with a small font (font size legible from 1.5 mm) and small, but deeper line thickness on surfaces with a hardness of up to 57 HRC.

Workpiece unevenness of up to 3 mm is compensated for. The marking speed depends on the feed rate of the machine and is independent of the spindle speed. The workpiece surface can be machined either dry or wet.

Features:

The AMF-Writer Small has high-quality guides and a robust special needle. Setting occurs steplessly via an inside screw, which can be adjusted using a hexagon wrench. Because this tool has to be removed from the holder in order to be set, it is optimally suited for large-scale production. The tool is preferably received into 12 mm collets or Weldon holders.

Advantage:

- High wear resistance
- Suitable for marking a wide variety of materials
- Very compact design

Dimensions:

Order no.	D1 [mm]	D2 [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]
17459	3	12	72	66	6	34
17467	3	12	72	66	6	34

No. 1440WSL

AMF-Writer Slimline

Marking tool with long, narrow tip, fits 12 mm collets and Weldon holders.



Order no.	Needle	R1 [mm]	Speed [1/min]	Max. marking speed [m/min]	Weight [g]
535146	90R05 Ex00	0,5	0-300	200	28
535161	90R03 Ex00	0,3	0-300	200	28

Application:

The tool is especially well-suited for marking in a very confined spaces.

A wide variety of materials such as aluminium, titanium, steel, bronze, copper, brass, plastics etc. can be marked.

Two needle types are available.

- Needle 90R05 Ex00 is optimal for marking with a small font (font size legible from 2.5 mm) and medium line thickness on surfaces with a hardness of up to 55 HRC.

- Needle 90R03 Ex00 is optimal for marking with a small font (font size legible from 1.5 mm) and small, but deeper line thickness on surfaces with a hardness of up to 57 HRC.

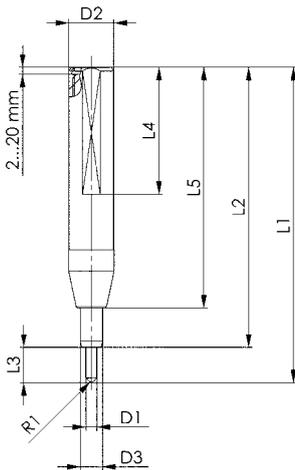
Workpiece unevenness of up to 3 mm is compensated for. The marking speed depends on the feed rate of the machine and is independent of the spindle speed. The workpiece surface can be machined either dry or wet.

Features:

The AMF Slimline writer has high-quality guides and a robust special needle. It has an outstanding narrow tip. Setting occurs steplessly via an inside screw, which can be adjusted using a hexagon wrench. Because this tool has to be removed from the holder in order to be set, it is optimally suited for large-scale production. The tool is preferably received into 12 mm collets or Weldon holders.

Advantage:

- High wear resistance
- Suitable for marking a wide variety of materials
- Very compact design
- Long, narrow tip for use in confined spaces (e.g. in grooves)



Dimensions:

Order no.	D1 [mm]	D2 [mm]	D3 [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]
535146	3	12	6	85	76	9	34	65
535161	3	12	6	85	76	9	34	65

