

» *Watchmakers use small lightweight hammers and boxwood mallets to strike with precision.*



MSA	Head length mm	Total length mm	Kg
04.001	50	195	0.052
04.002	60	210	"
04.003	70	230	"
04.004	80	230	0.123
04.005	90	230	"
04.006	67	218	0.050
04.007	35	193	0.020

Hammer with **forged polished steel** flat head, conic shape on one side and "V" shape for riveting on the other. Delivered with a wooden handle, ideal for lightweight precise watch making work.



MSA	Head length mm	Total length mm	Kg
04.010	52	235	0.123

Hammer with round head made of **polished brass** ø 16 mm, flat shape on one side and dome shape on the other, delivered with a wooden handle.



MSA	Head length mm	Total length mm	Kg
04.020	75	230	0.106

Watch makers hammer for riveting with **steel** head, flat and round shape (ø 10 mm) on one side and "V" shape (width 2 mm) on the other, delivered with a wooden handle.



MSA	Head length mm	Total length mm	Kg
04.200	70 x ø 30	220	0.085

Robust **boxwood** mallet, ideal for flattening metals without scraping.



MSA	Head length mm	Total length mm	Kg
04.210	73 x ø 30 x ø 10	225	0.073

Robust **boxwood** mallet with conic shape head, ideal for flattening metals without scraping.

» *Hammer handles.*



MSA	Length mm	Kg
04.100	240	0.058
04.101	260	"

**Wooden** handle for chase hammers, with curved oval shape.



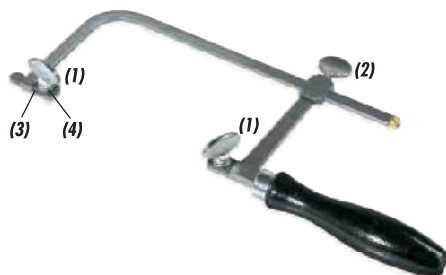
MSA	Length mm	Kg
04.102	240	0.060
04.103	260	"

**Wooden** handle for chase hammers, with straight oval shape.



MSA	Head	Length mm	Kg
04.104	11 x 11	235	0.035
04.105	11 x 13	245	0.038
04.106	11 x 14	255	0.042

**Wooden** handle for watchmakers hammer.

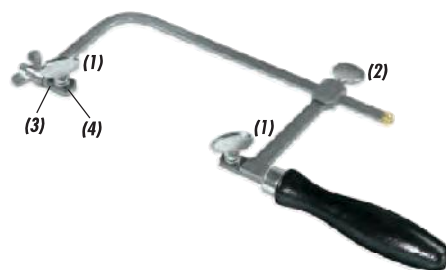


MSA	Depth mm	Kg
04.310-060	60	0.140
04.310-070	70	0.145
04.310-080	80	0.150
04.310-100	100	0.155
04.310-120	120	0.165
04.310-150	150	0.174
04.310-200	200	0.194

Saw frame made of **rigid** and resistant steel, with black varnished wooden handle.  
Delivered with 1 toothed plate and fixing screws to firmly hold the saw blades in place.

**Replacement parts for MSA 04.310-xxx and MSA 04.315-xxx :**

MSA	Items	Kg
04.310-A	Saw blade screw (1)	0.007
04.310-B	Upper screw (2)	0.005
04.310-C	Fixing plate for saw blade (3)	0.002
04.310-D	Saw blade washer (4)	0.001



MSA	Depth mm	Kg
04.315-060	60	0.150
04.315-070	70	0.150
04.315-080	80	0.153
04.315-100	100	0.170
04.315-120	120	0.180
04.315-150	150	0.190
04.315-200	200	0.210

Saw frame made of **rigid** and resistant steel, with black varnished wooden handle.  
Delivered with 1 toothed plate and fixing screws to firmly hold the saw blades in place. Tension screws are practical for tightening the saw blades.



144  
pieces



MSA	Number	Length mm	Kg
04.450-6/0	6/0	130	0.007
04.450-5/0	5/0	"	0.008
04.450-4/0	4/0	"	0.012
04.450-3/0	3/0	"	0.014
04.450-2/0	2/0	"	0.018
04.450-0	0	"	0.029
04.450-1	1	"	0.033
04.450-2	2	"	0.037
04.450-3	3	"	0.042
04.450-4	4	"	0.045
04.450-5	5	"	0.049
04.450-6	6	"	0.055
04.450-8	8	"	0.063

**Remark : 6/0 (fine)...8 (coarse).**

Saw blades HOROTEC® for **metal**.  
Delivered in a bag with 1 gross (144 pieces).

144  
pieces



MSA	Number	Length mm	Kg
04.410-8/0	8/0	130	0.004
04.410-7/0	7/0	"	0.006
04.410-6/0	6/0	"	0.008
04.410-5/0	5/0	"	0.011
04.410-4/0	4/0	"	0.013
04.410-3/0	3/0	"	0.015
04.410-2/0	2/0	"	0.017
04.410-0	0	"	0.019
04.410-1	1	"	0.023
04.410-2	2	"	0.028
04.410-3	3	"	0.031
04.410-4	4	"	0.035
04.410-5	5	"	0.039
04.410-6	6	"	0.042
04.410-8	8	"	0.045

**Remark : 8/0 (fine)...8 (coarse).**

Saw blades GLARDON® for **metal**.  
Delivered in a bag with 1 gross (144 pieces).

144  
pcs



MSA	Number	Length mm	Kg
04.401-A	6/0	130	0.008
04.401-B	5/0	"	0.009
04.401-C	4/0	"	0.012
04.401-D	3/0	"	0.015
04.401-E	2/0	"	0.018
04.401-F	0	"	0.020
04.401-G	1	"	0.024
04.401-H	2	"	0.029
04.401-J	3	"	0.033
04.401-K	4	"	0.037
04.401-L	5	"	0.041
04.401-M	6	"	0.045
04.401-N	8	"	0.050

**Remark : 6/0 (fine)...8 (coarse).**

Saw blades IDEAL® for **metal**.

Delivered in a bag with 1 gross (144 pieces).

144  
pcs



MSA	Number	Length mm	Kg
04.402-2/0	2/0	130	0.018
04.402-0	0	"	0.020
04.402-1	1	"	0.022
04.402-2	2	"	0.028
04.402-3	3	"	0.032
04.402-4	4	"	0.036
04.402-5	5	"	0.042
04.402-6	6	"	0.047
04.402-7	7	"	0.056
04.402-8	8	"	0.062
04.402-9	9	"	0.074
04.402-10	10	"	0.083
04.402-11	11	"	0.090
04.402-12	12	"	0.100

**Remark : 2/0 (fine)...12 (coarse).**

Saw blades NIQUA-FIX® for **wood**.

Delivered in a bag with 1 gross (144 pieces).

## » Threading taps and dies.

MSA	Dimensions mm	Kg
04.518	136 x 136 x 26	0.125

High quality set of metric thread dies and Taps for watch making.

**Contents :** 12 sets of 3 taps HSS ø 0.40-1.40 mm, 12 dies HSS ø 0.40-1.40 mm, 1 dies holder ø 8 mm.

Delivered in wooden box.

## Spares :

MSA	Items
04.536	Dies holder ø 8 mm
04.537-M0.4	Die ø 8 mm M 0.4
04.537-M0.5	Die ø 8 mm M 0.5
04.537-M0.6	Die ø 8 mm M 0.6
04.537-M0.65	Die ø 8 mm M 0.65
04.537-M0.7	Die ø 8 mm M 0.7
04.537-M0.8	Die ø 8 mm M 0.8
04.537-M0.9	Die ø 8 mm M 0.9
04.537-M1.0	Die ø 8 mm M 1.0
04.537-M1.1	Die ø 8 mm M 1.1
04.537-M1.2	Die ø 8 mm M 1.2
04.537-M1.3	Die ø 8 mm M 1.3
04.537-M1.4	Die ø 8 mm M 1.4



» Spare Finishing taps MSA 04.520-xxx, see page 04 9.

144  
pcs



MSA	Number	Length mm	Kg
04.400-A	8/0	130	0.006
04.400-B	7/0	"	"
04.400-C	6/0	"	0.008
04.400-D	5/0	"	0.010
04.400-E	4/0	"	0.012
04.400-F	3/0	"	0.014
04.400-G	2/0	"	0.016
04.400-H	0	"	"
04.400-J	1	"	0.022
04.400-K	2	"	0.028
04.400-L	3	"	0.032
04.400-M	4	"	0.036
04.400-N	5	"	0.038
04.400-P	6	"	0.047

**Remark : 8/0 (fine)...6 (coarse).**

Saw blades ANTILOPE® for **metal**.

Delivered in a bag with 1 gross (144 pieces).

MSA	Size mm	Kg
04.517	175 x 195 x 25	0.340

High quality set of metric thread dies and Taps for Clock making.

**Contents :** 8 sets of 3 taps HSS  $\varnothing$  1.00-3.00mm, 8 dies HSS  $\varnothing$  1.00-3.00mm, 1 dies holder  $\varnothing$  16 mm, 1 adjustable hand wrench  
Delivered in wooden box.

#### Spares :

MSA	Items
04.534	Adjustable hand wrench
04.536	Dies holder
04.535-M1	Die $\varnothing$ 16 mm M1
04.535-M1.2	Die $\varnothing$ 16 mm M1.2
04.535-M1.4	Die $\varnothing$ 16 mm M1.4
04.535-M1.7	Die $\varnothing$ 16 mm M1.7
04.535-M2	Die $\varnothing$ 16 mm M2
04.535-M2.3	Die $\varnothing$ 16 mm M2.3
04.535-M2.6	Die $\varnothing$ 16 mm M2.6
04.535-M3	Die $\varnothing$ 16 mm M3

MSA	Items	$\varnothing$ mm
04.526-1A	Tap	1.0
04.526-1B	"	"
04.526-1C	"	"
04.527-1.2A	"	1.2
04.527-1.2B	"	"
04.527-1.2C	"	"
04.528-1.4A	"	1.4
04.528-1.4B	"	"
04.528-1.4C	"	"
04.529-1.7A	"	1.7
04.529-1.7B	"	"
04.529-1.7C	"	"
04.530-2A	"	2.0
04.530-2B	"	"
04.530-2C	"	"
04.531-2.3A	"	2.3
04.531-2.3B	"	"
04.531-2.3C	"	"
04.532-2.6A	"	2.6
04.532-2.6B	"	"
04.532-2.6C	"	"
04.533-3A	"	3.0
04.533-3B	"	"
04.533-3C	"	"

- - A : Starting Tap
- B : Roughing Tap
- C : Finishing Tap.



#### Wide threading taps.



MSA	$\varnothing$ mm	Kg
04.520-040**	0.40	0.003
04.520-045	0.45	"
04.520-050**	0.50	"
04.520-055	0.55	"
04.520-060**	0.60	"
04.520-065**	0.65	"
04.520-070**	0.70	"
04.520-080**	0.80	0.004
04.520-090**	0.90	"
04.520-095	0.95	"
04.520-100**	1.00	"
04.520-110**	1.10	"
04.520-120**	1.20	"
04.520-130**	1.30	"
04.520-140**	1.40	0.005
04.520-150	1.50	"
04.520-160	1.60	"
04.520-170	1.70	"
04.520-180	1.80	"
04.520-190	1.90	"
04.520-200	2.00	"

Finishing Taps only, HSS, **metric thread** for watch making.  
\*\*, sizes delivered in the MSA 04.518 page 04 7.

MSA	$\varnothing$ mm	Kg
04.522-070	0.70	0.003
04.522-080	0.80	"
04.522-090	0.90	"
04.522-100	1.00	"
04.522-110	1.10	"
04.522-120	1.20	0.004
04.522-130	1.30	"
04.522-140	1.40	"
04.522-150	1.50	"
04.522-160	1.60	0.005
04.522-170	1.70	"
04.522-180	1.80	"
04.522-190	1.90	"
04.522-200	2.00	"

Taps 3 grooves HSS, EE wide thread for jewellery making.

» *Tapping machine Taps HSS.*



MSA	ø mm	Kg
04.524-030	0.30	0.001
04.524-035	0.35	"
04.524-040	0.40	"
04.524-045	0.45	"
04.524-050	0.50	"
04.524-060	0.60	"
04.524-070	0.70	"
04.524-080	0.80	"
04.524-090	0.90	"
04.524-095	0.95	"
04.524-100	1.00	"
04.524-110	1.10	"
04.524-120	1.20	"
04.524-130	1.30	"
04.524-140	1.40	"
04.524-150	1.50	"
04.524-160	1.60	"
04.524-170	1.70	"
04.524-180	1.80	"
04.524-190	1.90	"
04.524-200	2.00	"
04.524-220	2.20	"
04.524-230	2.30	"
04.524-240	2.40	"
04.524-250	2.50	"
04.524-260	2.60	"
04.524-300	3.00	"
04.524-350	3.50	"
04.524-400	4.00	"
04.524-450	4.50	"
04.524-500	5.00	"
04.524-600	6.00	"

Taps for Brass material suitable for through and blind holes. For tapping machine.

» *Taps HSS for screw pushers.*



MSA	Size mm	Kg
04.525-01	2.50 x 0.20	0.002
04.525-02	2.50 x 0.25	"
04.525-03	2.80 x 0.20	"

Taps for through holes.