

» Tools for locking/unlocking oscillating weight bolts.

► Cal. 7750... Cal. 2892...



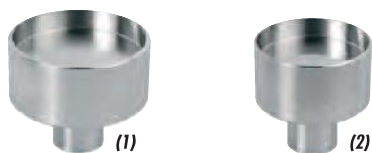
ø 12 mm

MSA	For calibres	MVT holder	Kg
03.676-7750	7750 - 7751 - 7753	Without	0.665
03.676-2892	2892 - 2893 - 2894 - 2895	Without	0.665
03.677-7750	7750 - 7751 - 7753	With	0.755
03.677-2892	2892 - 2893 - 2894 - 2895	With	0.735

Press **for locking and unlocking oscillation weight bolts**. The broach is mounted on spring for a fast and precise job. The broach is easy interchangeable in unscrewing the black handle.

Delivered with and without movement holders 7750, 7751, 753, 2892, 2893, 2894, 2895.

This tool is adapted for series.



Movement holders only for MSA 03.676-7750 and 03.676-2892.

MSA	For calibres	Kg
03.678-7750 (1)	7750 - 7751 - 7753	0.090
03.678-2892 (2)	2892 - 2893 - 2894 - 2895	0.070



Broach only for MSA 03.676-7750 and 03.676-2892.

MSA	For calibres
03.679-7750	7750 - 7751 - 7753
03.679-2892	2892 - 2893 - 2894 - 2895



MSA	Kg
03.676-P	0.665

Press only for locking and unlocking oscillation weight bolts.

Delivered without any accessory.



MSA	Kg
03.675	0.170

Tool for **locking/unlocking oscillating weight bolts**.

Delivered with 2 interchangeable snap-on keys (MSA 03.620-2892 and 03.620-7750) and a detailed user's manual.

Replacement parts :

MSA	Items
03.620-2892	Key for calibres 2892, 2893, 2894 and 2895
03.620-7750	Key for calibres 2000-1, 7750, 7751 and 7753
03.620-A	Hexagonal handle only

» Tools for assembling/disassembling screw-on pushers and tubes, oscillating weight bolts and battery covers.



MSA	Size mm	Kg
03.621	120 x 70 x 35	0.496

Tool for assembling/disassembling **screw-on pushers and tubes, oscillating weight bolts and battery covers**. Complete assortment delivered with 17 interchangeable keys.

Detail of replacement parts: see page 03 4.



MSA	Size mm	Kg
03.622	120 x 70 x 35	0.448

Tool for assembling/disassembling **screw-on pushers and tubes**. Assortment delivered with 12 interchangeable keys.

Detail of replacement parts: see page 03 4.



MSA	Size mm	Kg
03.623	120 x 70 x 35	0.460

Tool for assembling/disassembling **screw-on pushers and tubes, and oscillating weight bolts.**

Assortment delivered with 14 interchangeable keys.

Replacement keys for screw-on tubes :

MSA	For tubes	o mm
03.620-01	MSA 65.001	1.50
03.620-02	MSA 65.002	1.80
03.620-03	MSA 65.003	2.65
03.620-04	MSA 65.004	2.75
03.620-05	MSA 65.005	2.95
03.620-06	MSA 65.006	3.00
03.620-07	MSA 65.007	3.00

Replacement keys for screw-on pushers :

MSA	For pushers	o mm
03.620-203	MSA 61.203 - 61.703	4.35
03.620-207	MSA 61.207 - 61.707	4.80
03.620-P3	Type P3	3.00
03.620-P27	Type P27	3.50
03.620-P39	Type P39	3.60

Replacement keys for oscillating weight bolts :

MSA	Calibre
03.620-2892	2892-2893-2894-2895
03.620-7750	7750 - 2001-1

Replacement keys for Swatch® battery covers :

MSA	Grandeur
03.620-GENT	Gent
03.620-LADY	Lady
03.620-MED	Medium

Replacement hexagonal handle :

MSA	Kg
03.620-A	0.060

Hexagonal replacement handle compatible with all illustrated accessories.



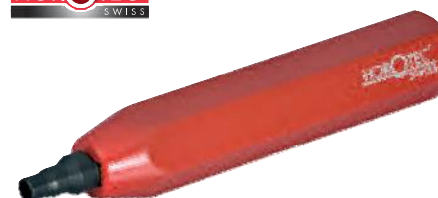
MSA	o int. mm	Kg
03.655	3.10	0.007

Steel key, black finishing, for **screw and unscrew the pushers** MSA 61.207 and 61.707 of chronographs.



MSA	For tubes	o mm	Kg
03.665-01	MSA 65.001	1.50	0.006
03.665-02	MSA 65.002	1.80	"
03.665-03	MSA 65.003	2.80	"
03.665-04	MSA 65.004	2.85	"
03.665-05	MSA 65.005	3.00	"
03.665-06	MSA 65.006	3.10	"

Steel key, black finishing, for **screw and unscrew the tubes of screw-on tubes** to assure waterproof of diving watches.



MSA	Type	o mm	Kg
03.653-P27	P27	3.50	0.070
03.653-P3	P3	3.00	"
03.653-P39	P39	3.60	"

Key for screw and unscrew knurled screw-on pushers. Stainless steel dies, aluminium handle.

» Press for fitting/removing press-in pushers and crown tubes easily and safely.



HOROTEC
SWISS

MSA	Size mm	Kg
03.654	45 x 60 x 7.8	0.210

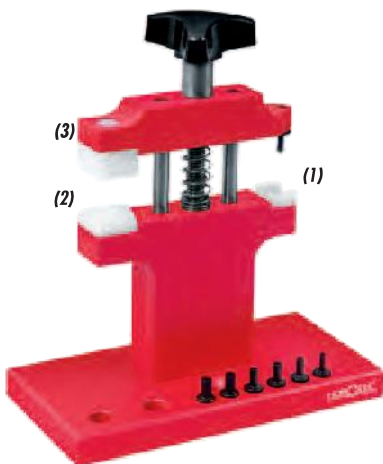
Press for **removing press-in pushers and crown tubes**.

Delivered with 7 stakes, exterior ø from 1.55 to 2.95 mm.

Replacement parts :

MSA	Items	Ext.ø mm	Int. ø mm
03.654-A	Stake	2.95	1.55
03.654-B	Stake	2.65	"
03.654-C	Stake	2.45	"
03.654-D	Stake	2.15	"
03.654-E	Stake	1.95	1.45
03.654-F	Stake	1.75	1.25
03.654-G	Stake	1.55	1.05
03.654-H	Unfitting support (1)	-	-

HOROTEC
SWISS



MSA	Size mm	Kg
03.656	90 x 45 x 105	0.268

Press for **fitting and removing press-in pushers and crown tubes**.

Delivered with 7 stakes, exterior ø from 1.55 to 2.95 mm.

Replacement parts :

MSA	Items	Ext.ø mm	Int. ø mm
03.654-A	Stake	2.95	1.55
03.654-B	Stake	2.65	"
03.654-C	Stake	2.45	"
03.654-D	Stake	2.15	"
03.654-E	Stake	1.95	1.45
03.654-F	Stake	1.75	1.25
03.654-G	Stake	1.55	1.05
03.654-H	Unfitting support (1)	-	-
03.656-A	Lower fitting support (2)	-	-
03.656-B	Upper fitting support (3)	-	-

» Tools for lanterning canon pinions.



MSA	Size mm	Kg
03.005	50 x 50 x 120	0.317

Press for **lanterning canon pinions** with hard metal beaks and sliding ring mounted on grooved broach. This press can be used in 2 different ways :

1 - with 1 standard broach for single use

2 - with 1 grooved scale broach and 1 screwed sliding ring for height punch adjustment.



MSA	Size mm	Kg
03.004	97 x 7 x 45	0.135

Tool for **lanterning canon pinions**. Fixable on vice.

» Tools for removing canon pinions and unfitting rollers.



MSA	For	Length mm	Kg
03.003-A	Bracelet watches	120	0.069
03.003-B	Pocket watches	"	"

Pliers for **removing canon pinions**.

Deliverable in 2 versions.



MSA	Height mm	Kg
03.000	75	0.156

Tool on stand for **unfitting rollers**. Hole puncher with cracked hardened blade on both sides, "V" shape to unfit the adjusted plate on balance staff.

Tools for hairsprings collets.



MSA	ø mm	Kg	MSA	ø mm	Kg
03.101-03	0.30	0.006	03.101-08	0.80	0.006
03.101-04	0.40	"	03.101-09	0.90	"
03.101-05	0.50	"	03.101-10	1.00	"
03.101-06	0.60	"	03.101-12	1.20	"
03.101-07	0.70	"			

Broaches for **hairspring collets** with nickel-plated brass knurled handle. Length 98 mm.



MSA	Exterior ø mm	Hole ø mm	Length mm	Kg
03.102-11	1.10	0.45	95	0.010
03.102-16	1.60	0.55	"	"
03.102-21	2.10	0.75	"	"

Tool for turning and setting **hairspring collets** with nickel-plated brass knurled handle.

Paire



MSA	Width spatula-shape fork mm	Total length mm	Kg
03.103-E	1.80	95	0.015
03.103-C	2.50	115	0.022
03.103-D	3.00	120	0.024

Pair of **hairspring collets** levers with nickel-plated brass knurled handle.

Truing calipers.



MSA	Size mm	Kg
03.410	80 x 35	0.036

Brass **truing calliper**, for verifying the balances and wheels truing.



MSA	Dimensions mm	Kg
03.414	75 x 40	0.022

Lightweight steel **truing calliper**, for verifying the balances and wheels truing.

Tools for adjusting each pair of opposed screws to keep the balance perfectly equilibrated. Delivered in a transparent plastic box with detailed user's manual.



MSA	Kg
03.670	0.070

Tool for **setting the balances**, micro-star shape. For calibres RLX 3035, 3055 and similar.



MSA	Kg
03.671	0.070

Tool for **setting the balances**, square shape. For calibres OM 2500 B and similar.

Tools for riveting oscillating weight axles.

ASSORTMENT



MSA	Length mm	Kg
03.666	90 x 45 x 105	0.110

Assortment of 4 punches for **riveting oscillating weight axles**, RLX 1570, 2135, 2235 and 3035/3135.

Replacement punches :

MSA	Calibre RLX	MSA	Calibre RLX
03.666-1570	1570	03.666-2235	2235
03.666-2135	2135	03.666-3035	3035/3135

» Tools for stud holding and for setting balance screws.



MSA	Size mm	Kg
03.200	ø 40 x 9	0.106

Tool for **stud holding**, used for fixing the stud on the balance-spring.



MSA	Size mm	Kg
03.424	ø 40 x 7	0.030

Nickel-plated brass tool with holes for **setting the balances**, with 12 holes of ø 0.5 to 2.5 mm.

» Tools for winding stems.



MSA	Lacquered base mm	Kg
03.602	60 x 118	0.353

Tool for **shortening winding stems**, allowing the length setting of stems in serial production.

Description :

- 1 - lever with ergonomic handle with 1 return spring
- 2 - micrometric screw graduated to 1/10 mm for precise setting of cut length
- 3 - blocking screw to always keep the same length during cutting in serial production
- 4 - base equipped with a small ruler with divisions from 0 to 15 mm
- 5 - side pierced with 3 holes suitable for stems ø 0.90, 1.00 and 1.20 mm.

Spare parts :

MSA	Items
03.602-A	Spring
03.602-B	Blade



MSA	Size mm	Kg
03.010	115	0.011

Lantern-chuck. Tool to hold the screw by its head used to shorten or round and polish the screw thread end. Delivered with 3 chucks of ø 0.40, 0.60, 0.80.

Spare parts :

MSA	For ø mm
03.010-40	0.40
03.010-60	0.60
03.010-80	0.80



MSA	ø mm	Kg	MSA	ø mm	Kg
03.600-08	0.80	0.030	03.600-12	1.20	0.030
03.600-09	0.90	"	03.600-13	1.30	"
03.600-10	1.00	"	03.600-14	1.40	"
03.600-11	1.10	"	03.600-15	1.50	"

Tool for **shortening winding stems**, with knurled handle. Provided with a stop for regular cutting. Length 70 mm.



MSA	Kg
03.603	0.110

Tool for **oiling the winding stems**. Allows a perfect, clean and quick greasing for all types of stems.

Replacement cup with felt :

MSA
03.603-A



MSA	Size mm	Kg
03.006	127 x 80	1.050

Tool used to check the perfect straightness of stems. This tool is usually placed in a vice.

Delivered without American chucks.

Chucks : see page 03 18 (MSA 03.839-xxx).

» Special lathes for polishing pivots.



MSA	Type	Versions
03.452	106	With 3 broaches MSA 03.467, 03.474 and 03.475 (Pict.)
03.454	108	With 4 broaches MSA 03.467, 03.468, 03.469 and 03.475

Nickel-plated brass pivoting tool with 3 broaches (24 notches and 48 lanterns) or 4 broaches (36 notches and 72 lanterns).
Delivered in a wooden case.

Replacement broaches :

MSA	Type	Items	Use
03.467	123	Broach with conical notched disk	For seconds ø 0.15 – 0.30 mm
03.468	124	Broach with lantern and notched disk	For pivots ø 0.04 – 0.10 mm
03.469	125	Broach with lantern and notched disk	For pivots ø 0.10 – 0.15 mm
03.474	126	Broach with lantern and notched disk	For pivots ø 0.04 – 0.15 mm
03.475	127	Broach with lantern and notched disk	For pivots ø 0.16 – 0.36 mm

Replacement parts :

MSA	Type	Items
03.425-A	131	Pivot gauge ø 0.05 – 0.40 mm
03.425-B	131a	Pivot gauge ø 0.40 – 0.80 mm
03.425-C	131b	Pivot gauge ø 0.80 – 1.20 mm
03.470	119	Supplement for sliding puppet
03.472	135	Pulley with fork
03.473	135a	Fork only
03.476	118a	Broach with notched disks for pivots ø 0.38 – 0.76 mm
03.477	117a	Broach with notched disks for pivots ø 0.38 – 1.00 mm
03.478	118	Broach with notched disks for pivots ø 0.38 – 1.20 mm
03.479	122	Cylinder for broaches MSA 03.468, 03.469 et 03.474
03.481	155a	Bow for hand work

» High precision lathes available in 6 combinations. Delivered in a wooden box.



MSA	Type	Kg
03.800	7A	4.400

STAR high precision lathe. Drilling 8 mm.
See contents on page 03 15.



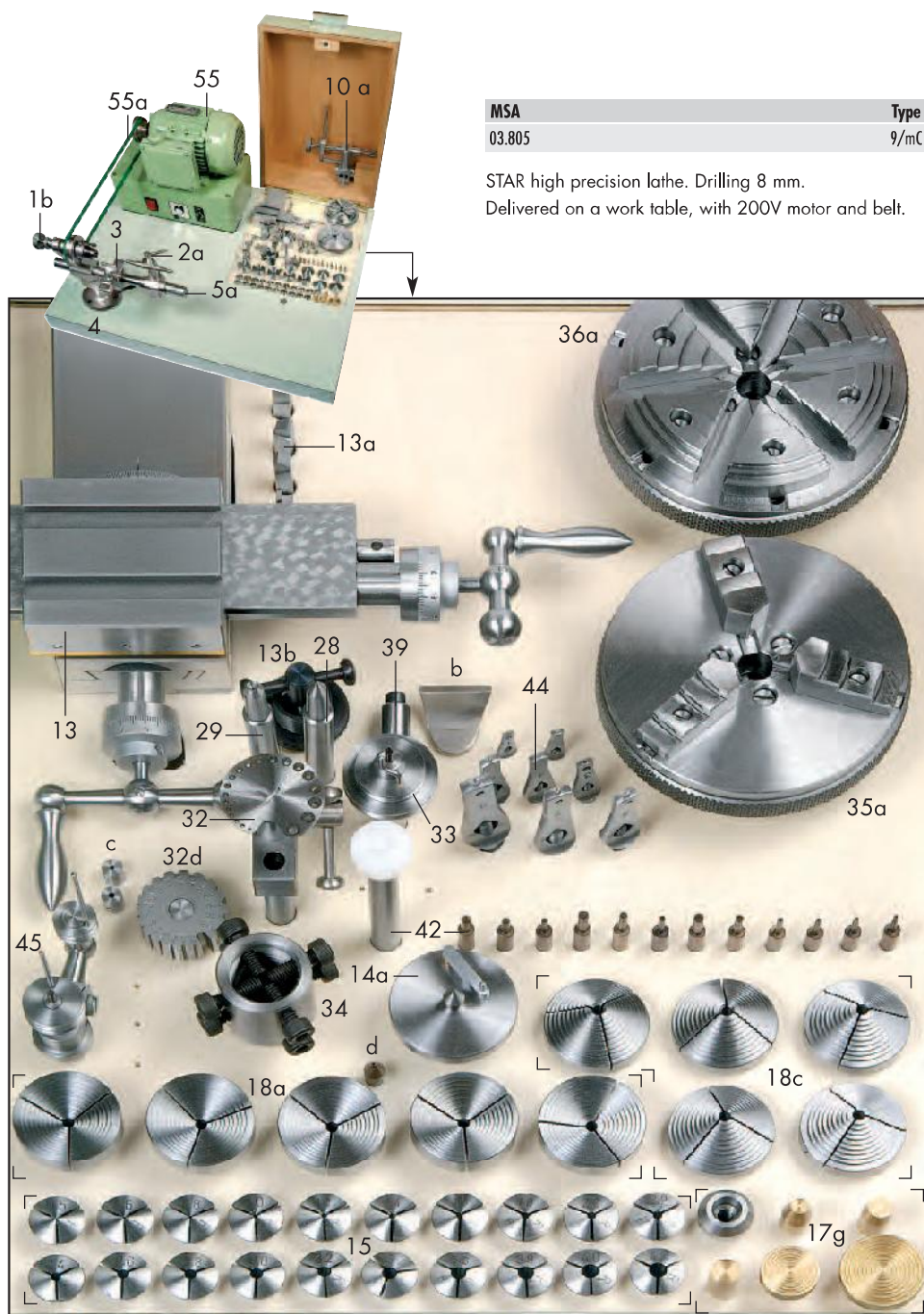
MSA	Type	Kg
03.807	6A	4.250

STAR high precision lathe. Drilling 8 mm.
See contents on page 03 15.



MSA	Type	Kg
03.805	9/mC	15.700

STAR high precision lathe. Drilling 8 mm.
Delivered on a work table, with 200V motor and belt.
See contents on pages 03 14 and 03 15.



MSA	Type
03.805	9/mC

STAR high precision lathe. Drilling 8 mm.
Delivered on a work table, with 200V motor and belt.

Contents of different available versions and replacement parts. Delivered in a wooden case :

MSA	Type*	Items	6a MSA 03.807	7a MSA 03.800	8a MSA 03.801	9a MSA 03.802	9d MSA 03.803	9h MSA 03.808	9k MSA 03.804	9/mC MSA 03.805
03.845	1b	Headstock	✓	✓	✓	✓	✓	✓	✓	✓
03.810	2a	Tailstock	✓	✓	✓	✓	✓	✓	✓	✓
03.811	3	Swing over hand rest with 2 T-rests	✓	✓	✓	✓	✓	✓	✓	✓
03.846	4	Movable foot	✓	✓	✓	✓	✓	✓	✓	✓
03.847	5a	Bed length 250 mm	✓	✓	✓	✓	✓	✓	✓	✓
03.813	10a	Drilling tailstock							✓	✓
03.848	11a	Chuck with grinding wheel (not illustrated)							✓	
03.815	13	Slide-rest support				✓	✓	✓	✓	✓
03.815-A	13a	Set of 6 cutters								✓
03.815-B	13b	Cutter holder pour MSA 03.815								✓
03.836	14a	Carrier chuck			✓	✓	✓	✓	✓	✓
03.840-xxx	15/1	Set of 10 chucks ø 0.40 to 3.00 mm (page 3 16)	✓	✓						
03.840-xxx	15/2	Set of 20 chucks ø 0.40 to 4.20 mm (page 3 16)			✓	✓	✓	✓	✓	✓
03.849	17a	Steel chucks holder	✓							
03.850	17c	Brass wax chuck	✓							
03.851	17e	Brass wax chuck	✓							
03.852	17g	Steel chucks holder with 5 brass chucks		✓		✓	✓	✓	✓	✓
03.842	18a	Set of 5 step chucks		✓		✓	✓	✓	✓	✓
03.843	18c	Set of 5 ring step chucks					✓	✓	✓	✓
03.830	28	Broach with 2 pivots holder	✓	✓	✓	✓	✓	✓	✓	✓
03.831	29	Broach with centre point	✓	✓	✓	✓	✓	✓	✓	✓
03.819	32	Universal broach					✓	✓	✓	✓
03.853	32d	Pivoting plate					✓	✓	✓	✓
03.820	33	Broach with large pulley and 4 assorted points						✓	✓	✓
03.816	35a	3-jaw self centring chuck						✓		✓
03.817	36a	Universal self centring chuck with interior and exterior tightening ø 70 mm							✓	✓
03.844	39	Roller rest							✓	✓
03.832	42	Broach with 12 points						✓	✓	✓
03.835	44	Set of 8 training hearts					✓	✓	✓	✓
03.854	45	Return broach					✓	✓	✓	✓
03.841	55	220V motor, 3000 RPM								✓
	b	Rest pour MSA 03.811	✓	✓	✓	✓	✓	✓	✓	✓
	c	Drill holder for MSA 03.819								✓
	d	Female point for MSA 03.836								✓
03.855	55a	Green belt Ø 6 mm, length 900 mm.								3

* see references on page 03 14.



MSA	Voltage	Kg
03.841	220 V	4.300
03.841-110	110 V	4.300

Motor with frequency converter, 1 on/off switch, 1 runner-inverter button and 1 potentiometer to adjust the rotation speed. 1 on/off pedal or 1 speed variation button is optional.

Speed : variable from 0 to 3000 RPM

Power : 0.18 kW

Voltage : 220 V.

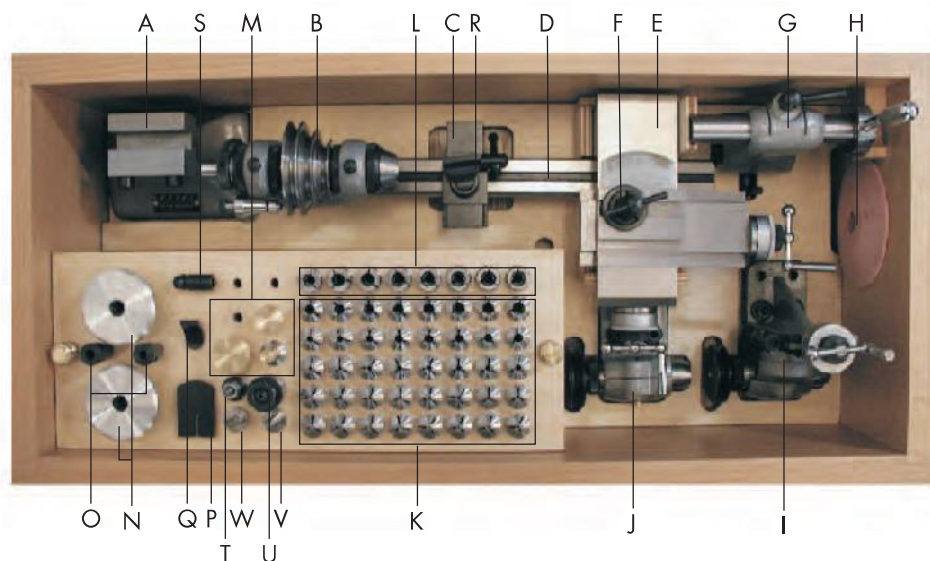
» Precision lathe available in different versions according to needs.
Delivered in wooden box.



MSA	Type	Kg
03.806	110-01-03	12.000

Precise lathe for watch-making VECTOR®. Drilling 8 mm with complete basic equipment.

Head stock, right hand (B), lathe base (A), bed (D), swing over hand rest set with base, swing over hand rest and wide trest (C), compound slide rest (E), drilling tail stock (G), milling attachment including draw-in spindle, to be screwed onto the compound slide rest (I), grinding attachment including draw-in spindle (J), grinding disc borehole \varnothing 13,5 mm outer \varnothing 74 mm (H), set of 48 chucks (0.3 to 8.0 mm) (K), set of 8 crown chucks (L), set of 3 brass wax chucks including (M), wide T-Rest width 20 mm (R), small T-Rest width 10 mm (Q), tool holder for clamping cutters with quadratic cross-section at maxi 6 mm, including mandrill (F), saw table for usage with base of swing over hand rest supporting area \sim 20 x 30 mm (P), roller rest to use with base of swing over hand rest (S), arbour chuck \varnothing 8 mm for clamping grinding disc, milling cutters (\varnothing 8 mm) (U), arbour chuck \varnothing 5 mm for clamping buzz saw blades hole \varnothing 5 mm, milling cutters borehole \varnothing 5 mm (T), male centre chuck (V), female centre chuck (W), 2 draw-in spindles standard length (N), 2 draw-in spindles standard length, for grinding tool (O), driving belt and welding plate.



Other versions available :

MSA	Content	Kg
03.880	MSA 03.806 + 03.868 + 03.869 + 03.870 + 03.860	25.100
03.881 (1)	MSA 03.806 + 03.868 + 03.869 + 03.870 + 03.861	26.300



Accessories :

MSA	Items	Kg
03.868	Countershaft including two brass bearings and driving belt	
03.869	dividing disk	
03.870	wooden base	
03.860	motor 0/2500 r.p.m. 230 volts	
03.861	motor MSA 03.860 including foot pedal	
03.806-a	American chuck only (\varnothing to be mentioned)	

» American chucks only compatible with MSA 03.807, 03.800, 03.801, 03.802, 03.803, 03.808, 03.804, 03.805.



B8 american chuck for STAR high precision lathes.

* Information : 10 chucks delivered with lathes MSA 03.800 and 03.807.

* + ** Information : 20 chucks delivered with lathes MSA 03.801, 03.802, 03.803, 03.804, 03.805 and 03.808.

MSA	ø mm	Kg	MSA	ø mm	Kg
03.840-0.3	0.30	0.090	03.840-2.3	2.30	0.090
03.840-0.4	0.40	"	03.840-2.4**	2.40	"
03.840-0.47	0.47	"	03.840-2.5	2.50	"
03.840-0.5*	0.50	"	03.840-2.6**	2.60	"
03.840-0.6*	0.60	"	03.840-2.8**	2.80	"
03.840-0.7	0.70	"	03.840-3.0**	3.00	"
03.840-0.8*	0.80	"	03.840-3.2**	3.20	"
03.840-0.9	0.90	"	03.840-3.3	3.30	"
03.840-1.0*	1.00	"	03.840-3.4**	3.40	"
03.840-1.1	1.10	"	03.840-3.5	3.50	"
03.840-1.2*	1.20	"	03.840-3.6**	3.60	"
03.840-1.3	1.30	"	03.840-3.8**	3.80	"
03.840-1.4*	1.40	"	03.840-4.0**	4.00	"
03.840-1.5	1.50	"	03.840-4.2**	4.20	"
03.840-1.6*	1.60	"	03.840-4.5	4.50	"
03.840-1.7	1.70	"	03.840-4.6	4.60	"
03.840-1.8*	1.80	"	03.840-4.7	4.70	"
03.840-1.9	1.90	"	03.840-5.0	5.00	"
03.840-2.0*	2.00	"	03.840-6.0	6.00	"
03.840-2.2*	2.20	"	03.840-7.0	7.00	"



American chuck B6/128.

MSA	ø mm	Kg	MSA	ø mm	Kg
03.839-030	0.30	0.060	03.839-200	2.00	0.060
03.839-040	0.40	"	03.839-210	2.10	"
03.839-050	0.50	"	03.839-220	2.20	"
03.839-060	0.60	"	03.839-230	2.30	"
03.839-070	0.70	"	03.839-240	2.40	"
03.839-080	0.80	"	03.839-250	2.50	"
03.839-090	0.90	"	03.839-260	2.60	"
03.839-100	1.00	"	03.839-270	2.70	"
03.839-110	1.10	"	03.839-280	2.80	"
03.839-120	1.20	"	03.839-290	2.90	"
03.839-130	1.30	"	03.839-300	3.00	"
03.839-140	1.40	"	03.839-350	3.50	"
03.839-150	1.50	"	03.839-400	4.00	"
03.839-160	1.60	"	03.839-450	4.50	"
03.839-170	1.70	"	03.839-500	5.00	"
03.839-180	1.80	"	03.839-550	5.50	"
03.839-190	1.90	"	03.839-600	6.00	"

» Other american chucks.



MSA	ø mm	Kg
03.856-050	0.50	0.002
03.856-150	1.50	"
03.856-200	2.00	"
03.856-300	3.00	"
03.856-400	4.00	"

Chuck P4.5 type. Inside thread.

» Riveting stakes and hole plates are in tempered stainless steel. Used for riveting, holing small pieces. V shape slots are suitable to remove pinions or any other watch components.



MSA	Size mm	Nr. of holes	Holes ø mm	Kg
03.901	53 x 15	24 (1)	0.50 à 2.20	0.030
03.902	"	36 (2)	0.50 à 2.50	0.026

Hardened steel riveting stake.



MSA	Size mm	Nr. of holes	Holes ø mm	Kg
03.903	50 x 15	36	0.50 à 2.50	0.025

Brass riveting stake.



MSA	Size mm	Nr. of holes	Holes ø mm	Kg
03.904	72 x 15	20	0.50 à 2.50	0.030

Hardened steel riveting stake, with 2 V shape slots and 5 notches of different dimensions.



MSA	Size mm	Kg
03.905	40 x 40 x 40	0.378

Hardened steel riveting stake, universal cubic shape, with 36 calibrated holes from \varnothing 0.3 to 10.0 mm and 16 slots with different shapes and dimensions. For watches, alarm clocks and wall clocks.



MSA	Size mm	Kg
03.906	46 x 46 x 15	0.196

Polished hardened steel riveting stake, hexagonal shape, with 15 calibrated holes from \varnothing 0.8 to 6.3 mm and 4 slots of different dimensions.