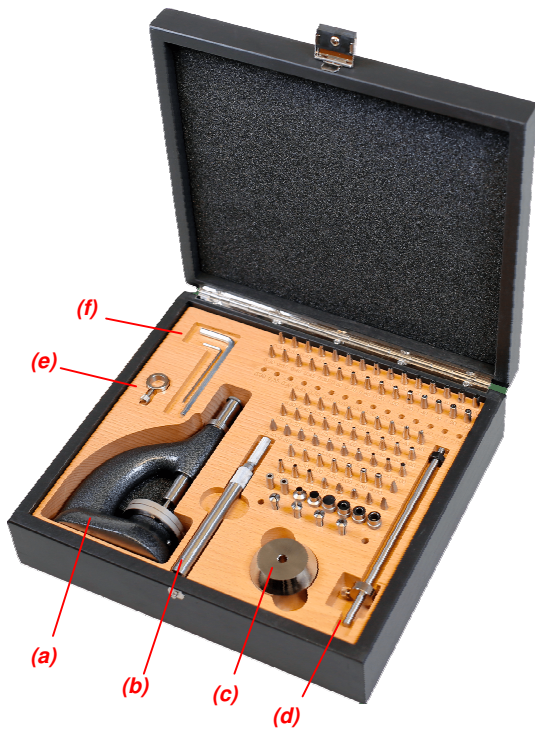


Presses for riveting and milling.



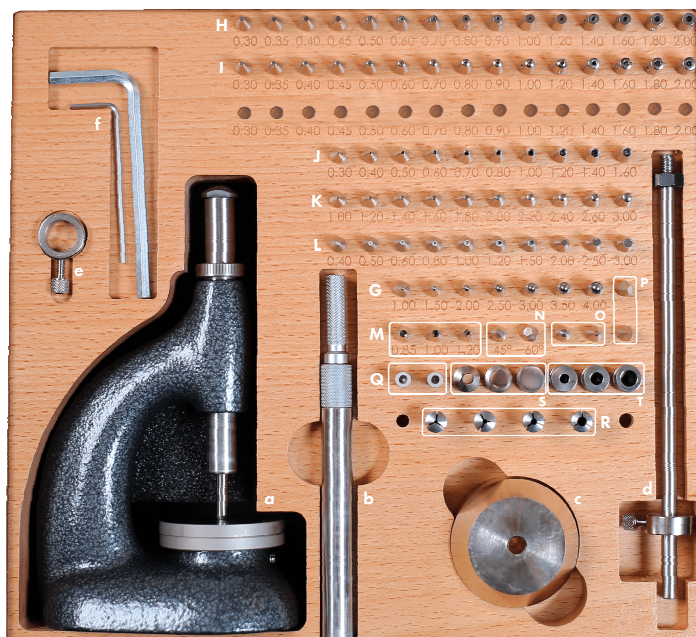
** See details of these components on the following pages

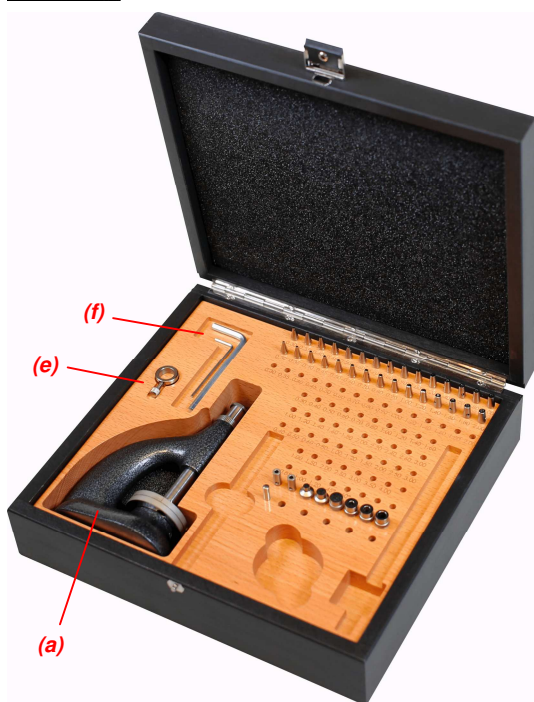
MSA	Box size	Kg
13.210	240 x 220 x 70 mm	2.750

Press for riveting and milling, full version.
Broach and table reaming \varnothing 4 mm.
Delivered in a wooden box.

Contents :

MSA	Item
03.856-x **	(R) ** 4x tightening chuck P4.5 type, \varnothing 1.0 + 1.5 + 2.0 + 3.0 mm
13.129-x	(T) ** 3x flat pierced stake, \varnothing 8 / hole \varnothing 3 + 4 + 5 mm
13.130-x	(S) ** 3x flat stake, \varnothing 4 / \varnothing ext. 4 + 6 + 8 mm
13.210-A	Empty box
13.210-B	(a) Press with table + broach + screw, anthracite
13.210-C	(b) Milling broach, for chucks P4.5, \varnothing ext. 10 x L113.50 mm
13.210-D	(c) Weight for rod, \varnothing 40 x 25 mm
13.210-E	(d) Rod for use with MSA13.210-C spindle and MSA13.210-D weight
13.210-F	Locknut for shank, \varnothing 15 / \varnothing 5 x 5 mm
13.210-G	(e) Locknut for broach, \varnothing 15 / \varnothing 10 x 5 mm
13.210-H15	(f) L Allen wrench, 1.50 mm
13.210-H40	(f) L Allen wrench, 4.00 mm
13.220-x	(G) ** 7x riveting punch, ball / \varnothing 1.00 ... 4.00 mm
13.221-x	(H) ** 15x riveting punch, domed pierced / hole \varnothing 0.30 ... 2.00 mm
13.222-x	(I) ** 15x riveting punch, flat pierced / hole \varnothing 0.30 ... 2.00 mm
13.223-x	(J) ** 10x riveting punch, concave, pierced / hole \varnothing 0.30 ... 1.60 mm
13.224-x	(K) ** 10x riveting punch, cylindrical domed / \varnothing 1.00 ... 3.00 mm
13.225-x	(L) ** 10x riveting punch, cylindrical flat / \varnothing 0.40 ... 3.00 mm
13.226-x	(M) ** 3x riveting punch, flat pierced ellipse / hole \varnothing 0.85 ... 1.20 mm
13.227-x	(N) ** 2x riveting punch, conical 45° + 60° / \varnothing 1.80 + 2.00 mm
13.228-x	(O) ** 2x conical milling point 40° + 60°
13.229-021	(P) ** Pair of lanterning punches 30°, No. 21
13.230-04	** Cylindrical pin, \varnothing 4 x L24 mm
13.230-H1	(Q) ** Reamer holder, No. H1 / \varnothing 5 x L16 mm / 2°
13.230-H2	(Q) ** Wheel countersink holder, No. H2 / \varnothing 5 x L16 mm / 1°





MSA	Box size	Kg
13.211	240 x 220 x 70 mm	2.315

Riveting press, light version.
Broach and table reaming Ø 4 mm.

Delivered in a wooden box.

Contents :

MSA	Item
13.129-x	(T) ** 3x flat pierced stake, Ø 8 / hole Ø 3 + 4 + 5 mm
13.130-x	(S) ** 3x flat stake, Ø 4 / Ø ext. 4 + 6 + 8 mm
13.210-A	Empty box
13.210-B	(a) Press with table + broach + screw, anthracite
13.210-G	(e) Locknut for broach, Ø 15 / Ø 10 x 5 mm
13.210-H15	(f) L Allen wrench, 1.50 mm
13.210-H40	(f) L Allen wrench, 4.00 mm
13.221-x	(H) ** 15x riveting punch, domed pierced / hole Ø 0.30 ... 2.00 mm
13.222-x	(I) ** 15x riveting punch, flat pierced / hole Ø 0.30 ... 2.00 mm
13.230-04	** Cylindrical pin, Ø 4 x L24 mm
13.230-H1	(Q) ** Reamer holder, No. H1 / Ø 5 x L16 mm / 2°
13.230-H2	(Q) ** Wheel countersink holder, No. H2 / Ø 5 x L16 mm / 1°

** See details of these components on the following pages

Riveting punches, with ball (delivered with the full version MSA13.210).



MSA	No.	Ø
13.220-100	100	1.00 mm
13.220-150	150	1.50 mm
13.220-200	200	2.00 mm
13.220-250	250	2.50 mm

MSA	No.	Ø
13.220-300	300	3.00 mm
13.220-350	350	3.50 mm
13.220-400	400	4.00 mm

Riveting punches, domed pierced (delivered with the full version MSA13.210 and light version MSA13.211).



MSA	No.	Ø	Ø hole
13.221-030	30	1.50 mm	0.30 mm
13.221-035	35	1.60 mm	0.35 mm
13.221-040	40	1.70 mm	0.40 mm
13.221-045	45	1.80 mm	0.45 mm
13.221-050	50	1.90 mm	0.50 mm
13.221-060	60	2.10 mm	0.60 mm
13.221-070	70	2.30 mm	0.70 mm
13.221-080	80	2.50 mm	0.80 mm

MSA	No.	Ø	Ø hole
13.221-090	90	2.70 mm	0.90 mm
13.221-100	100	3.00 mm	1.00 mm
13.221-120	120	3.30 mm	1.20 mm
13.221-140	140	3.50 mm	1.40 mm
13.221-160	160	3.70 mm	1.60 mm
13.221-180	180	3.90 mm	1.80 mm
13.221-200	200	4.10 mm	2.00 mm

Riveting punches, flat pierced (delivered with the full version MSA13.210 and light version MSA13.211).



MSA	No.	Ø	Ø hole
13.222-030	30	1.50 mm	0.30 mm
13.222-035	35	1.60 mm	0.35 mm
13.222-040	40	1.70 mm	0.40 mm
13.222-045	45	1.80 mm	0.45 mm
13.222-050	50	1.90 mm	0.50 mm
13.222-060	60	2.10 mm	0.60 mm
13.222-070	70	2.30 mm	0.70 mm
13.222-080	80	2.50 mm	0.80 mm

MSA	No.	Ø	Ø hole
13.222-090	90	2.70 mm	0.90 mm
13.222-100	100	3.00 mm	1.00 mm
13.222-120	120	3.30 mm	1.20 mm
13.222-140	140	3.50 mm	1.40 mm
13.222-160	160	3.70 mm	1.60 mm
13.222-180	180	3.90 mm	1.80 mm
13.222-200	200	4.10 mm	2.00 mm

Riveting punches, concave pierced (delivered with the full version MSA13.210).



MSA	No.	Ø	Ø hole
13.223-030	30	0.70 mm	0.30 mm
13.223-040	40	0.90 mm	0.40 mm
13.223-050	50	1.30 mm	0.50 mm
13.223-060	60	1.60 mm	0.60 mm
13.223-070	70	2.00 mm	0.70 mm

MSA	No.	Ø	Ø hole
13.223-080	80	2.10 mm	0.80 mm
13.223-100	100	2.50 mm	1.00 mm
13.223-120	120	2.70 mm	1.20 mm
13.223-140	140	3.00 mm	1.40 mm
13.223-160	160	3.10 mm	1.60 mm

Riveting punches, cylindrical domed (delivered with the full version MSA13.210).



MSA	No.	Ø
13.224-100	100	1.00 mm
13.224-120	120	1.20 mm
13.224-140	140	1.40 mm
13.224-160	160	1.60 mm
13.224-180	180	1.80 mm

MSA	No.	Ø
13.224-200	200	2.00 mm
13.224-220	220	2.20 mm
13.224-240	240	2.40 mm
13.224-260	260	2.60 mm
13.224-300	300	3.00 mm

Riveting punches, cylindrical flat (delivered with the full version MSA13.210).



MSA	No.	Ø
13.225-040	40	0.40 mm
13.225-050	50	0.50 mm
13.225-060	60	0.60 mm
13.225-080	80	0.80 mm
13.225-100	100	1.00 mm

MSA	No.	Ø
13.225-120	120	1.20 mm
13.225-150	150	1.50 mm
13.225-200	200	2.00 mm
13.225-250	250	2.50 mm
13.225-300	300	3.00 mm

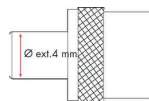
Riveting punches, flat pierced and ellipse (delivered with the full version MSA13.210).



MSA	No.	Ø	Ø hole
13.226-085	85	2.20 mm	0.85 mm
13.226-100	100	2.30 mm	1.00 mm

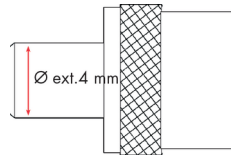
MSA	No.	Ø	Ø hole
13.226-120	120	2.50 mm	1.20 mm

Flat pierced stakes (delivered with the full version MSA13.210 and light version MSA13.211).



MSA	No.	Ø	Ø hole
13.129-300	300	8.00 mm	3.00 mm
13.129-400	400	8.00 mm	4.00 mm
13.129-500	500	8.00 mm	5.00 mm

Flat stakes (** delivered with the full version MSA13.210 and light version MSA13.211).



MSA	No. stake	External Ø	Kg
13.130-070	070	0.70 mm	0.003
13.130-080	080	0.80 mm	0.003
13.130-090	090	0.90 mm	0.003
13.130-100	100	1.00 mm	0.003
13.130-130	130	1.30 mm	0.003
13.130-150	150	1.50 mm	0.003
13.130-190	190	1.90 mm	0.003
13.130-200	200	2.00 mm	0.003

MSA	No. stake	External Ø	Kg
13.130-250	250	2.50 mm	0.003
13.130-300	300	3.00 mm	0.003
13.130-400	**	4.00 mm	0.003
13.130-500	500	5.00 mm	0.003
13.130-600	**	6.00 mm	0.003
13.130-700	700	7.00 mm	0.003
13.130-800	**	8.00 mm	0.003

Special flat stakes.

Other diameters available upon request.

SCHAUBLIN chucks P4.5 type (delivered with the full version MSA13.210).



Ø 4.50 mm

MSA	Ø	Kg
03.856-100	1.00 mm	0.002
03.856-150	1.50 mm	0.002
03.856-200	2.00 mm	0.002
03.856-300	3.00 mm	0.002

Horotec® Chucks P 4.5 type.



Ø 4.50 mm

MSA	Ø	Kg
03.875-080	0.80 mm	0.002
03.875-100	1.00 mm	0.002
03.875-150	1.50 mm	0.002
03.875-160	1.60 mm	0.002
03.875-200	2.00 mm	0.002
03.875-235	2.35 mm	0.002
03.875-250	2.50 mm	0.002
03.875-300	3.00 mm	0.002
03.875-400	4.00 mm	0.002

Tightening chuck 4.5 type.

Other accessories for riveting and milling presses MSA13.210 and MSA13.211 :



(1)



(2)



(3)



(4)

MSA	Item
13.227-045 *	(1) Riveting punch with conical point, No. 45 / Ø 1.80 mm / 45°
13.227-060 *	Riveting punch with conical point, No. 60 / Ø 2.00 mm / 60°
13.228-045 *	Conical milling point, No. 45 / 40°
13.228-060 *	(2) Conical milling point, No. 60 / 60°
13.229-021 *	(3) Pair of lanterning punches, No. 21 / 30°
13.230-04 **	Cylindrical pin, Ø 4 x L24 mm
13.230-H1 **	(4) Reamer holder, No. H1 / Ø 5 x L16 mm / 2°
13.230-H2 **	Wheel countersink holder, No. H2 / Ø 5 x L16 mm / 1°

* Delivered with press MSA13.210 (full version)

** Delivered with presses MSA13.210 (full version) and MSA13.211 (light version)