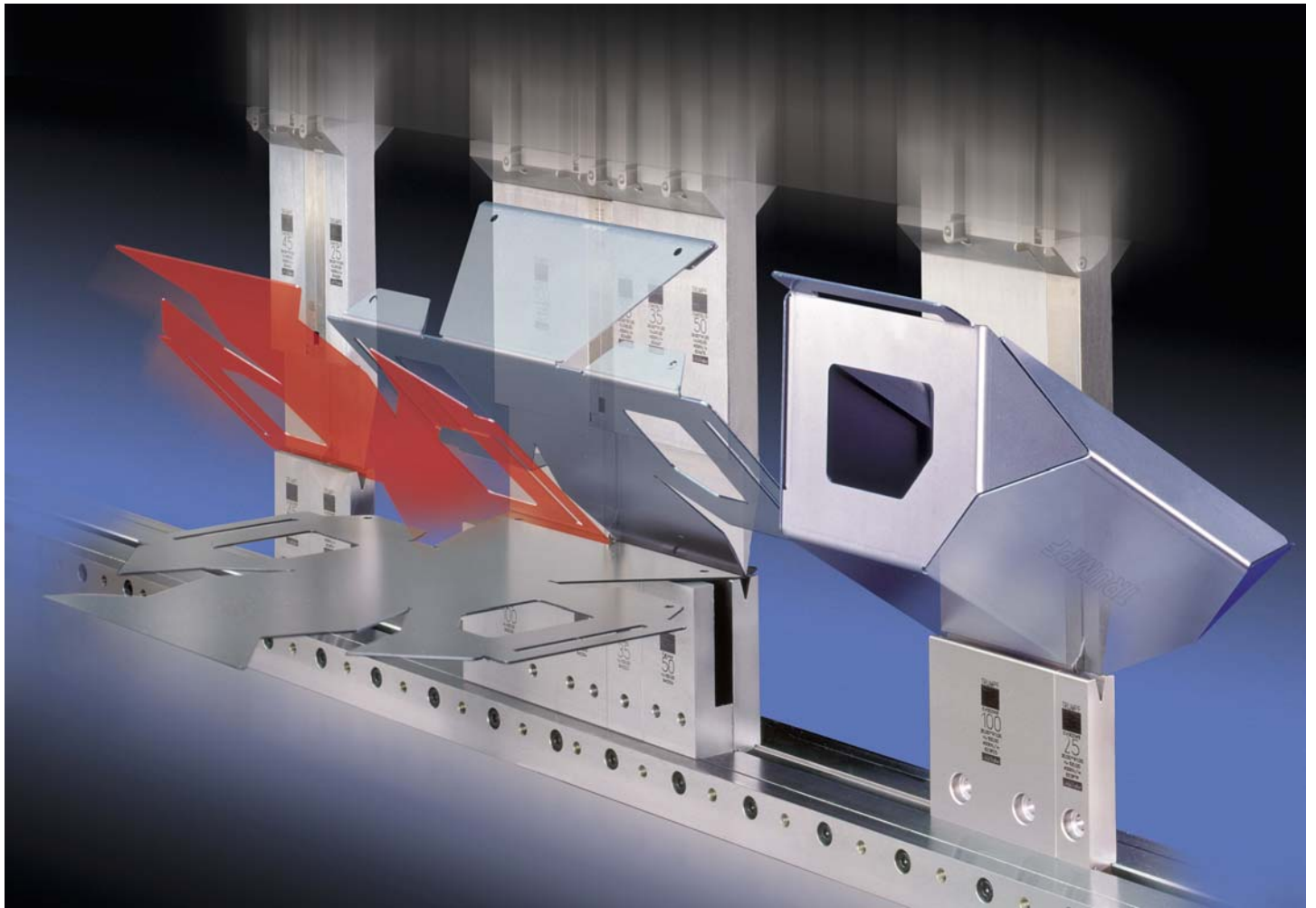
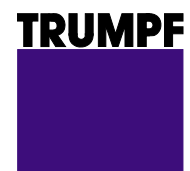


TRUMPF CNC Press Brakes



Laser hardened
TRUMPF Press Brake tooling
is precise and durable

Press Brake Tooling
LASERdur



Quality is Standard

Quality and Safety Packaging



■ Tooling elements are self centering, interchangeable and may even be rotated.

■ Safety design secures punches against falling out

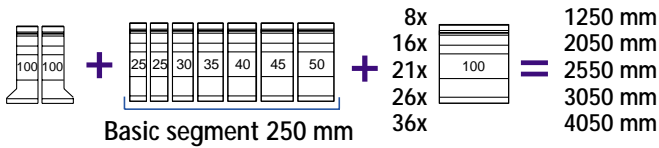
■ Permanent and comprehensive description

■ Laser hardened working zone (58-60 HRC)



Modular Bending Tool System

Upper tool sets using Modular Segment A:

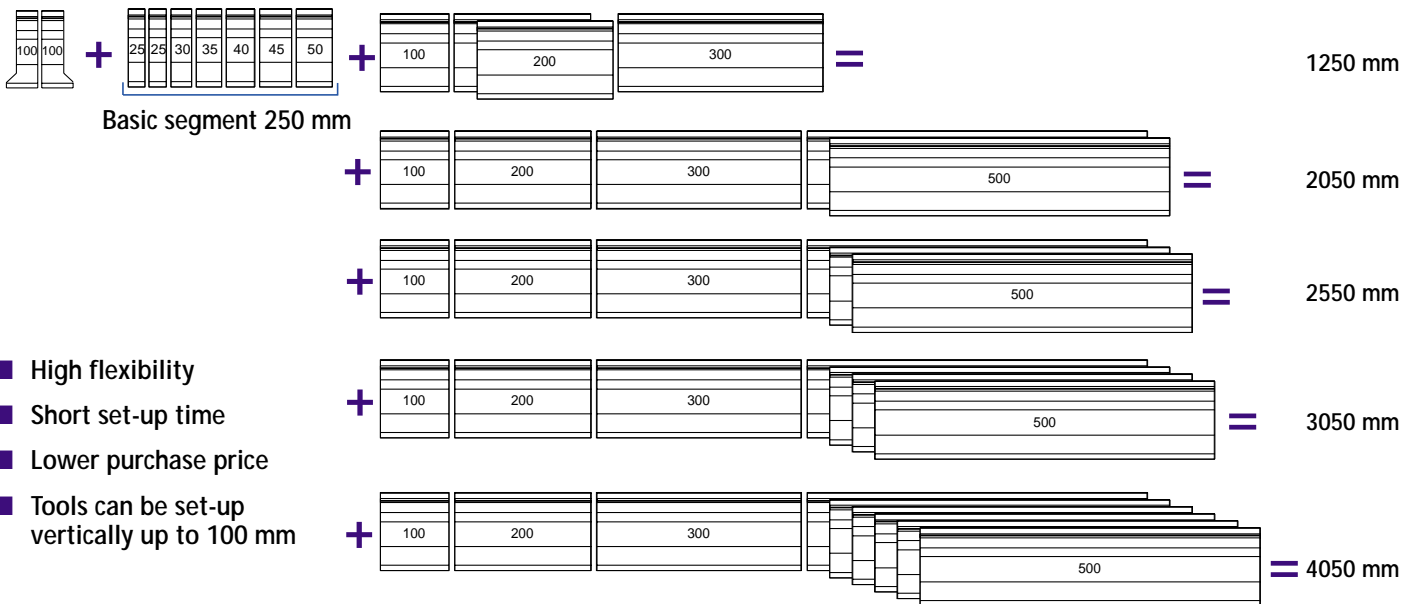


■ Maximum flexibility

■ Minimum set-up time

■ All tools can be set-up vertically and horizontally

Upper tool sets using Modular Segment B:



■ High flexibility

■ Short set-up time

■ Lower purchase price

■ Tools can be set-up vertically up to 100 mm

Lower tool sets

Same modular systems as for upper tool sets (Horn tools are replaced by 100 mm sections)

Standard Punches

swan neck	goose neck	acute goose neck	pointed	pointed with flattening surface	bottoming
OW200 120 86° R1	OW201 120 86° R1	OW202 120 28° R1	OW203 120 60° R4	OW210 140 28° R1	OW211 120 90° R1
OW200/S 220 86° R1	OW201/S 220 86° R1	OW202/S 220 28° R1	OW203/S 220 60° R4	OW210/S 240 28° R1	OW320 220 90° R1 R0,2 R0,5 R1,0 R1,5

Accessories

Tool holders

for hemming Z bending

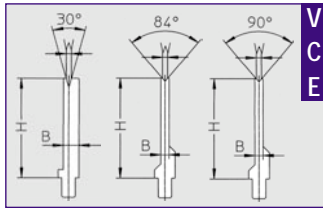
OW209/S 220 28° R0,3 R1,6 R2 R3 R4 R5	OW308 120 35 R10 - R25	OW308/S 120 55 R15 - R40	FWZ ZDL 100 Combination options	OWZ/K EVZ Z: 4 to 10 mm, 90° increment: 2 mm	OWK/90 120 100 ZE 90 EV/70 Suitable for different stations with I-axis
--	--	--	--	--	--

Adapter

Upper tools for thin sheet processing

TRUMPF extension H 60 H: 60, 80, 100, 150 mm	Amada 80/150 A Amada 80/150 B LVD Beyeler Safan u.a.	OW280/K 140 24 45 80° R0,5	OW/K130 130 20.4 5 3	OW/K80 80 20.4 5 3	OW390 6 3 90 29° R0,5 8 3 10 90° R0,5	OW391 8 3 90 80° R0,5 8 3 90° R0,5
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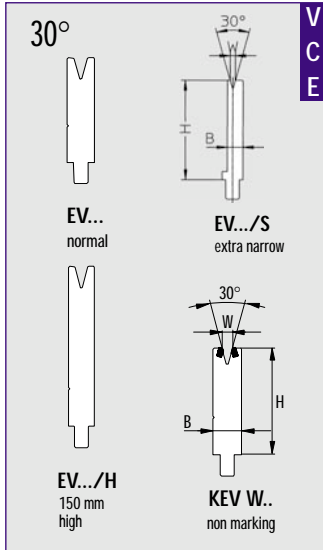
Standard dies for thin sheet processing



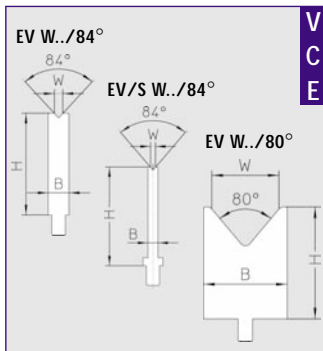
Type 30°	W	H	B	Type 90°	W	H	B
EV/S W4/30°	4	100	15	EV/S W4/90°	4	100	8
EV/S W5/30°	5	100	15	EV/S W5/90°	5	100	10

Type 84°	W	H	B
EV/S W4/84°	4	100	8
EV/S W5/84°	5	100	8

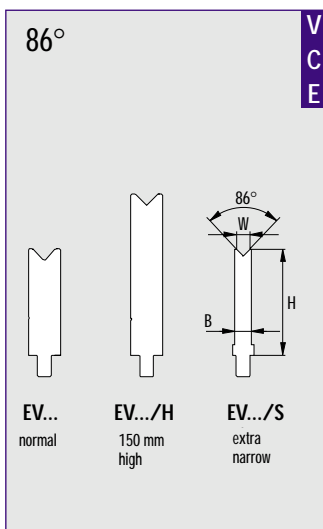
Standard dies for air bending



Type 30°	W	H	B	Type 30°	W	H	B
EV001	6	100	20	EV005	16	100	30
EV001/R3	6	100	20	EV005/R3	16	100	30
EV001/H	6	150	20	EV005/H	16	150	30
EV001/S	6	100	16				
EV002	8	100	20	EV006	20	100	35
EV002/R3	8	100	20	EV006/H	20	150	35
EV002/H	8	150	20	EV007	24	100	40
EV002/S	8	100	17	EV007/H	24	150	40
EV003	10	100	20	KEV W8	8	100	25
EV003/R3	10	100	20	KEV W10	10	100	27
EV003/H	10	150	20	KEV W12	12	100	30
EV003/S	10	100	18				
EV004	12	100	25	KEV W16	16	100	35
EV004/R3	12	100	25	KEV W20	20	100	38
EV004/H	12	150	25	KEV W24	24	100	45
EV004/S	12	100	21,5				



Type 84°	W	H	B	Type 80°	W	H	B
EV W6/84°	6	100	20	EV W24/80°	24	100	35
EV/S W6/84°	6	100	10	EV W30/80°	30	100	45
EV W8/84°	8	100	20	EV W40/80°	40	100	55
EV/S W8/84°	8	100	12	EV W50/80°	50	100	65
EV W10/84°	10	100	20	EV W60/80°	60	100	75
EV/S W10/84°	10	100	14	EV W70/80°	70	100	85
EV W12/84°	12	100	25	EV W80/80°	80	100	100
EV/S W12/84°	12	100	16	EV W90/80°	90	120	110
EV W16/84°	16	100	30	EV W100/80°	100	120	120
EV W20/84°	20	100	30				



Type 86°	W	H	B	Type	W	H	B
EV020	6	100	20	EV025	20	100	30
EV020/H	6	150	20	EV025/H	20	150	30
EV020/S	6	100	10				
EV021	8	100	20	EV026	24	100	35
EV021/H	8	150	20	EV026/H	24	150	35
EV021/S	8	100	12				
EV022	10	100	20	EV027	30	100	45
EV022/H	10	150	20	EV027/H	30	150	45
EV022/S	10	100	14				
EV023	12	100	25	EV028	40	100	55
EV023/H	12	150	25	EV028/H	40	150	55
EV023/S	12	100	16				
EV024	16	100	30	EV029	50	100	75
EV024/H	16	150	30	EV029/H	50	150	75

TRUMPF bending tool catalog on CD-ROM

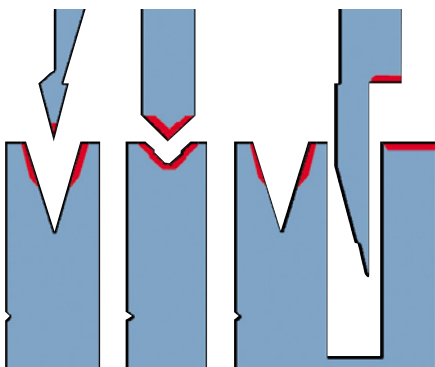
Your advantages:

- Paperless, fast ordering
- Clear navigation
- Rationalised tool selection
- Integrated tool ordering and ACB ordering in just one catalog
- Error avoidance
- Ease of operation
- Available from your TRUMPF distributor

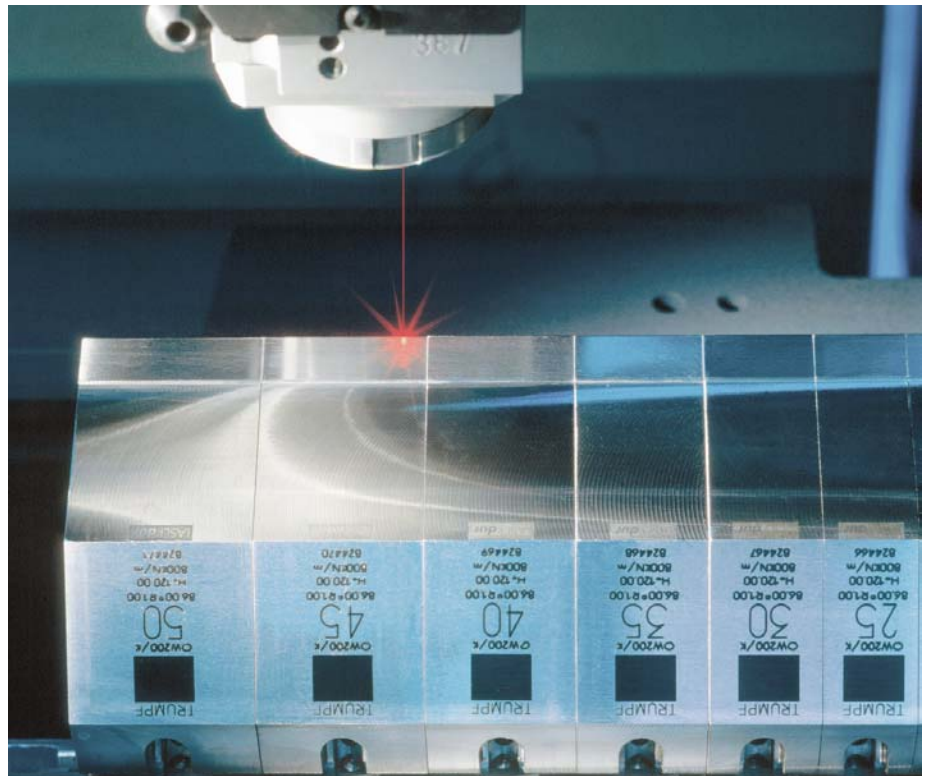


Laser hardened tools

- Laser hardened to 60 HRC
- Tough tool core
- No distortion
- Extremely wear-resistant work zones



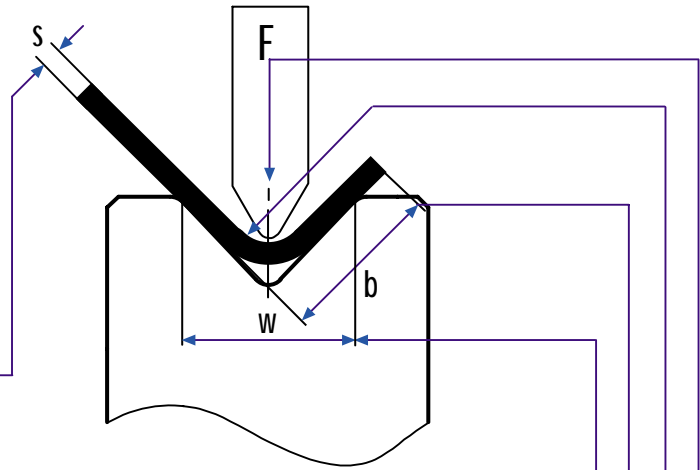
Hardened work zones



Laser hardening of tools

Press force table

Required press force for 90° air bends
material 400 N/mm²



s	6	8	10	12	16	20	24	30	40	50	60	70	80	90	100	120	w	b	Ri
	4.5	6	7.5	9	12	15	18	22.5	30	37.5	45	52.5	60	67.5	75	90			
0,75	52	39	31	26															
1	93	70	56	47	35														
1,25	145	109	87	73	55	44													
1,5	209	157	126	105	79	63													
1,75		214	171	143	107	86	71												
2			223	186	140	112	93												
2,5				291	218	175	145	116											
3					314	251	209	168	126										
3,5					428	342	285	228	171	137									
4						447	372	298	223	179	149								
4,5						566	471	377	283	226	189	162							
5								466	349	279	233	200	175						
6								670	503	402	335	287	251	223					
7									684	547	456	391	342	304	274				
8										715	596	511	447	397	358	298			
10												798	698	621	559	466			
12													1005	894	804	670			

F in kN
s, v, b, Ri in mm

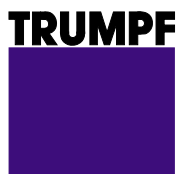
= optimum die

material 700 N/mm², stainless steel

s	6	8	10	12	16	20	24	30	40	50	60	70	80	90	100	120	w	b	Ri
	4.5	6	7.5	9	12	15	18	22.5	30	37.5	45	52.5	60	67.5	75	90			
0,75	87	65	52	44															
1	155	116	93	78	58														
1,25	242	182	145	121	91	73													
1,5	349	262	209	175	131	105													
1,75		356	285	238	178	143	119												
2			372	310	233	186	155												
2,5				485	364	291	242	194											
3					524	419	349	279	209										
3,5						570	475	380	285	228									
4							621	497	372	298	248								
4,5								628	471	377	314	269							
5									582	466	388	333	291						
6									838	670	559	479	419						
7										912	760	652	570	507					
8										1192	993	851	745	662	596				
10												1330	1164	1034	931	776			
12													1675	1490	1340	1118			

F in kN
s, v, b, Ri in mm

= optimum die



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