



CATALOGUE 02/2016-WW-T.1

# SYSTEM TRUMPF

### **CATALOGUE 02/2016-WW-T.1**



#### SCOPE OF APPLICATION:

Deliveries and services provided by PASS Stanztechnik AG are effected exclusively according to PASS delivery and payment conditions. These conditions shall be deemed accepted at the latest upon receipt of the goods or services.

#### **GENERAL REMARKS:**

You can find our general terms and conditions on our Homepage under: www.pass-ag.com

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# TO RE-EXPERIENCE STANDARD: STANDARD TOOLS

# PASS TOOLS FOR YOUR TRUMPF SYSTEM

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# PASS STANDARD TOOLS ROUND







SIZE	DIM. D	PARTNO	
PUNCH (H-PM®)			
0	1,00 - 6,00	107A01C	
0	6,01 - 10,50 (*1)	107B01C	
1	1,00 - 30,50	101111C	
2	30,51 - 40,00	101211C	
2	40,01 - 50,80	101221C	
2	50,81 - 60,00	101231C	
2	60,01 - 72,00	101241C	
2	72,01 - 76,20	101251C	
Reinforced	1,00 - 30,50	108111C	
Reinforced	30,51 - 40,00	108121C	
STRIPPER			

DIE (1.114.10)				
DIE (HWS)				
	1 (*2)	1,00 - 32,00	106111C	
	2 (*3)	32,01 - 77,00	106211C	
	1 reinforced	1,00 - 32,00	109111C	
	2 reinforced	32,01 - 42,00	109221C	
	2 reinforced	42,01 - 62,00	109231C	

1,00 - 78,00

112211C



Additional costs:	Cross references:	see page
PUNCH	PUNCH	
Shear (WT / DOWT / etc.) -> see page 56	Fully guided punch	14
(*1) Smaller 6,00 mm	Adjusting rings	34
Cutting part under 1,00 mm	Punch chuck	35
X3-PM quality -> see page 68	Additional costs for coating	54
	Polished cutting part	55

STRIPPER	STRIPPER	
PU coating for low-scratch material handling	Spare parts	52
	PU stripper	65
DIE	DIE	
<sup>(*2)</sup> H-PM <sup>®</sup> quality	Adapter rings	35
<sup>('3)</sup> H-PM <sup>®</sup> quality	Compensating rings	38
Slug-stop version (negative cutting part)	RTC cartridge and die carrier	41
Brush version for low-scratch material handling	Die clip	52
X8-PM quality -> see page 68	Slug-snap version (for slug problems)	57

# PASS STANDARD TOOLS SQUARE

SIZE	DIM. A	PARTNO.	
PUNCH (H-PM®)			
0	1,00 - 4,20	107A02C	
0	4,21 - 7,40 (*1)	107B02C	
1	1,00 - 21,55	101112C	
2	21,56 - 28,25	101212C	
2	28,26 - 35,90	101222C	
2	35,91 - 42,40	101232C	
2	42,41 - 50,90	101242C	
2	50,91 - 53,90	101252C	
Reinforced	1,00 - 21,55	108112C	
Reinforced	21,56 - 28,25	108122C	
STRIPPER			
2	1,00 - 56,00	112212C	
DIE (HWS)			
1 (*2)	1,00 - 22,50	106112C	
2 (*3)	22,51 - 54,90	106212C	
1 reinforced	1,00 - 22,50	109112C	
2 reinforced	22,51 - 30,20	109222C	
2 reinforced	30,21 - 43,00	109232C	







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Additional costs:	Cross references:	see page
PUNCH	PUNCH	
Shear (WT / DOWT / etc.) -> see page 56	Fully guided punch	14
<sup>(*1)</sup> Smaller 4,20 mm	Adjusting ring	34
Cutting part under 1,00 mm	Punch chuck	35
4 x same corner radius	PASS-fit system - explanation and additional costs	40
X3-PM quality -> see page 68	Additional costs for coating	54
	Polished cutting part	55
STRIPPER	STRIPPER	
PU coating for low-scratch material handling	Spare parts	52
	Push-out stripper	53
	PU stripper	65
DIE	DIE	
<sup>(*2)</sup> H-PM <sup>®</sup> quality	Adapter rings	35
<sup>(*3)</sup> H-PM <sup>®</sup> quality	Compensating rings	38
Slug-stop version (negative cutting part)	RTC cartridge and die carrier	41
Additional keyway	Die clip	52
Brush version for low-scratch material handling	Slug-snap version (for slug problems)	57
X8-PM quality -> see page 68		

# PASS STANDARD TOOLS RECTANGLE







	SIZE	DIM. D	PARTNO.	
PUNCH (H-PM®)				
	0	1,00 - 6,00	107A03C	
	0	6,01 - 10,50 (*1)	107B03C	
	1	1,00 - 30,50	101113C	
	2	30,51 - 40,00	101213C	
	2	40,01 - 50,80	101223C	
	2	50,81 - 60,00	101233C	
	2	60,01 - 72,00	101243C	
	2	72,01 - 76,20	101253C	
	Reinforced	1,00 - 30,50	108113C	
	Reinforced	30,51 - 40,00	108123C	

	2	1,00 - 78,00	112213C	
DIE (HWS)				
	1 (*2)	1,00 - 32,00	106113C	
	2 (*3)	32,01 - 77,00	106213C	
	1 reinforced	1,00 - 32,00	109113C	

32,01 - 42,00

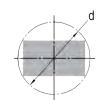
42,01 - 62,00

109223C

109233C

2 reinforced

2 reinforced



Additional costs:	Cross references:	see page
PUNCH	PUNCH	
Shear (WT / DOWT / etc.) -> see page 56	Fully guided punch	15
(*1) Smaller 6,00 mm	Slitting tools for slittings close to embossing	30 - 31
Cutting part under 1,00 mm	Adjusting rings	34
4 x same corner radius	Punch chuck	35
X3-PM quality -> see page 68	PASS-fit system - explanation and additional costs	40
	Additional costs for coating	54
	Polished cutting part	55
STRIPPER	STRIPPER	
PU coating for low-scratch material handling	Spare parts	52
	Push-out stripper	53
	PU stripper	65
DIE	DIE	
('2) H-PM® quality	Adapter rings	35
(3) H-PM® quality	Compensating rings	38
Slug-stop version (negative cutting part)	RTC cartridge and die carrier	41
Additional keyway	Die clip	52
Brush version for low-scratch material handling	Slug-snap version (for slug problems)	57
X8-PM quality -> see page 68		

STRIPPER

# PASS STANDARD TOOLS OBLONG

	SIZE	DIM. D	PARTNO.	
PUNCH (H-PM®)				
	0	1,00 - 6,00	107A04C	
	0	6,01 - 10,50 (*1)	107B04C	
	1	1,00 - 30,50	101114C	
	2	30,51 - 40,00	101214C	
	2	40,01 - 50,80	101224C	
	2	50,81 - 60,00	101234C	
	2	60,01 - 72,00	101244C	
	2	72,01 - 76,20	101254C	
	Reinforced	1,00 - 30,50	108114C	
	Reinforced	30,51 - 40,00	108124C	
STRIPPER				
	2	1,00 - 78,00	112214C	
DIE (HWS)				
	1 (*2)	1,00 - 32,00	106114C	
	2 (*3)	32,01 - 77,00	106214C	
	1 reinforced	1,00 - 32,00	109114C	
	2 reinforced	32,01 - 42,00	109224C	
	2 reinforced	42,01 - 62,00	109234C	





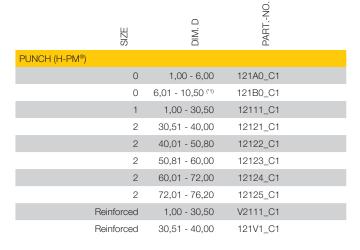




Cross references:	see page
PUNCH	
Fully guided punch	15
Slitting tools for slittings close to embossing	30 - 31
Adjusting rings	34
Punch chuck	35
PASS-fit system - explanation and additional costs	40
Additional costs for coating	54
Polished cutting Part	55
STRIPPER	
Spare parts	52
Push-out stripper	53
PU stripper	65
DIE	
Adapter rings	35
Compensating rings	38
RTC cartridge and die carrier	41
Die clip	52
Slug-snap version (for slug problems)	57
	PUNCH Fully guided punch Slitting tools for slittings close to embossing Adjusting rings Punch chuck PASS-fit system - explanation and additional costs Additional costs for coating Polished cutting Part STRIPPER Spare parts Push-out stripper PU stripper DIE Adapter rings Compensating rings RTC cartridge and die carrier Die clip

(SF01, SF02, SF04, SF05)







STRIPPER			
	2	1,00 - 78,00	127H1_C1

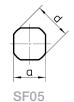
DIE (HWS)				
	1 (*2)	1,00 - 32,00	12611_C1	
	2 (*3)	32,01 - 77,00	12621_C1	
	1 reinforced	1,00 - 32,00	V2611_C1	
	2 reinforced	32,01 - 42,00	126V1_C1	
	2 reinforced	42,01 - 62,00	126V2_C1	











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SF02

SF04

Additional costs:	Cross references:	see page
PUNCH	PUNCH	
Shear (WT / DOWT / etc.) -> see page 56	Fully guided punch	15
(*1) smaller 6,00 mm	Adjusting rings	34
Cutting part under 1,00 mm	Punch chuck	35
X3-PM quality -> see page 68	PASS-fit system - explanation and additional costs	40
	Additional costs for coating	54
	Polished cutting part	55

STRIPPER	STRIPPER	
PU coating for low-scratch material handling	Spare parts	52
	PU stripper	65

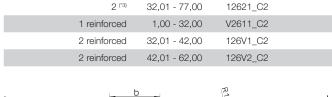
DIE	DIE	
<sup>(*2)</sup> H-PM <sup>®</sup> quality	Adapter rings	35
(*3) H-PM® quality	Compensating rings	38
Slug-stop version (negative cutting part)	RTC cartridge and die carrier	41
Additional keyway	Die clip	52
Brush version for low-scratch material handling	Slug-snap version (for slug problems)	57
X8-PM quality -> see page 68		

(SF03, SF07, SF13, SF17)

	SIZE	DIM. D	PARTNO.	
PUNCH (H-PM®)				
	0	1,00 - 6,00	121A0_C2	
	0	6,01 - 10,50	121B0_C2	
	1	1,00 - 30,50	12111_C2	
	2	30,51 - 40,00	12121_C2	
	2	40,01 - 50,80	12122_C2	
	2	50,81 - 60,00	12123_C2	
	2	60,01 - 72,00	12124_C2	
	2	72,01 - 76,20	12125_C2	
R	einforced	1,00 - 30,50	V2111_C2	
R	einforced	30,51 - 40,00	121V1_C2	

STRIPPER				
	2	1,00 - 78,00	127H1_C2	

DIE (HWS)				
	1 (*2)	1,00 - 32,00	12611_C2	
	2 (*3)	32,01 - 77,00	12621_C2	
	1 reinforced	1,00 - 32,00	V2611_C2	
	2 reinforced	32,01 - 42,00	126V1_C2	
	2 reinforced	42,01 - 62,00	126V2_C2	









SF07



SF13



**SF17** 







Additional costs:	Cross references:	see page
PUNCH	PUNCH	
Shear (WT / DOWT / etc.) -> see page 56	Fully guided punch	15
(°1) smaller 6,00 mm	Slitting tools for slittings close to embossing	30 - 31
Cutting part under 1,00 mm	Adjusting rings	34
X3-PM quality -> see page 68	Punch chuck	35
	PASS-fit system - explanation and additional costs	40
	Additional costs for coating	54
	Polished cutting part	55
STRIPPER	STRIPPER	
PU coating for low-scratch material handling	Spare parts	52
	Push-out stripper	53
	PU stripper	65
DIE	DIE	
(°2) H-PM® quality	Adapter rings	35
(*3) H-PM® quality	Compensating rings	38
Slug-stop version (negative cutting part)	RTC cartridge and die carrier	41
Additional keyway	Die clip	52
Brush version for low-scratch material handling	Slug-snap version (for slug problems)	57
X8-PM quality -> see page 68		

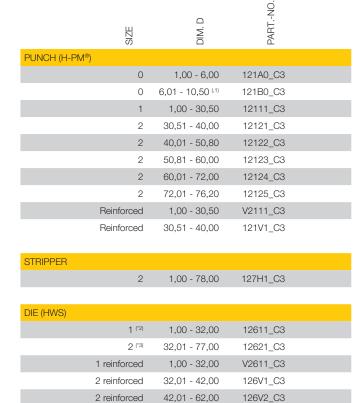
(SF06, SF08, SF14, SF16)





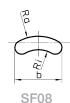


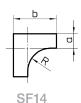














SF16

Additional costs:	Cross references:	see page
PUNCH	PUNCH	
Shear (WT / DOWT / etc.) -> see page 56	Fully guided punch	15

<sup>(*1)</sup> Smaller 6,00 mm	Slitting tools for slittings close to embossing	30 - 31
Cutting part under 1,00 mm	Adjusting rings	34
X3-PM quality -> see page 68	Punch chuck	35
	PASS-fit system - explanation and additional costs	40
	Additional costs for coating	54
	Polished cutting part	55
STRIPPER	STRIPPER	
PU coating for low-scratch material handling	Spare parts	52
	Push-out stripper	53
	PU stripper	65

DIE	DIE	
(°2) H-PM® quality	Adapter rings	35
('3) H-PM® quality	Compensating rings	38 5
Slug-stop version (negative cutting)	RTC cartridge and die carrier	41
Additional keyway	Die clip	52 <del>-</del>
Brush version for low-scratch material handling	Slug-snap version (for slug problems)	57

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X8-PM quality -> see page 68

(SF09, SF10, SF11, SF12)

	SIZE	Q WIQ	PARTNO.	
PUNCH (H-PM®)				
	0	1,00 - 6,00	121A0_C4	
	0	6,01 - 10,50 (*1)	121B0_C4	
	1	1,00 - 30,50	12111_C4	
	2	30,51 - 40,00	12121_C4	
	2	40,01 - 50,80	12122_C4	
	2	50,81 - 60,00	12123_C4	
	2	60,01 - 72,00	12124_C4	
	2	72,01 - 76,20	12125_C4	
	Reinforced	1,00 - 30,50	V2111_C4	
	Reinforced	30,51 - 40,00	121V1_C4	



STRIPPER			
	2	1,00 - 78,00	127H1_C4

DIE (HWS)				
	1 (*2)	1,00 - 32,00	12611_C4	
	2 (*3)	32,01 - 77,00	12621_C4	
	1 reinforced	1,00 - 32,00	V2611_C4	
	2 reinforced	32,01 - 42,00	126V1_C4	
	2 reinforced	42,01 - 62,00	126V2_C4	





SF09

Additional costs:



SF10

Brush version for low-scratch material handling

X8-PM quality -> see page 68



SF11



Cross references:



PUNCH	PUNCH	
Shear (WT / DOWT / etc.) -> see page 56	Fully guided punch	15
(*1) Smaller 6,00 mm	Adjusting rings	34
Cutting part under 1,00 mm	Punch chuck	35
X3-PM quality -> see page 68	PASS-fit system - explanation and additional costs	40
	Additional costs for coating	54
	Polished cutting part	55
STRIPPER	STRIPPER	
PU coating for low-scratch material handling	Spare parts	52
	PU stripper	65
DIE	DIE	
(°2) H-PM® quality	Adapter rings	35
('3) H-PM® quality	Compensating rings	38
slug-stop version (negative cutting)	RTC cartridge and die carrier	41
Additional keyway	Die clip	52

Slug-snap version (for slug problems)

57

see page

# PASS PUNCH WITH GUIDED CUTTING PART

FOR ROUND PUNCH (DIMENSION D = 0.50 MM - 6.00 MM / 6.01 MM - 10.50 MM)



DESCRIPTION	POSITION	PARTNO.	
UP TO 6,00 MM			
Complete upper part	1 - 5	1S160A	
Stripper round 26 mm	6	112211C26	

Die (HWS) (\*2)

SPARE PARTS			
Spare punch needle (H-PM®)	2	1S16SA	
Spare spring	3	1S1608	
Spare guide	5	1S1603	
Spare clamp nut	4	1S1607	

106111C



UP TO 10,50 MM (*1)				
Complete upper part	1 - 5	1S160B		
Stripper round 26 mm	6	112211C26		
Die (HWS) (*2)	7	106111C		

SPARE PAR	RTS			
Sp	are punch needle (H-PM®)	2	1S16SB	
	Spare spring	3	1S1609	
	Spare guide	5	1S1604	
	Spare clamp nut	4	1S1607	



Additional costs:	Cross references:	see page
PUNCH	PUNCH	
(*1) Smaller 6,00 mm	Standard round punch	6
Cutting part under 1,00 mm	Suitable adjusting ring - partno. 118101	34
	Punch chuck	35
	Additional costs for coating (such as size 0)	54
	Polished cutting part (such as size 0)	55

STRIPPER	STRIPPER	
PU coating for low-scratch material handling	Spare parts	52

DIE	DIE	
<sup>(*2)</sup> H-PM <sup>®</sup> Quality	Adapter rings	35
Brush version for low-scratch material handling	Compensating rings	38
	RTC cartridge and die carrier	41
	Slug-snap version (for slug problems)	57
		•

# PASS PUNCH WITH GUIDED CUTTING PART

FOR FORM PUNCH (DIMENSION D = 0.50 MM - 16,00 MM)

DESCRIPTION	POSITION	PARTNO.	
SQUARE			
Complete upper part	1 - 6	1S16502	
Spare punch insert (H-PM®)	3	1S16532	
Spare spring	4	1S16540	
Spare guide	6	1S16562	
Die (HWS) (*2)	7	106112C	

RECTANGULAR		
Complete upper part	1 - 6	1S16503
Spare punch insert (H-PM®)	3	1S16533
Spare spring	4	1S16540
Spare guide	6	1S16563
Die (HWS) (*2)	7	106113C

OBLONG			
Complete upper part	1 - 6	1S16504	
Spare punch insert (H-PM®)	3	1S16534	
Spare spring	4	1S16540	
Spare guide	6	1S16564	
Die (HWS) (*2)	7	106114C	

SPECIAL SHAPE TOOLS		
Complete upper part	1 - 6	on request
Spare punch insert (H-PM®)	3	on request
Spare spring	4	on request
Spare guide	6	on request
Die (HWS) (*2)	7	on request





Additional costs:	Cross references:	see page
PUNCH	PUNCH	
Cutting part under 1,00 mm	Standard punch	from 7
	Punch chuck	35
	Additional costs for coating (such as size 1)	54
	Polished cutting part (such as size 1)	55

STRIPPER	STRIPPER	
Polished version for low-scratch material handling	Spare parts	52

DIE	DIE	
(°2) H-PM® Quality	Adapter rings	35
Brush version for low-scratch material handling	Compensating rings	38
	RTC cartridge and die carrier	41
	Die clip	52
	Slug-snap version (for slug-problems)	57



# BEING MULTILATERAL: MULTITOOLS

PASS TOOLS FOR YOUR TRUMPF SYSTEM

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# PASS MULTITOOL 5-STATION

FOR MACHINE GROUP I (DIMENSION 1,00 MM — 16,00 MM) (TRUPUNCH1000, 2000, 2020, 3000, 5000 TRUMATIC3000, 6000, 7000)



	DESCRIPTION	NOILISOA	PARTNO.	
UPPER PAR	RT			
	Punch adapter	1	113S30	
PUNCH INS	SERT (H-PM®)			
	Round	2	113N31	
	Square	2	113N32	
	Rectangle	2	113N33	
	Oblong	2	113N34	
	Special shape	2	on request	
STRIPPER				
	Standard (round)	3	115A30	
	Close-fitting (*1)	(3)*.	115B30	
DIE INSERT	- (H-PM®)			
	Round	4	114031	
	Square	4	114032	
	Rectangle	4	114033	
	Oblong	4	114034	
	Special shape	4	on request	
LOWER PA	RT			
	Die adapter (*2)	5	114Z30	

Details / Additional costs:	Cross references:	see page
PUNCH ADAPTER AND PUNCH INSERT	PUNCH	
Max. sheet thickness - steel and alu up to 4,50 mm / stainless steel up to 3,00 mm $$	Types of special shapes	10 - 13
Cutting part under 1,00 mm	Additional costs for coating (Multitool)	54
	Polished cutting part (Multitool)	55

Polished version for low-scratch material handling	Spare parts	52
(*1) Contours on customer request		
DIE	DIE	
Slug-stop version (negative cutting part)	RTC cartridge and die carrier	41
<sup>(2)</sup> Brush version for low-scratch material handling	Slug-snap version (for slug problems)	57
Compensating rings:		
1 Set (2xt = 0,1 mm / 2xt = 0,3 mm / 2xt = 0,5 mm) - partno. 114U3M		

STRIPPER

\*no picture

STRIPPER

# PASS MULTITOOL 10-STATION

FOR MACHINE GROUP I (DIMENSION 1,00 MM — 10,50 MM) (TRUPUNCH1000, 2000, 2020, 3000, 5000 TRUMATIC3000, 6000, 7000)

DESCRIPTION	N O	ON	
DESCA	POSITION	PARTNO	
UPPER PART			
Punch adapter	1	113S40	
PUNCH INSERT (H-PM®)			
Round	2	113N41	
Square	2	113N42	
Rectangle	2	113N43	
Oblong	2	113N44	
Special shape	2	on request	
STRIPPER			
Standard (round)	3	115A40	
Close-fitting (*1)	(3)*	115B40	
DIE INSERT (H-PM®)			
Round	4	114041	
Square	4	114042	
Rectangle	4	114043	
Oblong	4	114044	
Special shape	4	on request	
LOWER PART			
Die adapter (*2)	5	114Z40	
			*no picture



Details / Additional costs:	Cross references:	see page
PUNCH ADAPTER AND PUNCH INSERT	PUNCH	
Max. sheet thickness - steel and alu up to 4,50 mm / stainless steel up to 3,00 mm	Types of special shapes	10 - 13
Cutting part under 1,00 mm	Additional costs for coating (Multitool)	54
	Polished cutting part (Multitool)	55

	STRIPPER	STRIPPER	
	Polished version for low-scratch material handling	Spare parts	52
	(*1) Contours on customer request		
	DIE	DIE	
	Slug-stop version (negative cutting part)	('2) Version as onepiece die insert	22
-	<sup>(*2)</sup> Brush version for low-scratch material handling	RTC cartridge and die carrier	41
S S S	Compensating rings:	Slug-snap version (for slug problems)	57
-	1 Set (2xt = 0.1 mm / 2xt = 0.3 mm / 2xt = 0.5 mm) - part -no 114U4M		

# PASS MULTITOOL 4-STATION

FOR MACHINE GROUP H AND TC260 (DIMENSION 1,00 MM - 16,00 MM) (TC600L, TC500R, TC200R, TC190R, TC260R, TC260L)









DESCRIPTION	NOILISC	TNO.
DESC	POSIT	PART.

I ID	DED	PART	
UF	$\neg$	FAD I	

Punch adapter incl. stripper system \* on request

PUNCH INSERT (H-PM®)			
Round	2	113N11	
Square	2	113N12	
Rectangle	2	113N13	
Oblong	2	113N14	
Special shape	2	on request	

#### STRIPPER ADAPTER

All contours 3 on request

STRIPPER PLATE				
	Standard (round)	4	on request	
	Close-fitting (*1)	4*	on request	

DIE INSERT (H-PM®)			
Round	5	114011	
Square	5	114012	
Rectangle	5	114013	
Oblong	5	114014	
Special shape	5	on request	

LOWER PART				
	Die adapter (*2)	*	on request	

\*no picture

Details / Additional costs:	Cross references:	see page
PUNCH ADAPTER AND PUNCH INSERT	PUNCH	
Max. sheet thickness - steel and alu up to 3,00 mm / stainless steel up to 2,00 mm	Types of special shapes	10 - 13
Cutting part under 1,00 mm	Additional costs for coating (Multitool)	54
	Polished cutting part (Multitool)	55

STRIPPER	STRIPPER	
Polished version for low-scratch material handling	Spare parts	52
(*1) Contours on customer request		

DIE	DIE	
Slug-stop version (negative cutting part)	Slug-snap version (for slug problems)	57

(\*2) Brush version for low-scratch material handling

Compensating rings:

1 Set (2xt = 0,1 mm / 2xt = 0,3 mm / 2xt = 0,5 mm) - part.-no. 114U1M

# PASS MULTITOOL 6-STATION

FOR MACHINE GROUP H AND TC260 (DIMENSION 1,00 MM — 10,50 MM) (TC600L, TC500R, TC200R, TC190R, TC260R, TC260L)

UPPER PART		
Punch adapter incl. stripper system	*	on request

PUNCH INSERTS (H-PM®)				
	Round	2	113N21	
	Square	2	113N22	
	Rectangle	2	113N23	
	Oblong	2	113N24	
Sp	pecial shape	2	on request	
Sp		2	on request	

STRIPPER ADAPTER				
	All contours	3	on request	

STRIPPER PLATE				
	Standard (round)	4	on request	
	Close fitting (*1)	//×	on roquest	

DIE INSERT (H-PM®)				
	Round	5	114021	
	Square	5	114022	
	Rectangle	5	114023	
	Oblong	5	114024	
	Special shape	5	on request	

LOWER PART				
	Die adapter (*2)	*	on request	
				*no picture











Details / Additional costs:	Cross references:	see page
PUNCH ADAPTER AND PUNCH INSERT	PUNCH	
Max. sheet thickness - steel and alu up to 3,00 mm / stainless steel up to 2,00 mm $$	Types of special shapes	10 - 13
Cutting part under 1,00 mm	Additional costs for coating (Multitool)	54
	Polished cutting part (Multitool)	55

STRIPPER	STRIPPER	
Polished version for low-scratch material handling	Spare parts	52
(*1) Contours on customer request		
DIE	DIE	
Slug-stop version (negative cutting part)	Slug-snap version (for slug problems)	57

(\*2) Brush version for low-scratch material handling

Compensating rings:

1 Set (2xt = 0.1 mm / 2xt = 0.3 mm / 2xt = 0.5 mm) - part.-no. 114U2M

### ALTERNATIVELY 10-STATION DIE

FOR MULTITOOL MACHINE GROUP I (DIMENSION 1,00 MM - 10,50 MM) (TRUPUNCH1000, 2000, 2020, 3000, 5000 TRUMATIC3000, 6000, 7000)



DESCRIPTION	POSITION	PARTNO.	
DIE INSERT (H-PM®)			
Contours on customer request	1	114941	
DIE ADAPTER (*1)			
Without die insert	2	114640	



#### Details / Additional costs:

#### DIE ADAPTER AND DIE INSERT

 $^{\mbox{\tiny (^{1})}}$  Incl. 1 set of shims

Slug-stop version (negative cutting part)

Slug-snap version (for slug problems)

Compensating rings for die insert:

1 Set (2xt = 0,1 mm / 2xt = 0,3 mm / 2xt = 0,5 mm) - part.-no. 114U4MG



# SLITTING TOOLS

# PASS TOOLS FOR YOUR TRUMPF SYSTEM

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# PASS SLITTING TOOL SIZE 2 / 5 X 30

#### INTEGRATED ADJUSTING RING, SLITTING PUNCH BLADE, DIE PLATE INSERT









DESCRIPT	POSITION PARTNO	
COMPLETE TOOL		
Oblong	1 - 5 1S0433110	
Rectangle	1 - 5 1S0433120	
Rectangle with $4 \times R = 0.5$	1 - 5 1S0433130	
Trapezoid SF17	1 - 5 1S0433140	
Davida - tuana :-   OE40	1 5 100400150	

NO

SLITTING PUNCH BLADE ADAPTER (WITHOUT PUNCH BLADE INSERT)			
With integrated adjusting ring	1	1S0393	
SLITTING PUNCH BLADE INSERT (H-PM®) (*1)			
Ohlong	2	1504331	

SLITTING PUNCH BLADE INSERT (H-PM®) (*1)		
Oblong	2	1S04331
Rectangle	2	1S04332
Rectangle with $4 \times R = 0.5$	2	1S04333
Trapezoid SF17	2	1S04334
Double trapezoid SF16	2	1S04335

STRIPPER				
	Oblong	3	119234	
	Rectangle	3	119233	
	Rectangle with 4 x R = 0,5	3	119233	
	Trapezoid SF17	3	119237	
	Double trapezoid SF16	3	119236	

DIE PLATE INSERT (H-PM®)		
Oblong	4	1S17251
Rectangle (*2)	4	1S17252
Trapezoid SF17	4	1S17254
Double trapezoid SF16	4	1S17255

DIE PLATE ADAPTER (WITHOUT DIE PLATE IN	NSERT) (*3)		
Incl. screws	5	1S1730	

Details / Additional costs:	Cross references:	see page
UPPER PART	UPPER PART	
Max. sheet thickness up to 3,00 mm	Additional cost for coating (slitting punch blade insert)	54
<sup>(*1)</sup> Additional costs for reduced dimensional deviation	Polished cutting part (punch size 2)	55
<sup>(*1)</sup> Standard version with rooftop		
Set of spare screws M 8 x 16 (2 pc per set)		

STRIPPER	STRIPPER	
PU coating for low-scratch material handling	Spare parts	52
	Push-out stripper	53
LOWER PART	LOWER PART	
Compensating rings:	RTC cartridge and die carrier	41

1 Set (2

(\*2) Suita

(\*3) Brusl

ER PART	LOWER PART	
pensating rings:	RTC cartridge and die carrier	41
(2xt = 0.1  mm / 2xt = 0.3  mm / 2xt = 0.5  mm) - partno. 1S3794	Die clip	52
table for rectangle, as well as rectangle $4 \times R = 0.5$	Slug-snap version for slug problems (die size 2)	57
ush version for low-scratch material handling		

Part.-No. 1S0393Z

# PASS SLITTING TOOL SIZE 2 / 5 X 56

INTEGRATED ADJUSTING RING, SLITTING PUNCH BLADE, DIE PLATE INSERT

DESCRIPTION	POSITION	PARTNO.
OMPLETE TOOL		

<del>_</del>	_	_	
COMPLETE TOOL			
Oblong	1 - 5	1S0431110	
Rectangle	1 - 5	1S0431120	
Rectangle with $4 \times R = 0.5$	1 - 5	1S0431130	
Trapezoid SF17	1 - 5	1S0431140	
Double trapezoid SF16	1 - 5	1S0431150	

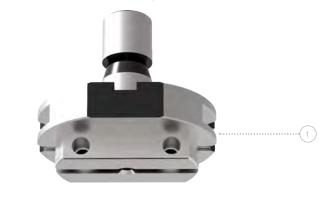
SLITTING PUNCH BLADE ADAPTER (WITHOUT	PUNC	H BLADE INSERT)
With integrated adjusting ring	1	1S0393

SLITTING PUNCH BLADE INSERT (H-PM®) (*1)		
Oblong	2	1S04311
Rectangle	2	1S04312
Rectangle with 4 x R = 0,5	2	1S04313
Trapezoid SF17	2	1S04314
Double trapezoid SF16	2	1S04315

STRIPPER				
	Oblong	3	119254	
	Rectangle	3	119253	
	Rectangle with $4 \times R = 0.5$	3	119253	
	Trapezoid SF17	3	119257	
	Double trapezoid SF16	3	119256	

DIE PLATE INSERT (H-PM®)				
	Oblong	4	1S17261	
	Rectangle (*2)	4	1S17262	
	Trapezoid SF17	4	1S17264	
	Double trapezoid SF16	4	1S17265	

DIE PLATE ADAPTER (WITHOUT DIE PLATE IN	NSERT) (*3)		
Incl. screws	5	1S1756	







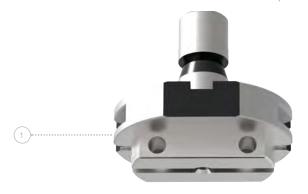
Details / Additional costs:	Cross references:	see page
UPPER PART	UPPER PART	
Max. sheet thickness up to 3,00 mm	Slittings close to embossing	29 - 30
(*1) Additional costs for reduced dimensional deviation	Additional costs for coating (slitting punch blade insert)	54
(*1) Standard version with rooftop	Polished cutting part (punch size 2)	55
Set of spare screws M 8 x 16 (2 pc. per set)		

STRIPPER	STRIPPER	
PU coating for low-scratch material handling	Spare parts	52
	Push-out stripper	53
LOWER PART	LOWER PART	
Compensating rings:	RTC cartridge and die carrier	41
1 Set (2xt = 0,1 mm / 2xt = 0,3 mm / 2xt = 0,5 mm) - partno. 1S3794	Die clip	52
$^{(2)}$ Suitable for rectangle, as well as rectangle $4 \times R = 0.5$	Slug-snap version for slug problems (die size 2)	57
('3) Brush version for low-scratch material handling		

Part.-No. 1S0393Z

# PASS SLITTING TOOL SIZE 2 / 5 X 76,2

#### INTEGRATED ADJUSTING RING, SLITTING PUNCH BLADE, DIE PLATE INSERT









DESCRIPTION	POSITION	PARTNO.	
COMPLETE TOOL			
Oblong	1 - 5	1S0432110	
Rectangle	1 - 5	1S0432120	
Rectangle with $4 \times R = 0.5$	1 - 5	1S0432130	
Trapezoid SF17	1 - 5	1S0432140	
Double trapezoid SF16	1 - 5	1S0432150	

SLITTING PUNCH BLADE INSERT (H-PM®) (*1)		
Oblong	2	1S04321
Rectangle	2	1S04322
Rectangle with 4 x R = 0,5	2	1S04323
Trapezoid SF17	2	1S04324
Double trapezoid SF16	2	1S04325

With intergrated adjusting ring

STRIPPER				
	Oblong	3	119274	
	Rectangle	3	119273	
	Rectangle with 4 x R = 0,5	3	119273	
	Trapezoid SF17	3	119277	
	Double trapezoid SF16	3	119276	

DIE PLATE INSERT (H-PM®)		
Oblong	4	1S17411
Rectangle (*2)	4	1S17412
Trapezoid SF17	4	1S17414
Double trapezoid SF16	4	1S17415

DIE PLATE ADAPTER (WITHOUT DIE PLATE INSERT) (13)				
Incl. screws	5	1S1776		

Details / Additional costs:	Cross references:	see page
UPPER PART	UPPER PART	
Max. sheet thickness up to 2,50 mm	Slittings close to embossing	31
<sup>(*1)</sup> Additional costs for reduced dimensional deviation	Additional costs for coating (slitting punch blade insert)	54
<sup>(*1)</sup> Standard version with rooftop	Polished cutting part (punch size 2)	55
Set of spare screws M 8 x 16 (2 pc. per set)		
PartNo. 1S0393Z		

STRIPPER	STRIPPER	
PU coating for low-scratch material handling	Spare parts	52
	Push-out stripper	53
LOWER PART	LOWER PART	
Compensating rings:	RTC cartridge and die carrier	41
1 Set (2xt = 0,1 mm / 2xt = 0,3 mm / 2xt = 0,5 mm) - partno. 1S3797	Die clip	52
$^{(2)}$ Suitable for rectangle, as well as rectangle 4 x R = 0,5	Slug-snap version for slug problems (die size 2)	57
(3) Brush version for low-scratch material handling		

### PASS SLITTING TOOL SIZE 2 / 5 X 56

INTEGRATED ADJUSTING RING, SLITTING PUNCH BLADE, DIE PLATE INSERT FOR SLITTING CLOSE TO EMBOSSING UP TO H=4,50 MM, WITH SPRING-LOADED METAL STRIPPER

Z		
DITA	Z	<u>o</u>
R	NOILISC	<b>-</b> .⊢
DESCRIPTION	SOS	PARTNC

COMPLETE TOOL			
Oblong	1 - 7	1S037110	
Rectangle	1 - 7	1S037120	
Rectangle with $4 \times R = 0.5$	1 - 7	1S037130	
Trapezoid SF17	1 - 7	1S037140	
Double trapezoid SF16	1 - 7	1S037150	

COMPLETE UPPER PART		
Oblong	1 - 5	1S03711
Rectangle	1 - 5	1S03712
Rectangle with $4 \times R = 0.5$	1 - 5	1S03713
Trapezoid SF17	1 - 5	1S03714
Double trapezoid SF16	1 - 5	1S03715

SPARE PARTS FOR UPPER PART			
Slitting punch blade adapter	1	1S0371	
Set of spare springs and screws	3 + 4	1S0379	
Active stripper	5	1S03752C	

PUNCH PLATE INSERT (H-PM®) (*1)			
Oblong	2	1S04311	
Rectangle	2	1S04312	
Rectangle with $4 \times R = 0.5$	2	1S04313	
Trapezoid SF17	2	1S04314	
Double trapezoid SF16	2	1S04315	

DIE PLATE INSERT (H-PM®)			
Oblong	6	1S17261	
Rectangle(*2)	6	1S17262	
Trapezoid SF17	6	1S17264	
Double trapezoid SF16	6	1S17265	





STRIPPER	STRIPPER

Polished version for low-scratch material handling

(°3) Brush version for low-scratch material handling

Set of spare screws M 8 x 16 (2 pc per set)

Part.-No. 1S0393Z

LOWER PART	LOWER PART	
Compensating rings:	RTC cartridge and die carrier	41
1 Set (2xt = 0,1 mm / 2xt = 0,3 mm / 2xt = 0,5 mm) - partno. 1S3794	Die clip	52
$^{(2)}$ Suitable for rectangle, as well as rectangle $4 \times R = 0.5$	Slug-snap version for slug problems (die size 2)	57

54

# PASS SLITTING TOOL SIZE 2 / 5 X 56

#### FOR SLITTINGS CLOSE TO EMBOSSING, WITH PU STRIPPER



DESCRIPTION	POSITION	PARTNO.	
COMPLETE TOOL			
Oblong	1 - 6	1S295010	
Rectangle	1 - 6	1S295020	
Rectangle with $4 \times R = 0.5$	1 - 6	1S295030	
Trapezoid SF17	1 - 6	1S295040	
Double trapezoid SF16	1 - 6	1S295050	

COMPLETE UPPER PART (INCL. SPRINGS,	SCREWS,	, SCREW-ADAPTER)
Oblong	1 - 4	1S29501
Rectangle	1 - 4	1S29502
Rectangle with 4 x R = 0,5	1 - 4	1S29503
Trapezoid SF17	1 - 4	1S29504
Double trapezoid SF16	1 - 4	1S29505



PUNCH (WITHOUT SPRINGS, SCREWS, SCR	REW-ADAF	TER) (H-PM®) (*1)
Oblong	1	1S29511
Rectangle	1	1S29512
Rectangle with $4 \times R = 0.5$	1	1S29513
Trapezoid SF17	1	1S29514
Double trapezoid SF16	1	1S29515

DIE PLATE INSERT (H-PM®)			
Oblong	5	1S17261	
Rectangle (*2)		1S17262	
Trapezoid SF17	5	1S17264	
Double trapezoid SF16	5	1S17265	

DIE PLATE ADAPTER (WITHOUT	DIE PLATE INSEF	RT) (*3)	
Incl. s	screws	6	1S1756
IIIGI. S	SCIEWS	O	131730

Details / Additional costs:	Cross references:	see page
UPPER PART	UPPER PART	
Max. sheet thickness up 3,00 mm	Adjusting rings	34
(1) Additional costs for reduced dimensional deviation	PASS-fit system - explanation and additional costs	40
<sup>(*1)</sup> Standard version with rooftop	Additional costs for coating (punch size 2)	54
X3-PM qualtiy -> see page 68	Polished cutting part (punch size 2)	55

STRIPPER	STRIPPER
Set of spare PU springs - partno. 1S2956 - pos. 4	
Set of spare screw-adapter - partno. 1S2954 - pos. 3	
Set of spare screws - partno. 1S2950 - pos. 2	
LOWER PART	LOWER PART
Compensating rings:	RTC cartridge and die carrier 41
1 Set (2xt = 0,1 mm / 2xt = 0,3 mm / 2xt = 0,5 mm) - partno. 1S3794	Die clip 52
$^{(2)}$ Suitable for rectangle, as well as rectangle 4 x R = 0,5	slug-snap version for slug problems (die size 2) 57
(3) Brush version for low-scratch material handling	

# PASS SLITTING TOOL SIZE 2 / 5 X 76,2

#### FOR SLITTING CLOSE TO EMBOSSING, WITH PU STRIPPER

DESCRIPTION	POSITION	PARTNO.	
COMPLETE TOOL			
Oblong	1 - 6	1S297010	
Rectangle	1 - 6	1S297020	
Rectangle with $4 \times R = 0,5$	1 - 6	1S297030	
Trapezoid SF17	1 - 6	1S297040	
Double trapezoid SF16	1 - 6	1S297050	

COMPLETE UPPER PART (INCL. SPRINGS, SCREWS, SCREW-ADAPTER			SCREW-ADAPTER)	
	Oblong	1 - 4	1S29701	
	Rectangle	1 - 4	1S29702	
	Rectangle with $4 \times R = 0.5$	1 - 4	1S29703	
	Trapezoid SF17	1 - 4	1S29704	
	Double trapezoid SF16	1 - 4	1S29705	

PUNCH (WITHOUT SPRINGS, SCREWS, SCREW-ADAPTER) (H-PM®) (*1)		
1	1S29711	
1	1S29712	
1	1S29713	
1	1S29714	
1	1S29715	
	1 1 1 1 1 1	

DIE PLATE INSERT (H-PM®)		
Oblong	5	1S17411
Rectangle (*2)	5	1S17412
Trapezoid SF17	5	1S17414
Double trapezoid SF16	5	1S17415

DIE PLATE ADAPTER (WITHOUT	T DIE PLATE INSE	RT) (*3)	
Incl.	. screws	6	1S1776





Details / Additional costs:	Cross references:	see page
UPPER PART	UPPER PART	
Max. sheet thickness up to 2,50 mm	Adjusting ring	34
<sup>(*1)</sup> Additional costs for reduced dimensional deviation	PASS-fit system - explanation and additional costs	40
<sup>(*1)</sup> Standard version with rooftop	Additional costs for coating (punch size 2)	54
X3-PM quality -> see page 68	Polished cutting part (punch size 2)	55

STRIPPER	STRIPPER	
Set of spare PU springs - partno. 1S2955 - pos. 4		
Set of spare screw-adapter - partno. 1S2954 - pos. 3		
Set of spare screws - partno. 1S2950 - pos. 2		
LOWER PART	LOWER PART	
Compensating rings:	RTC cartridge and die carrier	41
1 Set (2xt = 0,1 mm / 2xt = 0,3 mm / 2xt = 0,5 mm) - partno. 1S3797	Die clip	52
(°2) Suitable for rectangle, as well as rectangle 4 x R = 0,5	Slug-snap version for slug problems (die size 2)	57
(3) Brush version for low-scratch material handling		



# IT DEPENDS ON: ACCESSORIES

# PASS ACCESSORIES FOR YOUR TRUMPF SYSTEM

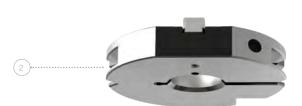
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# PASS ADJUSTING RINGS

(FOR MACHINE GROUPS E / F / H / I)











ADJUSTING RING INCL. KEY FOR REINFOR	RCED VERSION	ON PUNCHES	
Reinforced	3	118V01	

Spare parts:	Cross references:	see page
SPARE PARTS FOR ADJUSTING RINGS	ACCESSORIES	
Key for automatic adjusting rings - partno. 118902 - pos. 4	Punch size 1 and 2	6 - 13
Key for reinforced adjusting rings - partno. 118903 - pos. 5	PASS-fit system - explanation and additional costs	40
	Spare parts	52

# PASS PUNCH CHUCKS, ADAPTER RINGS

(FOR MACHINE GROUPS E / F / H / I)

	SIZE	POSITION	PARTNO.	
PUNCH CHUCK				
	0 (up to 6,00 mm)	1	119A01	
	0 (up to 10,50 mm)	1	119B01	

ADAPTER RING FOR DIE				
	2/1	2	120210	

ADAPTER RING WITH BRUSHE	S			
	2/1	3	1S1820	









Spare parts:	Cross references:	see page
SPARE PARTS FOR ADAPTER RING WITH BRUSHES	ACCESSORIES	
Spare brush for adapter ring - partno. 1S1822 - pos. 4	Punch size 0	6 - 13
Set of compensating rings / shims (6xt = 0,5 mm) - partno.	Die size 1	6 - 15
1S1823 - Pos. 5	Spare parts	52

### PASS TAPPING TOOLS

#### FOR MACHINE GROUP I

(TRUPUNCH1000, 2000, 2020, 3000, 5000 TRUMATIC3000, 6000, 7000)



DESCRIPTION	SIZE	POSITION	PARTNO.	
TOOL TYPE 1 (*5)				
Upper part (*1)	M2,5 - M5	1	924GF1101	
Spare tapping module (*2)	M2,5	2	924GF1301	
Spare tapping module (*2)	МЗ	2	924GF1302	
Spare tapping module (*2)	M3,5	2	924GF1303	
Spare tapping module (*2)	M4	2	924GF1304	
Spare tapping module (*2)	M5	2	924GF1305	
Spare tap 6HX - TIN	M2,5	3	924GF1401	
Spare tap 6HX - TIN	МЗ	3	924GF1402	
Spare tap 6HX - TIN	M3,5	3	924GF1403	
Spare tap 6HX - TIN	M4	3	924GF1404	
Spare tap 6HX - TIN	M5	3	924GF1405	
Die type A (*3)	M2,5 - M10	4	924GF2201	
Die type B (*4)	M2,5 - M8	4	924GF2211	

TOOL TYPE 2 (*6)			
Upper part (*1)	M6 - M10	1 924GF2101	
Spare tapping module (*2)	M6	2 924GF2301	
Spare tapping module (*2)	M8	2 924GF2302	2
Spare tapping module (*2)	M10	2 924GF2303	3
Spare tap 6HX - TIN	M6	3 924GF2401	
Spare tap 6HX - TIN	M8	3 924GF2402	2
Spare tap 6HX - TIN	M10	3 924GF2403	3
Die type A (*3)	M2,5 - M10	4 924GF2201	
Die type B (*4)	M2,5 - M8	4 924GF2211	

Details: Cross references: see page INFORMATION ACCESSORIES

RTC cartrigde and die carrier

One complete tool always includes:

"upper part; tapping module; tap and die"

- (\*1) Without spare tapping module and spare tap
- (\*2) Without spare tap
- ("3) Suitable for flat sheets and extrusions (form-up)
- (\*4) Suitable for flat sheets and extrusions (form-up and down)
- $^{(5)}$  Suitable for max. sheet thickness s = 1,50 mm bis 5,00 mm
- $^{(6)}$  Suitable for max. sheet thickness s = 3,00 mm bis 8,00 mm

Other thread sizes and versions (e. g. thread measured in inches) on request

Please note that tapping tools are exclusively used in machines with programming option "Thread Forming"

# PASS ADJUSTMENT UNIT FOR PUNCH

PART.-NO.

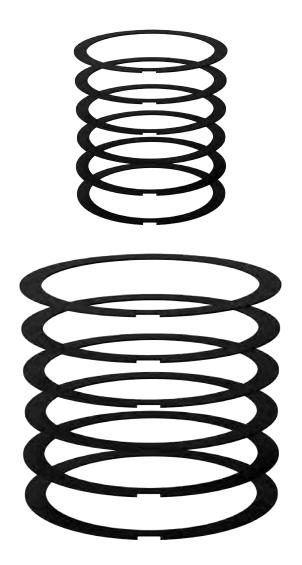
POSSIBLE ANGLES: 0° - 22,5° - 30° - 45° - 60° - 67,5° - 90°

Z497673



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# PASS COMPENSATING RINGS FOR DIES



SIZE	D. W.	PARTNC
SET OF COME	PENSATING RINGS FOR DIE SIZE 1	
1	$6 \times t = 0,1 \text{ mm}$	11AS01
1	$6 \times t = 0.3 \text{ mm}$	11AS03
1	$6 \times t = 0.5 \text{ mm}$	11AS05
1	2x0,1 mm / 2x0,3 mm / 2x 0,5 mm	11AS0_
SET COMPEN	ISATING RINGS FOR DIE SIZE 2	
2	6 x t = 0,1 mm	12AS01
2	$6 \times t = 0.3 \text{ mm}$	12AS03
2	6 x t = 0,5 mm	12AS05
2	2x0,1 mm / 2x0,3 mm / 2x 0,5 mm	12AS0_

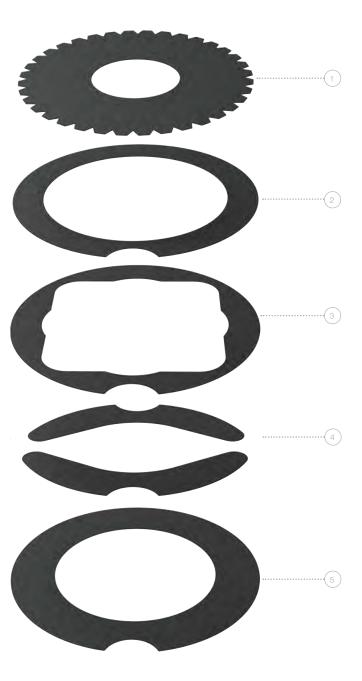
Details:	see page
ACCESSORIES	
Adapter rings for die	35
RTC cartridge and die carrier	41

# PASS SOFT PADS

SIZE	DIM.	POSITION	PARTNO.	
SOFT PADS FOR STRIP	PER			
2	Inside-Ø 16	1	PAD2A16	
2	Inside-Ø 25	1	PAD2A25	
2	Inside-Ø 50	1	PAD2A50	
2	Inside-Ø 76	1	PAD2A76	

SOFT PADS FOR DIE			
2	General	2	PAD2MAN
2	Square	3	PAD2MQN
2	Rectangle / oblong	4	PAD2MFN

SOFT PADS FOR ADAPTER RING		
2 to 1	5	PAD2ZAN



### PASS-FIT SYSTEM

### FOR FAST AND EASY ADJUSTMENT WITHOUT THE NEED FOR A FIXTURE



PASS-FIT ADJUSTING RING INCL. KEY FOR PUNCH SIZE 1

Size 1 E-I 1181P1

PASS-FIT ADJUSTING RING INCL. KEY FOR PUNCH SIZE 2
Size 2 E-I 1182P1

PASS-FIT ADJUSTING RING INCL. KEY FOR PUNCH REINFORCED VERSION

Reinforced E-I 118VP1

PASS-FIT FOR PUNCH SIZE 1

First keyway

O°

P1

Each additional keyway

PASS-FIT FOR PUNCH SIZE 2 AND SIZE 3

First alignment hole & pin 0 - 90°

\_\_\_P2

Each additional alignment hole

PASS-FIT PUNCH REINFORCED VERSION

First keyway 0° \_\_\_P1

Each additional keyway

Details:

### INFORMATION ABOUT PASS-FIT SYSTEM

- Form-fitting anti-rotation-lock
- High operational security of the machine
- Solid tool, as the approved standard punches serve as basic tool
- Can be used also with tougher materials like thick stainless steel, as no profile debilitation develops at the tension shaft
- High precision mating with punch; does not add to tool length
- Keyways on customer request
- Also reasonable for special tools
- All PASS cluster tools are generally equipped with PASS-fit system

Additional costs:

### SPARE PARTS

Adjusting key for PASS-fit - adjusting ring size 1 and size 2 - part.-no. 118902

Adjusting key for PASS-fit - adjusting ring reinforced version - part.-no. 118903

## RTC CARTRIDGE

FOR MACHINE GROUP H & I (TC 200, TC500, TC600, TRUPUNCH1000, 2000, 2020, 3000, 5000 TRUMATIC3000, 6000, 7000)

DESCRIPTION	POSITION	PARTNO.
RTC CARTRIDGE INCL. DIE CARRIER		
	1 - 2	
RTC CARTRIDGE		
	1	960100010
DIE CARRIER		
	2	960100020







# WITH PRECISION AND SWING: MARKING AND SIGNING

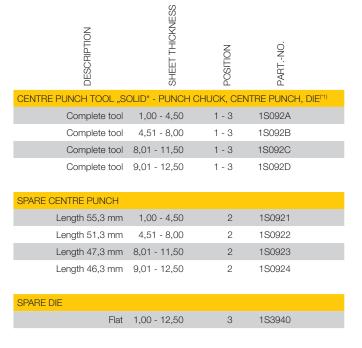
PASS CENTRE PUNCH AND SIGNING TOOLS FOR YOUR TRUMPF SYSTEM

### INDEX

PASS Centre Punch Tool from Above	Page 44
PASS Centre Punch Tool from Below	Page 45
PASS Signing Tool	Page 46
PASS Engraving Tool	Page 47
PASS Letter Marking Tool 10-Station	Page 48

## PASS CENTRE PUNCH TOOL FROM ABOVE







Details / Additional costs:

see page

### ACCESSORIES

(\*1) Suitable adjusting ring - part.-no. 118101 -> see page 34

 $^{(1)}$  Thread screw with shoulder M14 x 1,5 x 12 part.-no. 1S0925

# PASS CENTRE PUNCH TOOL FROM BELOW

DESCRIPTION	SHEET THICKNESS	POSITION	PARTNO.
CENTRE PUNCH TOOL WITH TEMPLATE DEPTH(*1)	H STEPLESS AD	JUSTABLE C	ENTRE MARK
Complete tool	1,00 - 4,00	1 - 7	1S2800
SPARE PARTS FOR CENTRE DEPTH	E PUNCH TOOL	WITH STEPL	ESS ADJUSTABLE
Upper part	1,00 - 4,00	1	1S2801
Stripper	1,00 - 4,00	2	1S2804
Centre punch	1,00 - 4,00	3	1S2805
Cushioning element	1,00 - 4,00	4	1S2806
Adjusting sorow	1.00 4.00	7	100000





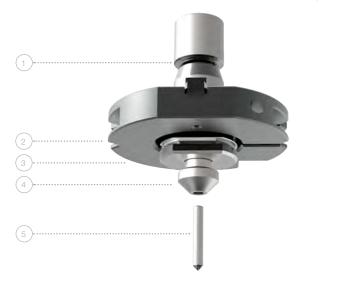
### Details

### ACCESSORIES

 $^{\mbox{\tiny (1)}}$  Suitable adjusting ring - part.-no. 118201 -> see page 34

# PASS SIGNING TOOL

### FOR SHEET THICKNESSES FROM 0,80 MM TO 8,00 MM







COMPLETE SIGNING TO	OOL		
	Consisting of:	1 - 7	1S390W

complete upper part, incl. adjusting ring, stripper Ø 20 and flat die

COMPLETE SIGNING UPPER PART			
Consisting of:	1 - 5	1S3900	
adapter adjusting ring signing pin			

SPARE SIGNING PIN			
Made of H-PM® steel	5	1S3930	

and spring

SPARE STRIPPER			
	Ø 20	6	112211-20

SPARE DIE			
	Flat	7	1S3940



Details:	see page
ACCESSORIES	
Spare adjusting ring - partno. 118101	34

Option "signing" must be unlocked in the machine controlling

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# PASS ENGRAVING TOOL

### FOR SHEET THICKNESSES FROM 1,00 MM TO 8,00 MM

DESCRIPTION	POSITION	PARTNO.	
ENGRAVING TOOL INCL. DIE AND BALL	CASTER		
Consisting of:	1 - 8	199103950	
complete upper part, incl. 3 types of springs,			
adjusting ring , die and ball caster			
ENGRAVING TOOL UPPER PART			
Incl. 3 types of springs	1 - 5	199103950-1	
SPARE ENGRAVING PIN			
Made of H-PM® steel	5	199103951	
SPARE DIE			
Incl. Ampco plate and ball caster	6 - 8	199103950-2	
SPARE SPRINGS			
"green" for aluminium		91701025A	
"blue" for steel		91701025B	
"red" for stainless steel		91701025C	





Details:	see page
ACCESSORIES	
Spare adjusting ring - partno. 118101	34

Option "engraving" must be unlocked in the machine controlling

# PASS LETTER MARKING TOOL 10-STATION

FOR MACHINE GROUP I

(TRUPUNCH1000, 2000, 2020, 3000, 5000 TRUMATIC3000, 6000, 7000)



DESCRIPTION	POSITION	PARTNO.	
UPPER PART			
Punch adapter	1	113S40	
LETTER MARKING PUNCH INSERT			
Letter, digit or special sign	2	113P10_?	

STRIPPER				
	Standard round	3	113PA10	

on customer request

DIE FOR 10-STATION MULTITOOL			
	Flat	4	113PM10





Cross references / Additional costs:

### ACCESSORIES

RTC cartridge and die carrier -> see page 41

Stripper in polished version for low-scratch material handling



# WORKING EFFECTIVELY: EXTRA EQUIPMENT

# PASS EXTRA EQUIPMENT FOR YOUR TRUMPF SYSTEM

### INDEX

Spare Parts	Page 52
PASS Push-out Stripper	Page 53
Punch Coatings	Page 54
Draw-Polished	Page 55
Punches with Different Shear Types	Page 56
PASS slug-snap for Dies	Page 57

# SPARE PARTS

NO Edia Condi		PARTNO.	
SCREWS			
	M5 x 10 for punch chuck Ø 6,00 mm	905006	
	M6 x 6 for punch chuck Ø 10,50 mm	905019	
	M8 x 16 for adapter rings size 2/1	905009	
	M8 x 12 with pins for adapter rings $3/1 - 3/2$	905008	
	M14 x 1,5 x 12 for punch chuck	119991	
CYLINDER PIN			
	Ø 8 x 16 for adapter ring size 2/1	1-901013	
	Ø 8 x 16 for adapter ring size $3/1 - 3/2$	2-901013	
PASS-FIT			
	Cylinder pin Ø 3 x 10 for adjusting ring size 1	901003	
	Adjusting key for punch size 2 + 3	118900006	
SLITTING PUNCH B	BLADE INSERT AND DIE PLATE INSERT		
	Center pin $\emptyset$ 6 x 20 for slitting punch blade adapter	901018	
S	et of spare screws for die plate adapter M4 x 12 - 6 pieces	1-907005	
S	et of spare screws for die plate adapter M4 x 12 - 4 pieces	2-907005	
MISCELLANEOUS			
	Die clip	106991	
	Stripper pin	110991	
	Clamping screw M6 x 25 for adjusting ring size 1 + 2	907013	
	Fixing screw M3 x 8 for adjusting key	907062	
	Handle for stripper adapter ring "manual" size 3/2	120326-2	

# PASS PUSH-OUT STRIPPER

(FOR MACHINE GROUP H / I)

DESCRIPTION		POSITION	PARTNO.	
PUSH-OUT STRIPPER				
	Round	1 - 4	1S21201	
	Square	1 - 4	1S21202	
	Rectangle	1 - 4	1S21203	
	Oblong	1 - 4	1S21204	
	Special shape	1 - 4	1S21200	



OF THE FAMILY			
Spare screws (4 per set)	2	1S21291	
Spare springs (4 per set)	3	1S21292	

Additional costs:	Cross references:	see page
STRIPPER:		
Polished version for low-scratch material handling	Standard tools	6 - 13
	Slitting tools	26 - 28
	Spare parts	52

# PUNCH COATINGS

### ADVANTAGE: INCREASES TOOL LIFETIME, REDUCES MATERIAL BUILD UP

TICN	
T-MAX	
A-MAX	
C-MAX	

SIZE	DI
TICN COATING (FOR WORKING	G WITH STAINLESS STEEL) (*1)
0	- 10,50 mm
1	- 30,50 mm
2	- 76,20 mm
3	- 105,00 mm
Multitool	- 16,00 mm
Slitting punch blade insert	- 60,00 mm
Slitting punch blade insert	- 80,00 mm

T-MAX COATING (FOR WORKING	WITH GALVANIZED SHEET / ZINCOR) (*1)
0	- 10,50 mm
1	- 30,50 mm
2	- 76,20 mm
3	- 105,00 mm
Multitool	- 16,00 mm
Slitting punch blade insert	- 60,00 mm
Slitting punch blade insert	- 80,00 mm

A-MAX COATING (FOR DRY PR	ROCESSING WITH ALUMINIUM SHEET) (*1)
0	- 10,50 mm
1	- 30,50 mm
2	- 76,20 mm
3	- 105,00 mm
Multitool	- 16,00 mm
Slitting punch blade insert	- 60,00 mm
Slitting punch blade insert	- 80,00 mm

C-MAX COATING (FOR PROCES	SSING WITH COPPER) (*1)
0	- 10,50 mm
1	- 30,50 mm
2	- 76,20 mm
3	- 105,00 mm
Multitool	- 16,00 mm
Slitting punch blade insert	- 60,00 mm
Slitting punch blade insert	- 80,00 mm

### Details:

<sup>(\*1)</sup> Suitable for cutting part sizes from Ø 4,00 mm or wide bases of 2,50 mm

## DRAW-POLISHED

### PUNCH EDGES

### INCREASES TOOL LIFETIME, REDUCES MATERIAL BUILD UP

SIZE	N.
ROUND	
0	- 10,50 mm
1	- 30,50 mm
2	- 76,20 mm
3	- 105,00 mm
Multitool	- 16,00 mm
SQUARE / RECTANGLE / OBLONG	
0	- 10,50 mm
1	- 30,50 mm
2	- 76,20 mm
3	- 105,00 mm
Multitool	- 16,00 mm
O.D. GROUND SPECIAL SHAPES (SPEC	CIAL SHAPE GROUP 1 & 2)
0	- 10,50 mm
1	- 30,50 mm
2	- 76,20 mm
3	- 105,00 mm
Multitool	- 16,00 mm
EDM REQUIRED SPECIAL SHAPES (SPI	ECIAL SHAPE GROUP 3 & 4)
0	- 10,50 mm
1	- 30,50 mm
2	- 76,20 mm

3

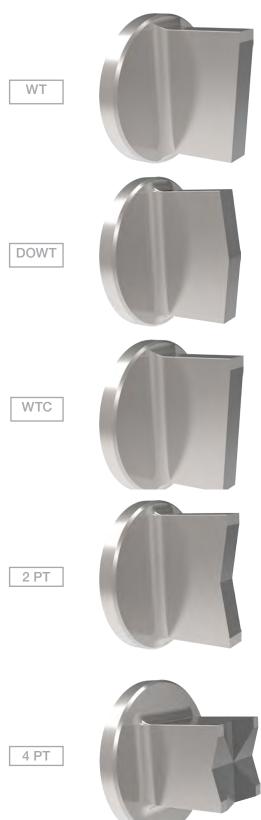
Multitool

- 105,00 mm

- 16,00 mm



# PUNCHES WITH DIFFERENT SHEAR TYPES



	DESCRIPTION	
WT		
- Advantage:	easy regrindable	
- Disadvantage:	lateral forces	
DOWT		
- Advantages:	easy regrindable	
	no lateral forces	
- Disadvantage:	only reasonable for big contours	
WTC		
- Advantage:	reduced edge weight	
- Disadvantage:	lateral forces	
2 PT		
- Advantage:	no lateral forces	
	optimal die cutting	
- Disadvantages:	only reasonable for big and slim contours	
	difficult to regrind	
4 PT		
- Advantage:	no lateral forces	
	optimal die cutting	
	suitable for trimming	
- Disadvantages:	only reasonable for big contours	
	difficult to regrind	



# PASS SLUG-SNAP FOR DIES

	SIZE	DIM.
FOR DIES ROUND		
	1	- 32,00 mm
	2	- 77,00 mm
	1 reinforced form	- 32,00 mm
	2 reinforced form	- 62,00 mm
	Multitool	- 16,00 mm
FOR DIES FORM		
	1	- 32,00 mm
	2	- 77,00 mm
	1 reinforced form	- 32,00 mm
	2 reinforced form	- 62,00 mm
	Multitool	- 16,00 mm



SLUG-SNAP

### Details:

### SLUG-SNAP

Special holding bolts are included in the die, clamping the pulling slug positively (better than the slug-stop version, negative cutting part)

The slug-snap version is also more convenient for shapes smaller than 4 mm and clearance smaller/equal 0,1 mm  $\,$ 



# YOU NEED IT BIG SIZE?

# PASS TOOLS SIZE 3 AND SPECIFIC TOOLING FOR BOSCHERT PUNCHING MACHINES

### INDEX

PASS Punching Tools (Standard) Size 3	Page 60
PASS Punching Tools (FORM) Size 3	Page 61
PASS Adapter and Manual Adjusting Rings	Page 62
PASS Slitting Tool Size 2	Page 63
PASS Slitting Tool Size 3	Page 64
PASS PU Stripper	Page 65

# PASS PUNCHING TOOLS (STANDARD) SIZE 3







	DESCRIPT	DIM. D	PARTNO	
ROUND				
	Punch	76,21 - 105,00 mm	101311C	
	Die	77,01 - 107,00 mm	106311C	
	Automatic stripper	78,01 - 107,00 mm	110311C	

78,01 - 107,00 mm

111311C

Manual stripper

SQUARE		
Punch	53,91 - 74,25 mm	101312C
Die	54,91 - 75,50 mm	106312C
Automatic stripper	56,01 - 77,00 mm	110312C
Manual stripper	56,01 - 77,00 mm	111312C

RECTANGLE			
Punch	76,21 - 105,00 mm	101313C	
Die	77,01 - 107,00 mm	106313C	
Automatic stripper	78,01 - 107,00 mm	110313C	
Manual stripper	78,01 - 107,00 mm	111313C	

OBLONG			
Punch	76,21 - 105,00 mm	101314C	
Die	77,01 - 107,00 mm	106314C	
Automatic stripper	78,01 - 107,00 mm	110314C	
Manual stripper	78.01 - 107.00 mm	111314C	

Additional costs:	Cross references:	see page
PUNCH	PUNCH	
Punches with shear (WT / DOWT / etc.) -> see page 56	PASS-fit System - explanation and additional costs	40
Cutting part under 1,00 mm	Additional costs for coating	54
4 x same corner radius	Polished cutting part	55
X3-PM quality -> see page 68	Adjusting ring	62

STRIPPER	STRIPPER	
Polished version for low-scratch material handling	Spare parts	52
	PU stripper	65
DIE	DIE	
Slug-stop version (negative cutting part)	Slug-snap version (for slug problems) - price on request	57
Additional keyway	Adapter rings	62
Brush version for low-scratch material handling		

X8-PM quality -> see page 68

# PASS PUNCHING TOOLS (FORM) SIZE 3

#### SPECIAL SHAPE TOOLS GROUP 1 (SF01, SF02, SF04, SF05)

FullCit	70,21 - 100,00 11111	12131_01
Die	77,01 - 107,00 mm	12631C1
utomatic stripper	78,01 - 107,00 mm	12731C1
Manual stripper	78,01 - 107,00 mm	1273D_C1

### SPECIAL SHAPE TOOLS GROUP 2 (SF03, SF07, SF13, SF17)

Automati

Punch	76,21 - 105,00 mm	12131C2
Die	77,01 - 107,00 mm	12631C2
Automatic stripper	78,01 - 107,00 mm	12731C2
Manual stripper	78,01 - 107,00 mm	1273D_C2

### SPECIAL SHAPE TOOLS GROUP 3 (SF06, SF08, SF14, SF16)

Punch	76,21 - 105,00 mm	12131C3
Die	77,01 - 107,00 mm	12631C3
Automatic stripper	78,01 - 107,00 mm	12731C3
Manual stripper	78.01 - 107.00 mm	1273D C3

### SPECIAL SHAPE GROUP 4 (SF09, SF10, SF11, SF12, SF15)

Punch	76,21 - 105,00 mm	12131_C4
Die	77,01 - 107,00 mm	12631C4
Automatic stripper	78,01 - 107,00 mm	12731C4
Manual stripper	78,01 - 107,00 mm	1273D_C4





Additional costs:	Cross references:	see page
PUNCH	PUNCH	

Punches with shear (WT / DOWT / etc.) -> see page 56 10 - 13 Types of special shapes Cutting part under 1,00 mm PASS-fit system - explanation and additional costs 40 X3-PM quality -> see page 68 54 Additional costs for coating Polished cutting part

Adjusting rings

STRIPPER	STRIPPER	
Polished version for low-scratch material handling	Spare parts	52

	. Gilding version for or accommending	oparo parto	0_
		PU stripper	65
	DIE	DIE	
	Slug-stop version (negative cutting part)	Slug-snap version (for slug problems) - price on request	57
-	Additional keyway	Adapter rings	62

X8-PM quality -> see page 68

Brush version for low-scratch material handling

34 + 62

# PASS ADAPTER AND MANUAL ADJUSTING RINGS





DESCRIPTION	MACHINE GROUF	POSITION	PARTNO.	
ADAPTER RING FOR STRIPPE	R			
from 3 to 2	G	1	120321	
from 3 to 2	C - D	1*	120326	
ADAPTER RING FOR DIE				
from 3 to 1	G	2*	120310	
from 3 to 2	G	2	120320	

ADJUSTING RINGS (MANUAL)	1			
1	A - D	3	118102	
2	A - D	3*	118202	
3 (outside Ø 95 mm)	A - D	3*	118302	

PASS-FIT ADJUSTING RINGS (MANUAL)					
1	A - D	4	1181P2		
2	A - D	4*	1182P2		
3 (outside Ø 95 mm)	A - D	4*	1183P2		

\*no picture





62

# PASS SLITTING TOOL SIZE 2

### FOR BOSCHERT PUNCHING MACHINES

DESCRIPTION	POSITION	PARTNO.	
SPRING LOADED SLITTING TOOL SIZE 2	2 - MEASURE	5 X 30 - 4 X R	=0,5
Complete upper part	1 - 4	1S0330530	
0 1111 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0	100110	

Complete upper part	1 - 4	1S0330530	
Spare slitting punch blade insert (*2)	2	1S0440	
Spare stripper 6 x 57	4	1S0333	
Die cl 0,1 - cl 0,3	5	106T530	
Die cl 0,4 - cl 1,0	5	109T530	

SPRING LOADED SLITTING TOOL SIZE 2 - M	//EASURE	5 X 40 - 4 X R=0,5 (*1)	
Complete upper part	1 - 4	1S0330540	
Spare slitting punch blade insert (*2)	2	1S0441	
Spare stripper 6 x 57	4	1S0333	
Die cl 0,1 - cl 0,3	5	106T540	
Die cl 0,4 - cl 1,0	5	109T540	

SPRING LOADED SLITTING TOOL SIZE 2	- MEASURE	5 X 56 - 4 X R=0,5 (*1)	
Complete upper part	1 - 4	1S0330556	
Spare slitting punch blade insert (*2)	2	1S0442	
Spare stripper 6 x 57	4	1S0333	
Die cl 0,1 - cl 0,3	5	106T556	
Die cl 0,4 - cl 1,0	5	109T556	

OTHER SPARE PARTS			
Spare springs			
Set of steel springs (2 x big / 2 x small)	3	1S0331	





### Details / Additional costs:

<sup>(\*1)</sup> Max sheet thickness s = 4,00 mm

<sup>(°2)</sup> Slitting punch blade insert general with PASS T-MAX coating

<sup>&</sup>lt;sup>(\*2)</sup> Additional costs for reduced dimensional deviation

# PASS SLITTING TOOL SIZE 3

### FÜR BOSCHERT PUNCHING MACHINES



DESCRIPTION	POSITION	PARTNO.	
SPRING LOADED SLITTING TOOL SIZE 3	- MEASUR	E 8 X 30 - 4 X R =	: 1,00 (*1)
Complete upper part	1 - 4	1S0350830	
Spare slitting punch blade insert (*2)	2	1S0446	
Spare stripper	4	1S0355830	
Die cl 0,3 - cl 1,0	5	109T830	
Die cl 1,2 - cl 1,5	5	109T830	

SPRING LOADED SLITTING TOOL SIZE 3	- MEASUR	E 8 X 40 - 4 X R = 1,00 (*1)
Complete upper part	1 - 4	1S0350840
Spare slitting punch blade insert (*2)	2	1S0447
Spare stripper	4	1S0355840
Die cl 0,3	5	106T840
Die cl 0,4 - cl 1,2	5	109T840

SPRING LOADED SLITTING TOOL SIZE	3 - MEASU	RE 8 X 56 - 4 X R	= 1,00 (*1)
Complete upper part	1 - 4	1S0350856	
Spare slitting punch blade insert (*2)	2	1S0448	
Spare stripper	4	1S0355856	
Die cl 0,3	5	106T856	
Die cl 0,4 - cl 1,0	5	109T856	

OTHER SPARE PARTS	
Spare springs	
Set of steel springs (4 x big / 4 x small)	3



### Details / Additional costs:

- (\*1) Max sheet thickness s = 6,00 mm
- (\*2) Slitting punch blade insert general with PASS T-MAX coating
- (\*2) Additional costs for reduced dimensional deviation

# PASS PU STRIPPER

SPRING TYPE	PUNCH SHAPE (**)	DIM.	PARTNO.		
WITHOUT C	ONTOUR				
1	Flat size 1	- 12,00 mm	1S013810		
1	Whisper size 1	- 12,00 mm	1S013820		
2	Flat size 1	- 30,50 mm	1S013830		
2	Whisper size 1	- 30,50 mm	1S013840		
3	Flat size 2	- 48,00 mm	1S013850		
3	Whisper size 2	- 48,00 mm	1S013860	SPRING TYPE 1	
	Flat / Whisper size 2	> 48,00 mm	on request		
FOR ROUNE	PUNCHES				
1	Flat size 1	- 12,00 mm	1S013811		
1	Whisper size 1	- 12,00 mm	1S013821		
2	Flat size 1	- 30,50 mm	1S013831		
2	Whisper size 1	- 30,50 mm	1S013841		
3	Flat size 2	- 48,00 mm	1S013851		
3	Whisper size 2	- 48,00 mm	1S013861	SPRING TYPE 2	
	Flat / Whisper size 2	> 48,00 mm	on request		
FOR FORM	PUNCHES				
1	Flat size 1	- 12,00 mm	1S013812		
1	Whisper size 1	- 12,00 mm	1S013822		
2	Flat size 1	- 30,50 mm	1S013832		
2	Whisper size 1	- 30,50 mm	1S013842		
3	Flat size 2	- 48,00 mm	1S013852		
3	Whisper size 2	- 48,00 mm	1S013862	SPRING TYPE 3	
	Flat / Whisper size 1	> 48,00 mm	on request	SPRING LIPE 3	

Details:

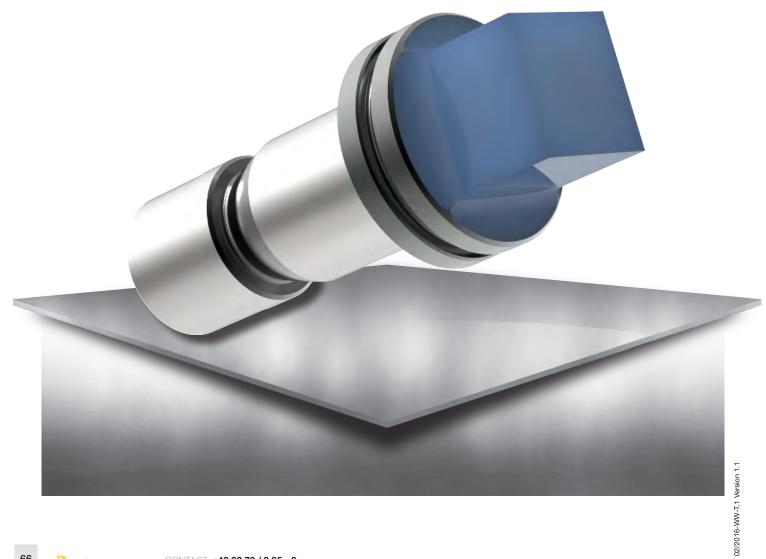
### PUNCH SECTION

(\*1) Flat = length 74,00 mm

CONTACT: **+49 92 70 / 9 85 - 0** 

65

<sup>(\*1)</sup> Whisper = length 77,00 mm



# FOR ALL THOSE, WHO LIKE TO UNDERSTAND EXACTLY

INFORMATION
ABOUT OUR TOOLS FOR YOUR TRUMPF SYSTEM

### **INDEX**

PASS Tool Variety	Page 68
Lifetime of Tools / Regrind Advice	Page 69
Index	Page 70

### PASS TOOL VARIETY

### **HWS**

HWS tools are made of a secondary hardened cold work steel with superior toughness. This type of steel is especially suitable for dies.

Advantage for customer:

excellent cost in accordance to performance

### H-PM®

H-PM® tools are produced with steel made on powder-metallurgical base with a high degree of purity.

This guarantees a segregational uniformed microstructure in the complete cross-section of the tool.

#### Advantage for customer:

excellent cost in accordance to performance good stability for edges by increased toughness

high tool lifetime due to the unformed microstructure

increased current hit-flex-capability; suitable as an excellent base for dies

### X3-PM

The X3-PM tools are made of a high-end powder-metallurgical steel with the best possible performance characteristics for punches in the punching technology due to the best possible degree of purity.

The segregational uniformed microstructure with high vanadium concentration in the complete cross-section of the punch guarantees best possible wear resistance regarding tool lifetime.

### Advantage for customer:

best efficiency by multiple increase of the punch hit count

best possible stability for cutting edges extremely high abrasion resistance

utmost compressive strength

### X8-PM

The X8-PM tools are made of a highend powder-metallurgical steel with the best possible performance characteristics for dies in the punching technology caused by best possible degree of purity.

The high ductility of the segregational uniformed microstructure guarantees best possible fatigue limit. This kind of steel is especially suitable for dies with risk-breakage in regards to special contours.

### Advantage for customer:

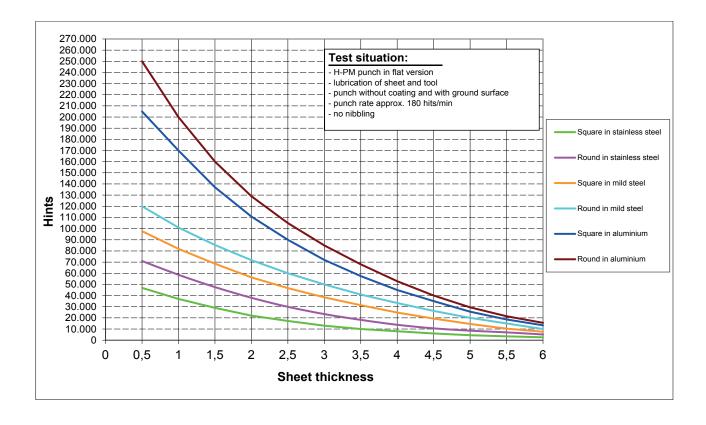
best possible absorption of hit-flex stress; prevents fatigue breakage.

high abrasion resistance



# LIFETIME OF TOOLS / REGRIND ADVICE

PASS punches and dies are made of high-end special steel in order to guarantee best lifetime of tools together with high robustness.



INFLUENCING FACTORS	FACTOR
Zinc coated sheet / stainless steel with foil / aluminium anodized	0,5 - 0,8
No sheet-lubrication	0,4 - 0,6
Punch coating (TICN for stainless steel / T-MAX for zinc coated steel / A-Max for aluminium / C-Max for copper)	2,0 - 4,0
PASS-X3-PM punch	6,0 - 10,0
Nibbling	0,7 - 0,9
Corner-punching	0,5 - 0,7
Whisper Tool	0,8 - 0,9
Punching rate > 300 hits / min.	0,8 - 0,9
Cutting part with EDM surface	0,4 - 0,8
Cutting part with polished surface	1,5 - 3,0
Cutting part smaller than 1,5x sheet thickness	0,6 - 0,8
Cutting part smaller than 1,0x sheet thickness	0,3 - 0,5
Using of a too close radius	0,4 - 0,9

An average decrease of the tool life of 5-10% per regrind has to be taken in account for the first regrind.

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