KTMP.CNC.TOOLING

THICK TURRET TOOLING

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Belgium

ОФИЦИАЛЬНЫЙ ДИЛЕР В РОССИИ

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TICN COATING

NOTE

- TICN coating
- Increase grind life 200%
- Better to cost in ABS tooling
- Specially for stainless,aluminum

M85 Q-ADJUST

NOTE

- 5mm grind life for E85 long punch
- Standard E85 punch body
- Only replace punch,stripper,die to change size
- Adjust quickly and easily
- Increase tooling life 150%

CHARACTER STAMPING

Character font & range

A B C D E F G H I J K L M
N O P Q R S T U V W X Y Z
0 1 2 3 4 5 6 7 8 9
& / . - ( )

Character type and size

TYPE	A SIZE	B SIZE	C SIZ
2.4	2.36mm	6.35mm	19.05mm
3.2	3.175mm	6.35mm	19.05mm
4.8	4.76mm	7.94mm	19.05mm
6.4	6.35mm	9.52mm	19.05mm

Note:2.4 type is too small, not recommanded

Character height chart

Character depth & FORCE KN

Type	Depth	AL	MS	SS
2.4	0.1mm	1.1KN	2.8KN	8.9KN
3.2	0.1mm	1.6KN	4.4KN	13.3KN
4.8	0.2mm	3.6KN	10.7KN	30.2KN
6.4	0.3mm	6.2KN	16.9KN	48.9KN

CLOSE TO CLAMP

E Station(4 1/2")

Description	Part Code	Price
Guide ass'y&PDS		
RECT. (0° ,90°)	HR.EA1RE.	
Guide ass'y		
Guide ass'y(0°,90°)	HR.EC1.	
Punch		
Blade	HR.EP1RE.	
Pin	HR.EP9	
Stripper		
Rect.	HR.ES1RE.	
Die (Double)		
Rect.	HR.ED1RE.	
Die (Single)		
Rect.	HR.ED2RE.	
Guide only		
	HR.EG1	

D Station(3 1/2")

Description	Part Code	Price
Guide ass'y&PDS		
RECT. (0° ,90°)	HR.DA1RE.	
Guide ass'y		
Guide ass'y(0°,90°)	HR.DC1.	
Punch		
Blade	HR.DP1RE.	
Pin	HR.DP9	
Stripper		
Rect.	HR.DS1RE.	
Die (Double)		
Rect.	HR.DD1RE.	
Die (Single)		
Rect.	HR.DD2RE.	
Guide only		
	HR.DG1	

Fully Guided small diameter

SPS A Station(1/2") Round/Shape (1.0~3.1mm)

Description	Part Code	Price
Punch ass' y		
Round	HX.AA1RO.	
Insert		
Round	HX.AP1RO.	
Guide		
Round	HX.AG1RO.	
Die		
Round	HT.AD1RO.	

NOTE

- Repalceable insert,only for round
- For small hole:1.0mm-3.1mm
- Please use the tooling when size as below

  Aluminum 0.75T

  Mild steel: 1T

  Stainless steel:2T

E 85(metric NCT style) A Station(1/2") Round/Shape (1.6~12.7mm)

Description	Part Code	Price
Punch ass'y		
Round	HT.AA1RO.	
Square.(0,135)	HT.AA3SQ.	
Shape(0,90)	HT.AA2**.	
Other(0,90)	HT.AA2**.	
Punch		
Round(no pin)	HT.AP1RO.	
Shape(pin)	HT.AP2**.	
Other(pin)	HT.AP2**.	
Die		
Round(no pin)	HT.AD1RO.	
Shape(pin)	HT.AD2**.	
other(pin)	HT.AD2**.	
Guide		
Round(0)	HT.AG1RO.	
Shape(0,90)	HT.AG2**.	
Square(0,135)	HT.AG3SQ.	
Punch head ass' y		
Punch head ass'y	HT.AH9	

NOTE

- Interchange with popular tooling
- Square guide with 0° ,135°
  other shape with 0° ,90
- Set ass'y include punch ass'y,die
- Punch ass'y: complete ass'y of punch
  to install in upper turret

E SERIES

E 85(metric NCT style) B Station(1 1/4") Round/Shape (12.71~31.7mm)

Description	Part Code	Price
Punch ass'y		
Round(0)	HT.BA1RO.	
Square(0,135)	HT.BA3SQ.	
Shape(0,90)	HT.BA2**.	
Other(0,90)	HT.BA2**.	
Punch		
Round(no pin)	HT.BP1RO.	
Shape(pin)	HT.BP2**.	
Other(pin)	HT.BP2**.	
Die		
Round(no pin)	HT.BD1RO.	
Shape(pin)	HT.BD2**.	
other(pin)	HT.BD2**.	
Guide		
Round(0)	HT.BG1RO.	
Shape(0,90)	HT.BG2**.	
Square(0,135)	HT.BG3SQ.	
Punch head ass' y		
Punch head ass'y	HT.BH9	

NOTE

- Interchange with popular tooling
- Square guide with 0° ,135°
  other shape with 0° ,90
- Set ass'y include punch ass'y,die
- Punch ass'y: complete ass'y of punch
- to install in upper turret

E 85(metric M12 NCT style) C Station(2") Round/Shape (31.71-50.8mm)

Description	Part Code	Price
Punch ass'y		
Round	HT.CA1RO.	
Shape	HT.CA1**.	
Other	HT.CA1**.	
Guide ass'y(0,90)		
Guide ass'y(0,90)	HT.CC1.	
Punch		
Round	HT.CP1RO.	
Shape	HT.CP2**.	
Other	HT.CP2**.	
Sqaure(Opit. 0,45)	HT.CP3SQ.	
Stripper		
Round	HT.CS1RO.	
Shape	HT.CS1**.	
Other	HT.CS1**.	
Die		
Round(0)	HT.CD1RO.	
Shape(0,90)	HT.CD2**.	
Other(0,90)	HT.CD2**.	
Square(Opit.0,135)	HT.CD3SQ.	
Punch head ass' y		
Punch head ass'y	HT.CH9	

NOTE

- Interchange with popular tooling
- Standard guide with 0° ,90°
- Adjust to 96mm with shim after regrinding
- Set ass'y include punch ass'y,die
- Punch ass'y: Guide ass'y,punch,stripper

E SERIES

E 85(metric M12 NCT style) D Station(3 1/2") Round/Shape (50.81-88.9mm)

Description	Part Code	Price
Punch ass'y		
Round	HT.DA1RO.	
Shape	HT.DA1**.	
Other	HT.DA1**.	
Guide ass'y(0,90)		
Guide ass'y(0,90)	HT.DC1.	
Punch		
Round	HT.DP1RO.	
Shape	HT.DP2**.	
Other	HT.DP2**.	
Sqaure(Opit. 0,45)	HT.DP3SQ.	
Stripper		
Round	HT.DS1RO.	
Shape	HT.DS1**.	
Other	HT.DS1**.	
Die		
Round(0)	HT.DD1RO.	
Shape(0,90)	HT.DD2**.	
Other(0,90)	HT.DD2**.	
Square(Opit.0,135)	HT.DD3SQ.	
Punch head ass' y		
Punch head ass'y	HT.DH9	

NOTE

- Interchange with popular tooling
- Standard guide with 0° ,90°
- Adjust to 84mm with shim after regrinding
- Set ass'y include punch ass'y,die
- Punch ass'y: Guide ass'y,punch,stripper

E 85(metric M12 NCT style) E Station(4 1/2") Round/Shape (88.91-114.3mm)

Description	Part Code	Price
Punch ass'y		
Round	HT.EA1RO.	
Shape	HT.EA1**.	
Other	HT.EA1**.	
Guide ass'y(0,90)		
Guide ass'y(0,90)	HT.EC1.	
Punch		
Round	HT.EP1RO.	
Shape	HT.EP2**.	
Other	HT.EP2**.	
Stripper		
Round	HT.ES1RO.	
Shape	HT.ES1**.	
Other	HT.ES1**.	
Die		
Round(0)	HT.ED1RO.	
Shape(0,90)	HT.ED2**.	
Other(0,90)	HT.ED2**.	
Punch head ass' y		
Punch head ass'y	HT.EH9	

NOTE

- Interchange with popular tooling
- Standard guide with 0° ,90°
- Adjust to 85mm with shim after regrinding
- Set ass'y include punch ass'y,die
- Punch ass'y: Guide ass'y,punch,stripper

Q-ADJUST SERIES

M 85(metric) PATENT TOOL A Station(1/2") Round/Shape (1.6~12.7mm)

Description	Part Code	Price
Punch ass'y(209mm)		
Round	HY.AA1RO.	
Square(0,135)	HY.AA3SQ.	
Shape(0,90)	HY.AA2**.	
Other(0,90)	HY.AA2**.	
Punch ass'y(208mm)		
Round	HY.AA6RO.	
Square(0,135)	HY.AA8SQ.	
Shape(0,90)	HY.AA7**.	
Other(0,90)	HY.AA7**.	
Punch		
Round(no pin)	HT.AP1RO.	
Shape(pin)	HT.AP2**.	
Other(pin)	HT.AP2**.	
Die		
Round(no pin)	HT.AD1RO.	
Shape(pin)	HT.AD2**.	
other(pin)	HT.AD2**.	
Guide		
Round(0)	HT.AG1RO.	
Shape(0,90)	HT.AG2**.	
Square(0,135)	HT.AG3SQ.	
Punch head ass' y		
Punch head ass'y(209)	HY.AH9	
Punch head ass'y(208)	HY.AH8	

NOTE

- Std. punch grind life is 5mm
- Punch head ass'y always use when changing size
- Quick adjusting for intergrated punch head ass'y
- Square guide with 0° ,135°
  Other shape with 0° ,90°
- Set ass'y include punch ass'y,die
- Punch ass'y: complete ass'y of punch to install in upper turret

Q-ADJUST SERIES

M 85(metric) PATENT TOOL B Station(1 1/4") Round/Shape (12.71~31.7mm)

Description	Part Code	Price
Punch ass'y(209mm)		
Round	HY.BA1RO.	
Rect.(0,135)	HY.BA3SQ.	
Shape(0,90)	HY.BA2**.	
Other(0,90)	HY.BA2**.	
Punch ass'y(208mm)		
Round	HY.BA6RO.	
Rect.(0,135)	HY.BA8SQ.	
Shape(0,90)	HY.BA7**.	
Other(0,90)	HY.BA7**.	
Punch		
Round(no pin)	HT.BP1RO.	
Shape(pin)	HT.BP2**.	
Other(pin)	HT.BP2**.	
Die		
Round(no pin)	HT.BD1RO.	
Shape(pin)	HT.BD2**.	
other(pin)	HT.BD2**.	
Guide		
Round(0)	HT.BG1RO.	
Shape(0,90)	HT.BG2**.	
Shape(0,135)	HT.BG3SQ.	
Punch head ass' y		
Punch head ass'y(209)	HY.BH9	
Punch head ass'y(208)	HY.BH8	

NOTE

- Std. punch grind life is 5mm
- Punch head ass'y always use when changing size
- Quick adjusting for intergrated punch head ass'y
- Square guide with 0° ,135°
  Other shape with 0° ,90°
- Set ass'y include punch ass'y,die
- Punch ass'y: complete ass'y of punch to install in upper turret

Q-ADJUST SERIES

M 85 C Station(2") Round/Shape (31.71-50.8mm)

Description	Part Code	Price
Punch ass'y		
Round	HY.CA1RO.	
Shape	HY.CA1**.	
Other	HY.CA1**.	
Guide ass'y		
Guide ass'y(0,90,135)	HY.CC1.	
Punch		
Round	HT.CP1RO.	
Shape	HT.CP2**.	
Other	HT.CP2**.	
Stripper		
Round	H9.CS1RO.	
Shape	H9.CS1**.	
Other	H9.CS1**.	
Die		
Round(0)	HT.CD1RO.	
Shape(0,90)	HT.CD2**.	
Other(0,90)	HT.CD2**.	
Square(Opit.0,135)	HT.CD3SQ.	
Punch head ass' y		
Punch head ass'y	HY.CH9	

NOTE

- Punch grind life is 5-8 mm,reduce cost 60%
- Adjust quickly and conveniently without shims
- Std.guide 0° ,90° ,135°
- Long life for guide,use premium tool steel
- Interchange with amada punch
- Set ass'y include punch ass'y,die
- Punch ass'y: Guide ass'y,punch,stripper

M 85 D Station(3 1/2") Round/Shape (50.81-88.9mm)

Description	Part Code	Price
Punch ass'y		
Round	HY.DA1RO.	
Shape	HY.DA1**	
Other	HY.DA1**	
Guide ass'y		
Guide ass'y(0,90,135)	HY.DC1.	
Punch		
Round	HT.DP1RO.	
Shape	HT.DP2**	
Other	HT.DP2**	
Stripper		
Round	H9.DS1RO.	
Shape	H9.DS1**	
Other	H9.DS1**	
Die		
Round(0)	HT.DD1RO.	
Shape(0,90)	HT.DD2**	
Other(0,90)	HT.DD2**	
Square(Opit.0,135)	HT.DD3SQ.	
Punch head ass' y		
Punch head ass'y	HY.DH9	

NOTE

- Punch grind life is 5-8 mm,reduce cost 60%
- Adjust quickly and conveniently without shims
- Std.guide 0° ,90° ,135°
- Long life for guide,use premium tool steel
- Interchange with amada punch
- Set ass'y include punch ass'y,die
- Punch ass'y: Guide ass'y,punch,stripper

Q-ADJUST SERIES

TOP 85 PATENT TOOL A Station(1/2") Round/Shape (1.6~12.7mm)

Description	Part Code	Price
Punch ass'y(209mm)		
Round	HV.AA1RO.	
Square(0,135)	HV.AA3SQ.	
Shape(0,90)	HV.AA2**.	
Other(0,90)	HV.AA2**.	
Punch ass'y(208mm)		
Round	HV.AA6RO.	
Square(0,135)	HV.AA8SQ.	
Shape(0,90)	HV.AA7**.	
Other(0,90)	HV.AA7**.	
Punch		
Round(no pin)	HT.AP1RO.	
Shape(pin)	HT.AP2**.	
Other(pin)	HT.AP2**.	
Stripper		
Round	H9.AS1RO.	
Shape	H9.AS1**.	
Other	H9.AS1**.	
Die		
Round(no pin)	HT.AD1RO.	
Shape(pin)	HT.AD2**.	
other(pin)	HT.AD2**.	
Guide		
Round(0)	HV.AG1	
Shape(0,90)	HV.AG2	
Square(0,135)	HV.AG3	
Punch head ass' y		
Punch head ass'y(209)	HY.AH9	
Punch head ass'y(208)	HY.AH8	

NOTE

- Std. punch grind life is 5mm
- Only replace punch,stripper,die to change size, save cost for punch head ass'y
- Quick adjusting for intergrated punch head ass'y
- Square guide with 0° ,135°
  Other shape with 0° ,90°
- Set ass'y include punch ass'y,die
- Punch ass'y: complete ass'y of punch to install in upper turret

TOP 85 PATENT TOOL B Station(1 1/4") Round/Shape (12.71~31.7mm)

Description	Part Code	Price
Punch ass'y(209mm)		
Round	HV.BA1RO.	
Square(0,135)	HV.BA3SQ.	
Shape(0,90)	HV.BA2**.	
Other(0,90)	HV.BA2**.	
Punch ass'y(208mm)		
Round	HV.BA6RO.	
Square(0,135)	HV.BA8SQ.	
Shape(0,90)	HV.BA7**.	
Other(0,90)	HV.BA7**.	
Punch		
Round(no pin)	HT.BP1RO.	
Shape(pin)	HT.BP2**.	
Other(pin)	HT.BP2**.	
Stripper		
Round	H9.BS1RO.	
Shape	H9.BS1**.	
Other	H9.BS1**.	
Die		
Round(no pin)	HT.BD1RO.	
Shape(pin)	HT.BD2**.	
other(pin)	HT.BD2**.	
Guide		
Round(0)	HV.BG1	
Shape(0,90)	HV.BG2	
Square(0,135)	HV.BG3	
Punch head ass' y		
Punch head ass'y(209)	HY.BH9	
Punch head ass'y(208)	HY.BH8	

NOTE

- Std. punch grind life is 5mm
- Only replace punch,stripper,die to change size, save cost for punch head ass'y
- Quick adjusting for intergrated punch head ass'y
- Square guide with 0° ,135°
  Other shape with 0° ,90°
- Set ass'y include punch ass'y,die
- Punch ass'y: complete ass'y of punch to install in upper turret

Q-ADJUST SERIES

TOP 85 PATENT TOOL C Station(2") Round/Shape (31.71-50.8mm)

Description	Part Code	Price
Punch ass'y		
Round	HV.CA1RO.	
Shape	HV.CA1**.	
Other	HV.CA1**.	
Guide ass'y		
Guide ass'y(0,90,135)	HV.CC1.	
Punch		
Round	HT.CP1RO.	
Shape	HT.CP2**.	
Other	HT.CP2**.	
Stripper		
Round	HT.CS1RO.	
Shape	HT.CS1**.	
Other	HT.CS1**.	
Die		
Round(0)	HT.CD1RO.	
Shape(0,90)	HT.CD2**.	
Other(0,90)	HT.CD2**.	
Square(Opit.0,135)	HT.CD3SQ.	
Punch head ass' y		
Punch head ass'y	HV.CH9	

NOTE

- STD.punch grind life is 5-8 mm,reduce cost 60%
- Adjust quickly and conveniently without shims
- Std.guide 0° ,90° ,135°
- Long life for guide,use premium tool steel
- Lubrication function
- Set ass'y include punch ass'y,die
- Punch ass'y: Guide ass'y,punch,stripper

TOP 85 PATENT TOOL D Station(3 1/2") Round/Shape (50.81-88.9mm)

Description	Part Code	Price
Punch ass'y		
Round	HV.DA1RO.	
Shape	HV.DA1**	
Other	HV.DA1**	
Guide ass'y		
Guide ass'y(0,90,135)	HV.DC1.	
Punch		
Round	HT.DP1RO.	
Shape	HT.DP2**	
Other	HT.DP2**	
Stripper		
Round	HT.DS1RO.	
Shape	HT.DS1**	
Other	HT.DS1**	
Die		
Round(0)	HT.DD1RO.	
Shape(0,90)	HT.DD2**	
Other(0,90)	HT.DD2**	
Square(Opit.0,135)	HT.DD3SQ.	
Punch head ass' y		
Punch head ass'y	HV.DH9	

NOTE

- STD.punch grind life is 5-8 mm,reduce cost 60%
- Adjust quickly and conveniently without shims
- Std.guide 0° ,90° ,135°
- Long life for guide,use premium tool steel
- Lubrication function
- Set ass'y include punch ass'y,die
- Punch ass'y: Guide ass'y,punch,stripper

AIR BLOW SERIES

TOP 85 PATENT TOOL A Station(1/2") Round/Shape (1.6~12.7mm)

Description	Part Code	Price
Punch ass'y(209mm)		
Round	HK.AA1RO.	
Square(0,135)	HK.AA3SQ.	
Shape(0,90)	HK.AA2**.	
Other(0,90)	HK.AA2**.	
Punch ass'y(208mm)		
Round	HK.AA6RO.	
Square(0,135)	HK.AA8SQ.	
Shape(0,90)	HK.AA7**.	
Other(0,90)	HK.AA7**.	
Punch		
Round(no pin)	HQ.AP1RO.	
Shape(pin)	HQ.AP2**.	
Other(pin)	HQ.AP2**.	
Stripper		
Round	HP.AS1RO.	
Shape	HP.AS1**.	
Other	HP.AS1**.	
Die		
Round(no pin)	HT.AD1RO.	
Shape(pin)	HT.AD2**.	
other(pin)	HT.AD2**.	
Guide		
Round(0)	HK.AG1	
Shape(0,90)	HK.AG2	
Square(0,135)	HK.AG3	
Punch head ass' y		
Punch head ass'y(209)	HY.AH9	
Punch head ass'y(208)	HY.AH8	

NOTE

- Std. punch grind life is 5mm
- Only replace punch,stripper,die to change size, save cost for punch head ass'y
- Prevent slug pulling,sheet pulling. improve life 200%
- Quick adjusting for intergrated punch head ass'y
- Set ass'y include punch ass'y,die
- Punch ass'y: complete ass'y of punch to install in upper turret

AIR BLOW SERIES

TOP 85 ABS PATENT TOOL B Station(1 1/4") Round (12.71~30.0mm) Shape (12.71~31.7mm)

Description	Part Code	Price
Punch ass'y(209mm)		
Round	HK.BA1RO.	
Square(0,135)	HK.BA3SQ.	
Shape(0,90)	HK.BA2**.	
Other(0,90)	HK.BA2**.	
Punch ass'y(208mm)		
Round	HK.BA6RO.	
Square(0,135)	HK.BA8SQ.	
Shape(0,90)	HK.BA7**.	
Other(0,90)	HK.BA7**.	
Punch		
Round(no pin)	HQ.BP1RO.	
Shape(pin)	HQ.BP2**.	
Other(pin)	HQ.BP2**.	
Stripper		
Round	HP.BS1RO.	
Shape	HP.BS1**.	
Other	HP.BS1**.	
Die		
Round(no pin)	HT.BD1RO.	
Shape(pin)	HT.BD2**.	
other(pin)	HT.BD2**.	
Guide		
Round(0)	HK.BG1	
Shape(0,90)	HK.BG2	
Square(0,135)	HK.BG3	
Punch head ass' y		
Punch head ass'y(209)	HY.BH9	
Punch head ass'y(208)	HY.BH8	

NOTE

- Std. punch grind life is 5mm
- Only replace punch,stripper,die to change size, save cost for punch head ass'y
- Prevent slug pulling,sheet pulling. improve life 200%
- Quick adjusting for intergrated punch head ass'y
- Set ass'y include punch ass'y,die
- Punch ass'y: complete ass'y of punch to install in upper turret

AIR BLOW SERIES

TOP 85 ABS PATENT TOOL C Station(2") Round/Shape (31.71-50.8mm)

Description	Part Code	Price
Punch ass'y		
Round	HK.CA1RO.	
Shape	HK.CA1**.	
Other	HK.CA1**.	
Guide ass'y		
Guide ass'y(0,90,135)	HK.CC1.	
Punch		
Round	HQ.CP1RO.	
Shape	HQ.CP2**.	
Other	HQ.CP2**.	
Stripper		
Round	HK.CS1RO.	
Shape	HK.CS1**.	
Other	HK.CS1**.	
Die		
Round(0)	HT.CD1RO.	
Shape(0,90)	HT.CD2**.	
Other(0,90)	HT.CD2**.	
Square(Opit.0,135)	HT.CD3SQ.	
Guide		
Guide(0,90,135)	HK.CG1	
Punch head ass' y		
Punch head ass'y	HK.CH9	

NOTE

- STD.punch grind life is 5-8 mm,reduce cost 60%
- Adjust quickly and conveniently without shims
- Std.guide 0° ,90° ,135°
- Long life for guide,use premium tool steel
- Air blow tooling improve at lease life 200%
- Set ass'y include punch ass'y,die
- Punch ass'y: Guide ass'y,punch,stripper

TOP 85 ABS PATENT TOOL D Station(3 1/2") Round/Shape (50.81-88.9mm)

Description	Part Code	Price
Punch ass'y		
Round	HK.DA1RO.	
Shape	HK.DA1**.	
Other	HK.DA1**.	
Guide ass'y		
Guide ass'y(0,90,135)	HK.DC1.	
Punch		
Round	HQ.DP1RO.	
Shape	HQ.DP2**.	
Other	HQ.DP2**.	
Stripper		
Round	HK.DS1RO.	
Shape	HK.DS1**.	
Other	HK.DS1**.	
Die		
Round(0)	HT.DD1RO.	
Shape(0,90)	HT.DD2**.	
Other(0,90)	HT.DD2**.	
Square(Opit.0,135)	HT.DD3SQ.	
Guide		
Guide(0,90,135)	HK.DG1	
Punch head ass' y		
Punch head ass'y	HK.DH9	

NOTE

- STD.punch grind life is 5-8 mm,reduce cost 60%
- Adjust quickly and conveniently without shims
- Std.guide 0° ,90° ,135°
- Long life for guide,use premium tool steel
- Air blow tooling improve at lease life 200%
- Set ass'y include punch ass'y,die
- Punch ass'y: Guide ass'y,punch,stripper

AIR BLOW SERIES

KA85 ABS(metric AMADA types) A Station(1/2") Round/Shape (1.6 -12.7mm)

Punch Max. thickness:3.8mm(mild steel)

NOTE

- Prevent slug pulling,sheet pulling. improve life
- ABS guide with better lubrication,longer life
- Fit with STD.punch,sufficient lubritation.
- Square guide with 0,135 degree
  regular shape guide with 0,90 degree
- Set ass'y include punch ass'y,die
- Punch ass'y: complete ass'y of punch
  to install in upper turret

Description	Part Code	Price
Punch ass'y		
Round	HQ.AA1RO.	
Square(0,135)	HQ.AA3SQ.	
Shape(0,90)	HQ.AA2**.	
Other(0,90)	HQ.AA2**.	
Punch		
Round(no pin)	HQ.AP1RO.	
Shape(pin)	HQ.AP2**.	
Other(pin)	HQ.AA2**.	
Die		
Round(no pin)	HT.AD1RO.	
Shape(pin)	HT.AD2**.	
other(pin)	HT.AD2**.	
Guide		
Round(0)	HQ.AG1RO.	
Shape(0,90)	HQ.AG2**.	
Square(0,135)	HQ.AG3SQ.	
Punch head ass' y		
Punch head ass'y	HQ.AH9	

KA85 ABS(metric AMADA types)

B Station(1 1/4")

Round (12.71~30.0mm)
Shape (12.71~31.7mm)

Punch Max. thickness:6.3mm(mild steel)

Description	Part Code	Price
Punch ass'y		
Round	HQ.BA1RO.	
Square(0,135)	HQ.BA3SQ.	
Shape(0,90)	HQ.BA2**	
Other(0,90)	HQ.BA2**	
Punch		
Round(no pin)	HQ.BP1RO.	
Shape(pin)	HQ.BP2**	
Other(pin)	HQ.BA2**	
Die		
Round(no pin)	HT.BD1RO.	
Shape(pin)	HT.BD2**	
other(pin)	HT.BD2**	
Guide		
Round(0)	HQ.BG1RO.	
Shape(0,90)	HQ.BG2**	
Square(0,135)	HQ.BG3SQ.	
Punch head ass' y		
Punch head ass'y	HQ.BH9	

NOTE

- Prevent slug pulling,sheet pulling. improve life
- ABS guide with better lubrication,longer life
- Fit with STD.punch,sufficient lubritation.
- Square guide with 0,135 degree
  regular shape guide with 0,90 degree
- Set ass'y include punch ass'y,die
- Punch ass'y: complete ass'y of punch
  to install in upper turret

Q-ADJUST SERIES

M 90 A Station(1/2") Round/Shape (1.6~12.7mm)

Description	Part Code	Price
Punch ass'y		
Round	H9.AA1RO.	
Square(0,135)	H9.AA3SQ.	
Shape(0,90)	H9.AA2**.	
Other(0,90)	H9.AA2**.	
Punch		
Round(no pin)	H9.AP1RO.	
Shape(pin)	H9.AP2**.	
Other(pin)	H9.AP2**.	
Stripper		
Round	H9.AS1RO.	
Shape	H9.AS1**.	
Other	H9.AS1**.	
Die		
Round(no pin)	HT.AD1RO.	
Shape(pin)	HT.AD2**.	
other(pin)	HT.AD2**.	
Guide		
Round(0)	H9.AG1	
Shape(0,90)	H9.AG2	
Square(0,135)	H9.AG3	
Punch head ass' y		
Punch head ass'y	H9.AH9	

NOTE

- 90 punch grind life is 6.5mm,reduce cost 60%
- Only replace punch,stripper,die to change size, save cost for punch head ass'y
- Separate punch head ass'y adjust quickly, can lubrication
- Set ass'y include punch ass'y,die
- Punch ass'y: complete ass'y of punch to install in upper turret

M 90 B Station(1 1/4") Round/Shape (12.71~31.7mm)

Description	Part Code	Price
Punch ass'y		
Round	H9.BA1RO.	
Square(0,135)	H9.BA3SQ.	
Shape(0,90)	H9.BA2**.	
Other(0,90)	H9.BA2**.	
Punch		
Round(no pin)	H9.BP1RO.	
Shape(pin)	H9.BP2**.	
Other(pin)	H9.BP2**.	
Stripper		
Round	H9.BS1RO.	
Shape	H9.BS1**.	
Other	H9.BS1**.	
Die		
Round(no pin)	HT.BD1RO.	
Shape(pin)	HT.BD2**.	
other(pin)	HT.BD2**.	
Guide		
Round(0)	H9.BG1	
Shape(0,90)	H9.BG2	
Square(0,135)	H9.BG3	
Punch head ass' y		
Punch head ass'y	H9.BH9	

NOTE

- 90 punch grind life is 6.5mm,reduce cost 60%
- Only replace punch,stripper,die to change size, save cost for punch head ass'y
- Separate punch head ass'y adjust quickly, can lubrication
- Set ass'y include punch ass'y,die
- Punch ass'y: complete ass'y of punch to install in upper turret

Q-ADJUST SERIES

M 90 C Station(2") Round/Shape (31.71-50.8mm)

Description	Part Code	Price
Punch ass'y		
Round	H9.CA1RO.	
Shape	H9.CA1**.	
Other	H9.CA1**.	
Guide ass'y		
Guide ass'y(0,90,135)	H9.CC1.	
Punch		
Round	H9.CP1RO.	
Shape	H9.CP1**.	
Other	H9.CP1**.	
Stripper		
Round	H9.CS1RO.	
Shape	H9.CS1**.	
Other	H9.CS1**.	
Die		
Round(0)	HT.CD1RO.	
Shape(0,90)	HT.CD2**.	
Other(0,90)	HT.CD2**.	
Square(Opit.0,135)	HT.CD3SQ.	
Punch head ass' y		
Punch head ass'y	H9.CH9	

NOTE

- Punch grind life is 5-8 mm,reduce cost 60%
- Adjust quickly and conveniently without shims
- Std.guide 0° ,90° ,135°
- Long life for guide,use premium tool steel
- Interchange with amada punch
- Set ass'y include punch ass'y,die
- Punch ass'y: Guide ass'y,punch,stripper

M 90 D Station(3 1/2") Round/Shape (50.81-88.9mm)

Description	Part Code	Price
Punch ass'y		
Round	H9.DA1RO.	
Shape	H9.DA1**.	
Other	H9.DA1**.	
Guide ass'y		
Guide ass'y(0,90,135)	H9.DC1.	
Punch		
Round	H9.DP1RO.	
Shape	H9.DP1**.	
Other	H9.DP1**	
Stripper		
Round	H9.DS1RO.	
Shape	H9.DS1**.	
Other	H9.DS1**.	
Die		
Round(0)	HT.DD1RO.	
Shape(0,90)	HT.DD2**.	
Other(0,90)	HT.DD2**.	
Square(Opit.0,135)	HT.DD3SQ.	
Punch head ass' y		
Punch head ass'y	H9.DH9	

NOTE

- Punch grind life is 5-8 mm,reduce cost 60%
- Adjust quickly and conveniently without shims
- Std.guide 0° ,90° ,135°
- Long life for guide,use premium tool steel
- Interchange with amada punch
- Set ass'y include punch ass'y,die
- Punch ass'y: Guide ass'y,punch,stripper

AIR BLOW SERIES

TOP 90 ABS A Station(1/2") Round/Shape (1.6~12.7mm)

Description	Part Code	Price
Punch ass'y		
Round	HP.AA1RO.	
Square(0,135)	HP.AA3SQ.	
Shape(0,90)	HP.AA2**.	
Other(0,90)	HP.AA2**.	
Punch		
Round(no pin)	HP.AP1RO.	
Shape(pin)	HP.AP2**.	
Other(pin)	HP.AP2**.	
Stripper		
Round	HP.AS1RO.	
Shape	HP.AS1**.	
Other	HP.AS1**.	
Die		
Round(no pin)	HT.AD1RO.	
Shape(pin)	HT.AD2**.	
other(pin)	HT.AD2**.	
Guide		
Round(0)	HP.AG1	
Shape(0,90)	HP.AG2	
Square(0,135)	HP.AG3	
Punch head ass' y		
Punch head ass'y	H9.AH9	

NOTE

- Only replace punch,stripper,die to change size, save cost for punch head ass'y
- Prevent slug pulling,sheet pulling. improve life
- 90 ABS guide with better lubrication,longer life
- Punch grind life is 6.5mm,reduce cost 60%
- Adjust quickly and conveniently without shims
- Set ass'y include punch ass'y,die
- Punch ass'y: Guide ass'y,punch,stripper

AIR BLOW SERIES

TOP 90 ABS

B Station(1 1/4")

Round (12.71~30.0mm)
Shape (12.71~31.7mm)

Description	Part Code	Price
Punch ass'y		
Round	HP.BA1RO.	
Square(0,135)	HP.BA3SQ.	
Shape(0,90)	HP.BA2**.	
Other(0,90)	HP.BA2**.	
Punch		
Round(no pin)	HP.BP1RO.	
Shape(pin)	HP.BP2**.	
Other(pin)	HP.BP2**.	
Stripper		
Round	HP.BS1RO.	
Shape	HP.BS1**.	
Other	HP.BS1**.	
Die		
Round(no pin)	HT.BD1RO.	
Shape(pin)	HT.BD2**.	
other(pin)	HT.BD2**.	
Guide		
Round(0)	HP.BG1	
Shape(0,90)	HP.BG2	
Square(0,135)	HP.BG3	
Punch head ass' y		
Punch head ass'y	H9.BH9	

NOTE

- Only replace punch,stripper,die to change size, save cost for punch head ass'y
- Prevent slug pulling,sheet pulling. improve life
- 90 ABS guide with better lubrication,longer life
- Punch grind life is 6.5mm,reduce cost 60%
- Adjust quickly and conveniently without shims
- Set ass'y include punch ass'y,die
- Punch ass'y: Guide ass'y,punch,stripper

AIR BLOW SERIES

TOP 90 ABS | C Station(2") | Round/Shape (31.71-50.8mm)

Description	Part Code	Price
Punch ass'y		
Round	HP.CA1RO.	
Shape	HP.CA1**	
Other	HP.CA1**	
Guide ass'y		
Guide ass'y(0,90,135)	HP.CC1.	
Punch		
Round	H9.CP1RO.	
Shape	H9.CP1**	
Other	H9.CP1**	
Stripper		
Round	HP.CS1RO.	
Shape	HP.CS1**	
Other	HP.CS1**	
Die		
Round(0)	HT.CD1RO.	
Shape(0,90)	HT.CD2**	
Other(0,90)	HT.CD2**	
Square(Opit.0,135)	HT.CD3SQ.	
Punch head ass' y		
Punch head ass'y	HP.CH9	

NOTE

- Prevent slug pulling,sheet pulling. improve life
- ABS guide with better lubrication,longer life
- Punch grind life is 5-8mm,reduce cost 60%
- Adjust quickly and conveniently without shims
- Guide slog with 0,90,135
- Set ass'y include punch ass'y,die
- Punch ass'y: Guide ass'y,punch,stripper

M 90 D Station(3 1/2") Round/Shape (50.81-88.9mm)

Description	Part Code	Price
Punch ass'y		
Round	HP.DA1RO.	
Shape	HP.DA1**.	
Other	HP.DA1**.	
Guide ass'y		
Guide ass'y(0,90,135)	HP.DC1.	
Punch		
Round	H9.DP1RO.	
Shape	H9.DP1**.	
Other	H9.DP1**	
Stripper		
Round	HP.DS1RO.	
Shape	HP.DS1**.	
Other	HP.DS1**.	
Die		
Round(0)	HT.DD1RO.	
Shape(0,90)	HT.DD2**.	
Other(0,90)	HT.DD2**.	
Square(Opit.0,135)	HT.DD3SQ.	
Punch head ass' y		
Punch head ass'y	HP.DH9	

NOTE

- Prevent slug pulling,sheet pulling. improve life
- ABS guide with better lubrication,longer life
- Punch grind life is 5-8mm,reduce cost 60%
- Adjust quickly and conveniently without shims
- Guide slog with 0,90,135
- Set ass'y include punch ass'y,die
- Punch ass'y: Guide ass'y,punch,stripper

SPH SERIES

SPH90 A Station(1/2") Round/Shape (1.6~12.7mm)

Punch Max. thickness:6.3mm(mild steel)

Description	Part Code	Price
Punch ass'y		
Round	HZ.AA1RO.	
Square(0,135)	HZ.AA3SQ.	
Shape(0,90)	HZ.AA2**.	
Other(0,90)	HZ.AA2**.	
Punch		
Round(no pin)	HZ.AP1RO.	
Shape(pin)	HZ.AP2**.	
Other(pin)	HZ.AP2**.	
Stripper		
Round	H9.AS1RO.	
Shape	H9.AS1**.	
Other	H9.AS1**.	
Die		
Round(no pin)	HZ.AD1RO.	
Shape(pin)	HZ.AD2**.	
other(pin)	HZ.AD2**.	
Guide		
Round(0)	H9.AG1	
Shape(0,90)	H9.AG2	
Square(0,135)	H9.AG3	
Punch head ass' y		
Punch head ass'y	HZ.AH9	

NOTE

- 90 punch grind life is 6.5mm,reduce cost 60%
- Only replace punch,stripper,die to change size, save cost for punch head ass'y
- Separate punch head ass'y adjust quickly, can lubrication
- Suggest to select heavy duty for thickness over 2.5mm T stainess steel,or over 3.5mm MS
- Set ass'y include punch ass'y,die
  Punch ass'y: complete ass'y of punch to install in upper turret

SPH90 B Station(1 1/4") Round/Shape (12.71~31.7mm)

Punch Max. thickness:6.3mm(mild steel)

Description	Part Code	Price
Punch ass'y		
Round	HZ.BA1RO.	
Square(0,135)	HZ.BA3SQ.	
Shape(0,90)	HZ.BA2**.	
Other(0,90)	HZ.BA2**.	
Punch		
Round(no pin)	HZ.BP1RO.	
Shape(pin)	HZ.BP2**.	
Other(pin)	HZ.BP2**.	
Stripper		
Round	H9.BS1RO.	
Shape	H9.BS1**.	
Other	H9.BS1**.	
Die		
Round(no pin)	HZ.BD1RO.	
Shape(pin)	HZ.BD2**.	
other(pin)	HZ.BD2**.	
Guide		
Round(0)	H9.BG1	
Shape(0,90)	H9.BG2	
Square(0,135)	H9.BG3	
Punch head ass' y		
Punch head ass'y	HZ.BH9	

NOTE

- 90 punch grind life is 6.5mm,reduce cost 60%
- Only replace punch,stripper,die to change size, save cost for punch head ass'y
- Separate punch head ass'y adjust quickly, can lubrication
- Suggest to select heavy duty for thickness over 2.5mm T stainess steel,or over 3.5mm MS
- Set ass'y include punch ass'y,die
  Punch ass'y: complete ass'y of punch to install in upper turret

SPH SERIES

SPH80 A Station(1/2") Round/Shape (1.6~12.7mm)

Punch Max. thickness:6.3mm(mild steel)

Description	Part Code	Price
Punch ass'y		
Round	HH.AA1RO.	
Square(0,135)	HH.AA3SQ.	
Shape(0,90)	HH.AA2**.	
Other(0,90)	HH.AA2**.	
Punch		
Round(no pin)	HH.AP1RO.	
Shape(pin)	HH.AP2**.	
Other(pin)	HH.AP2**.	
Stripper		
Round	H9.AS1RO.	
Shape	H9.AS1**.	
Other	H9.AS1**.	
Die		
Round(no pin)	HZ.AD1RO.	
Shape(pin)	HZ.AD2**.	
other(pin)	HZ.AD2**.	
Guide		
Round(0)	H9.AG1	
Shape(0,90)	H9.AG2	
Square(0,135)	H9.AG3	
Punch head ass' y		
Punch head ass'y	HH.AH9	

NOTE

- Suggest to select heavy duty for thickness over 2.5mm T stainess steel,or over 3.5mm MS
- Coating punch is advised
- Set ass'y include punch ass'y,die
  Punch ass'y: complete ass'y of punch to install in upper turret

SPH90

B Station(1 1/4")

Round/Shape (12.71~31.7mm)

Punch Max. thickness:6.3mm(mild steel)

Description	Part Code	Price
Punch ass'y		
Round	HH.BA1RO.	
Square(0,135)	HH.BA3SQ.	
Shape(0,90)	HH.BA2**.	
Other(0,90)	HH.BA2**.	
Punch		
Round(no pin)	HH.BP1RO.	
Shape(pin)	HH.BP2**.	
Other(pin)	HH.BP2**.	
Stripper		
Round	H8.BS1RO.	
Shape	H8.BS1**.	
Other	H8.BS1**.	
Die		
Round(no pin)	HZ.BD1RO.	
Shape(pin)	HZ.BD2**.	
other(pin)	HZ.BD2**.	
Guide		
Round(0)	H8.BG1	
Shape(0,90)	H8.BG2	
Square(0,135)	H8.BG3	
Punch head ass' y		
Punch head ass'y	HH.BH9	

NOTE

- Suggest to select heavy duty for thickness over 2.5mm T stainess steel,or over 3.5mm MS
- Coating punch is advised
- Set ass'y include punch ass'y,die
  Punch ass'y: complete ass'y of punch to install in upper turret

E SERIES

E 80 A Station(1/2") Round/Shape (1.6~12.7mm)

Description	Part Code	Price
Punch ass'y		
Round	H8.AA1RO.	
Square(0,135)	H8.AA3SQ.	
Shape(0,90)	H8.AA2**.	
Other(0,90)	H8.AA2**.	
Punch		
Round(no pin)	H8.AP1RO.	
Shape(pin)	H8.AP2**.	
Other(pin)	H8.AP2**.	
Stripper		
Round	H9.AS1RO.	
Shape	H9.AS1**.	
Other	H9.AS1**.	
Die		
Round(no pin)	HT.AD1RO.	
Shape(pin)	HT.AD2**.	
other(pin)	HT.AD2**.	
Guide(Opt.solid)		
Round(0)	H8.AG1RO.	
Shape(0,90)	H8.AG2**.	
Square(0,135)	H8.AG3SQ.	
Guide (Std.open)		
Round(0)	H9.AG1	
Shape(0,90)	H9.AG2	
Square(0,135)	H9.AG3	
Punch head ass' y		
Punch head ass'y	H8.AH9	

NOTE

- Interchage with popular tooling
  Set ass'y include punch ass'y,die
- Punch ass'y: complete ass'y of punch
  to install in upper turret

E 80 B Station(1 1/4") Round/Shape (12.71~31.7mm)

Description	Part Code	Price
Punch ass'y		
Round	H8.BA1RO.	
Square(0,135)	H8.BA3SQ.	
Shape(0,90)	H8.BA2**.	
Other(0,90)	H8.BA2**.	
Punch		
Round(no pin)	H8.BP1RO.	
Shape(pin)	H8.BP2**.	
Other(pin)	H8.BP2**.	
Stripper		
Round	H8.BS1RO.	
Shape	H8.BS1**.	
Other	H8.BS1**.	
Die		
Round(no pin)	HT.BD1RO.	
Shape(pin)	HT.BD2**.	
other(pin)	HT.BD2**.	
Guide		
Round(0)	H8.BG1	
Shape(0,90)	H8.BG2	
Square(0,135)	H8.BG3	
Punch head ass' y		
Punch head ass'y	H8.BH9	

NOTE

- Interchage with popular tooling
  Set ass'y include punch ass'y,die
- Punch ass'y: complete ass'y of punch
  to install in upper turret

MULTI-TOOL

For FINN-POWER

Product	FIN-8-24mm		FIN-10-16mm		FIN-24-8mm	
	Code	Price	Code	Price	Code	Price
Punch insert						
Round	HF.8P1		HF.10P1		HF.24P1	
Shape	HF.8P1		HF.10P1		HF.24P1	
Stripper						
Round (No pin)	HF.8S1		HF.10S1		HF.24S1	
Shape (Pin)	HF.8S2		HF.10S2		HF.24S2	
Square (Pin)	HF.8S3		HF.10S3			
Pin	HF.10D9		HF.10D9		HF.24D9	
Die						
Round (No pin)	HF.8D1		HF.10D1		HF.24D1	
Shape (Pin)	HF.8D2		HF.10D2		HF.24D2	
Square (Pin)	HF.8D3		HF.10D3			
Pin	HF.8D9		HF.10D9		HF.24D9	

Product	WT-8		WT-3		EUR-6		STR-8		B0S-6	
	Code	Price	Code	Price	Code	Price	Code	Price	Code	Price
Punch insert										
Round	HW.8P1		H9.BP1		HE.6P1		HS.8P1		HB.6P1	
Square	HW.8P3									
Shape	HW.8P2		H9.BP2		HE.6P2		HS.8P2		HB.6P2	
Pin			HT.T-3B		HT.T-2B		HS.8P9		HB.6P9	
Stripper										
Round	HW.8S1		HW.3S1		HE.6S1					
Shape	HW.8S1		HW.3S1		HE.6S1					
Die										
Round (No pin)	HW.8D1		HW.3D1		HF.8D1		HS.8D1		HB.6D1	
Shape (Pin)	HW.8D2		HW.3D2		HF.8D2		HS.8D2		HB.6D1	
Sqaure (Pin)					HF.8D3					
Pin	HT.AD9		HT.AD9		HF.8D9		HS.8D9			

NOTE

- WT -8、WT -3 FOR WILSON MULTI-TOOL
- EUR-6: FOR EUROMAC
- STR-8: FOR STRIPPIT

SLITTING TOOL

Description	D Station		E Station		Remark
	Code	Price	Code	Price	(mm)
Blade	HI.DT1RE		HI.ET1RE		Width 16
Holder	HI.DT9		HI.ET9		
Holder(ABS)	HI.DT8		HI.ET8		
Blade	HI.DM1RE		HI.EM1RE		Width 18
Holder	HI.DM9				

Description	C Station		D Station		E Station		Remark
	Code	Price	Code	Price	Code	Price	(mm)
Blade	HI.CW1RE		HI.DW1RE		HI.EW1RE		Width 19.05
Holder	HI.CW9						
Blade	HI.CR1RE						Width 15

M90 WLS (Lubrication)

A Station	Code	Price
Punch		
Round(no pin)	HG.AP1RO.	
Shape(pin)	HG.AP2**.	
other(pin)	HG.AP2**.	
Guide		
Round(0)	HG.AG1	
Shape(0,90)	HG.AG2	
Shape(0,135)	HG.AG3	

B Station	Code	Price
Punch		
Round(no pin)	HG.BP1RO.	
Shape(pin)	HG.BP2**.	
other(pin)	HG.BP2**.	
Guide		
Round(0)	HG.BG1	
Shape(0,90)	HG.BG2	
Shape(0,135)	HG.BG3	

ULTRA TOOLING

A Station	Code	Price
Punch		
Round	HU.AP1RO	
Shape	HU.AP1**.	
Stripper		
Round	HU.AS1RO	
Shape	HU.AS1**.	

B Station	Code	Price
Punch		
Round	HU.BP1RO	
Shape	HU.BP1**.	
Stripper		
Round	HU.BS1RO	
Shape	HU.BS1**.	

C Station	Code	Price
Stripper		
Round	HU.CS1RO	
Shape	HU.CS1**.	

D Station	Code	Price
Stripper		
Round	HU.DS1RO	
Shape	HU.DS1**.	

CENTERPOINT

Machine:_____
Material:_____ T:_____

1. Forbid punching empty
2. Control point depth with punch ass'y height
3. Two typess: Form up and Form down
4. Angle:90 degree,Max.thickness:6.0mm
5. Please fill in the above form

HALF SHEAR

FORMUP

Machine:_____ A: _____
Material:_____ B: _____ T: _____

1. Max.B size :0.6 X thickness.
2. Two typess: Form up and Form down.
3. Give tool enough time to strip.
4. Please fill in the above form

EXTRUSION

FORMUP

Machine:_____ A:_____
Material:_____ B:_____
H:_____ T:_____

1. Need prepunch
2. Give tool enough time to strip
3. Replaceable insert design on extrusion
4. Max.thickness: 2mm for mild steel or AL.
   1mm for stainless.
5. Forming height Max.H: over 3 x thread pitch
6. Two typess: Form up and Form down.
7. Please fill in the above form.

● Prepunch size (Mild steel,Aluminum)

Unit: mm

Thickness		0.8		1.0		1.2		1.6 (AL .Ƃ)		2.0		2.3	
	⌀A	PP	H	PP	H	PP	H	PP	H	PP	H	PP	H
M2.6	2.21	1.3	1.5	1.3	1.8	1.3	2.0	1.6	2.2				
M3	2.57	1.3	1.7	1.3	2.0	1.6	2.0	1.6	2.4				
M4	3.40	2.0	1.8	2.0	2.0	2.0	2.2	2.3	2.5	2.3	2.5	2.5	3.2
M5	4.30			2.3	2.3	2.3	2.5	2.8	2.8	2.8	3.2	3.0	3.5
M6	5.10					3.0	2.6	3.0	3.1	3.8	3.2	3.8	3.4

EXTRUSION

FORMUP

	A:_____	
Machine:_____	B:_____	
Material:_____	H:_____	T:_____

1. Need prepunch
2. Give tool enough time to strip
3. Max.thickness: 2mm for mild steel or AL
   1mm for stainless
4. Max.H≥2T
5. Two typess: Form up and Form down
6. Please fill in above form

EMBOSS AND EXTRUSION

FORMUP

	A:_____	D:_____
Machine:_____	B:_____	H:_____
Material:_____	C:_____	T:_____

1. Complete emboss and extrusion on one hit.
2. Give tool enough time to strip
3. Only form up.
4. Please fill in the above form.

EMBOSS

FORMUP

Machine:_____	A: _____	
	B: _____	H:_____
Material:_____	C: _____	T: _____

1. Escape clamp or punching hole
2. Option:round or shape
3. Give tool enough time to strip
4. Two typess: Form up and Form down
5. Please fill in the above form

BRIDGE

FORMUP

	A: _____	D: _____
Machine:_____	B: _____	H: _____
Material:_____	C: _____	T: _____

1. Design single or double bridge,
2. Give tool enough time to strip
3. Two types:formdown and formup
4. Bridge width (C)≥2XT and ≥1.8mm
5. Please fill in the above form

LANCE AND FORM

FORMUP

Machine:_____	A: _____	D: _____	
Material:_____	B: _____	R: _____	
	C: _____	H: _____	T: _____

FORMUP

	A: _____		
Machine:_____	B: _____	D: _____	
Material:_____	C: _____	R: _____	T: _____

1. Tooling is made for specific thickness
2. Give tool enough time to strip
3. Two types:only form up

LOCATOR

FORMUP

1. No scrab on opposite side of sheetmetal
2. Use thinner thickness if shear button cannot make
3. Forbid punching empty
4. Min.spaces between centers of locators:15mm

CLOSE LOUVER

	A: ____	D: ____
Machine: ____	B: ____	H: ____
Material: ____	C: ____	T: ____

	STOCKED SIZE			
A SIZE	50mm	60mm	80mm	80mm
B SIZE	10mm	10mm	10mm	12mm
H SIZE	5mm	5mm	6mm	6mm

1. Tooling is made for specific thickness
2. Consider sheetmetal move direction and give tool enough time to strip
3. Adjust length without shim,replaceable insert
4. Only form up

OPEN LOUVER

	A: ____	D: ____	
Machine: ____	B: ____	E: ____	
Material: ____	C: ____	T: ____	R: ____

1. Tooling is made for specific thickness
2. Consider sheetmetal move direction and give tool enough time to strip
3. Adjust length wiithout shim,replaceable insert
4. Only form up

CARD GUIDE

FORMUP

Machine:_____	A: _____	D: _____
Material:_____	B: _____	H: _____
	C: _____	T: _____

1. Tooling is made for specific thickness
2. Give tool enough time to strip
3. Adjust length wiithout shim,replaceable insert
4. Only form up
5. Form height H≤2T

HINGLE

FORMUP

	A: _____	
Machine:_____	B: _____	D: _____
Material:_____	C: _____	T: _____

1. Tooling is made for specific thickness
2. Need prepunch
3. First for curling,second for forming
4. Only form up
5. T≤2T (Mild steel), ≤1.5mm (Stainless steel)

RIB TOOL

FORMUP

Machine: _____	A: _____	H: _____
Material: _____	B: _____	T: _____

1. Keep proper away from holes,clamp,material edge
2. Two typess: Specific length & nibbling
   Form up and Form down
3. Increment of ribbbling rib should be 0.5~2.0mm
4. For Max.thickness: 2.7mm mild steel or AL,
   2.3mm Stainless steel

KNOCKOUT

FORMUP

Machine: _____	A: _____	
Material: _____	B: _____	T: _____

1. Forbid punch empty
2. Control shear depth with tool height
3. Design singl EKO,double EKO,triple EKO
4. Give tool enough time to strip
5. Two types:form down and form up

THREAD FORM

FORMDOWN

	A: _____	
Machine: _____	B: _____	D: _____
Material: _____	C: _____	T: _____

1. Two types:form down and form up
2. Sheetmetal range:0.5mm~1.2mm
3. Please fill the above form
4. Consult our sales desk if not clear

THREAD LOOP

	A: _____	
Machine: _____	B: _____	R: _____
Material: _____	C: _____	T: _____

1. Angle "B" standard 90°
2. Please fill in the above form
3. Consult our sales desk if not clear

STAMPING

FORMUP

Machine:_____	A: _____	D: _____	
	B: _____	E: _____	G(width): _____
Material:_____	C: _____	F: _____	H(depth):_____

1. Forbid punch empty
2. Form up or form down.
3. Make other symbol besides ground symbol.
4. Dash tool can make various symbol in auto index station.
5. Please fill in the above form.

MULTI-SCRIBE

FORMDOWN

1. Forbid punch empty
2. Control special program in machine
3. Change spring for different sheetmetal
4. in auto index station
5. Only form down

COUNTERSINK

FORMDOWN

Machine:_____	A: _____ B: _____	D: _____
Material:_____	C: _____	T: _____

FORMDOWN

Machine:_____	A: _____ B: _____	D:_____
Material:_____	C: _____	T: _____

1. Need prepunch
2. Change hole size to get different depth
3. Two types:form down and form up
4. Min.thickness: T≥1.0mm

CLUSTER

Machine:_____	A: _____ B: _____	
Material:_____	C: _____	T: _____

1. Space of holes must be over 3.2mm or 2 XT
2. Please fill in the above form
3. Consult our sales desk if not clear

ADPTOR

	Description	Code	Price
B-A	Set ass'y	J.H-BA1	
	Punch ass'y	J.H-BA3	
C-A	Set ass'y	J.H-CA1	
	Punch ass'y	J.H-CA3	
D-A	Set ass'y	J.H-DA1	
	Punch ass'y	J.H-DA3	
C-B	Set ass'y	J.H-CB1	
	Punch ass'y	J.H-CB3	
D-B	Set ass'y	J.H-DB1	
	Punch ass'y	J.H-DB3	
D-C	Set ass'y	J.H-DC1	
	Punch ass'y		

Adjustment cap	
Code	Price
P.TZD	

ALIGNMENT TOOL

Description		
	Code	Price
Set ass'y	J.DW-HA1	
Punch ass'y	J.DW-HA2	
Die	J.DW-HA3	
T-handle	J.DW-HA4	

Description	B Station	
	Code	Price
Set ass'y	J.DW-HB1	
Punch ass'y	J.DW-HB2	
Die	J.DW-HB3	
T-handle	J.DW-HB4	

Description	C Station	
	Code	Price
Set ass'y	J.DW-HC1	
Punch ass'y	J.DW-HC2	
Die	J.DW-HC3	
T-handle	J.DW-HB4	

Description	D Station	
	Code	Price
Set ass'y	J.DW-HD1	
Punch ass'y	J.DW-HD2	
Die	J.DW-HD3	
T-handle	J.DW-HB4	

BALL RIDING DIE/BRUSH DIE

Description	BALL RIDING DIE	
A Station	Code	Price
Ball riding die	J.GZ-HA1	
Die holder	J.GZ-HA2	
Ball ass' y	J.GZ-HA3	
Spring	P.YH-GZHA	
Spacer	J.GZ-HA4	
Retaining ring	P.DQ-GZHA	
	Code	Price
Ball riding die	J.GZ-HB1	
Die holder	J.GZ-HB2	
Ball ass' y	J.GZ-HB3	
Spring	P.YH-GZHB	
Spacer	J.GZ-HB4	
Retaining ring	P.DQ-GZHB	
C Station	Code	Price
Ball riding die	J.GZ-HC1	
Die holder	J.GZ-HC2	
Ball ass' y	J.GZ-HA3	
Spring	P.YH-GZHA	
Spacer	J.GZ-HA4	
Retaining ring	P.DQ-GZHA	
D Station	Code	Price
Ball riding die	J.GZ-HD1	
Die holder	J.GZ-HD2	
Ball ass' y	J.GZ-HA3	
Spring	P.YH-GZHA	
Spacer	J.GZ-HA4	
Retaining ring	P.DQ-GZHA	

A Station	Brush die	
	Code	Price
Brush die	J.MS-HA1	
Die holder	J.MS-HA2	
Brush	P.MS8	
B Station	Code	Price
Brush die	J.MS-HB1	
Die holder	J.MS-HB2	
Brush	P.MS13	
C Station	Code	Price
Brush die	J.MS-HC1	
Die holder	J.MS-HC2	
Brush	P.MS13	
D Station	Code	Price
Brush die	J.MS-HD1	
Die holder	J.MS-HD2	
Brush	P.MS13	

Ejector

Description	ϕ3mm		ϕ6mm		ϕ10mm	
	Code	Price	Code	Price	Code	Price
Ejector	P.JL03		P.JL06		P.JL10	
Package	P.JL0315		P.JL0610		P.JL1005	

SHAPE CLASSES

Code: RO	Code: RE	Code: OB	Code: SQ	Code: SD	Code: DD
Name: Round	Name: Rectangle	Name: Oblong	Name: Square	Name: Single D	Name: Double D
size: A	size: B/A	size: B/A	size: A	size: B/A	size: B/A
Code: QD	Code: QR	Code: ET	Code: HX	Code: OT	Code: A0
Name: Quad D	Name: Quad R	Name: Equi.triangle	Name: Hexagon	Name: Octagon	Name: Diamond
size: B/A	size: B/A/A	size: A	size: A	size: A	size: B/A
Code: A1	Code: A2	Code: A3	Code: A4	Code: A5	Code: A6
Name: Diamond	Name: Diamond	Name: Diamond	Name: Cable connector	Name: Eix edge	Name: Eight edge
size: B/A/R	size: B/A/C	size: B/A/C/R	size: B/A/C/R	size: B/A/C	size: C/B/A/D
Code: A7	Code: A8	Code: A9	Code: B0	Code: B1	Code: B2
Name: Triangle	Name: Tri.with R	Name: Right Tri.	Name: Double R	Name: Tri-R	Name: Quad-R
size: B/A	size: A/B/R	size: B/A	size: B/A/C/D/R	size: B/A/C/D/E	size: B/A/D/E/F/G
Code: B3	Code: B4	Code: B5	Code: C0	Code: C1	Code: C2
Name: Ellipse	Name: Football	Name: Keyhole	Name: Keyway	Name: Double keyway	Name: Quad keyway
size: B/A/C/R	size: A/B	size: A/B/C	size: C/B/A	size: C/B/A	size: C/B/A

■Standard shape:RE,OB,SQ,SD,DD,QD,EX,HX,OT.

SHAPE CLASSES

Code：C3	Code：C4	Code：C5	Code：C6	Code：C7	Code：D0
Name：keyway	Name：Double-keyway	Name：Quad-keyway	Name：Keyway	Name：Micro-joint	Name：Triangle with R
size：C/B/A	size：C/B/A	size：C/B/A	size：C/B/A/D	Size：B/A	size：A/B/C/R
Code：D1	Code：D2	Code：D3	Code：D4	Code：D5	Code：E0
Name：One way radius	Name：Four way radius	Name:Four way	Name：H with radius	Name：H shape	Name：Four Radius
size：B/A/R	size：A/R	size：A/B/C/D/E/F	size：D/C/B/A	size：D/C/A/B	size：A/B/C/D/E
Code：E1	Code：E2	Code：E3	Code：E4	Code：E5	Code：E6
Name：Banana	Name：Banana	Name：Connector	Name：Connector	Name：Connector	Name：Keyhole
size：A/C/D/R	size：B/C/A	size：D/B/C/A/R	size：D/B/A/C/F/R	size：D/B/C/A/R	size：C/A/B
Code：E7	Code：E8	Code：F0	Code：F1	Code：F2	Code：F3
Name：Keyhole	Name：Keyhole	Name：Keyhole	Name：Keyhole	Name：Keyhole	Name：Keyhole
size：C/A/B	size：C/A/B	size：C/A/B	size：C/A/B	size：C/A/B	size：B/C/A
Code：F4	Code：F5	Code：F6	Code：F7	Code：F8	
Name：T shape	Name：T shape	Name：Cross	Name：Cross	Name：Cross	
size：D/C/B/A	size：D/C/A/B	size：C/B/D/A	size：B/A/D	size：B/A/C/D/R	