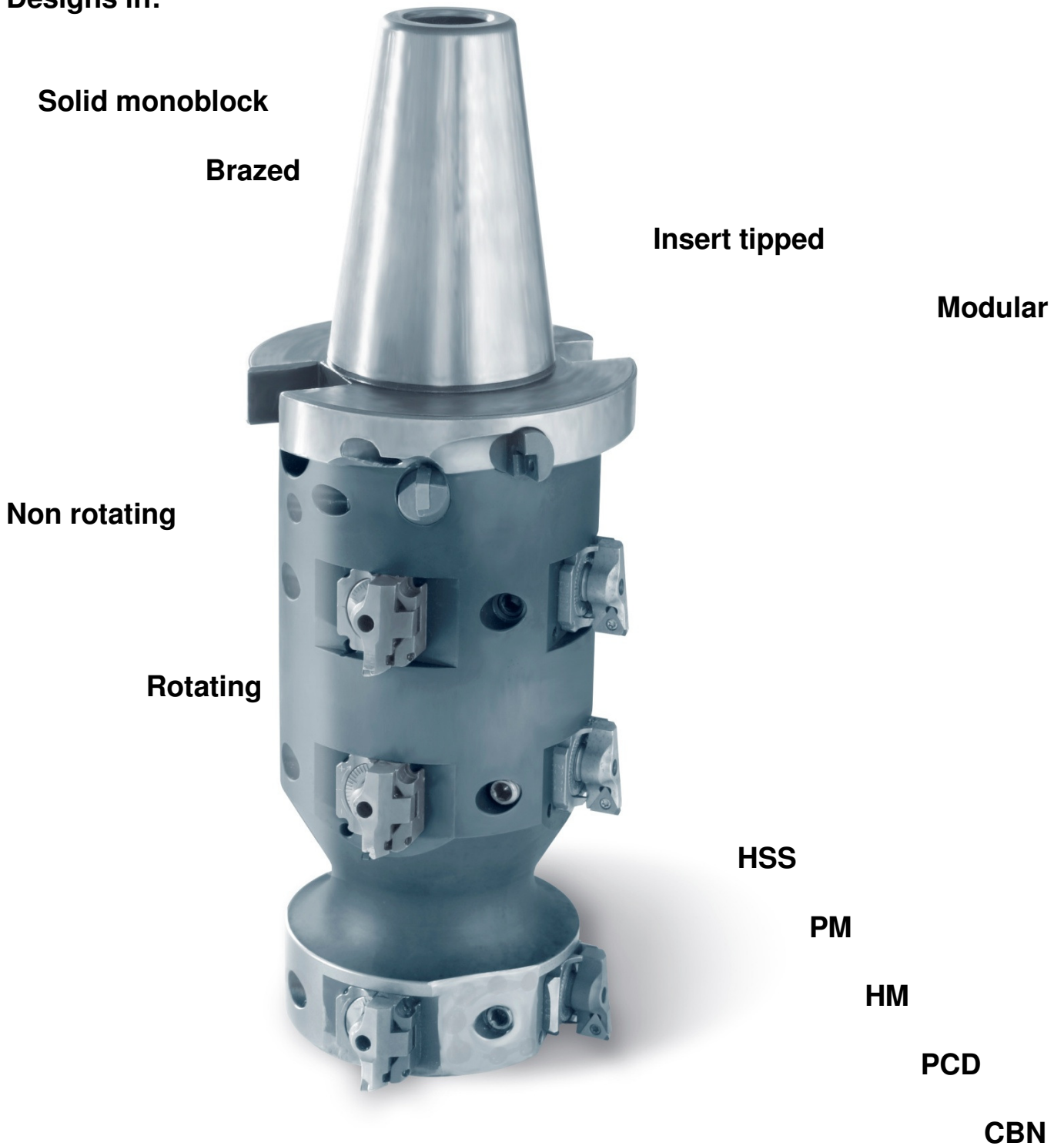




FOLDER

TAILER MADE TOOLING FORMATS

Designs in:





Customer and general inquiry **DATA SHEET**

Customer :
Contact person :
Street / number :
Postal code / Town :
Country :

Date :
Phone :
Fax :
E-mail :

Workpiece :
Drawing / drawing number :
Workpiece material :
Workpiece conditions :
Required surface finish :
Hardness / tensile strength :

Machining method :
Necessary cutting parameters :
Coolant medium / pressure :
Type of coolant supply :

Required tool design :
Sketch / drawing / description :
Right / left hand :
Rotating / non rotating :
Shank style / form / size :
Preferable cutting material :
Amount of tools :
Amount of inserts :

Remarks :



Machine and fixture DATA SHEET

Brand :
Single type :
FMS :
Transferline :
Automatic workpiece loading :
Other features :

Turret junction / size :
Spindel junction/ size :
Shank and holder junction / size :
Other junction / size :
Automatic tool change system :

Spindel power :
Spindel torque :
Spindel revolutions range :
Sub spindel features :
Driven tooling features :
Other specifications :

Number of controlled axis :
Number of simultaneous axis :
X, Z, Y - axis power / torque :
A, B, C - axis power / torque :
Other mechatronics :

Plain fixture :
Multiple plain fixture :
Modular fixture :
Interference clamping device :
Interference workpiece shape :
Automatic pallet change sytem :

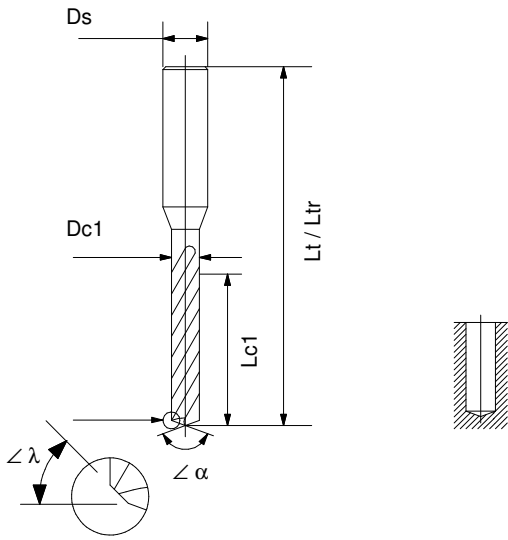
Remarks :





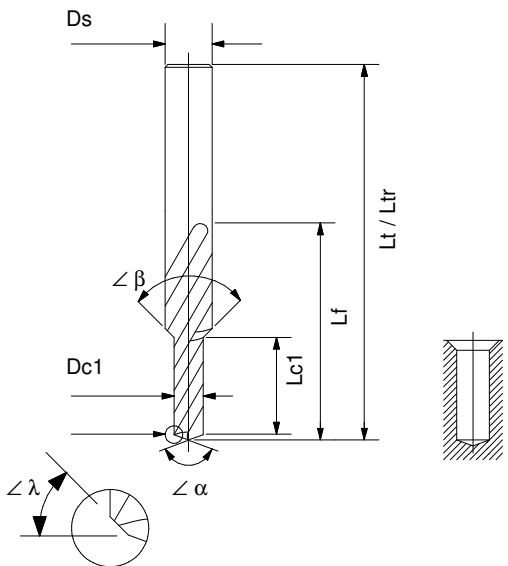
Solid drilling

DATA SHEET



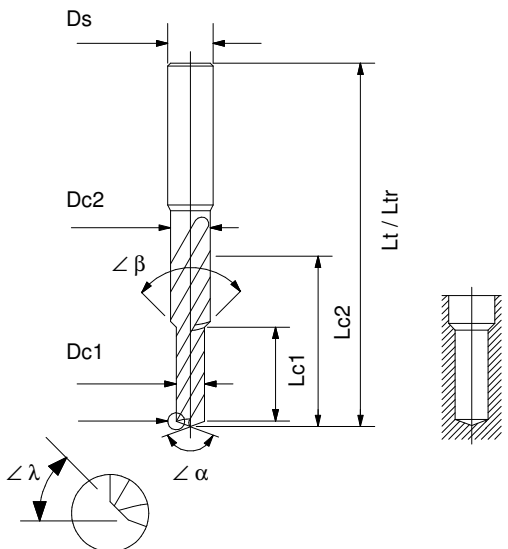
Ds	:
Dc1	:
Lt / Ltr	:
Lc1	:
$\angle \alpha$:
$\angle \lambda$:

Right / left hand tool	:
Shank type	:
No. of chip flutes	:
No. of circular guide lands	:
Helix angle	:
No. of coolant holes	:
Cutting material	:
Coating type	:
Pre / post treatment	:
Regrinding extension on Ltr	:
Other informations	:



Ds	:
Dc1	:
Lt / ltr	:
Lc1	:
Lf	:
$\angle \alpha$:
$\angle \beta$:
$\angle \lambda$:

Right / left hand tool	:
Shank type	:
No. of chip flutes	:
No. of circular guide lands	:
Helix angle	:
No. of coolant holes	:
Cutting material	:
Coating type	:
Pre / post treatment	:
Regrinding extension on Ltr	:
Other informations	:



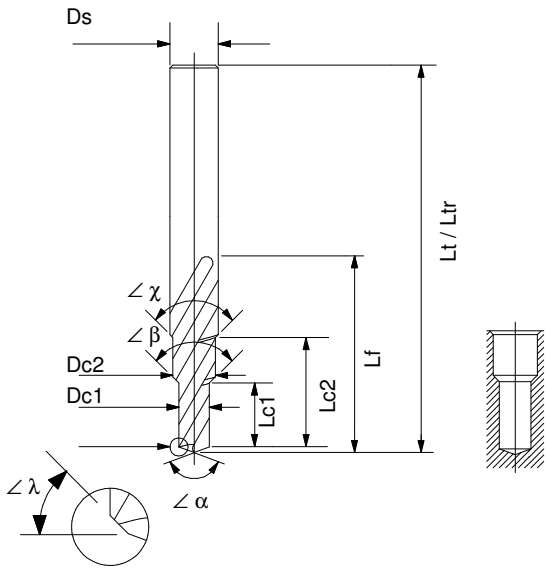
Ds	:
Dc1	:
Dc2	:
Lt / Ltr	:
Lc1	:
Lc2	:
$\angle \alpha$:
$\angle \beta$:
$\angle \lambda$:

Right / left hand tool	:
Shank type	:
No. of chip flutes	:
No. of circular guide lands	:
Helix angle	:
No. of coolant holes	:
Cutting material	:
Coating type	:
Pre / post treatment	:
Regrinding extension on Ltr	:
Other informations	:



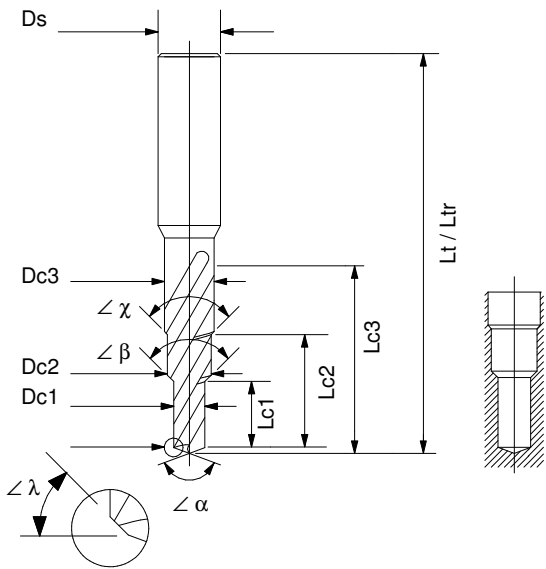
Solid drilling

DATA SHEET



Ds	:
Dc1	:
Dc2	:
Lt / Ltr	:
Lf	:
Lc1	:
Lc2	:
$\angle \alpha$:
$\angle \beta$:
$\angle \chi$:
$\angle \lambda$:

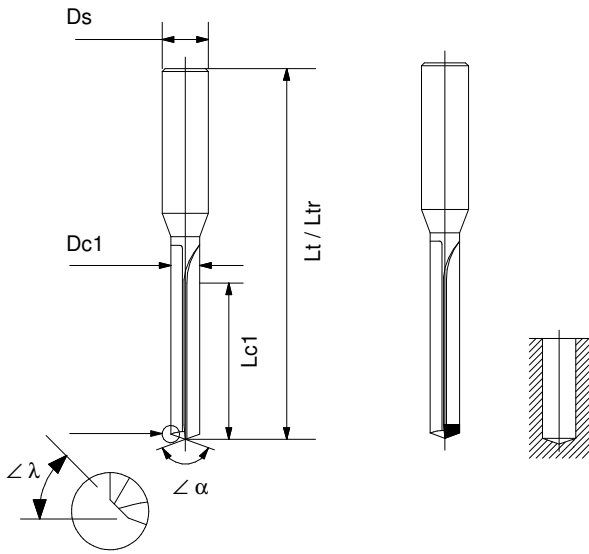
Right / left hand tool	:
Shank type	:
No. of chip flutes	:
No. of circular guide lands	:
Helix angle	:
No. of coolant holes	:
Cutting material	:
Coating type	:
Pre / post treatment	:
Regrinding extension on Ltr	:
Other informations	:



Ds	:
Dc1	:
Dc2	:
Dc3	:
Lt / Ltr	:
Lc1	:
Lc2	:
Lc3	:
$\angle \alpha$:
$\angle \beta$:
$\angle \chi$:
$\angle \lambda$:

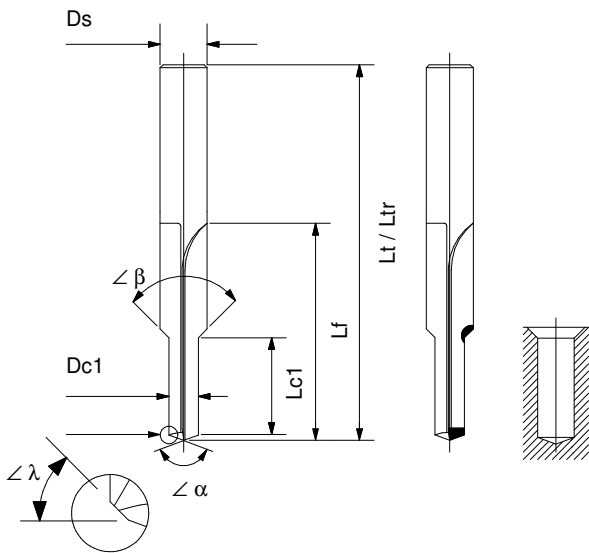
Right / left hand tool	:
Shank type	:
No. of chip flutes	:
No. of circular guide lands	:
Helix angle	:
No. of coolant holes	:
Cutting material	:
Coating type	:
Pre / post treatment	:
Regrinding extension on Ltr	:
Other informations	:





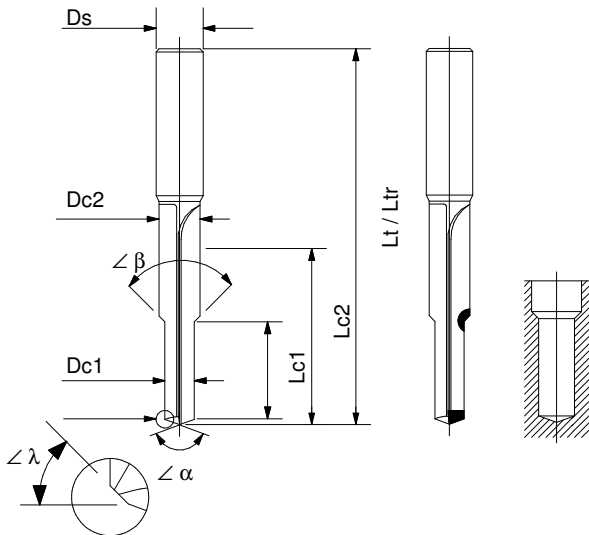
Ds	:
Dc1	:
Lt / Ltr	:
Lc1	:
$\angle \alpha$:
$\angle \lambda$:

Right / left hand tool	:
Shank type	:
No. of circular guide lands	:
With / without coolant holes	:
Cutting material	:
Coating type	:
Carrier material	:
Pre / post treatment	:
Regrinding extension on Ltr	:
Other informations	:



Ds	:
Dc1	:
Lt / Ltr	:
Lc1	:
Lf	:
$\angle \alpha$:
$\angle \beta$:
$\angle \lambda$:

Right / left hand tool	:
Shank type	:
No. of circular guide lands	:
With / without coolant holes	:
Cutting material	:
Coating type	:
Carrier material	:
Pre / post treatment	:
Regrinding extension on Ltr	:
Other informations	:



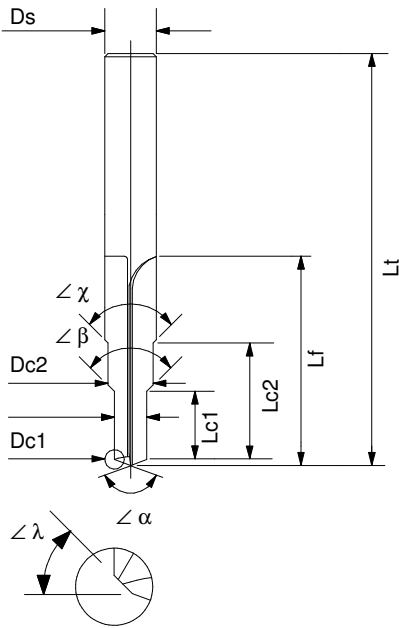
Ds	:
Dc1	:
Dc2	:
Lt / Ltr	:
Lc1	:
Lc2	:
$\angle \alpha$:
$\angle \beta$:
$\angle \lambda$:

Right / left hand tool	:
Shank type	:
No. of circular guide lands	:
With / without coolant holes	:
Cutting material	:
Coating type	:
Carrier material	:
Pre / post treatment	:
Regrinding extension on Ltr	:
Other informations	:



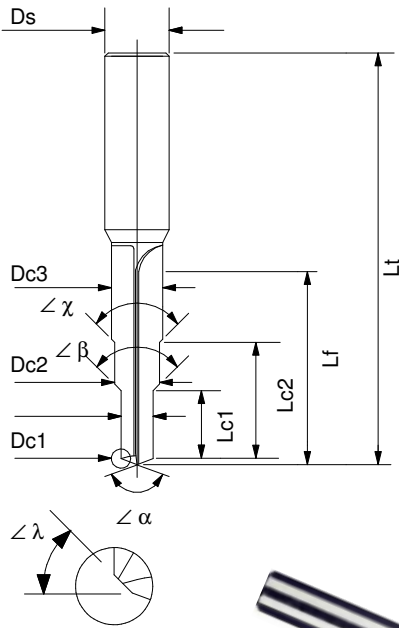
Solid / brazed [straight flute] drilling

DATA SHEET



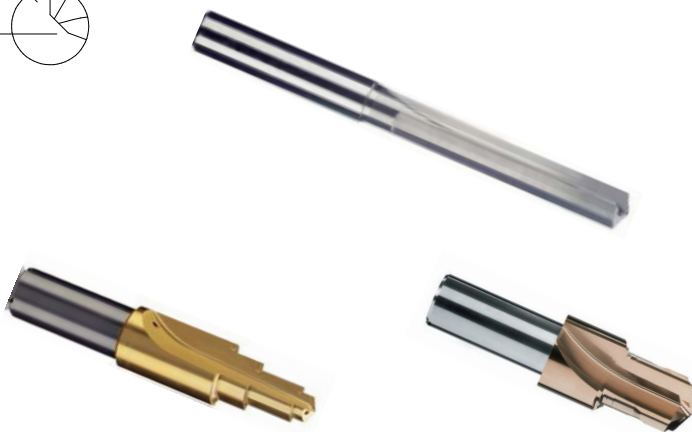
D_s	:	
D_{c1}	:	
D_{c2}	:	
L_t / L_{tr}	:	
L_f	:	
L_{c1}	:	
L_{c2}	:	
$\angle \alpha$:	
$\angle \beta$:	
$\angle \gamma$:	
$\angle \lambda$:	

Right / left hand tool	:	
Shank type	:	
No. of circular guide lands	:	
With / without coolant holes	:	
Cutting material	:	
Coating type	:	
Carrier material	:	
Pre / post treatment	:	
Regrinding extension on Ltr	:	
Other informations	:	



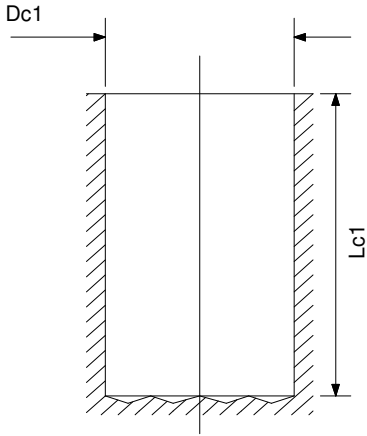
D_s	:	
D_{c1}	:	
D_{c2}	:	
D_{c3}	:	
L_t / L_{tr}	:	
L_f	:	
L_{c1}	:	
L_{c2}	:	
L_{c3}	:	
$\angle \alpha$:	
$\angle \beta$:	
$\angle \gamma$:	
$\angle \lambda$:	

Right / left hand tool	:	
Shank type	:	
No. of circular guide lands	:	
With / without coolant holes	:	
Cutting material	:	
Coating type	:	
Carrier material	:	
Pre / post treatment	:	
Regrinding extension on Ltr	:	
Other informations	:	

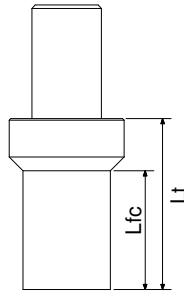




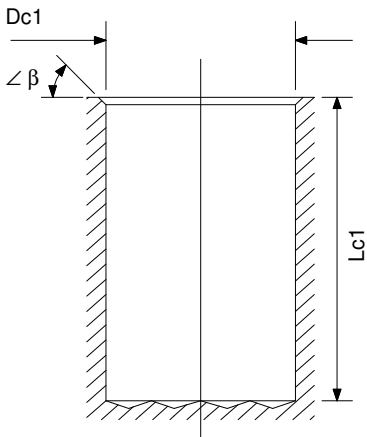
Insert tipped drilling DATA SHEET



Dc1	:	
Lc1	:	
Lt	:	
Lfc	:	

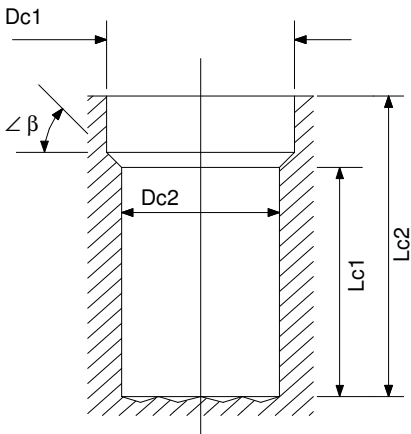


Right / left hand tool	:	
Shank type / size	:	
Modular junction type / size	:	
No. of effective teeth	:	
Preferred insert shape	:	-
Cutting material inserts	:	
Coating type	:	
Blind / through hole	:	
Bottom shape	:	
Max. overall length [Lt]	:	
Total free cutting length [Lfc]	:	
Coolant medium	:	
Other informations	:	



Dc1	:	
Lc1	:	
$\angle \beta$:	
Lt	:	
Lfc	:	

Right / left hand tool	:	
Shank type / size	:	
Modular junction type / size	:	
No. of effective teeth	:	
Preferred insert shape	:	-
Cutting material inserts	:	
Coating type	:	
Blind / through hole	:	
Bottom shape	:	
Max. overall length [Lt]	:	
Total free cutting length [Lfc]	:	
Coolant medium	:	
Other informations	:	

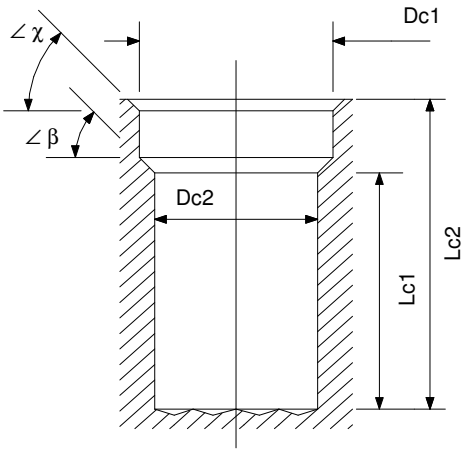


Dc1	:	
Dc2	:	
Lc1	:	
Lc2	:	
$\angle \beta$:	
Lt	:	
Lfc	:	

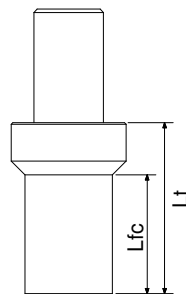
Right / left hand tool	:	
Shank type / size	:	
Modular junction type / size	:	
No. of effective teeth	:	
Preferred insert shape	:	-
Cutting material inserts	:	
Coating type	:	
Blind / through hole	:	
Bottom shape	:	
Max. overall length [Lt]	:	
Total free cutting length [Lfc]	:	
Coolant medium	:	
Other informations	:	



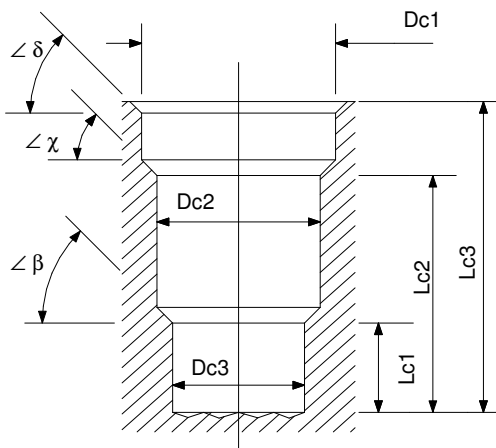
Insert tipped drilling DATA SHEET



Dc1	:	
Dc2	:	
Lc1	:	
Lc2	:	
$\angle \beta$:	
$\angle \chi$:	
Lt	:	
Lfc	:	



Right / left hand tool	:	
Shank type / size	:	
Modular junction type / size	:	
No. of effective teeth	:	
Preferred insert shape	:	
-	:	
Cutting material inserts	:	
Coating type	:	
Blind / through hole	:	
Bottom shape	:	
Max. overall length [Lt]	:	
Total free cutting length [Lfc]	:	
Coolant medium	:	
Other informations	:	



Dc1	:	
Dc2	:	
Dc3	:	
Lc1	:	
Lc2	:	
Lc3	:	
$\angle \beta$:	
$\angle \chi$:	
$\angle \delta$:	
Lt	:	
Lfc	:	

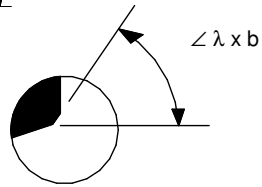
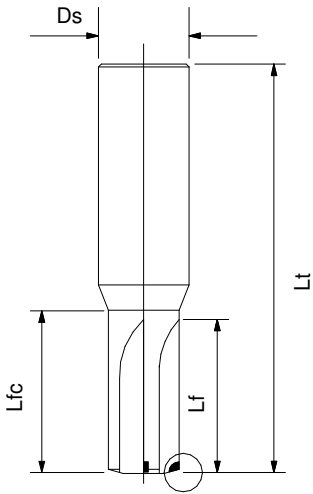
Right / left hand tool	:	
Shank type / size	:	
Modular junction type / size	:	
No. of effective teeth	:	
Preferred insert shape	:	
-	:	
Cutting material inserts	:	
Coating type	:	
Blind / through hole	:	
Bottom shape	:	
Max. overall length [Lt]	:	
Total free cutting length [Lfc]	:	
Coolant medium	:	
Other informations	:	



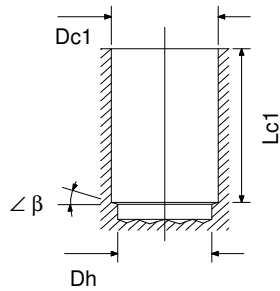


Brazed boring

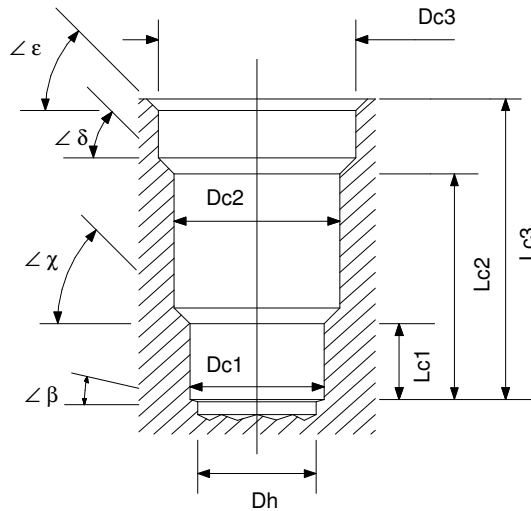
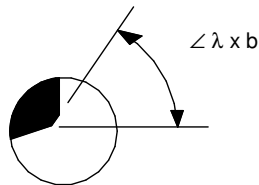
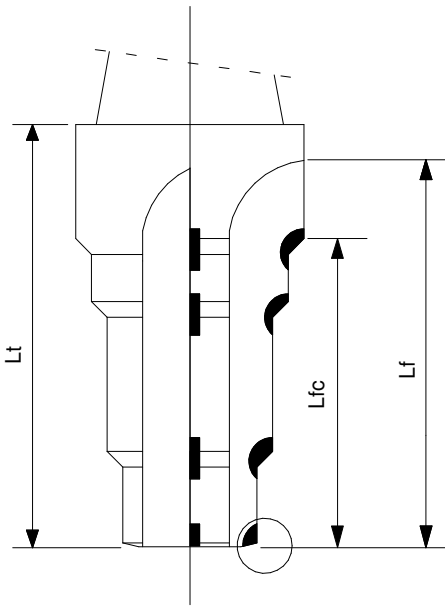
DATA SHEET



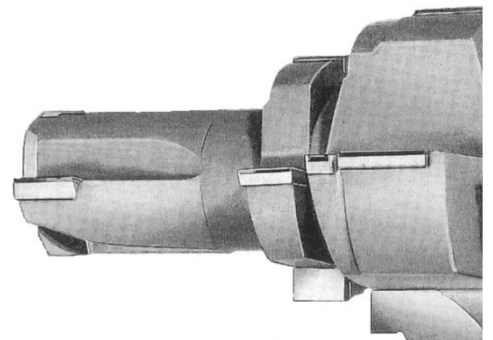
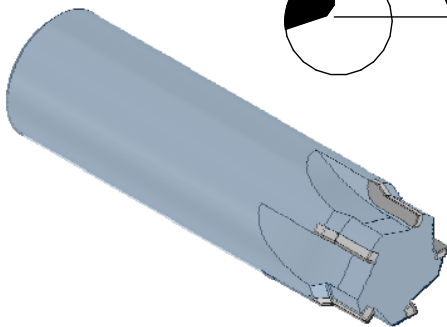
Single step	
Ds	:
Dh	:
Dc1	:
Lt	:
Lf	:
Lfc	:
Lc1	:
∠β	:
∠λ x b	:



Right / left hand tool	:
Shank type / size	:
Modular junction type / size	:
No. of effective teeth	:
No. of steps	:
Carrier material	:
Cutting material	:
Pre post treatment	:
Coating type	:
Blind / through hole	:
Stock on pre-machined hole	:
Max. overall length [Lt]	:
Total free cutting length [Lfc]	:
Coolant medium	:
Other informations	:

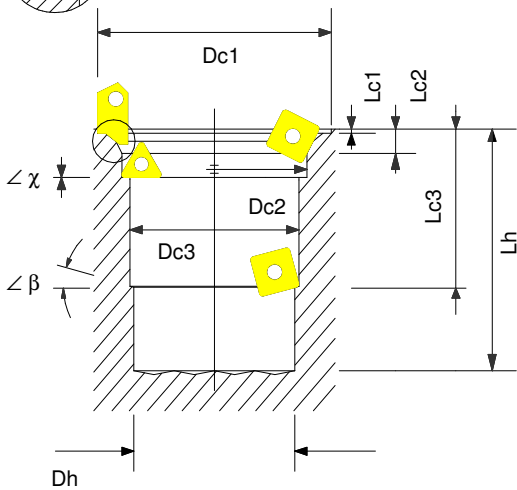
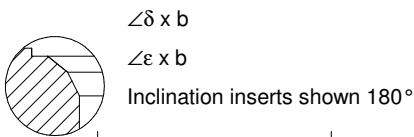
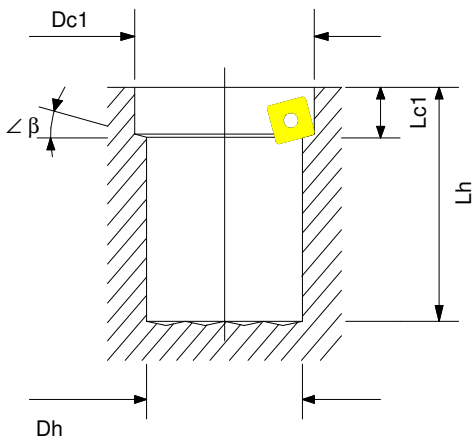
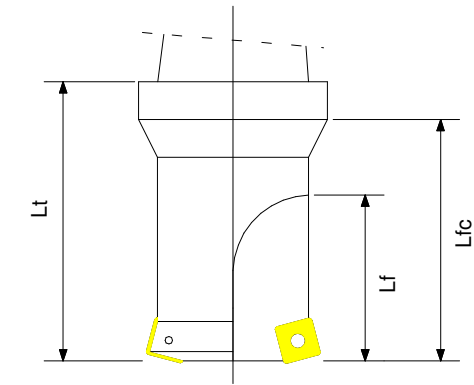


Multiple steps	
Dh	:
Dc1	:
Dc2	:
Dc3	:
Lt	:
Lf	:
Lfc	:
Lc1	:
Lc2	:
Lc3	:
∠β	:
∠χ	:
∠δ	:
∠ε	:
∠λ x b	:



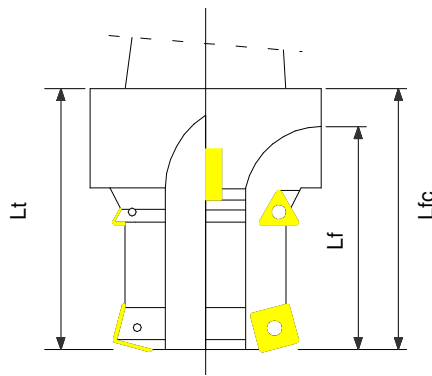
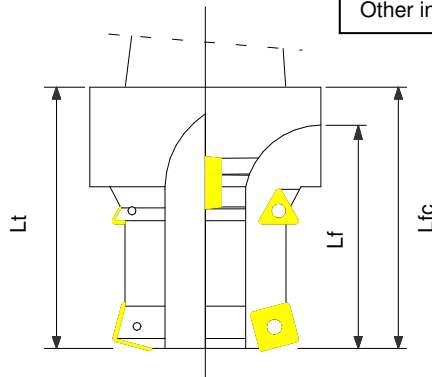


Insert tipped boring DATA SHEET

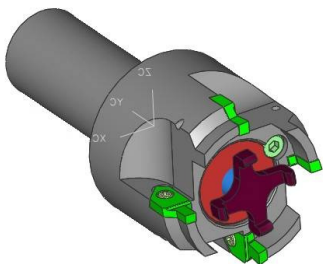


Single step	
Dh	:
Dc1	:
Lt	:
Lf	:
Lfc	:
Lh	:
Lc1	:
∠β	:

Right / left hand tool	:
Shank type / size	:
Modular junction type / size	:
No. of effective teeth	:
No. of steps	:
Insert shape standard / special	:
-	:
Cutting material	:
Coating type	:
No. adjustable pocket seats	:
Blind / through hole	:
Stock on pre-machined hole	:
Max. overall length [Lt]	:
Total free cutting length [Lfc]	:
Coolant medium	:
Other informations	:



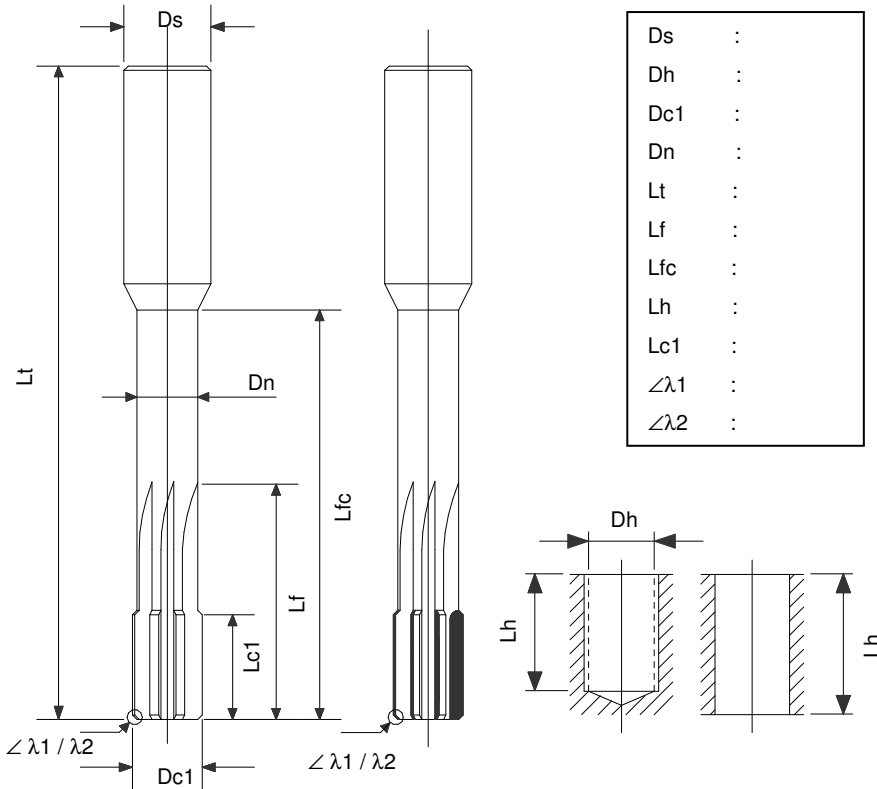
Multiple steps	
Dh	:
Dc1	:
Dc2	:
Dc3	:
Lt	:
Lf	:
Lfc	:
Lh	:
Lc1	:
Lc2	:
Lc3	:
Lc4	:
∠β	:
∠χ	:
∠δ x b	:
∠ε x b	:





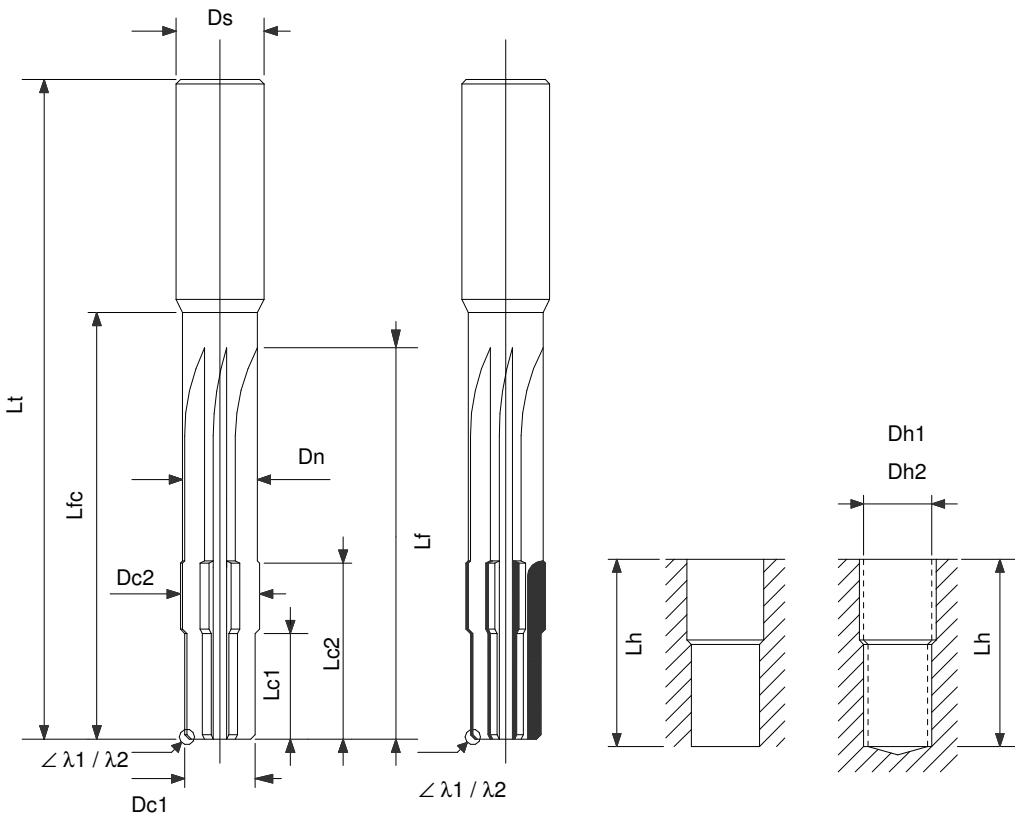
Solid / brazed reaming

DATA SHEET



Ds	:
Dh	:
Dc1	:
Dn	:
Lt	:
Lf	:
Lfc	:
Lh	:
Lc1	:
∠λ1	:
∠λ2	:

Workpiece / detail drawing	:
Left / neutral hand helix	:
Shank type / size	:
Stationary / rotating application	:
Vertical / horizontal application	:
No. of effective teeth	:
Cutting material	:
Coating type	:
Blind / through hole	:
Interrupted / smooth cut	:
Pre-machining tool	:
Stock on pre-machined hole	:
Hole tolerance workpiece	:
Max. overall length [Lt]	:
Total free cutting length [Lfc]	:
Dry / wet machining	:
Pressure coolant supply	:
Single / multiple coolant outlet	:
Coolant medium	:
Other informations	:

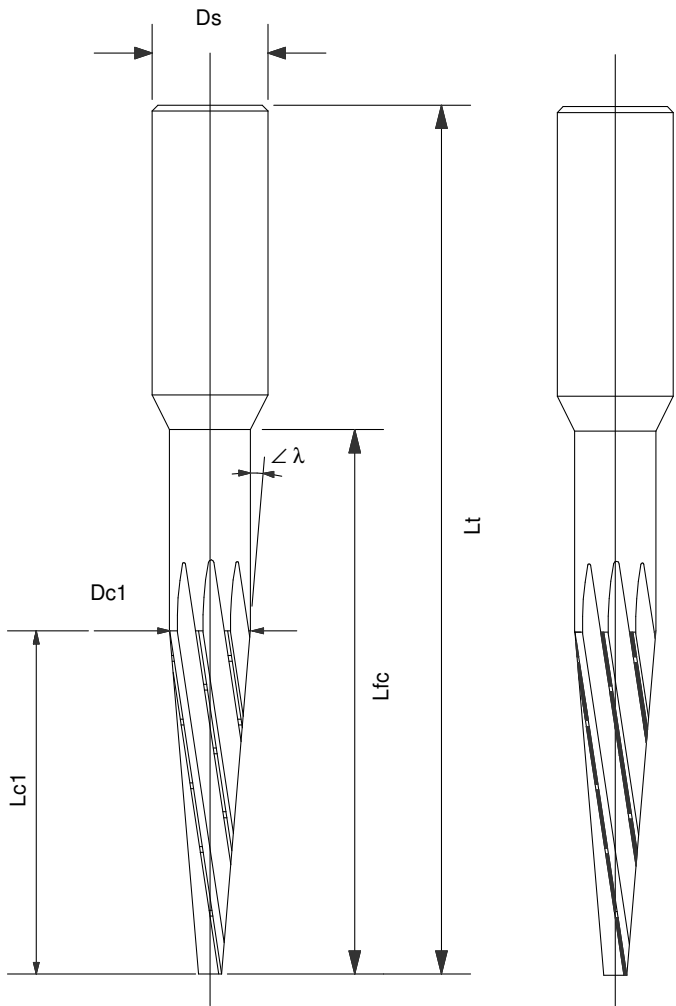


Ds	:
Dh1	:
Dh2	:
Dc1	:
Dc2	:
Dn	:
Lt	:
Lf	:
Lfc	:
Lh	:
Lc1	:
Lc2	:
∠λ1 x b	:
∠λ2 x b	:

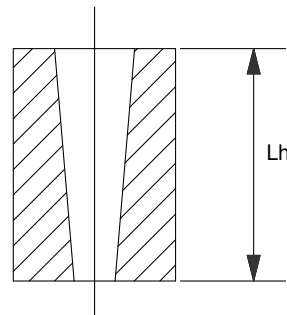


Solid / brazed reaming

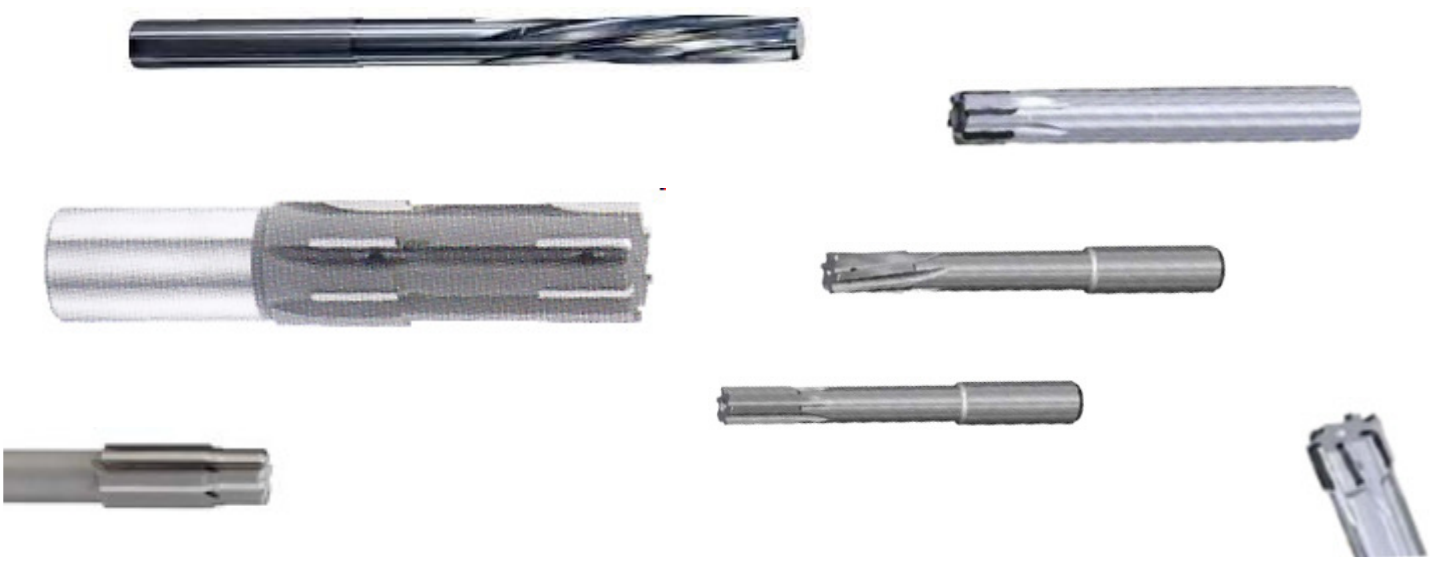
DATA SHEET



Workpiece / detail drawing	:
Left / neutral hand helix	:
Chip breaker	:
Shank type / size	:
Stationary / rotating application	:
Vertical / horizontal application	:
No. of effective teeth	:
Cutting material	:
Coating type	:
Interrupted / smooth cut	:
Pre-machining tool	:
Hole tolerance workpiece	:
Max. overall length [Lt]	:
Total free cutting length [Lfc]	:
Dry / wet machining	:
Pressure coolant supply	:
Single / multiple coolant outlet	:
Coolant medium	:
Other informations	:

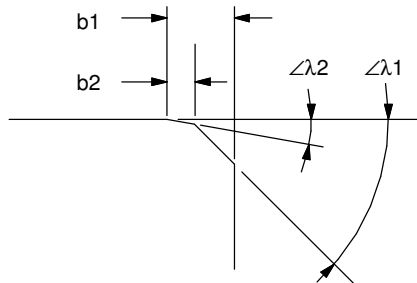
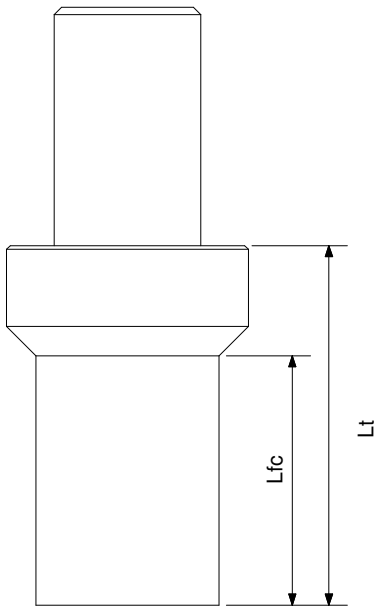
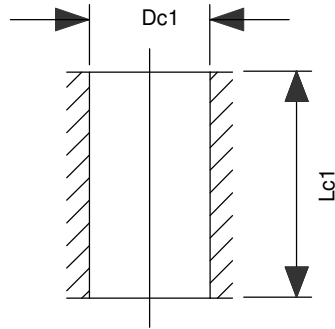
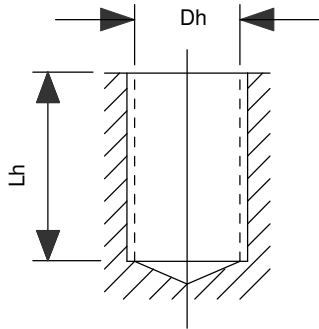


D_s	:
D_{c1}	:
L_t	:
L_{fc}	:
L_h	:
L_{c1}	:
λ	:



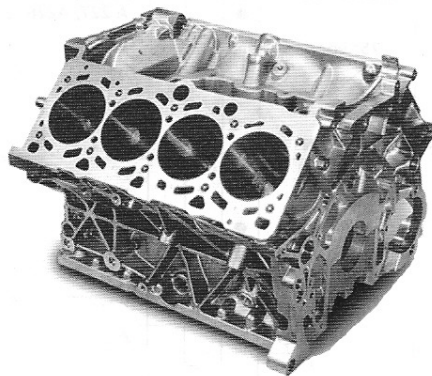


Insert tipped reaming DATA SHEET



- Workpiece / detail drawing :**
- Right / left hand tool :
 - Shank type / size :
 - Stationary / rotating application :
 - Vertical / horizontal application :
 - No. of effective teeth :
 - No. of guide pads :
 - Guide pad material :
 - Cutting material :
 - Coating type :
 - Blind / through hole :
 - Interrupted / smooth cut :
 - Pre-machining tool :
 - Stock on pre-machined hole :
 - Hole tolerance workpiece :
 - Max. overall length [Lt] :
 - Total free cutting length [Lfc] :
 - Dry / wet machining :
 - Pressure coolant supply :
 - Single / multiple coolant outlet :
 - Coolant medium :
 - Other informations :

Werkstückzeichnung oder Einzelheitender Bearbeitung unbedingt erforderlich:



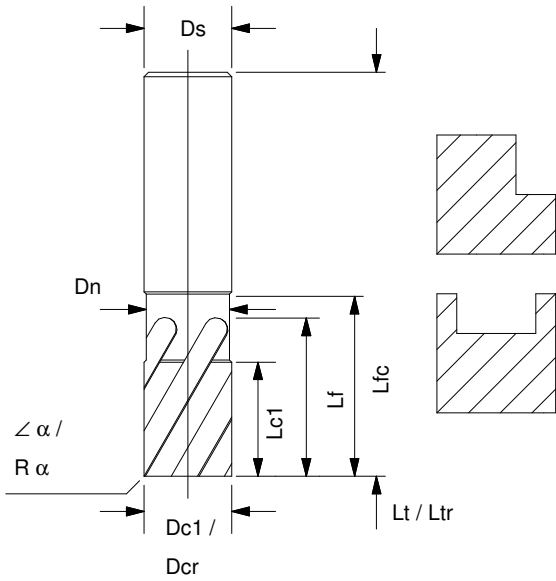
- Dh :
- Dc1 :
- Lt :
- Lfc :
- Lh :
- Lc1 :
- Insert lead angles**
- λ1 x b1 :
- λ2 x b2 :





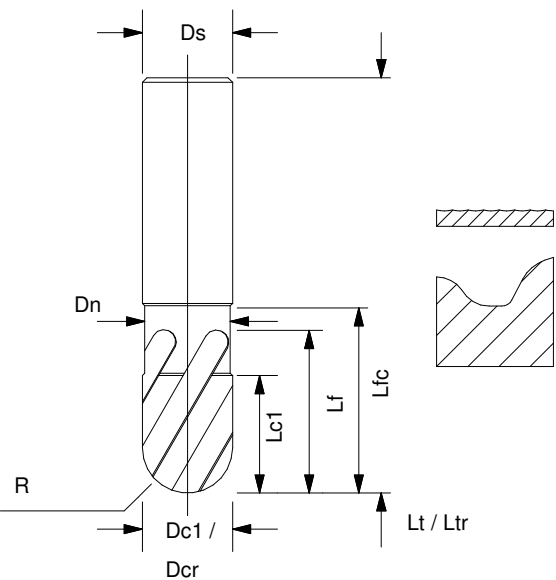
Solid milling

DATA SHEET



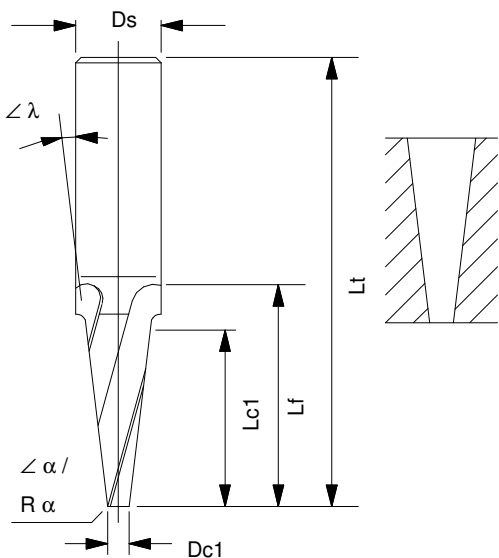
Ds	:
Dn	:
Dcr	:
Dc1	:
Lt / Ltr	:
Lf	:
Lfc	:
Lc1	:
∠ α	:
R α	:

Right / left hand tool	:
Shank type	:
No. of chip flutes	:
Center cutting	:
Helix angle	:
No. of coolant holes	:
Cutting material	:
Coating type	:
Pre / post treatment	:
Regrinding extension on Dcr	:
Regrinding extension on Ltr	:
Contour drawing workpiece	:
Other informations	:



Ds	:
Dn	:
Dcr	:
Dc1	:
Lt / Ltr	:
Lf	:
Lfc	:
Lc1	:
R	:

Right / left hand tool	:
Shank type	:
No. of chip flutes	:
Center cutting	:
Helix angle	:
No. of coolant holes	:
Cutting material	:
Coating type	:
Pre / post treatment	:
Regrinding extension on Dcr	:
Regrinding extension on Ltr	:
Contour drawing workpiece	:
Other informations	:



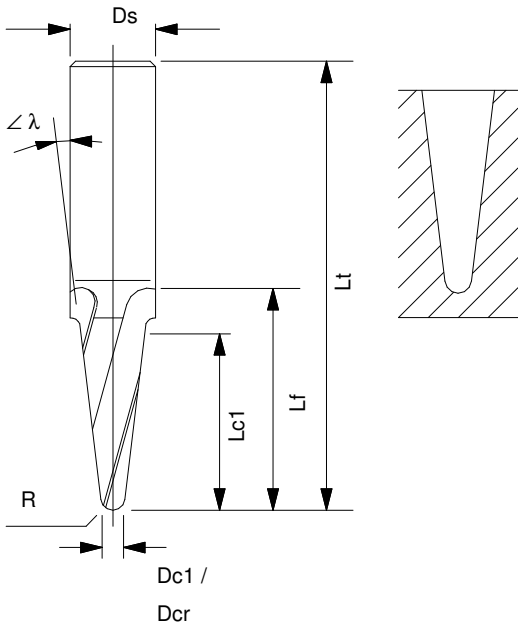
Ds	:
Dc1	:
Lt	:
Lf	:
Lc1	:
∠ α	:
R α	:
∠ λ	:

Right / left hand tool	:
Shank type	:
No. of chip flutes	:
Center cutting	:
Helix angle	:
No. of coolant holes	:
Cutting material	:
Coating type	:
Pre / post treatment	:
Contour drawing workpiece	:
Other informations	:



Solid milling

DATA SHEET



Ds	:
Dc1	:
Lt	:
Lf	:
Lc1	:
$\angle \lambda$:
R	:
$\angle \lambda$:

Right / left hand tool	:
Shank type	:
No. of chip flutes	:
Center cutting	:
Helix angle	:
No. of coolant holes	:
Cutting material	:
Coating type	:
Pre / post treatment	:
Contour drawing workpiece	:
Other informations	:

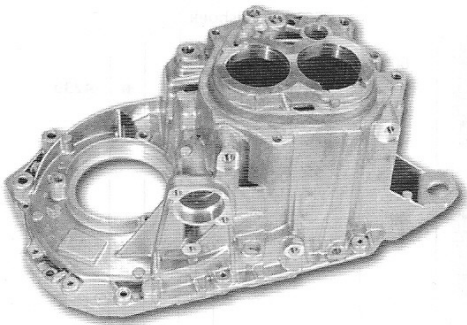
Werkstückzeichnung oder Einzelheiten der Bearbeitung unbedingt erforderlich:



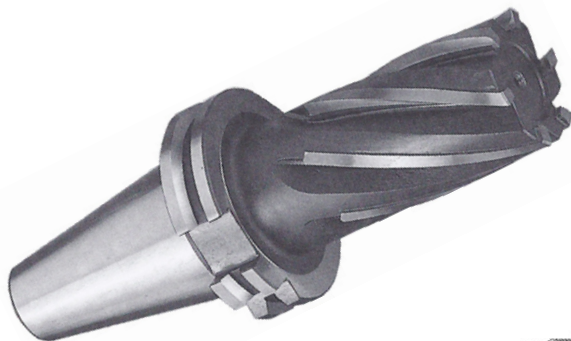
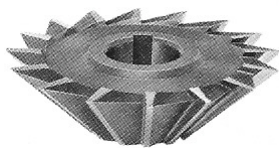


Brazed milling DATA SHEET

For complex multi-contour, please add a workpiece drawing or detail:



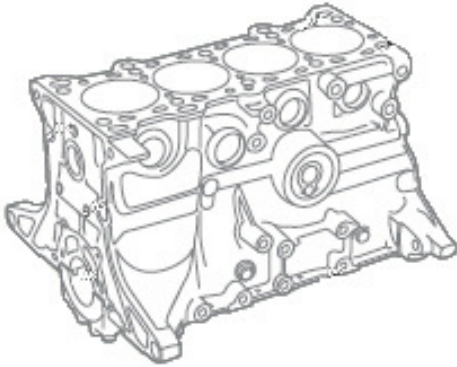
Right / left hand tool	:
Shank type / size	:
Arbor mounting / size	:
Vertical / horizontal application	:
In solid / periferal / contour application	:
No. of effective teeth	:
Center cutting	:
Cutting material	:
Coating type	:
Preferred cutting data	Vc:
	Vf:
	Ap:
	Ae:
No. of simultaneous driven CNC - axis	:
Max. overall length [Lt]	:
Total free cutting lenght [Lfc]	:
Recess diameter on shank	:
Dry / wet machining	:
Pressure coolant supply	:
Coolant medium	:
Fixture interference or parts	:
Workpiece material	:
Other informations	:





Insert tipped milling DATA SHEET

For complex multi-contour, please add a workpiece drawing or detail:



Right / left hand tool	:
Shank type / size	:
Arbor mounting / size	:
Vertical / horizontal application	:
In solid / periferal / contour application	:
No. of effective teeth	:
Center cutting	:
Cutting material	:
Coating type	:
Preferred cutting data	Vc:
	Vf:
	Ap:
	Ae:
No. of simultaneous driven CNC - axis	:
Max. overall length [Lt]	:
Total free cutting lenght [Lfc]	:
Recess diameter on shank	:
Dry / wet machining	:
Pressure coolant supply	:
Coolant medium	:
Fixture interference or parts	:
Workpiece material	:
Other informations	:

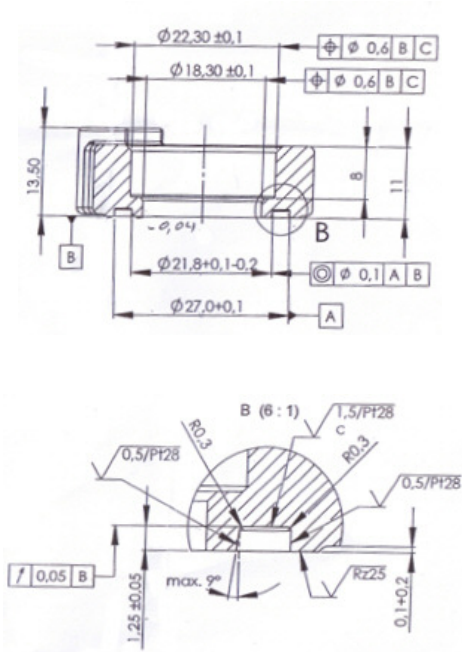




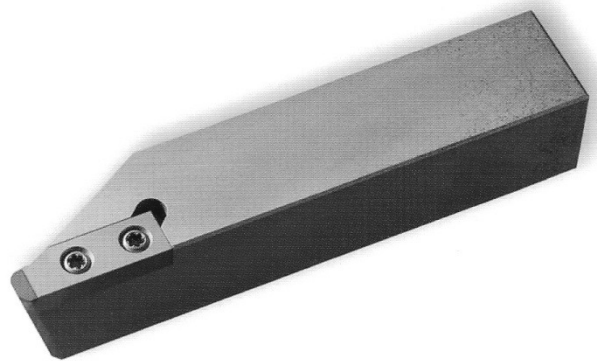
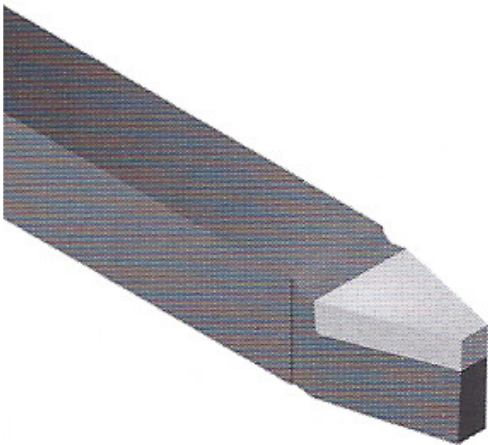
Brazed turning

DATA SHEET

For complex multi-contour, please add a workpiece drawing or detail:



Right / left hand tool	:
Shank type / size	:
Modular interface	:
Vertical / horizontal application	:
Cutting material	:
Coating type	:
Preferred cutting data	Vc:
	fn:
	Ap:
Max. overall length [Lt]	:
Total free cutting length [Lfc]	:
Dry / wet machining	:
Pressure coolant supply	:
Coolant medium	:
Fixture interference or parts	:
Workpiece material	:
Other informations	:

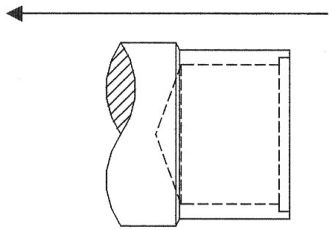




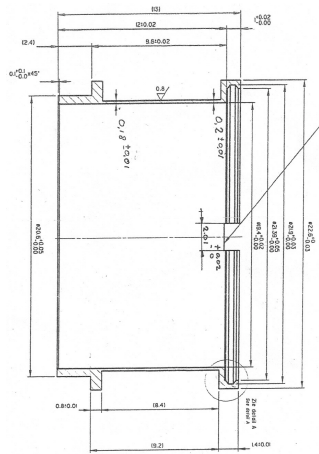
Insert tipped turning DATA SHEET

For complex multi-contour, please add a workpiece drawing or detail:

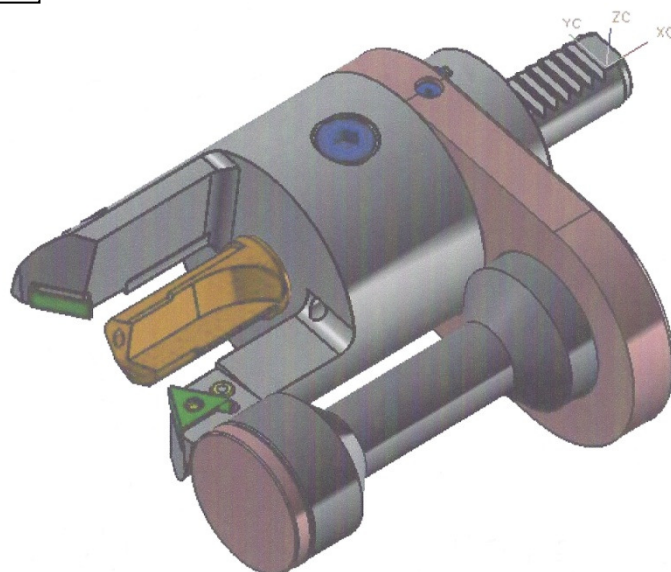
**T0101
S6000 M3
G0 X30 Z0.3
G4 X1.5
G0 Z5
X0 Z0.5
G1 F0.36 Z-18**



G0 Z1



Right / left hand tool	:	
Shank type / size	:	
Modular interface	:	
Vertical / horizontal application	:	
No. of inserts	:	
Cutting material	:	
Coating type	:	
Preferred cutting data	Vc:	
	fn:	
	Ap:	
Max. overall length [Lt]	:	
Total free cutting length [Lfc]	:	
Dry / wet machining	:	
Pressure coolant supply	:	
Coolant medium	:	
Fixture interference or parts	:	
Workpiece material	:	
Other informations	:	

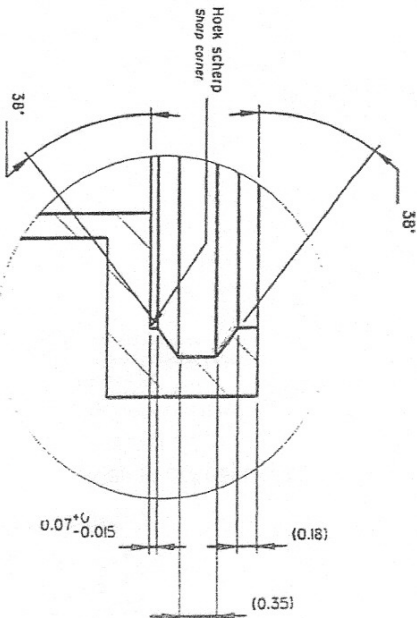




Special insert

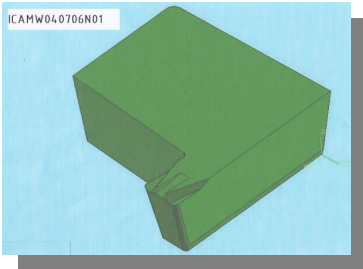
DATA SHEET

For complex multi-contour, please add a workpiece drawing or detail:

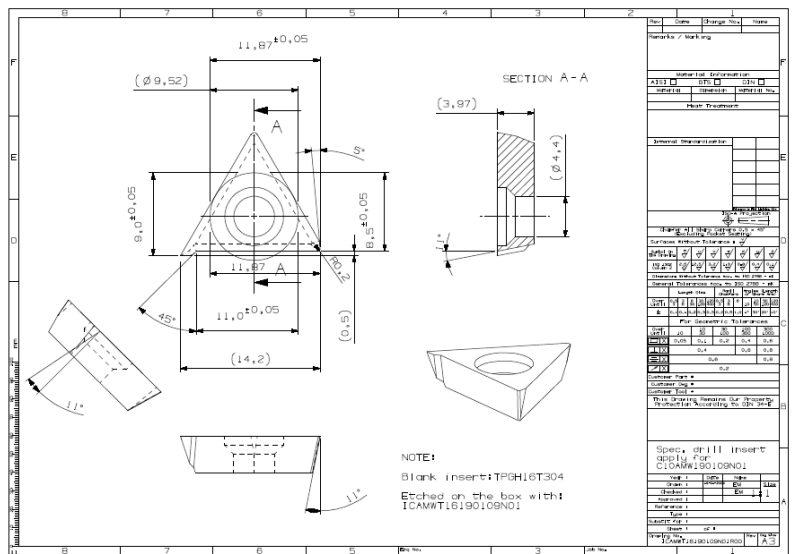
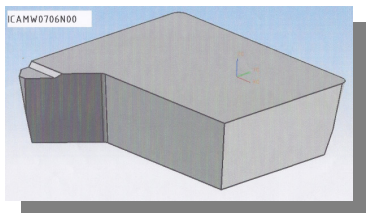


Demand on no. of inserts / time lapse :
 Rotating / stationary application :
 Right / left or neutral cutting direction :
 Preferred clamp sytem mounting insert :
 Preferred no. of cutting edges :
 Pressed to size :
 Grinded faces :
 Cutting material :
 Coating type :
 Remarks macro geometry :
 Remarks micro geometry :
 Workpiece material :
 Machining conditions :
 Dry / wet machining :
 Required cutting data Vc :
 Vf / fn / fz :
 Ap :
 Ae :
 Other informations :

ICAMW04.0706N01



ICAMW0706N00



Rev.	Desc.	Change No.	Date
1	Initial		

Customer No.	
Customer Part No.	
Customer Name	
Customer Address	
Customer City	
Customer Country	
Customer Phone	
Customer Fax	
Customer E-mail	
Customer Website	
Customer Industry	
Customer Material	
Customer Quantity	
Customer Lead Time	
Customer Comments	

Spec. of III Insert	
Part No.	ICAMW16190106N01
Part Name	
Part Material	TPGH16T304
Part Quantity	1
Part Lead Time	
Part Comments	



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E - mail: info@amwsystems.nl
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**Insert tipped tooling for turn,
mill, drill and boring operations**

**Taps, dies and thread milling
tools**

Adapters

Mini tools for Swiss machines

**Tailer made tooling according
to customer specifications**

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