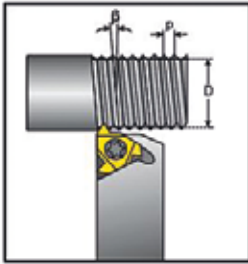


# Berechnung des Steigungswinkel $\beta$



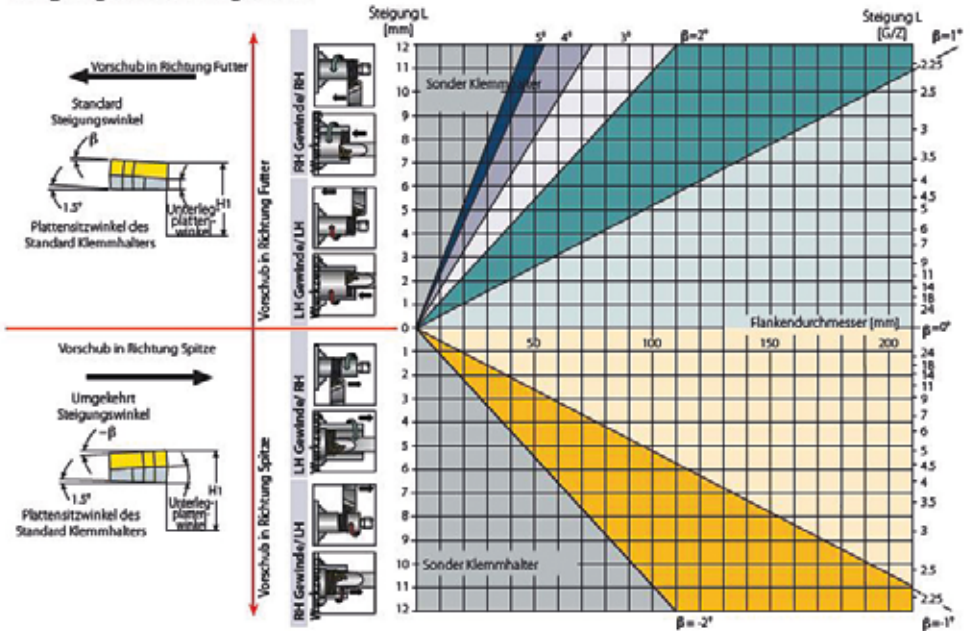
Der Steigungswinkel wird mit folgender Formel berechnet:

$$\beta = \arctan \frac{P \times N}{\pi \times D}$$

$\beta$  - Steigungswinkel [°]  
 P - Teilung [mm]  
 N - Anzahl der Gänge  
 D - Flankendurchmesser [mm]  
 Steigung L = P x N

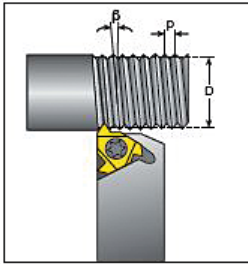
Der Steigungswinkel kann ebenfalls aus dem untenstehenden Diagramm abgelesen werden.

## Steigungswinkeldiagramm



Resultierender Steigungswinkel		4,5°	3,5°	2,5°	1,5°	0,5°	0°	-0,5°	-1,5°
Plattengröße 16 mm	Plattensitzwinkel	3°P	2°P	1°P	0°	1°N	1,5°N	2°N	3°N
	Artikelnummer R	002.00.186	002.00.181	002.00.182	002.00.180	002.00.183	002.00.187	002.00.184	002.00.185
	Artikelnummer L	002.00.196	002.00.191	002.00.192	002.00.190	002.00.193	002.00.197	002.00.194	002.00.195

## Calculating the Helix Angle $\beta$



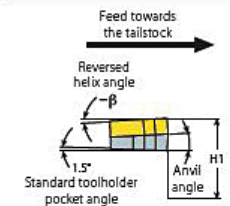
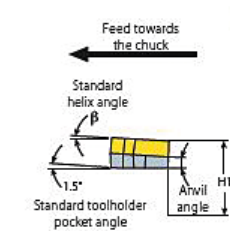
The helix angle is calculated by the following formula:

$$\beta = \arctan \frac{P \times N}{\pi \times D}$$

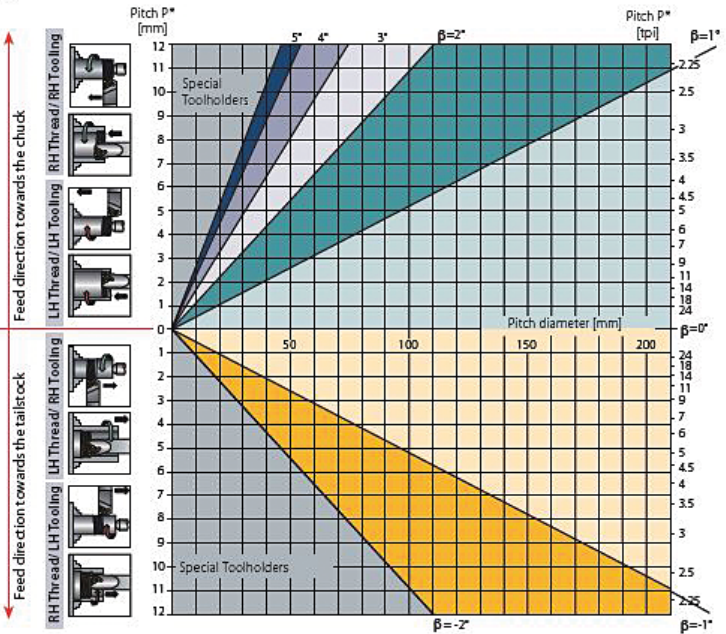
$\beta$  - Helix angle [°]  
P - Pitch [mm]  
N - No. of starts  
D - Pitch diameter [mm]  
Lead = P x N

The helix angle can also be found from the diagram below.

## Helix Angle Diagram



The dimension H1 (cutting edge height) remains constant with every insert/ anvil combination.



\*For Multi-start threads, use the lead value instead of the pitch

resultant pitch angle		4,5°	3,5°	2,5°	1,5°	0,5°	0°	-0,5°	-1,5°
Insert size 16 mm	shim angle	3°P	2°P	1°P	0°	1°N	1,5°N	2°N	3°N
	article number R	002.00.186	002.00.181	002.00.182	002.00.180	002.00.183	002.00.187	002.00.184	002.00.185
	article number L	002.00.196	002.00.191	002.00.192	002.00.190	002.00.193	002.00.197	002.00.194	002.00.195