



Diameter Correction Tool for thread mills

E-DCT

Volume 1



KEY FEATURES: E-DCT



1 Diameter correction tool for thread milled hole

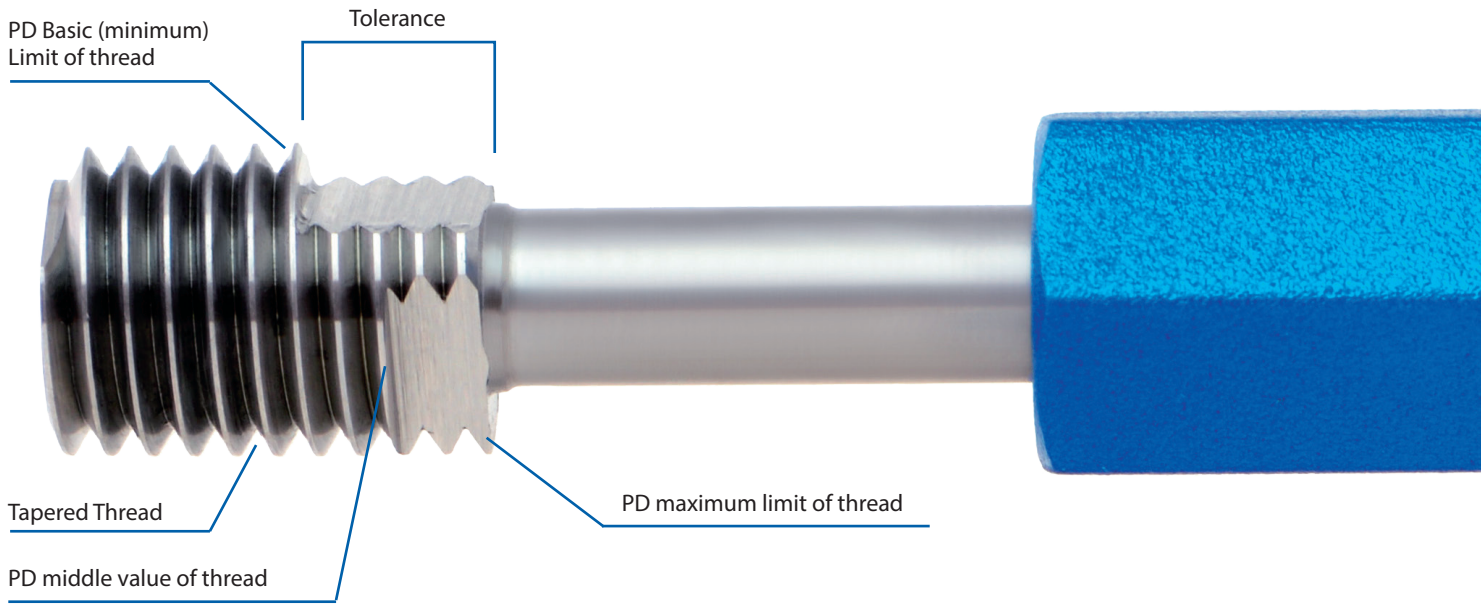
2 Reduce the set up and machining time

3 Measuring level at the workpiece surface

4 Estimate the position within tolerance by notch

E-DCT: KEY FEATURES & BENEFITS

E-DCT Specification

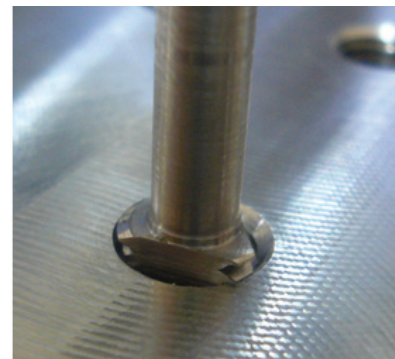
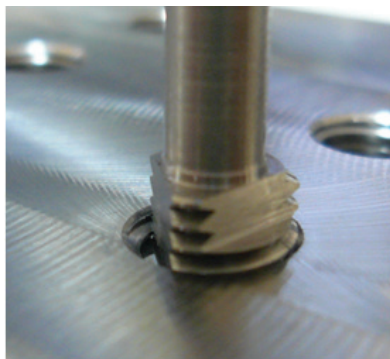
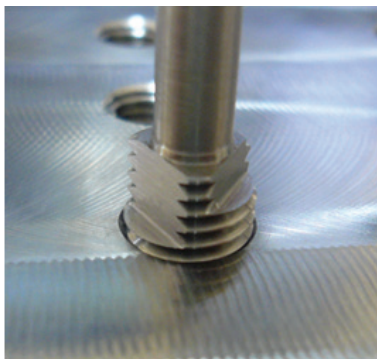


Judgement of internal thread with E-DCT

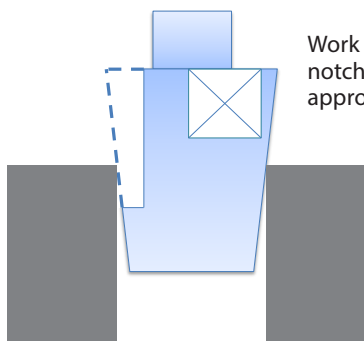
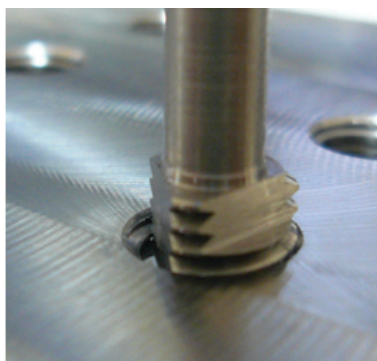


Hole No.	1	2	3	4	5
Position of gauge (depth) E-DCT					
GP gauge go through	NG	NG	NG (not go through)	OK	OK
NP gauge stop	OK	OK	OK	OK	NG
Judgement	NG (-)	NG (0)	NG	OK	NG (+)
Reason of Judgement	Smaller than Basic Pitch Diameter	Pitch Diameter is around Basic Pitch Diameter	Internal thread Tapered		Larger than maximum tolerance of Pitch Diameter

1. Estimate the PD by position of the notches



1.1 Work surface is between 1st notch and 2nd notch

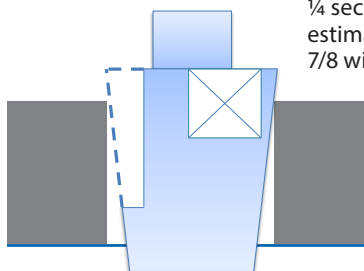


Work surface is between 1st notch and 2nd notch, which is approx. 1/4 of PD tolerance.

Example: M10X1.5 6H
Tolerance
9.026 +0.180 / 0
 $+0.180 \times 1/4 = +0.045$

PD of the thread is about +0.045

1.2 Work surface is between 2nd notch and 3rd notch

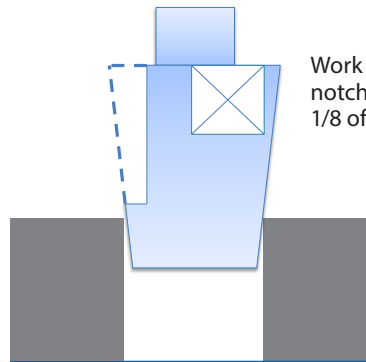
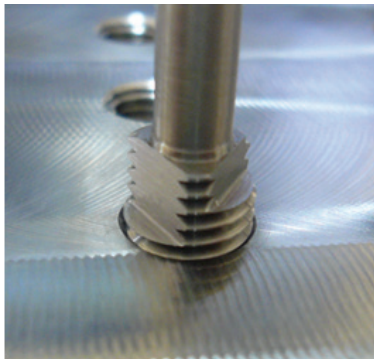


Work surface is at upper position about 1/4 second and third notch. Soof you can estimate PD is about 7/8 within tolerance.

Example: M10X1.5 6H
Tolerance
9.026 +0.180 / 0
 $+0.180 \times 7/8 = +0.158$

PD of the thread is about +0.160

1.3 Work surface is below the first notch (minimum limit)

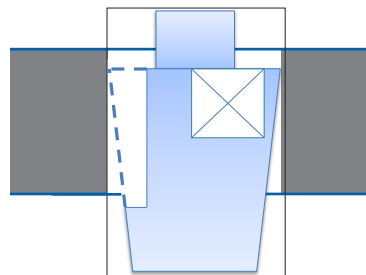
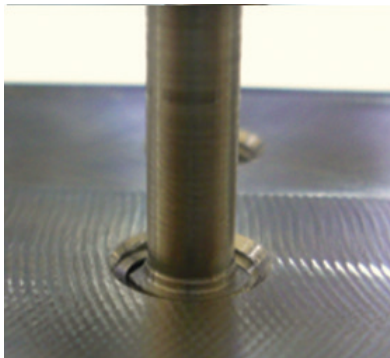


Work surface is below the first notch (Bottom Limit), about 1/8 of PD tolerance.

Example: M10X1.5 6H
Tolerance
9.026 +0.180 / 0
+0.180X -1/8=-0.023

PD of the thread is about -0.020. (Not pass for small PD)

1.4 Work surface is over the 3rd notch (maximum limit)



Work surface is over the 3rd notch (maximum Limit), about 1/8 of PD tolerance.

Example: M10X1.5 6H
Tolerance
9.026 +0.180 / 0
+0.180X +9/8= +0.203

PD of the thread is about +0.203. (Not pass for large PD)

How to calculate the correction value?

- 1) After threadmilling inspect the female thread with a plug gauge GP-NP.
- 2) After process 1), inspect position of pitch diameter with "E-DCT"
- 3) Notch ① indicates the tolerance of the pitch diameter.

Notch ② indicates medium value of tolerance and over.

E-DCT shows pitch diameter value is around 0 in the below photo.



Ex) M10X1.5-6H Tolerance of pitch diameter is 0.180
pitch diameter value is around 0 as show on left photo.
If target value is 75% of tolerance , threadmill should rotate larger.

Correction value should be

- Based on diameter =0.180x75%=0.135
- Based on semi-diameter =0.135/2=0.068

Tolerance of pitch diameter is marked on shank of E-DCT.

Tolerance of pitch diameter x ratio of notch(%) = correction value.

E-DCT

Threading | Measuring | UNJC UNJF



- Diameter correction tool for thread mill
- Reduce the set up and machining time

UNJC

UNJF

For 3B

EDP	Thread size
G1609623	1/4 - 20 UN(J)C
G1609624	1/4 - 28 UN(J)F
G1609625	5/16 - 18 UN(J)C
G1609626	5/16 - 24 UN(J)F
G1609627	3/8 - 16 UN(J)C
G1609628	3/8 - 24 UN(J)F
G1609631	1/2 - 13 UN(J)C
G1609632	1/2 - 20 UN(J)F
G1609635	5/8 - 11 UN(J)C
G1609636	5/8 - 18 UN(J)F
G1609638	3/4 - 16 UN(J)F

For EG-3B Helicoil

EDP	Thread size
G1609723	1/4 - 20 EG-UN(J)C
G1609724	1/4 - 28 EG-UN(J)F
G1609726	5/16 - 24 EG-UN(J)F
G1609728	3/8 - 24 EG-UN(J)F
G1609731	1/2 - 13 EG-UN(J)C
G1609732	1/2 - 20 EG-UN(J)F
G1609736	5/8 - 18 EG-UN(J)F
G1609738	3/4 - 16 EG-UN(J)F





shaping your dreams

OSG EUROPE LOGISTICS

Avenue Lavoisier 1
B-1300 Z.I. Wavre - Nord - Belgium
Tel: +32 10 23 05 07
info@osgeurope.com

OSG POLAND Sp. z o.o.

Spółdzielcza 57
05-074 Halinów - Poland
Tel: +22 760 82 71
osg@osg-poland.com

OSG ROMANIA SRL

25C, Bucuresti-Magurele Street (Sector 5)
051431 Bucuresti - România
Tel: +40 21 322 07 47
info@osgromania.ro

OSG BELUX

Avenue Lavoisier 1
B-1300 Z.I. Wavre - Nord - Belgium
Tel: +32 10 23 05 11
info@osg-belgium.com

OSG GERMANY

Karl-Ehmann-Str. 25
D - 73037 Göppingen - Germany
Tel: +49 7161 6064 - 0
Fax: +49 7161 6064 - 444
info@osg-germany.de

AUSTRIA

Branch office of OSG GERMANY
Messestraße 11
A-6850 Dornbirn
Tel: +49 7161 6064-0
info@osg-germany.de

OSG FRANCE

Parc Icade, Paris Nord 2
Immeuble "Le Rimbaud"
22 Avenue des Nations
CS66191 - 93420 Villepinte - France
Tel: +33 1 49 90 10 10
sales@osg-france.com

OSG SCANDINAVIA

(For Scandinavian countries)
Langebjergvaenget 16
4000 Roskilde - Denmark
Tel: +45 46 75 65 55
osg@osg-scandinavia.com

OSG ITALIA

Via Ferrero, 65 A/B3
I - 10098 Rivoli - Italy
Tel: +39 0117705211
info@osg-italia.it

OSG NETHERLANDS

Bedrijfsweg 5 - 3481 MG Harmelen
Tel: +31 348 44 2764
info@osg-nl.com

SWEDEN

Branch office of OSG SCANDINAVIA
Singelgatan 7
212 28 Malmö - Sweden
Tel: +46 40 41 22 55
osg@osg-scandinavia.com

Vischer & Bolli AG

Machining and Workholding
Im Schossacher 17
CH-8600 Dübendorf
T +41 44 802 15 15
info@vb-tools.com

OSG UK

Kelsey Close, Attleborough Fields Ind Est,
CV11 6RS, Nuneaton, United Kingdom.
Tel: +44 1827 720 013
uk_sales@osg-uk.com

OSG IBERICA

Bekolarra 4
E - 01010 Vitoria-Gasteiz - Spain
Tel: +34 945 242 400
osg.iberica@osg-ib.com

CZECH, SLOVAKIA, HUNGARY

OSG Europe Logistics S.A.
Slovakia organizacna zlozka
Racianská 22/A, SK-83102 Bratislava
Slovakia
Tel. +421 24 32 91 295
Orders-osgsvk@osgeurope.com

OSG TURKEY

Rami Kışla Cad.No:56 Eyüp
Istanbul 34056 - Turkey
Tel+90 212 565 24 00
Fax: +90 212 565 44 00
info@osg-turkey.com

OSG EUROPE LOGISTICS S.A.

01/2022 - All rights reserved. © OSG Europe 2022

The contents of this catalogue are provided to you for viewing only. They are not intended for reproduction either in part or in whole in this or other medium. They cannot be copied, used to create derivation work or used for any reason, by means without the express, written permission of the copyright owner. If prices are stated, they are netto unit-prices and any eventual tax(es) have to be added. The company is not responsible for any printing error in technical, price and/or any other data.

Tool specifications subject to change without notice.

www.osgeurope.com