



TSCHORN®

Probes & Tools Technology



3D Testers

Revolutionary: Digital & Analogue on one display!

Analogue display
Rough scale

Analogue display
Fine scale 0,01 mm
from -0,250

Digitale Anzeige
Auflösung 0,005 mm

Probing status LED

- Off = Rough scale
- Green = Fine scale
- Red = Warning range



Revolutionary! The new **3D Tester Digital** combines the best of two worlds, as the 3D Tester Digital is digital and analogue at the same time: The digital display with numbers allows you to accurately read digitally. Tracking a rapidly changing digital display with your eyes is nearly certainty, the additional analog display of the 3D Tester Digital gives you security when reading. Because a moving pointer can be followed visually much better and more reliably. Additionally, a built-in LED shows the status of your probing with the help of different colours and protects you from overpassing and a possible resulting defect. With the 3D Tester Digital, you quickly and easily determine workpiece zero points and lengths in all axial directions (X/Y/Z) and you can adjust you workpiece or vice to the machine axis.

How to work with the 3D Tester Digital:

Clamp the 3D Tester into your tool holder, adjust the run-out and there you go:



Rough scale (1.5 till 0,25 mm)

Fast approach and safe probing thanks to the analogue rough display. The eye can easily follow the progress as the black bar decreases clockwise.



Fine scale (0,25 till 0 mm)

At -0,250 mm, the display changes to the fine scale and the green LED lights up.



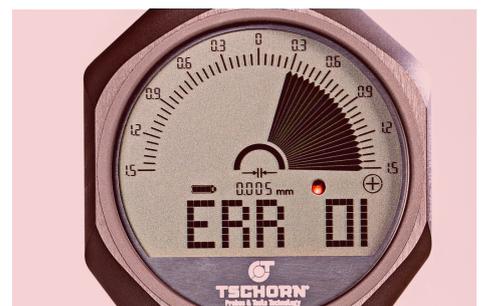
Zero point (precisely reached)

When the „0“ is reached, the spindle axis is positioned precisely on the edge of the workpiece.



Danger of crash (0 mm till ERR01)

When overpassing, the LED warns in red and the black bar builds up clockwise to the right. Shortly before crash (>1 mm), you can see ERR01 on the display..



Of course, the 3D Tester Digital is small and slim, waterproof (IP67) and is delivered with a serial number and a test certificate. The scope of delivery also includes a CR2450 battery and a ceramic probe tip $\varnothing 3$. Both items are available as spare parts. Switch on the 3D Tester Digital by moving the probe tip in any direction X, Y or Z. If not used, the probe switches off after 2 minutes.



Revolutionary: Digital & Analogue on one display!



Video



Article no.	Description	Shank	Ball
001D30012	3D Digital	Ø12	Ø3

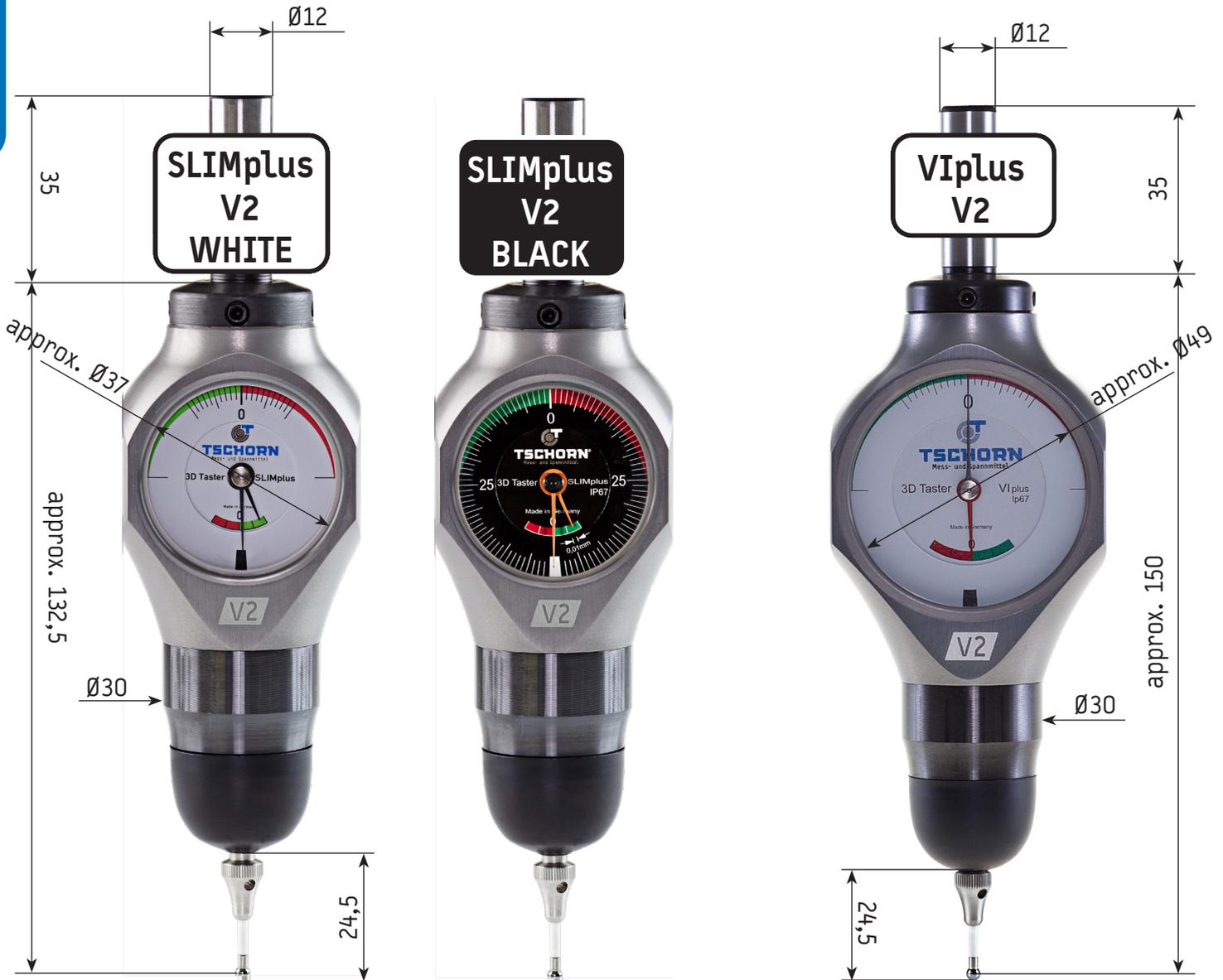
You can find spare parts on page 26.

Slim. robust. waterproof. With Tschorn 3D Testers you quickly and easily determine workpiece zero points and length measurements or adjust your workpiece or vice parallel to your machine axis.

3D stands for three-dimensional probing in all axial directions (X/Y/Z) - and all of this is possible with the same indicator resolution.

V2 stands for the newest generation of our 3D Testers.

A seal protects the 3D Tester from oil and coolant (IP67).

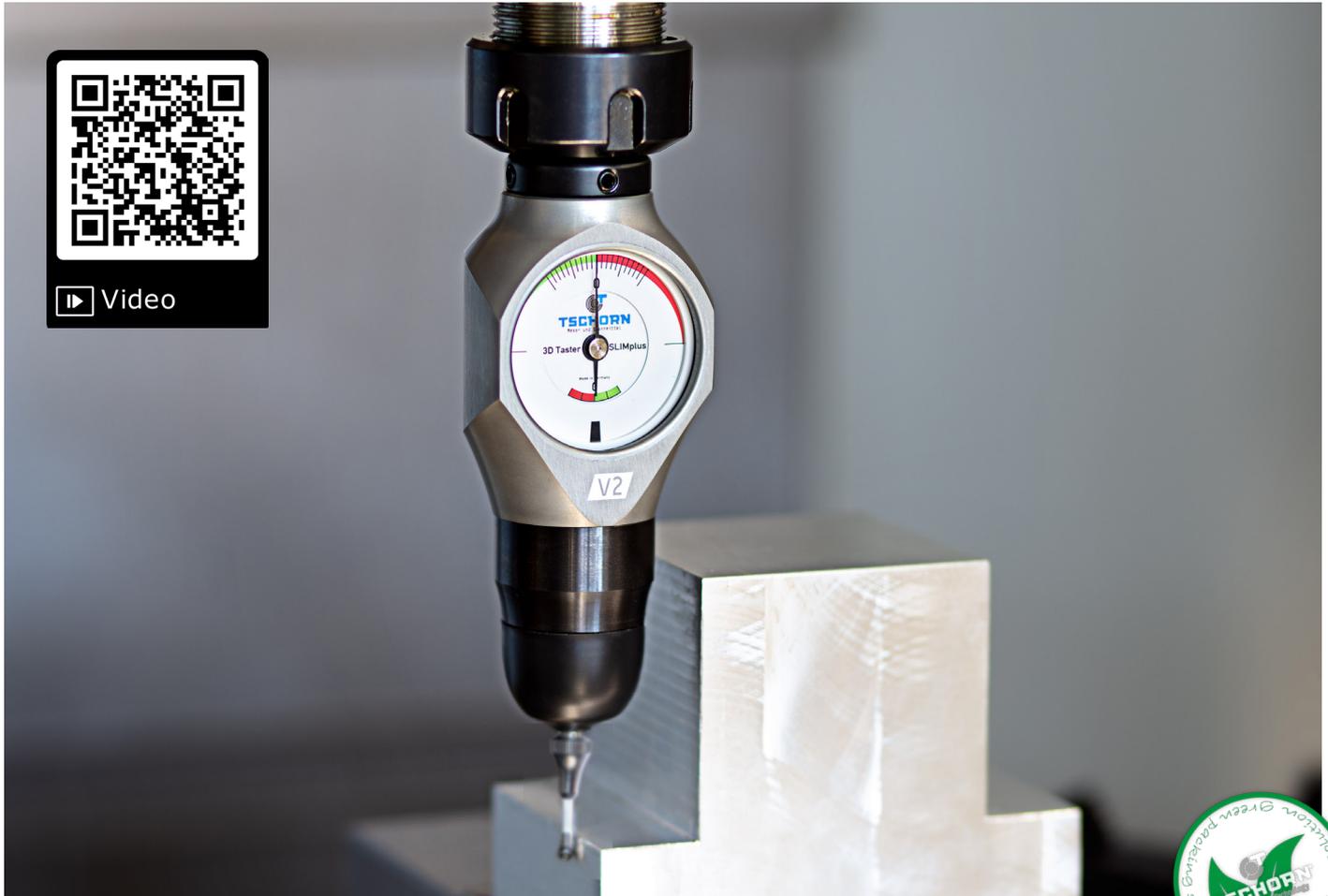


The universal device,
the bestseller

Identical to SLIMplus
WHITE but easier to
read because of the
black dial face

Especially on big machines ea-
sier to read but nevertheless
slim built





3D Tester



How to work with the 3D Tester:

Clamp the 3D Tester into your tool holder.
 Adjust the run-out as explained in the manual.
 Approach your workpiece with the 3D Tester.
 As soon as the indicators show „0“, the spindle axis precisely stands on the workpiece edge.

 Crashed? Contact your reseller for service!

Delivery contains:

3D Tester with serial number, incl. probe tip ceramic Ø3, adjusting key, with factory certificate

Article No.	Description	Shank	Length	Tester
001V2D012*	3D Tester SLIMplus V2 WHITE	Ø12	approx. 132,5 mm	Ø3
001V2DB12*	3D Tester SLIMplus V2 BLACK	Ø12	approx. 132,5 mm	Ø3
001V2DA40	3D Tester SLIMplus V2 WHITE with shank DIN69871 A40	DIN69871 A40	approx. 132,5 mm	Ø3
001V2V012	3D Tester VIplus V2	Ø12	approx. 150,0 mm	Ø3

*also available with shank Ø8 and Ø10 as special construction.

You can find spare parts on page 26.



The special probe tip Ø56:

Depth extreme!



Advantages:

- probing extremely depth
- also parallel running

Because its diameter is bigger than the body of the 3D Tester this probe tip allows probing in almost endless depth and opens up new possibilities. When using slim tool holders to clamp the 3D Tester (diameter smaller than 50 mm), you can extend the depth of probing as deep as you want. Find your workpiece position and check parallelism in almost endless depth.



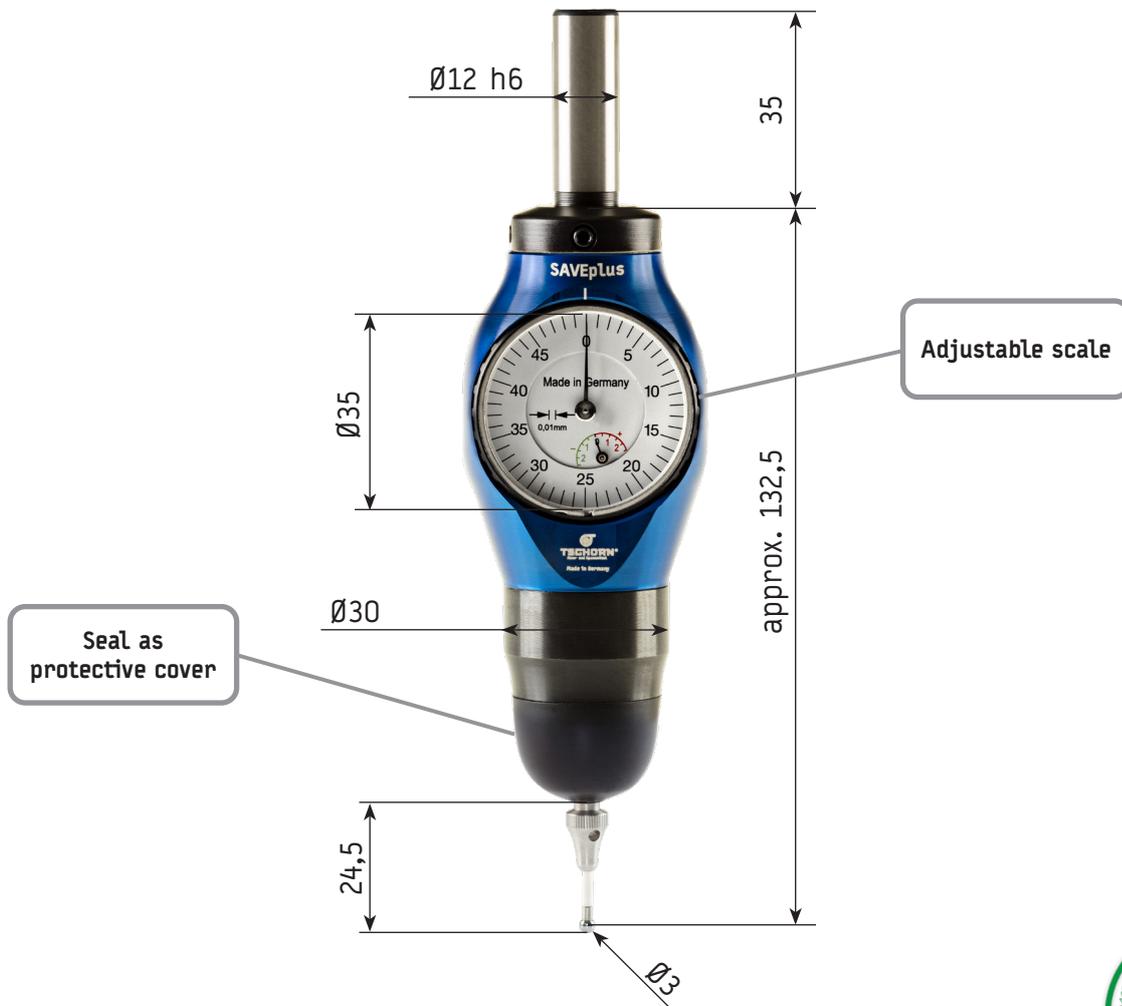
Article No.	Description	Length	Tester
00163D056	Probe tip Ø56 for 3D Tester SLIMplus	62	Ø56



SAVEplus

The 3D Tester SAVEplus is also characterized by its slim design - however, it is the cost-effective variant among our 3D Tester models.

3D Tester



Delivery contains:

3D Tester incl. probe tip ceramic Ø3

Article No.	Description	Shank	Length	Tester
00163B012	3D Tester SAVEplus	Ø12	approx. 132,5 mm	Ø3



Crashed? Contact your reseller for service!



Spare parts

The spare parts can be used for our 3D Tester models.

3D Tester



Easy screwing in and unscrewing of the probe tip thanks to the practical borehole.

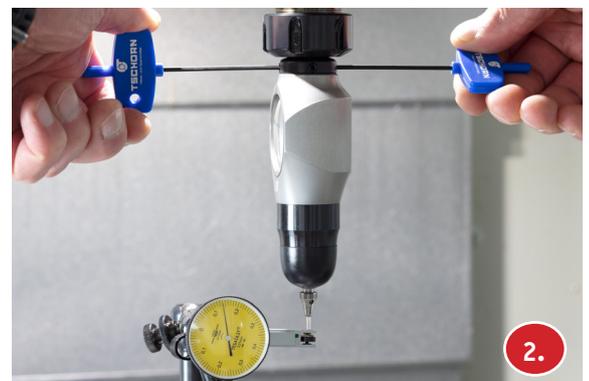
Two hexagon keys size 2 are supplied with each 3D Tester SLIMplus, VIplus and DREHplus.

Article No.	Description	Length	Tester
00163CN03	Probe tip ceramic	approx. 27 mm	Ø3
00163C006	Probe tip long ceramic	approx. 62 mm	Ø6
00163D099	Seal for 3D Tester	-	-
001D32450	Spare battery CR2450	-	-



Important Note:

When changing the probe tip, make sure not to damage the seal (see picture 1.), and check the run-out each time after changing the probe tip (see picture 2.). You will find a detailed description in the operating instructions.



Videos for training



3D Tester:
Scope of delivery



▶ Video

3D Tester:
Run-out



▶ Video

3D Tester:
Probing



▶ Video

3D Tester



Repair service



Crashed?

All our 3D-Testers can be repaired.

Our worldwide resellers support you for any repair or service question.



The plus for your lathe!

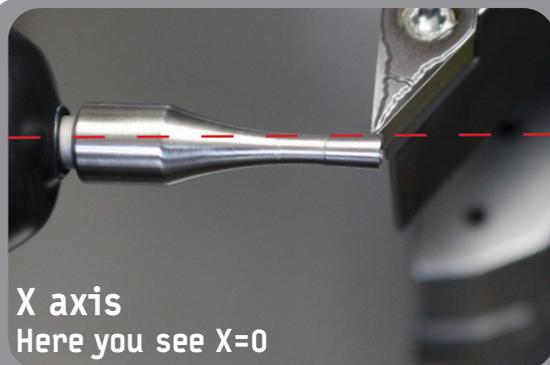
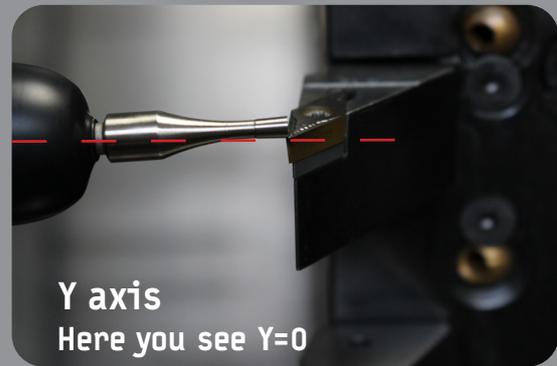
Tool measurement in all axes also in the rotating center (Y)

Innovative probing technology

The conical probing corpus allows you to measure any possible cutting insert with various radii and / or angles at any point of the probing corpus. You probe until both indicators show „0“. In this position, the outline of the conical probing corpus is exactly on the symmetry axis.

No other measuring equipment gives you the possibility to measure the rotating centre so simply, precisely and directly in your lathe.

Y=0 corresponds to the rotating centre. As a result, you ensure the best possible processing, achieve long lifetime and preserve best surfaces.

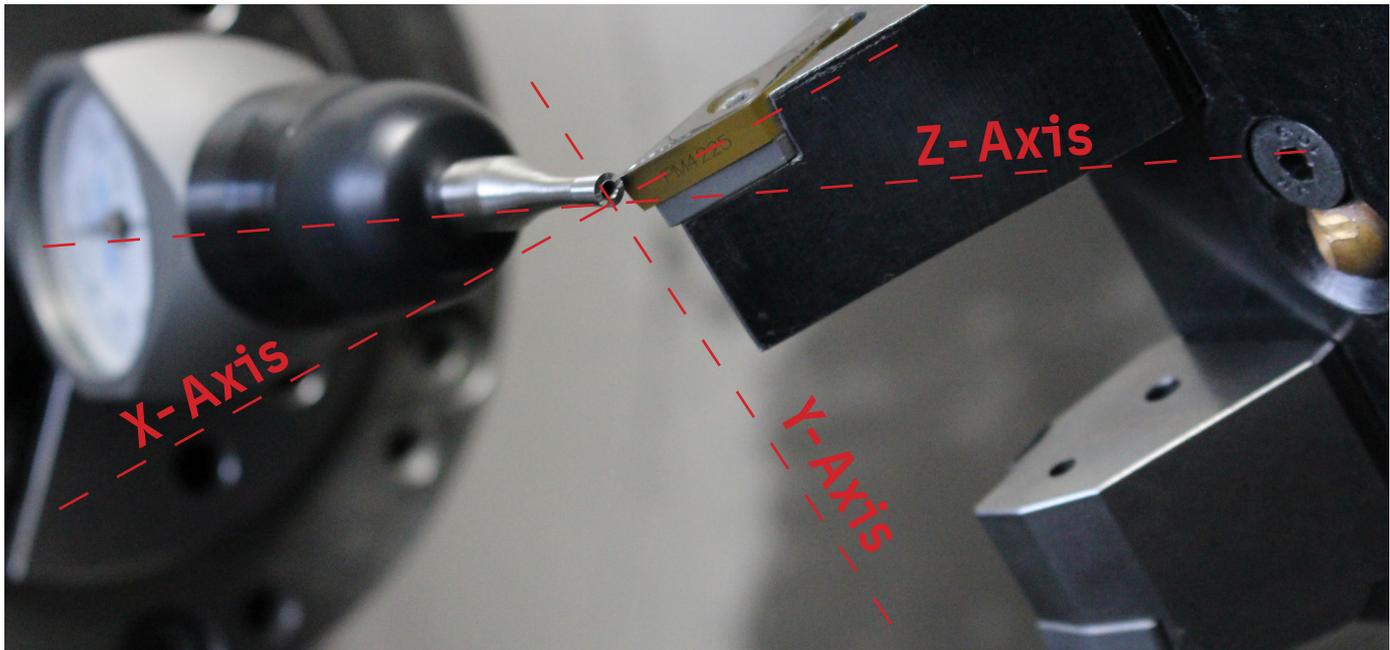


Without any further calculation, you measure your tools to the centre of the spindle, respectively X=0.

Also in Z, you can measure all tools, taking into account the length offset in your machine.



Measure your tools in all axes - especially in Y



DREHplus



No other measuring equipment gives you the possibility to measure your tool to the rotating centre simply, precisely and directly in your lathe. This is made possible by our unique probing technology which we have developed specifically for the use in your lathe.

On a ball, it is impossible to precisely measure sharp turning tools. This is why the 3D Tester DREHplus has a patented conical probing corpus. With this, you directly probe the centre of the spindle, both in X axis and in Y axis.

No need for further calculations, since $X = 0$ and $Y = 0$.



Crashed? Contact your reseller for repair service!



Delivery contains:

3D Tester incl. probe tip DREHplus, adjusting key, with factory certificate

Article No.	Description	Shank	Length	Tester
001V2T020	3D Tester V2 DREHplus V2	Ø20	approx. 138 mm	Ø3,6/Ø3,2
00163T036	Probe tip DREHplus	-	approx. 34 mm	Ø3,6/Ø3,2

