Your sales contact

Sina Kortmann

☎ +49 7181 606986 7
@ sina.kortmann@tschorn-gmbh.de

TSCHORN®
Probes & Tools Technology

3D Attack:
The new generation of 3D Testers.

3D Testers

Repair service

Crashed?

All our devices can be repaired.

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

Made in Germany

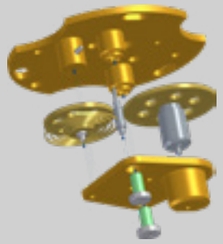
NEW: Available now!

3D Tester Universal

The 3D Tester Universal is our latest development and sets the highest standards for probing your workpieces on CNC machining centers.

Probe faster and more precisely than ever thanks to
- **a newly designed measuring mechanism,**
- **integrated protective stops, and**
- **just one single turn to zero.**

Your machine deserves the best movement!



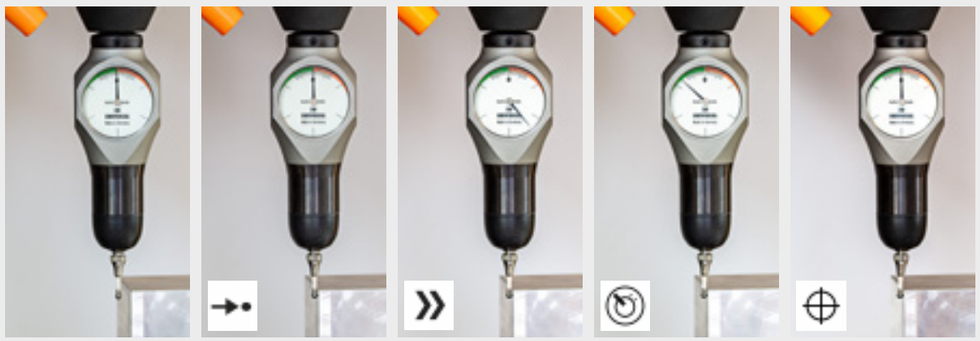
Green indicates:
Precise probing

Red indicates:
Warning - backlash

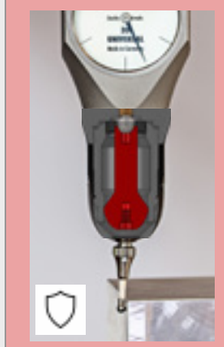
Easier than ever:
The only one with just 1 round!

Video

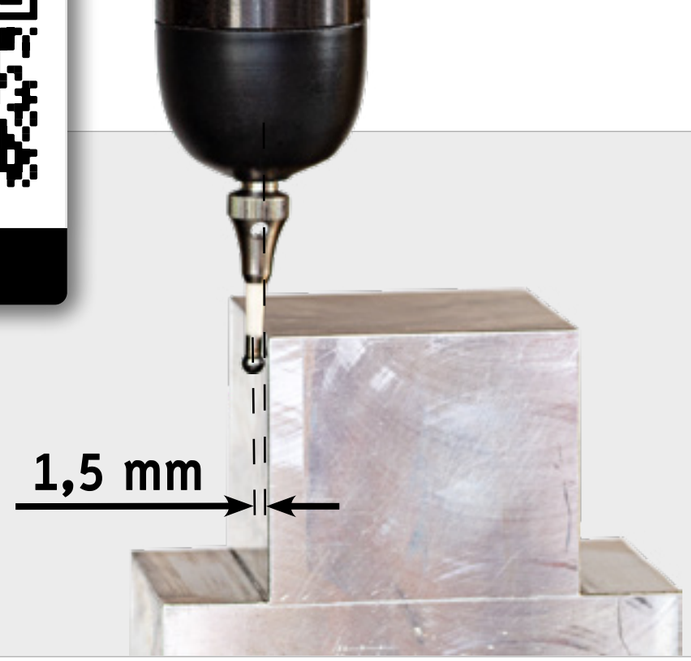
For everyone
who doesn't leave precision to chance!



Integrated
Don't give



safety stops::
crashs a chance!



3D Tester Universal

- Shank ø12
  (also available in ø10 / ø8)
- Probing ball ø3 mm
- 1 turn to 0
- Measuring range 1,5 mm
- Repeatability 0,003 mm
- Probing accuracy +/- 0,01 mm
- Overrun 1 mm

Video

Universal replaces the previous models:

SLIMplus, VIplus and SAVEplus.

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

Article No.	Description	Shank	Length	Tester
001U3D012	3D Taster Universal	Ø12	approx. 139 mm	Ø3

Spare parts and information about our repair service can be found on page 28.

Made in Germany

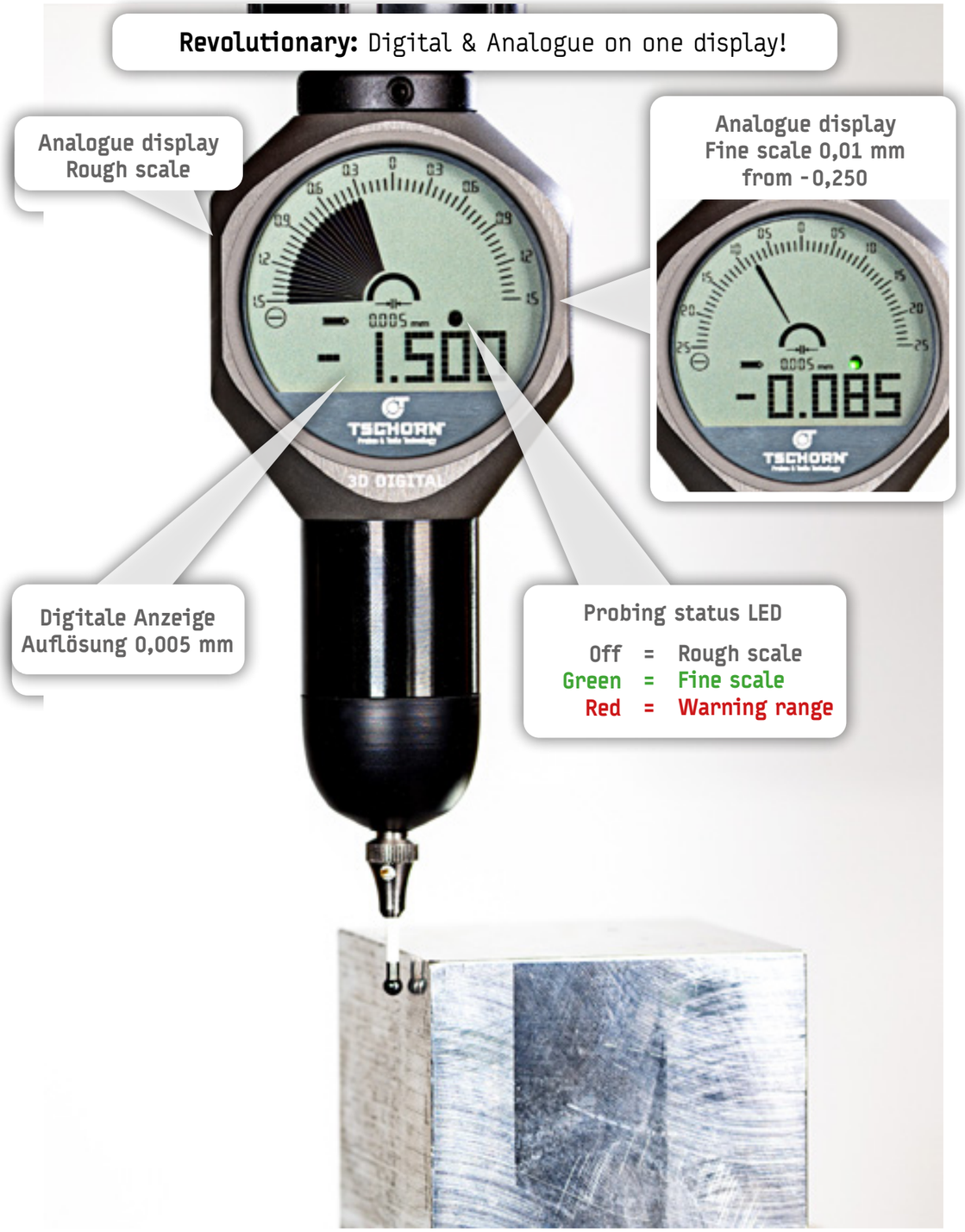
TSCHORN® Probes & Tools Technology
Spanntechnologie [Probing technology] Tasttechnologie

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 Universal	62	Ø56

Made in Germany



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 lenghts 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..

Spanntechnologie [Probing technology] Tasttechnologie
TSCHORN® Probes & Tools Technology

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 Ø3. 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.

The well-known ceramic probe tips with carbide ball Ø3 and Ø6 mm are compatible.

Revolutionary: Digital & Analogue on one display!

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

Video

You can find spare parts on page 26.

Made in Germany

Made in Germany

The plus for your lathe!

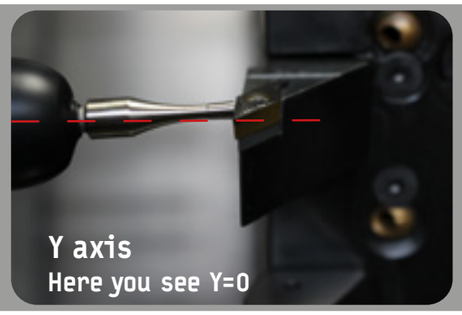
Tool measurement in all axes also in the rotating center (Y)

Innovative probing technology

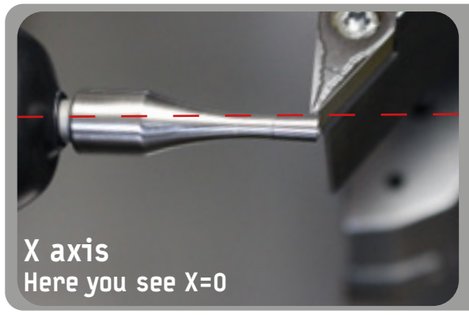
The conical probing corpus allows you to measure any possible cutting insert with various radii and / or angles at any point of the probing corpus. You probe until both indicators show „0“. In this position, the outline of the conical probing corpus is exactly on the symmetry axis.

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.



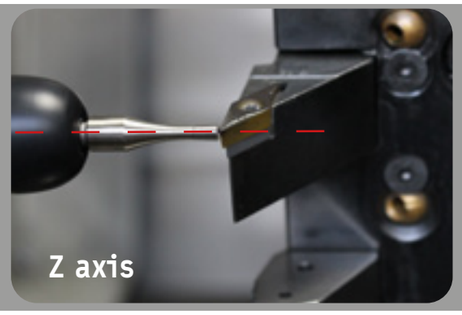
Y axis
Here you see Y=0



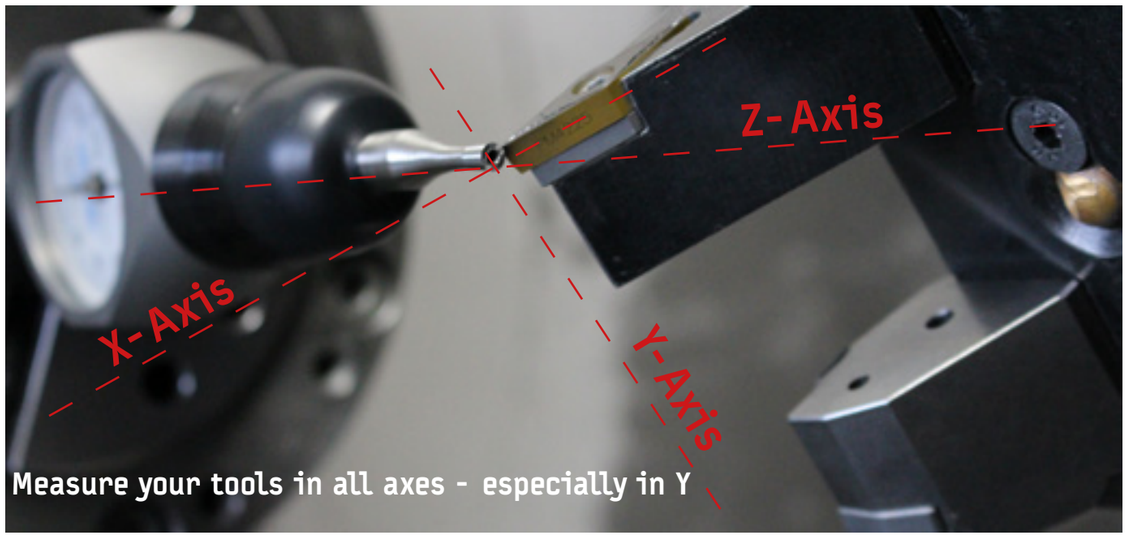
X axis
Here you see X=0

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

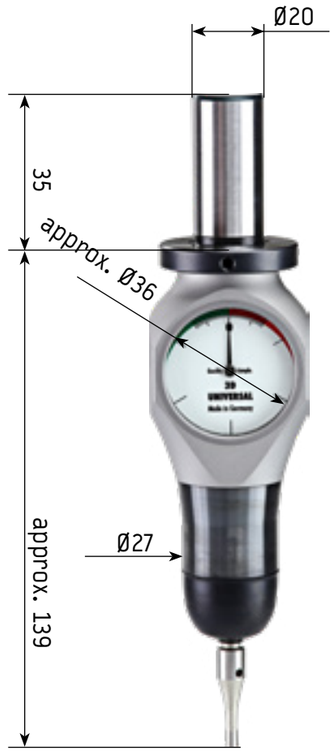
Also in Z, you can measure all tools, taking into account the length offset in your machine.



Z axis



Measure your tools in all axes - especially in Y



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
001U3T020	3D Tester DREHplus	Ø20	approx. 138 mm	Ø3,6/Ø3,2
00163T036	Probe tip DREHplus	-	approx. 34 mm	Ø3,6/Ø3,2

Made in Germany

Spare parts

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

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 Universal 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 damange 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.

TSCHORN® Probes & Tools Technology
Spanntechnologie [Probing technology] Tasttechnologie

3D Tester

Videos for training

3D Tester: Scope of delivery — Video

3D Tester: Run-out — Video

3D Tester: Probing — Video

Repair service

Crashed?

All our 3D-Testers can be repaired.

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