



NEXT.assembly

x-LinCheck-3D

Mobile test device for Dürr Assembly Products measuring technology

The regular inspection of measuring equipment is essential. This also applies to measurement technology in the end of line area of automobile production.

The mobile testing device x-LinCheck-3D is used to test x-3Dprofile sensors for linearity. During the linearity check, a reference plate moves in the measuring range of the sensor over a predetermined path. The sensor measures the corresponding reference values at defined holding positions. This process allows the linearity of each individual sensor in the entire measuring volume to be checked and evaluated.

The experience of Dürr Assembly Products leads to the recommendation to carry out the sensor inspection annually. This reduces the number of NIO lasers per inspection to a minimum and achieves positive effects.

CUSTOMER BENEFITS



[Reduction of production downtimes due to measurement at the plant](#)

[Quality improvement through the continuous use of this service](#)

[Reliable quality statement due to calibrated measuring equipment](#)

[Direct results on site](#)

[No disassembly of the laser sensors required](#)

x-LinCheck-3D

Mobile test device for Dürr Assembly Products measuring technology

PROTOCOL x-LinCheck-3D

To prove the test or to document the results, a corresponding result protocol is automatically generated.



Messprotokoll / Measurement protocol										
Angaben zum Bauteil / Data to the construction unit										
Produkt / Product x-3Dprofile										
Serien-Nr. / Serial No.					Auftrag-Nr. / Order No.					
Kunde / Customer xxxxxx					Standort / Location Püttlingen					
Linie / Line Halle x / Linie 104										
Angaben zum Test / Data to the test										
Prüfmittel / Testing machine x-LinCheck-3D										
Testort / Test Location Halle x					Datum / Date					
Prüfung Linearität / Check Linearity										
Spur / toe [°]					Sturz / Camber [°]					
	Ist-Wert	Toleranz				Ist-Wert	Toleranz			
Min	-10,14					Min	-31,83			
Max	-10,72					Max	-34,1			
Delta	0,58	+/- 2				Delta	2,27	+/- 2		
Gesamtbewertung	OK					Gesamtbewertung	OK			
"X - Wert" / "X - value" [mm]			"Y - Wert" / "Y - value" [mm]			"Z - Wert" / "Z - value" [mm]				
	Ist-Wert	Toleranz		Ist-Wert	Toleranz		Ist-Wert	Toleranz		
Min	-0,28	+/- 1		Min	-0,2	+/- 1	Min	-0,51	+/- 1	
Max	0,32	+/- 1		Max	0,1	+/- 1	Max	0,4	+/- 1	
Delta	0,6	+/- 2		Delta	0,3	+/- 2	Delta	0,91	+/- 2	
Gesamtbewertung	OK			Gesamtbewertung	OK			Gesamtbewertung	OK	
Prüfung Reproduzierbarkeit / Check Reproducibility										
Spur / toe [°]					Sturz / Camber [°]					
Ist-Wert	Toleranz	Result			Ist-Wert	Toleranz	Result			
0,03	0,3	OK			0,11	0,4	OK			
"X - Wert" / "X - value" [mm]			"Y - Wert" / "Y - value" [mm]			"Z - Wert" / "Z - value" [mm]				
Ist-Wert	Toleranz	Result	Ist-Wert	Toleranz	Result	Ist-Wert	Toleranz	Result		
0,03	0,2	OK	0,02	0,2	OK	0,04	0,2	OK		
Kamera Helligkeit [%]			Gesamtergebnis / total result							
Ist-Wert	Toleranz	Result								
0,16	12	OK								
Datum / Date		Prüfer / Tested by Max Mustermann			Unterschrift / Signature					



TESTS

[Linearity check](#)

[Reproducibility test](#)

[Camera brightness evaluation](#)

[Creation of result protocol](#)

- By using the device, each individual sensor or the complete measuring system is checked and possible errors are detected.
- This reduces the risk of incorrect measurements and avoids cost-intensive rework as a precaution.
- Possible "incorrect settings" due to incorrectly measuring sensors, which can lead, for example, to tilted steering wheels, are prevented.

CONCLUSION

Cost-intensive reworking and downtimes in production are avoided