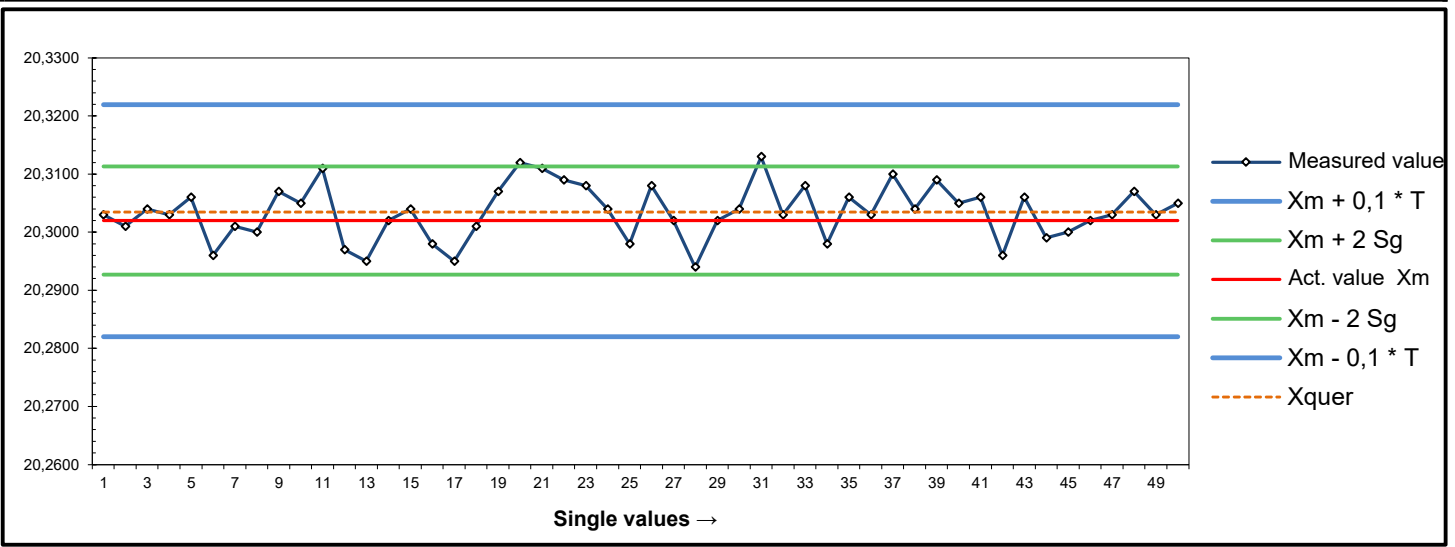


Date:	Examiner:	J. Schaude	Customer/Dep.:	Quality-Analysis	Test location:	
Test equipment		Standard		Feature		
Designation:	Zeiss Prismo	Designation:	Setting ring	Designation:	Diameter	
Number:	QA-PM 019	Number:	Inv-Nr. 200006	Designation:		
Resolution:	0,001	Actual value:	20,3020	Nom. dim.:	20,3000	OSG: 20,4000
Test reason:	Erstbemusterung	Unit:	mm	Unit:	mm	USG: 20,2000
Remark:	Actual value Normal corresponds to the mean value of the measurements					



Single values									
1 - 5	6 - 10	11 - 15	16 - 20	21 - 25	26 - 30	31 - 35	36 - 40	41 - 45	46 - 50
20,3030	20,2960	20,3110	20,2980	20,3110	20,3080	20,3130	20,3030	20,3060	20,3020
20,3010	20,3010	20,2970	20,2950	20,3090	20,3020	20,3030	20,3100	20,2960	20,3030
20,3040	20,3000	20,2950	20,3010	20,3080	20,2940	20,3080	20,3040	20,3060	20,3070
20,3030	20,3070	20,3020	20,3070	20,3040	20,3020	20,2980	20,3090	20,2990	20,3030
20,3060	20,3050	20,3040	20,3120	20,2980	20,3040	20,3060	20,3050	20,3000	20,3050

Specification values			Measured values			Statistical values		
X_m	20,3020	mm				\bar{x}_g	20,30348	mm
$X_m - 0,1 * T$	20,2820	mm	$x_{min.}$	20,294	mm	$\bar{x}_g - 2 * s_g$	20,2942	mm
$X_m + 0,1 * T$	20,3220	mm	$x_{max.}$	20,313	mm	$\bar{x}_g + 2 * s_g$	20,3128	mm
$0,2 * T$	0,0400	mm	R	0,019	mm	$4 * s_g$	0,01863	mm
T	0,2000	mm	$n_{ges.}$	50	Teile	s_g	0,004657	mm

Minimum requirement for the test index:

$C_g \geq$	1,33
$C_{gk} \geq$	1,33

$$C_g = \frac{0,2 * T}{4 * s_g} = 2,15$$

$$C_{gk} = \frac{0,1 * T - |\bar{x}_g - x_m|}{s_g * 2 * s} = 1,99$$

Resolution in % of T = **0,50%**

Measuring system capable for T to...

$T_{min/Cg} = 0,1239$ mm

$T_{min/Cgk} = 0,1387$ mm

$T_{max. Aufl.} = 0,0200$ mm

- Notes:
- 1.) Resolution is sufficient ! (Resolution of the measuring device is less than or equal to 5% !)
 - 2.) Measuring device is capable ! (Cg and Cgk both fulfill the minimum requirement !)