

# Inspection Certificate



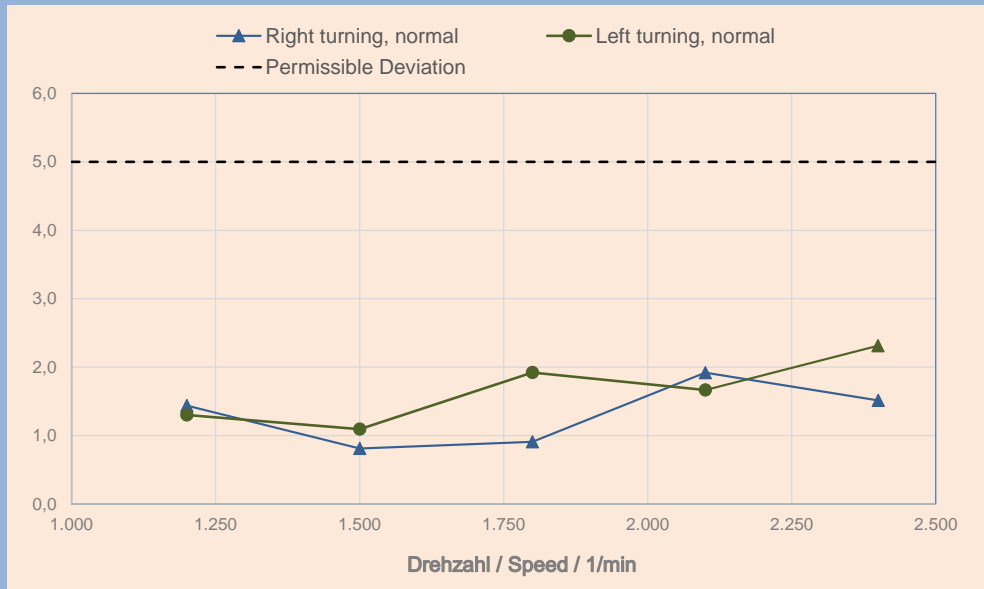
Test Certificate 3.1 acc. DIN EN 10204

Intelligent Balancing Solutions

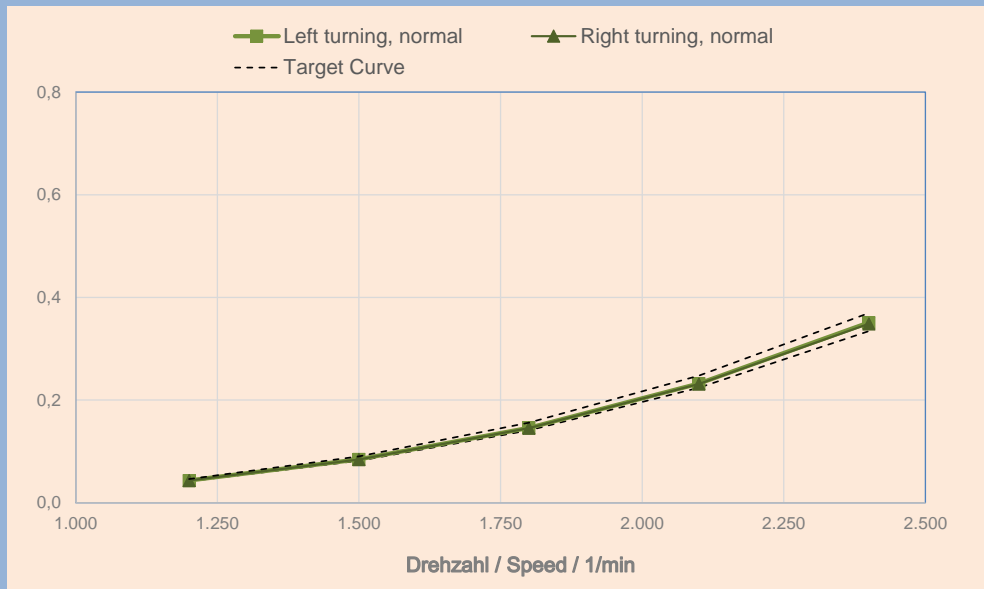
Customer	Neo-Tec		
Location	ul. Kobiałka 11a 09-411 Plock, Polen		
Order-No.	A20-047177		
Machine Type	HS 26		
Pedestal Type	HS 26		
Unbalance Measuring System	Quasar 2		
Test Performed by	Hofmann Mess- und Auswuchttechnik GmbH & Co. KG Werner-von-Siemens-Str. 21, D-64319 Pfungstadt		
Testing Device	Unbalance Shaker		
Testing Device No.	PH-003601		
Max. Unbalance	50.000,0		gmm
Test Unbalance	50.000,0		gmm
Angle	0,0		Grad
Perm. Deviation U, v	5,0		%
Stiffness Pedestal 1			
normal	1.600,0		N/μm
Stiffness Pedestal 2			
normal	1.600,0		N/μm
Testing Method	Setup certified Hofmann unbalance exciter into the bearing head. Connect speed sensor to measuring system of HS installation. Check unbalance and vibration calibration at different speeds within the operational range of the unbalance exciter.  Permissible values and deviations are given by manufacturer.		
Comment	  		
Date of Test	11/2024	Next Recommended Test	11/2025
Test passed	yes		
Date	06.11.2024	Signature	Stamp
Inspector	i.A. Alborz Aghdaie		Hofmann Mess- und Auswuchttechnik GmbH & Co. KG Werner-von-Siemens-Str. 21 64319 Pfungstadt

Diagrams Pedestal 1

Test of low-speed Unbalance Measurement

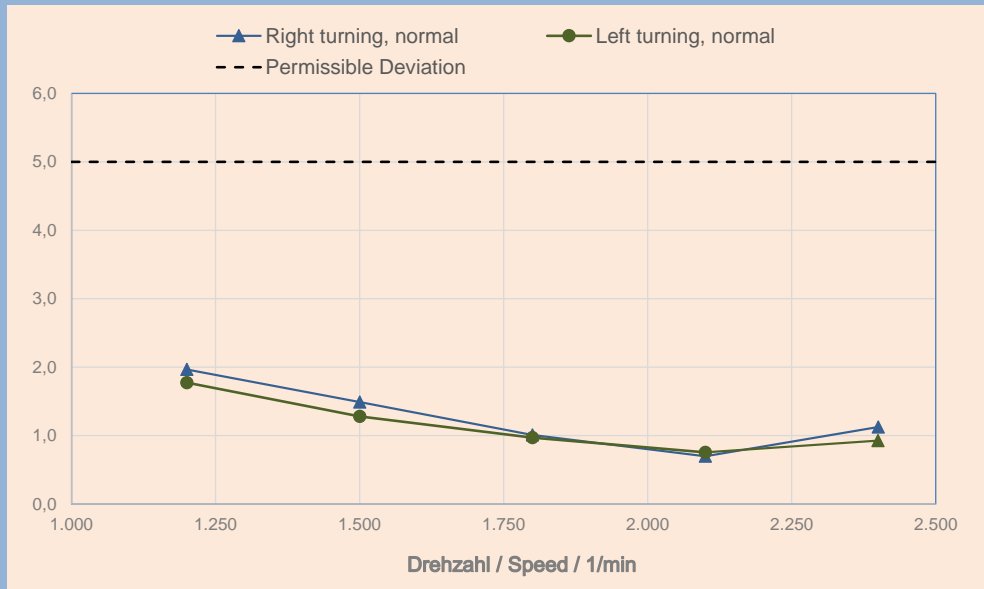


Test Vibration Velocity Measurement

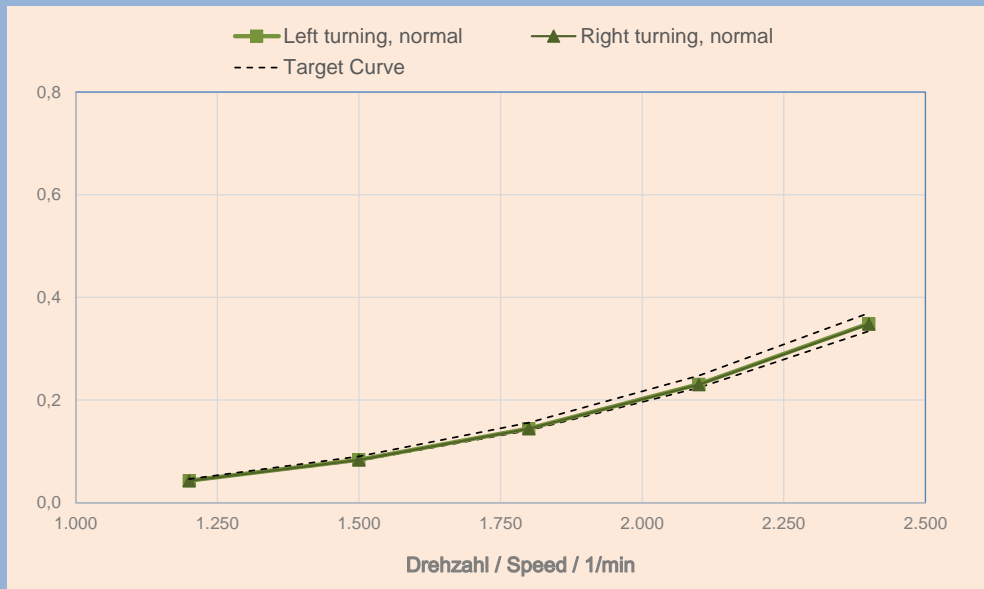


Diagrams Pedestal 2

Test of low-speed Unbalance Measurement



Test Vibration Velocity Measurement



Right turning, normal

Unbalance U and Vibration Velocity v-RMS by Unbalance Measuring System							
Meas. Values		Amount - Set Value		Deviation Amount			
Amount	Angle	Amount	Angle		Status		
<b>Pedestal 1</b>							
Speed 1/min	U gmm	W deg.	U gmm	W deg.	$\Delta U$ %	passed yes / no	Specification achieved yes / no
1.200,0	49.615,0	0,7	50.000,0	0,0	1,4	yes	<b>yes</b>
1.500,0	49.689,0	0,3	50.000,0	0,0	0,8	yes	
1.800,0	49.706,0	359,6	50.000,0	0,0	0,9	yes	
2.100,0	49.965,0	358,9	50.000,0	0,0	1,9	yes	
2.400,0	50.289,0	359,2	50.000,0	0,0	1,5	yes	
Speed 1/min	v-RMS mm/s	W deg.	v-RMS mm/s		$\Delta v$ %	passed yes / no	Specification achieved yes / no
1.200,0	0,043	169,0	0,044		1,3	yes	<b>yes</b>
1.500,0	0,084	170,0	0,086		1,7	yes	
1.800,0	0,146	170,5	0,148		2,0	yes	
2.100,0	0,232	170,9	0,236		1,8	yes	
2.400,0	0,349	170,0	0,352		1,0	yes	

<b>Pedestal 2</b>							
Speed 1/min	U gmm	W deg.	U gmm	W Grad	$\Delta U$ %	passed yes / no	Specification achieved yes / no
1.200,0	49.778,0	1,1	50.000,0	0,0	2,0	yes	<b>yes</b>
1.500,0	49.733,0	0,8	50.000,0	0,0	1,5	yes	
1.800,0	49.744,0	0,5	50.000,0	0,0	1,0	yes	
2.100,0	50.010,0	0,4	50.000,0	0,0	0,7	yes	
2.400,0	50.441,0	0,4	50.000,0	0,0	1,1	yes	
Speed 1/min	v-RMS mm/s	W deg.	v-RMS mm/s		$\Delta v$ %	passed yes / no	Specification achieved yes / no
1.200,0	0,043	170,5	0,044		2,9	yes	<b>yes</b>
1.500,0	0,084	171,3	0,086		2,8	yes	
1.800,0	0,144	172,1	0,148		3,0	yes	
2.100,0	0,230	172,6	0,236		2,4	yes	
2.400,0	0,348	175,3	0,352		1,1	yes	

Left turning, normal

Unbalance U and Vibration Velocity v-RMS by Unbalance Measuring System							
Meas. Values		Amount - Set Value		Deviation Amount			
Amount	Angle	Amount	Angle		Status		
<b>Pedestal 1</b>							
Speed 1/min	U gmm	W deg.	U gmm	W deg.	$\Delta U$ %	passed yes / no	Specification achieved yes / no
1.200,0	49.611,0	359,4	50.000,0	0,0	1,3	yes	<b>yes</b>
1.500,0	49.839,0	359,4	50.000,0	0,0	1,1	yes	
1.800,0	50.031,0	1,1	50.000,0	0,0	1,9	yes	
2.100,0	50.271,0	0,9	50.000,0	0,0	1,7	yes	
2.400,0	50.752,0	1,0	50.000,0	0,0	2,3	yes	
Speed 1/min	v-RMS mm/s	W deg.	v-RMS mm/s		$\Delta v$ %	passed yes / no	Specification achieved yes / no
1.200,0	0,043	177,4	0,044		1,3	yes	<b>yes</b>
1.500,0	0,085	178,8	0,086		1,6	yes	
1.800,0	0,146	179,6	0,148		1,6	yes	
2.100,0	0,232	180,0	0,236		1,6	yes	
2.400,0	0,351	179,5	0,352		0,2	yes	

<b>Pedestal 2</b>							
Speed 1/min	U gmm	W deg.	U gmm	W Grad	$\Delta U$ %	passed yes / no	Specification achieved yes / no
1.200,0	49.117,0	0,1	50.000,0	0,0	1,8	yes	<b>yes</b>
1.500,0	49.366,0	0,1	50.000,0	0,0	1,3	yes	
1.800,0	49.523,0	0,1	50.000,0	0,0	1,0	yes	
2.100,0	49.854,0	359,6	50.000,0	0,0	0,8	yes	
2.400,0	50.304,0	359,6	50.000,0	0,0	0,9	yes	
Speed 1/min	v-RMS mm/s	W deg.	v-RMS mm/s		$\Delta v$ %	passed yes / no	Specification achieved yes / no
1.200,0	0,043	177,7	0,044		2,2	yes	<b>yes</b>
1.500,0	0,084	177,0	0,086		2,6	yes	
1.800,0	0,144	177,9	0,148		2,7	yes	
2.100,0	0,231	178,0	0,236		2,0	yes	
2.400,0	0,349	177,0	0,352		0,8	yes	