MONOLITH S

Konfiguration der MONOLITH-Wuchtmaschine:

- automatische Radschutzöffnen/-schlissen
- pneumatische Schnellradspannung
- pneumatische Bremse in Unwuchtposition
- Kalibration
- Sprachsynthesizer
- Lassermessarm
- ALU Programme
- automatische Positionierung
- berührungslose Radparameter Messystem
- Optimierung
- USG Sensor für Felgenbreitemessung
- Programm 3P - Hinter-Speichen-Platzierung
- Touchscreen Monitor LED
- Ausgabe in Datei
- Benutzers Memory
- automatische Messung von Durchmesser, Breite, Abstand
- Unwuchtneuberechnung
- standard HAWEKAs adapter **Ø40,** manuelle Radschutz.

Technische Daten

Felgendurchmesser:	10” – 30”
Felgenbreite	2” – 15”
Radgewicht	80 kg
Auswuchtgenauigkeit	1 g
Genauigkeit der Radteilung	0.45°
Messdrehzahl:	140 obr/min
Leistung des Antriebsmotors	80 W
Spannungsversorgung	230V / 50 Hz
Pneumatische Versorgung	8 - 10 bar
Maße	980/1250/1490
Gewicht	120 kg

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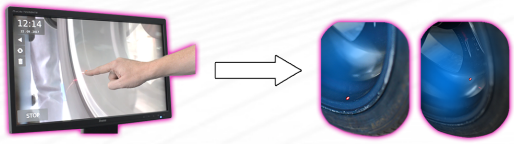
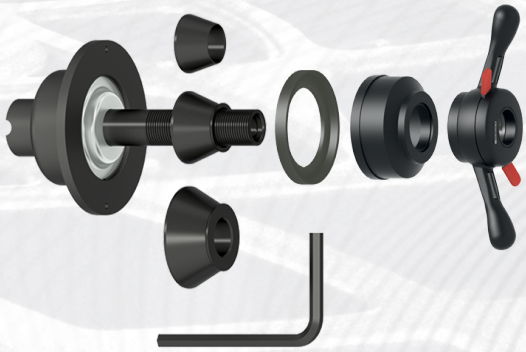
Vorteile der Maschine:

Die Wuchtmaschine ist mit einem patentierten System zur Eingabe von Radparametern basierend auf dem realen Bild einer Kamera ausgestattet. Zusätzlich verfügt die Wuchtmaschine über einen Laserindikator, der die Stelle zum Anbringen des Gewichts präzise markiert, um die Korrekturstelle genauer zu bestimmen.





Die Wuchtmaschine ist mit einer modernen Schnellspannaufnahme von HAWEKA ausgestattet, die die Zeit erheblich verkürzt und eine sichere Montage des Rades auf der Spindel der Wuchtmaschine ohne das Risiko einer außermittigen Positionierung gewährleistet.

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(12) **United States Patent**
Roguski et al.

(10) **Patent No.: US 10,281,355 B2**
(45) **Date of Patent: May 7, 2019**

(54) **METHOD AND SYSTEM FOR THE OPTICAL DETERMINATION OF CORRECTION PLANES IN ROTATING ELEMENTS**

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(73) Assignee: **UNIT S.C. WIESLAW ROGUSKI, JAN TWOREK**, Warsaw (PL)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 279 days.

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G01M 1/28 (2006.01)
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(Continued)

(52) **U.S. Cl.**
CPC ***G01M 1/16*** (2013.01); ***G01M 1/225*** (2013.01); ***G01M 1/28*** (2013.01); ***G01M 1/081*** (2013.01); ***H04N 7/181*** (2013.01)

(58) **Field of Classification Search**
CPC G01M 1/16
(Continued)

(56) **References Cited**

U.S. PATENT DOCUMENTS

5,827,964 A 10/1998 Douine et al.
6,484,574 B1 11/2002 Douglas et al.
(Continued)

FOREIGN PATENT DOCUMENTS

EP 0724144 7/1996
EP 1398611 3/2004
WO 98/10261 3/1998

OTHER PUBLICATIONS

EP Search Report for EP16185127, completed Jan. 17, 2017.
PPO Search Report for P.413757, completed Sep. 5, 2016.

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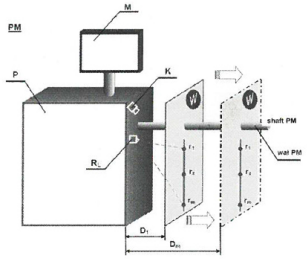
(57) **ABSTRACT**

The subject matter of the present invention relates to a system for the optical determination of correction planes in rotating elements, used in the process of balancing, in particular in diagnostic devices equipped with a system which has at least one video camera (K), at least one line projector (RL), a monitor screen (M) and a computer (P) which controls individual component elements of the system, wherein the video camera (K) cooperates with the line projector (RL) while projecting a view of the rotating element (EW) on the monitor screen (M) together with an image of a line (L) projected by means of the line projector (RL).

The subject matter of the present invention also relates a method for determining correction planes which consists in that an area of measurement space is defined on the basis of a virtual rotating element (EW) before placing a rotating element (EW) on the shaft of a diagnostic device (PM) onto which line (L) is projected by means of line projector (RL), and subsequently a view of the rotating element (EW) is transmitted by means of the video camera (K) to the monitor screen (M) together with an image of the projected line (L), and thus the run of the line is obtained which maps a change in the value of the radius r_i from the axis of the shaft of the diagnostic device (PM) and the value of distance D_i of the rotating element (EW) from the diagnostic device (PM) in the defined area of measurement space.

6 Claims, 6 Drawing Sheets



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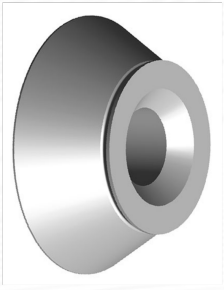
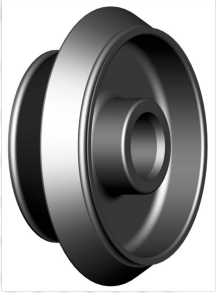
Zusätzliche Ausstattungen

Index	Beschreibung	Foto
150400049	Zentrierkonus, Konus 95-132 mm Ø40	
06.04.017.40	Zentrierkonus, Konus 110-125 mm Ø40	
06.04.008.40	Wuchtkone 125-145 mm Ø40	
150400043	Wuchtkone 122-174 mm Ø40	

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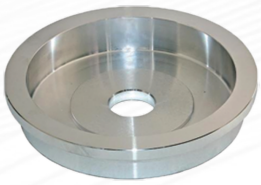
Index	Beschreibung	Foto
190400018	Distanzhülse für Konus Lieferfahrzeuge Ø40	
T-CĘG-001	Auswuchtgewichtezange Wuchtmaschine	
WT-2065-1	Kunststoffschaber	

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