

## Wyważarka TROLL MONOLITH

### Konfiguracja wyważarki MONOLITH:

- automatyczne otwieranie i zamykanie osłony koła
- pneumatyczny uchwyt szybkomocujący (MONOLITH P)
- pneumatyczny hamulec w miejscu niewyważenia
- kalibracja (łatwa przy pomocy przyrządu)
- syntezytor mowy
- laserowy wskaźnik
- program Alu + program "ukryty ciężarek"
- autonaprowadzanie
- automatyczny, bezdotykowy pomiar parametrów koła
- optymalizacja
- ultradźwiękowy pomiar zewnętrznej szerokości koła
- program 3P (ukrywanie ciężarka za ramionami felgi)
- monitor dotykowy LED
- drukowanie do pliku
- podręczna pamięć użytkownika
- automatyczny pomiar odległości, średnicy i szerokości
- przeliczenie niewyważień



### Dane techniczne

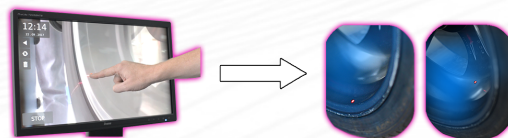
Średnica obręczy:	10" - 30"
Szerokość obręczy:	2" - 15"
Maks. ciężar koła:	80 kg
Dokładność niewyważenia:	1 g
Dokładność sygnalizacji miejsca niewyważenia:	0.45°
Prędkość obrotowa:	140 obr/min
Moc silnika napędzającego:	80 W
Zasilanie elektryczne:	230V / 50 Hz
Zasilanie pneumatyczne:	8 - 10 bar
Wymiary (G/SZ/W) mm:	980/1250/1490
Waga urządzenia:	120 kg

## Zalety maszyny:

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Wyważarka wyposażona jest w opatentowany system wprowadzania parametrów koła na podstawie realnego obrazu z kamery.

Dodatkowo, dla bardziej dokładnego określenia miejsca korekcji wyważarka posiada laserowy wskaźnik, precyzyjnie wskazujący miejsce klejenia ciężarka.



Wyważarka wyposażona jest w nowoczesny szybkoocucujący uchwyt pneumatyczny, znacznie skracający czas i ułatwiający pewny montaż koła na wrzecionie wyważarki bez ryzyka niecentrycznego zamocowania koła. Sterowanie mechanizmem uchwytu jest realizowane przy pomocy wygodnego pedału nożnego.

United States of America



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

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

FOREIGN PATENT DOCUMENTS

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

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OTHER PUBLICATIONS

EP Search Report for EP16185127, completed Jan. 17, 2017.  
PPO Search Report for P413757, 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 to a method for determining correction planes which consists in defining an area of measurement space; is defined on the basis of a virtual rotating element (EW) by 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 image 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 image of the lines obtained which shows a change in the values of the radius  $r_1$  from the axis of the shaft of the diagnostic device (PM) and the angle of distance  $\alpha$  of the rotating element (EW) from the diagnostic device (PM) in the defined area of measurement space.

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CPC G01M 1/16 (2013.01); G01M 1/22 (2013.01); G01M 1/28 (2013.01); G01M 1/30 (2013.01); G01M 1/31 (2013.01); G01M 1/32 (2013.01); G01M 1/33 (2013.01); G01M 1/34 (2013.01); G01M 1/35 (2013.01); G01M 1/36 (2013.01); G01M 1/37 (2013.01); G01M 1/38 (2013.01); G01M 1/39 (2013.01); G01M 1/40 (2013.01); G01M 1/41 (2013.01); G01M 1/42 (2013.01); G01M 1/43 (2013.01); G01M 1/44 (2013.01); G01M 1/45 (2013.01); G01M 1/46 (2013.01); G01M 1/47 (2013.01); G01M 1/48 (2013.01); G01M 1/49 (2013.01); G01M 1/50 (2013.01); G01M 1/51 (2013.01); G01M 1/52 (2013.01); G01M 1/53 (2013.01); G01M 1/54 (2013.01); G01M 1/55 (2013.01); G01M 1/56 (2013.01); G01M 1/57 (2013.01); G01M 1/58 (2013.01); G01M 1/59 (2013.01); G01M 1/60 (2013.01); G01M 1/61 (2013.01); G01M 1/62 (2013.01); G01M 1/63 (2013.01); G01M 1/64 (2013.01); G01M 1/65 (2013.01); G01M 1/66 (2013.01); G01M 1/67 (2013.01); G01M 1/68 (2013.01); G01M 1/69 (2013.01); G01M 1/70 (2013.01); G01M 1/71 (2013.01); G01M 1/72 (2013.01); G01M 1/73 (2013.01); G01M 1/74 (2013.01); 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G01M 1/03 (2013.01); G01M 1/04 (2013.01); G01M 1/05 (2013.01); G01M 1/06 (2013.01); G01M 1/07 (2013.01); G01M 1/08 (2013.01); G01M 1/09 (2013.01); G01M 1/10 (2013.01); G01M 1/11 (

## Dostępne kolory



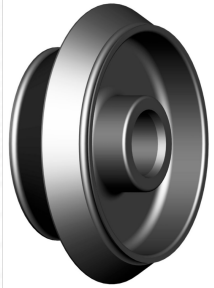
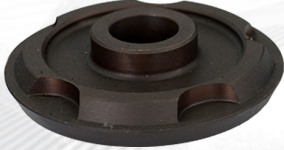

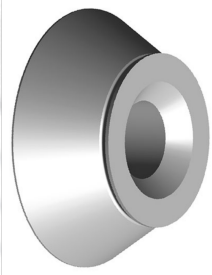
Kolory podstawowe



Kolory na zamówienie

## Wyposażenie dodatkowe

Indeks	Opis	Zdjęcie
PPK-2	Podnośnik koła PPK-1	
DO-5P	Docisk palcowy 5-bolcowy	
DO-4P	Docisk palcowy 4-bolcowy	
190400018	Pierścień dystansowy do stożków dostawczych Ø40	

Indeks	Opis	Zdjęcie
150400043	Stożek 122-174 mm Ø40	
06.04.008.40	Stożek 125-145 mm Ø40	
06.04.009.40	Stożek 145-165 mm Ø40	
150 400 049	Stożek 95-132 mm Ø40	

Indeks	Opis	Zdjęcie
W-U-2P-40	Uchwyt szpilkowy do uchwytu pneumatycznego	
143 403 003	Nakrętka Haweka ProGrip Ø40 mm x 3mm	
190 008 002	Kołpak dociskowy Haweka ProGrip	
T-CĘG-001	Cęgi wulkanizatorskie	

Indeks	Opis	Zdjęcie
WT-2065-1	Skrobak do ciężarków klejonych	