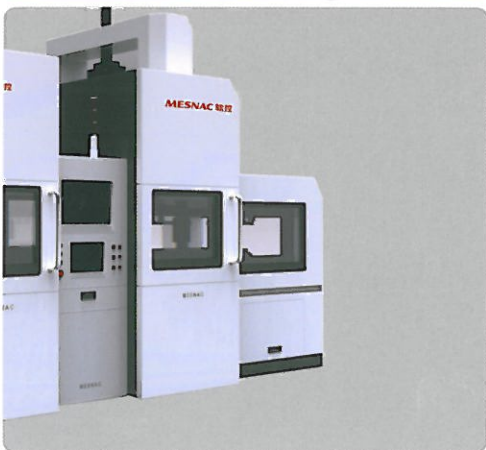
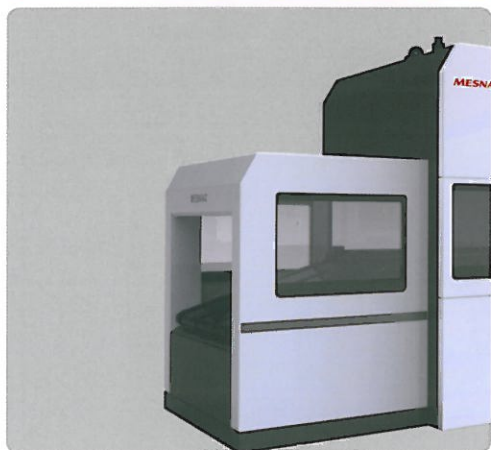
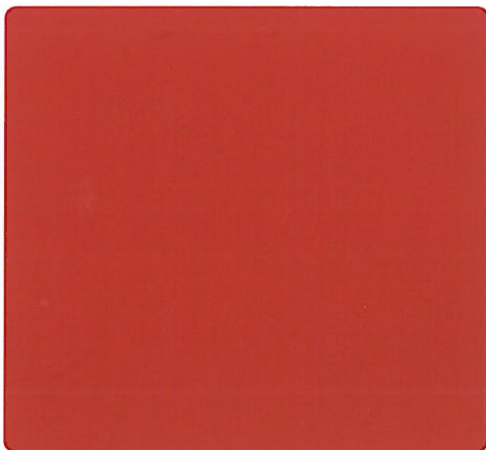


MESNAC

**YLH Tire Dynamic
Balance/Runout Testing Machine**



YLH Tire Dynamic Balance/Runout Testing Machine



PCR SERIES

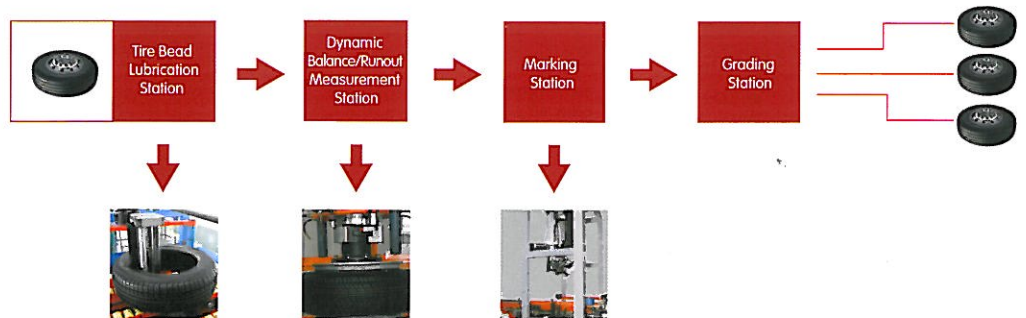


TBR SERIES

Application

Fully automatic Tire Dynamic Balance/Runout Testing Machine developed by MESNAC Co., Ltd., is a crucial machine to test tire quality. It is mainly used to measure dynamic balance performance, dimension deviation and concavo-convex surface of PCR, LTR and TBR tires on line. Dynamic balance testing items include upper tire surface unbalance amount and angle, lower tire surface unbalance amount and angle, static unbalance amount and angle, moment unbalance amount and angle, sum of upper and lower surface unbalance amount of a tire, etc; Runout testing items include lateral run-out of top and bottom; lateral run-out 1st harmonic of top and bottom; radial run-out of top, center and bottom; radial run-out 1st harmonic of top, center and bottom; bulges of top and bottom; depression of top and down, etc.

Components





Main Technical Parameters

Items	Tire Type	PCR/LTR Tires	TBR Tires
Tire Sizes	Tire outer diameter	450mm ~ 1050mm	700mm ~ 1350mm
	Bead diameter	13" ~ 26"	16" ~ 24.5"
	Cross section width	125mm ~ 400mm	200mm ~ 550mm
	Tire weight	Max.40kg	Max.110kg
Test Conditions	(Dynamic balance test) Tire rotary speed	600 ~ 800rpm	300 ~ 500rpm
	(Runout test)Tire rotary speed		60rpm
	Inflation pressure	0.2 ~ 0.5Mpa	0.6 ~ 0.9Mpa
	Ambient temperature		5°C ~ 40°C
Repeatability Accuracy	Dynamic balance manual test for 1 x 10	≤ ± 1.0g (with 50g weight)	≤ ± 2.0g (with 100g weight)
	Dynamic balance automatic test for 5 x 5	σ ≤ 2g	σ ≤ 5g
	Runout test		σ ≤ 0.1mm ≤ 10°
Mark Accuracy			0.1g
Resolution Ratio	Unbalance		0.1g
	Runout		0.01mm
	Measuring angle		0.3°
Work Time	Dynamic balance test	≤ 21s (195/65R15tire)	≤ 40s (11R22.5tire)
Marking	Marking method		Ribbon hot stamp
	Marking color/shape		Two colors/Two kinds (such as ●、○ or ●、○)
	Dynamic balance marking position		Light or heavy point of static unbalance
	Runout marking position		Highest or lowest point of Runout 1st harmonic
Power Supply Voltage			Three phase five-wire system
Air Pressure		Pressure ≥ 0.6Mpa	Pressure ≥ 1.0Mpa
Power Consumption	Power	About 25kW	About 40kW
	Compressed air	About 0.5m ³ /min	About 0.8m ³ /min

Testing Items

Dynamic Balance Testing Items

No.	Testing Items	PCR, LTR Tire Testing Range	TBR Radial Tire Testing Range	Grade
1	Upper surface unbalance amount and angle (U)	0 ~ 200g, 0 ~ 360°	0 ~ 400g, 0 ~ 360°	Y
2	Lower surface unbalance amount and angle (D)	0 ~ 200g, 0 ~ 360°	0 ~ 400g, 0 ~ 360°	Y
3	Static unbalance amount and angle(S)		Sum g, 0 ~ 360°	Y
4	Moment unbalance amount and angle (C)		Sum g, 0 ~ 360°	Y
5	Sum of upper and lower surface unbalance amount		Sum g	Y

Runout and Concavo-convex Testing Items

No.	Testing Items	Testing Range	Grade	Note
1	Top lateral run-out (TLRO)	0 ~ 50mm, 0 ~ 360°	Yes	P-P
2	Top radial run-out (TRRO)	0 ~ 50mm, 0 ~ 360°	Yes	P-P
3	Center radial run-out (CRRO)	0 ~ 50mm, 0 ~ 360°	Yes	P-P
4	Bottom radial run-out (BRRO)	0 ~ 50mm, 0 ~ 360°	Yes	P-P
5	Bottom lateral run-out (BLRO)	0 ~ 50mm, 0 ~ 360°	Yes	P-P
6	Top lateral run-out 1 harmonic (TLRO1H)	0 ~ 50mm, 0 ~ 360°	Yes	P-P
7	Top radial run-out 1 harmonics (TRRO1H)	0 ~ 50mm, 0 ~ 360°	Yes	P-P
8	Center radial run-out 1 harmonics (CRRO1H)	0 ~ 50mm, 0 ~ 360°	Yes	P-P
9	Bottom radial run-out 1 harmonics (BRRO1H)	0 ~ 50mm, 0 ~ 360°	Yes	P-P
10	Bottom lateral run-out 1 Harmonics (BLRO1H)	0 ~ 50mm, 0 ~ 360°	Yes	P-P
11	Top bulge (TBUGE)	0 ~ 20mm, 0 ~ 360°	Yes	-
12	Bottom bulge (BBUGE)	0 ~ 20mm, 0 ~ 360°	Yes	-
13	Top dent(TDENT)	0 ~ 20mm, 0 ~ 360°	Yes	-
14	Bottom dent (BDENT)	0 ~ 20mm, 0 ~ 360°	Yes	-

Product Model

Model	Product
YLH-J1326	PCR tire dynamic balance testing machine
YLH-Z1624	TBR tire dynamic balance testing machine
YLP-J1326	PCR tire runout testing machine
YLP-Z1624	TBR tire runout testing machine
YLHP-J1326	PCR tire dynamic balance/Runout testing machine
YLHP-Z1624	TBR tire dynamic balance/Runout testing machine
YLH-Z1624W	TBR tire dynamic balance testing machine (with automatic rim changer)
YLHP-Z1624W	TBR tire dynamic balance/Runout testing machine (with automatic rim changer)