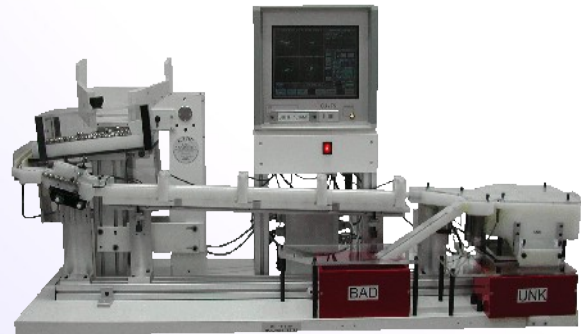


Hardness Tester

HT 1014 MF



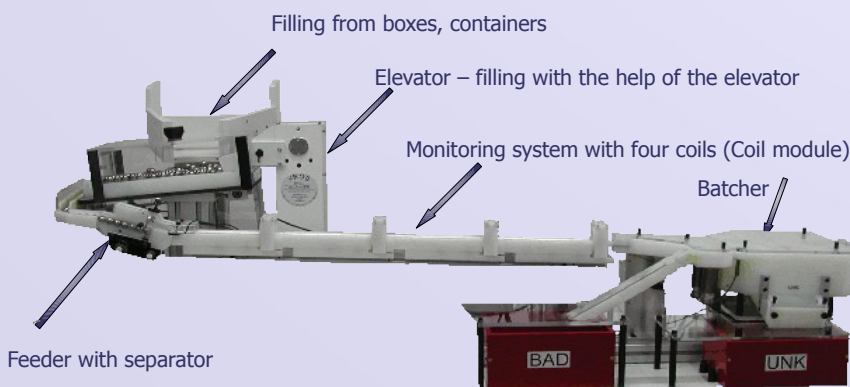
The automatic machine of type HT 1014 MF is a device for the non-destructive testing and sorting of steel bearing balls according to the criteria of their material composition and their hardness. The device uses a method of measurement of the electrical parameters of the balls as they pass through a coil, which presents a picture of the chemical and crystallographic composition of the structure of the ball's surface. The multifrequency basis of the automatic machine with four separate coils through which the balls pass gives it an ability to monitor hardness using four independent frequencies. Each coil has its own monitoring and assessment system. Through the comparison with known, previously monitored calibration balls, the automatic machine is then able to sort balls with the precision of ± 2 HRC from the calibration samples.



Description of the machine:

The hopper is composed of a plastic housing with an integrated ball loader and with a shute. The balls may be delivered to the entry hopper in two ways: 1) Filling the hopper of the HT with balls directly from customer's boxes, containers or 2) Filling the hopper of the HT with balls by means of the elevator of which the entry is placed below the HT. Second way of filling is suitable for integration into monitoring configurations – e.g. access behind the exit of OK balls of the monitoring machine BASC 1014. From the hopper the balls move to the feeder with separator which separates the individual balls. From here the balls run through the monitoring module with four coils (coil module). Each coil has its own adjusting and testing system. The central control and monitoring unit CU-TS then sorts the balls into OK/UNK (UNKnown) or BAD exits using the comparison of the test results with the control values (obtained previously by the monitoring of calibration balls). The OK/UNK exit leads to the ball batcher and only in the case that the full batch of OK balls is complete and duly examined the balls are sorted as OK. In case of

discrepancy (e. g. error in the number of balls etc.) the balls are sorted as „UNKnown” – UNK and it is possible to start the sorting process again. Balls are sorted out into the „BAD”, if they were indicated as minimally unsatisfactory by one or more coils compared to the calibration samples in term of their hardness or difference of material.

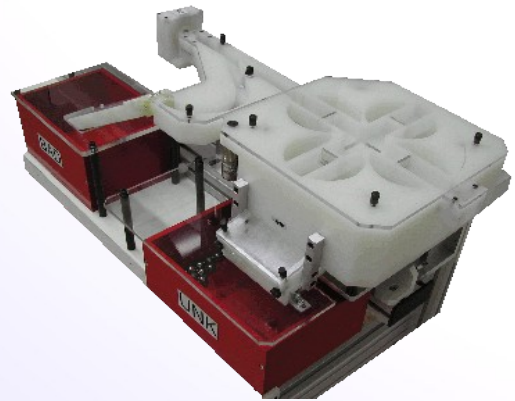


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Technical parameters:

Range:	from \varnothing 9,525mm to \varnothing 14,6mm (diameter of the sorted ball)
Precision:	ca \pm 2 HRC from the calibration samples
Frequency range:	from 10,0 to 150,0 kHz
Voltage:	120V/230V 50/60 Hz \pm 10%
Phase:	alternating one-phase current
Input:	max. 250 VA
Weight:	ca 60 kgs
Basic proportions:	150 cm x 60 cm x 60 cm (length x height x width)



Performance:

ball 's diameter	pcs/hour
\varnothing 9,525- \varnothing 12,7	9 000
\varnothing 13,494	8 370
\varnothing 14,288 - \varnothing 14,6	7 570

Order numbers:

NAME	ORDER NUMBER	DESCRIPTION
HT 1014 MF	K 373 024.001	Hardness Tester with Hopper and Pre-sorter for deviating diameters for the range from 9,525 to 14,6 mm <u>Multi</u> Frequency.
HT 1014 MF	K 373 024.002	Hardness Tester with Hopper and without Pre-sorter for deviating diameters for the range from 9,525 to 14,6 mm <u>Multi</u> Frequency.
BTE 1014	S 473 450	Ball Transporter type elevator for the range form 9,525 to 14,6 mm is supplied as one of the special accessories for the HT 1014 MF

For orders, please, contact the producer.



Coil module (with four coils)

