

HAIMER®
Quality Wins.



M A S T E R C A T A L O G

HAIMER®

BALANCING TECHNOLOGY



HAIMER.



Balancing
Technology

HAIMER
G 2.5 25000
A63.144.25.3
Ø 25 x 130
A 6

Tool Dynamic TD Automatic: For professionals



TOOL DYNAMIC TD AUTOMATIC AUTOMATIC BALANCING TECHNOLOGY

We take balancing to the next level: faster, better, more efficient!

The Tool Dynamic TD Automatic

The Tool Dynamic TD Automatic is a truly universal CNC-based balancing machine with automated correction of unbalance. It automatically corrects the unbalance in one or two planes by drilling, milling or grinding. The machine can work vertically and horizontally.

The balancing machine is controlled by an integrated 19" touch-screen. The numerical control is a Siemens 840DSL, which can be accessed simultaneously with the Balancing Software.

Automatic Balancing – that's how it works

After measuring for unbalance, the software calculates how deep the machine must drill, mill or grind in order to correct the unbalance. The balancing spindle turns to the correct position. The integrated CNC unit moves to the pre-selected balancing plane and automatically removes the appropriate amount of material. It's as simple as that.

Balancing could not be any faster or easier. Errors, such as those caused by incorrect marking on the tool holder or through inadvertently incorrect drilling depths, are no longer an issue.

- Measures and corrects unbalance in one step
- Rapid, easy and economic
- No incorrect drilling on the holder
- Integration into automatic production lines is possible
- Specific software for particular methods of balancing available

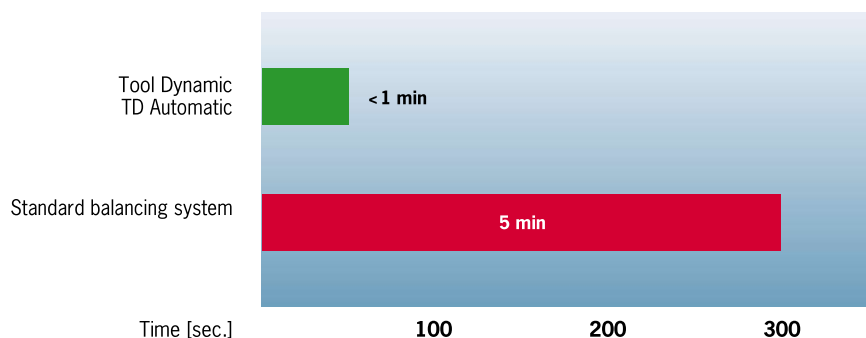
Tool Dynamic TD Automatic – automatic vertical CNC based balancing machine: **Maximum comfort, maximum process reliability with highest efficiency and precision.**

Contact Haimer USA for more details.

Improve your efficiency: balancing in record time!

Balancing process:

Simple measuring run,
balance correction and check



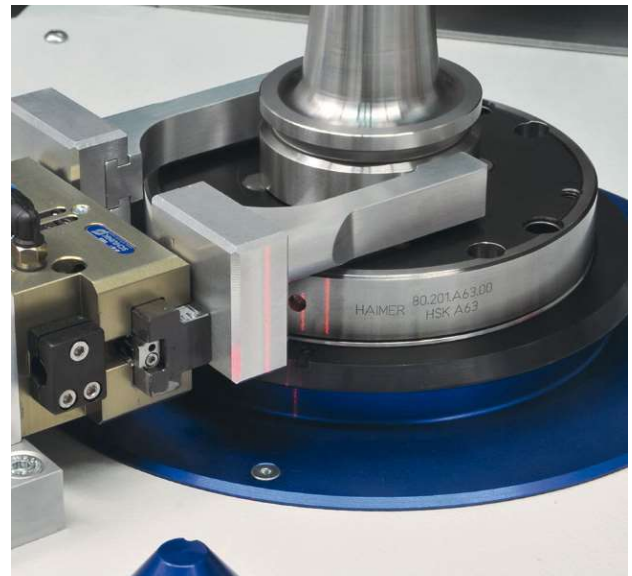
TOOL DYNAMIC TD AUTOMATIC PRODUCT FEATURES

Your benefits at a glance

- Correction of unbalance is fully automated by drilling, milling or grinding in one or two planes with the help of an integrated simultaneous 4 Axis CNC machine tool
- Integrated and exchangeable balancing adapters clamp holders with the highest precision. There are standard adapters for all common interfaces and customized solutions for special purposes
- Gripper for automated indexing (optional). It can be mounted without any additional tools and connected together with the balancing adapter
- Chips are removed by exhaust (suction) equipment
- Central lubrication enables a nearly maintenance free 3 shift use
- Balancing spindle and control box are cooled
- Dynamic measuring mode enables shortest measuring times – balance and control your holders in record time!
- Simple measuring mode: measuring, drilling and checking in less than **1 minute!**
- Integration of robot unit is possible – fully integrate your balancing machine into your production line
- Intelligent software allows for the fast and efficient re-balancing of holders that have been balanced on the machine once before



Automated correction of unbalance via CNC machining unit



Integrated balancing adapter and gripper for automatic index measuring

TOOL DYNAMIC TD AUTOMATIC PRODUCT FEATURES

Technical data		
Measuring accuracy		
Measuring accuracy	< 0.5 gmm	
Limitation of the rotor		
Max. diameter (mm/inch)	400 / 15.74	
Max. length (mm/inch)	600 / 23.6	
Max. weight (kg/lbs)	50 / 110	
Operational range		
X-axis (mm/inch)	155 / 6.10	
Y-axis (mm/inch)	395 / 15.55	
Z-axis (mm/inch)	205 / 8.07	
B-axis	360°	
Rapid mode	20 m/min	on all axis
Balancing spindle		
Max. RPM	1400 U/min/rpm	
Max. torque	35 Nm	
CNC unit		
Interface	VDI 30	
Max. engine speed	6000 U/min	adjustable
Max. torque	15 Nm	at S3-25%
Max. drilling capacity (mm/inch)	Ø 10 mm / 3/8"	in hardened steel with HRC 60
Operational range of rotor in horizontal mode		
Max. diameter (mm/inch)	400 / 15.74	
Max. height (mm/inch)	250 / 9.8	
Operational range of rotor in vertical mode		
Max. diameter (mm/inch)	400 / 15.74	
Max. height (mm/inch)	280 / 11.0	



Integrated control and Balancing software