

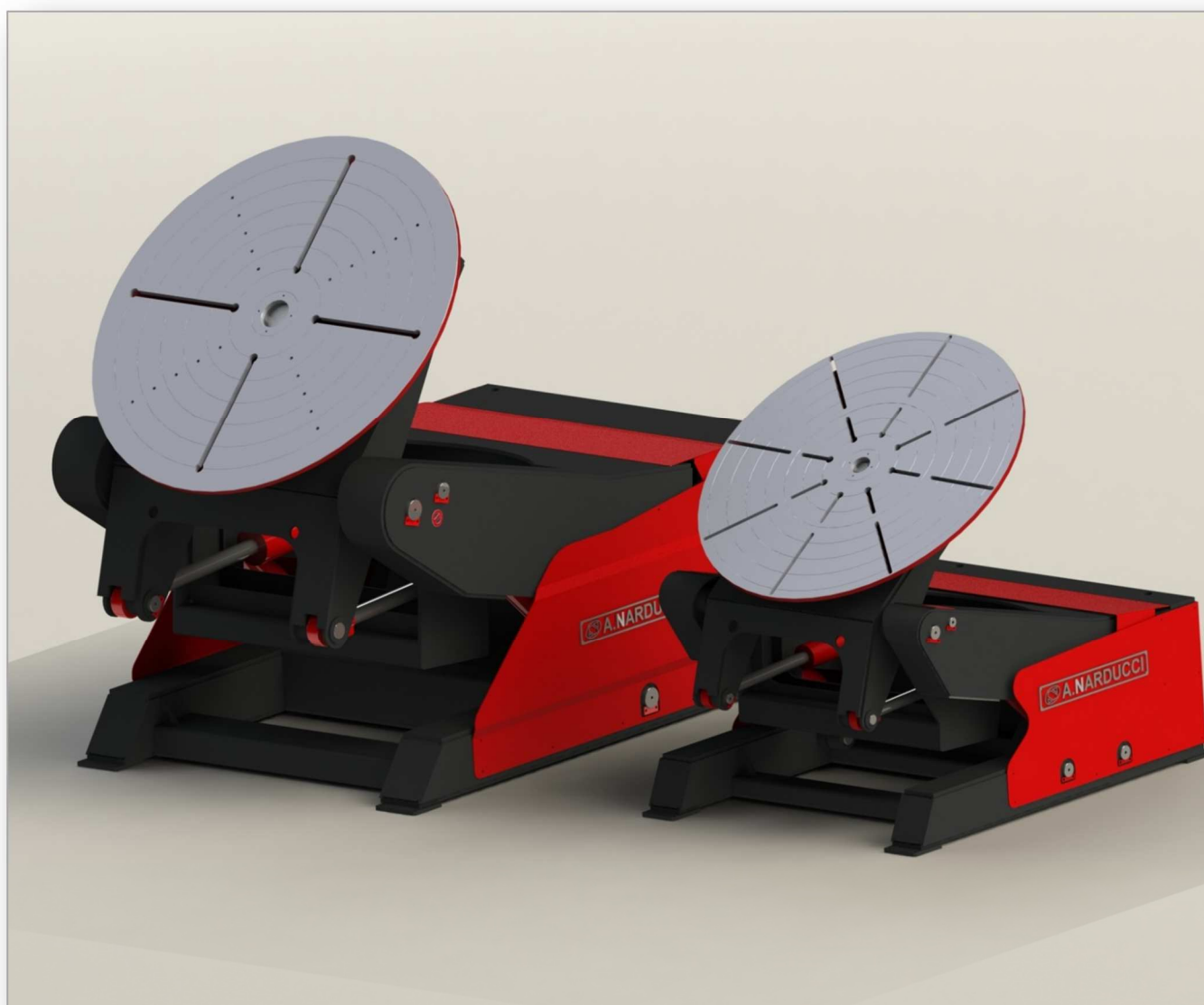


A.NARDUCCI

Testudo

P/E medium range elevating positioners

CAPACITY: 2.5 - 15 Ton



- **HIGH ELEVATION STROKE**
- **HIGH TILTING MOMENT**
- **COMPACT DESIGN**
- **VERTICAL TABLE ELEVATION**

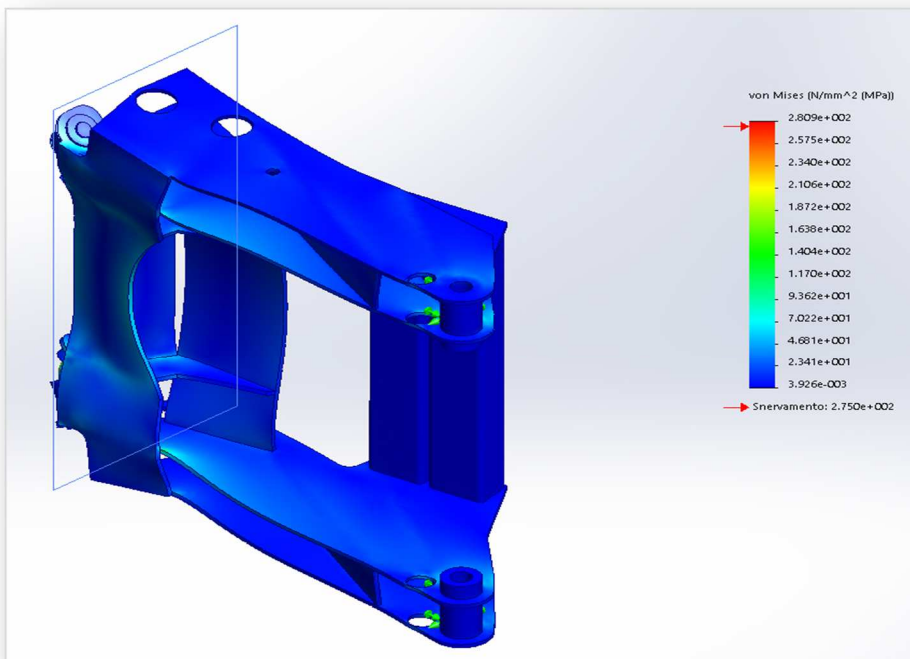
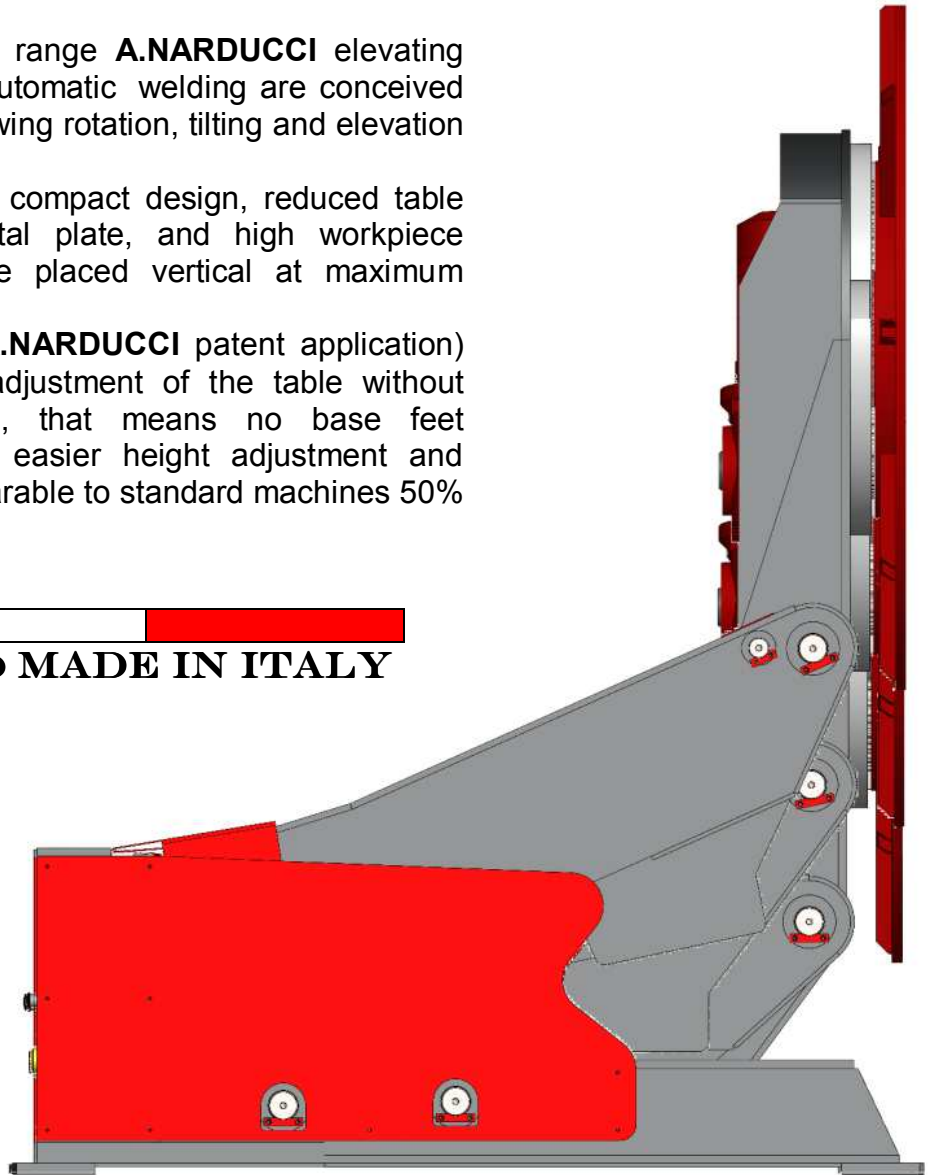
Testudo is the mid range **A.NARDUCCI** elevating positioners for manual and automatic welding are conceived to handle big size pieces allowing rotation, tilting and elevation movements.

The smart design assures a compact design, reduced table ground height with horizontal plate, and high workpiece diameter capacity with table placed vertical at maximum height.

An innovative cinematism (**A.NARDUCCI** patent application) makes possible an height adjustment of the table without undesired horizontal stroke, that means no base feet protrusion in working area, easier height adjustment and higher elevation stroke comparable to standard machines 50% longer.


DESIGNED AND MADE IN ITALY

The result is a machine with tilting moment twice than the standard average of the market and overall dimensions comparable to those of a conventional positioners of same nominal capacity.



All the model range is designed according top standards of performances and use proficiency, combined with high indeformability and structural resistance, warranted by FEM (Finit Element Method) trials of all the main welded elements, thermally stress relieved before of the finish process.

The positioner load capacity is warranted in all the positions for piece with centre of gravity at high distance from working plate. The large tilting angle is attainable in all the elevation positions, the only limit being imposed by workpiece dimension from ground surface. Table rotation, on slewing ring bearing, is driven by A.C. electric motors and frequency converter, with irreversible speed reducers featuring reduced backlash, placed in order to allow quick and easy maintenance. The rotating table, as all the machine, is made of thermally stress relieved welded carpentry structure in order to assure high dimensional stability and stress resistance, also after several high temperature cycles of preheating.

The tilting and elevation are operated each one by a couple of double effect hydraulic cylinders. All cylinders being equipped of restraint safety valves for each cylinder wise, at the end of each pipe and actuation valve. All the cylinders are installed inside the structures, to warrantee the maximum

protection and resistance both to wear and to accidental impacts, typical of several application like the heavy carpentry.

In order to assure top reliability the **A.NARDUCCI** machines are equipped with top quality components: RotheErde & DeFontaine for slewing ring bearings, SEW-Eurodrive for speed reducers and controls, Parker for hydraulics, Telemecanique for electric components, are only some example; hence all over the word the customers will be covered by major spare parts easy availability & service.

In addition **A.NARDUCCI** struggles to have a huge stock of major key spare parts in order to boost the availability and satisfy the hurgent needs for service: aproximately one hundred control boxes, dozens of speed reducers and frequency converter are ready at stock in order to make "customer satisfaction" not only a marketing slogan but an everyday service.



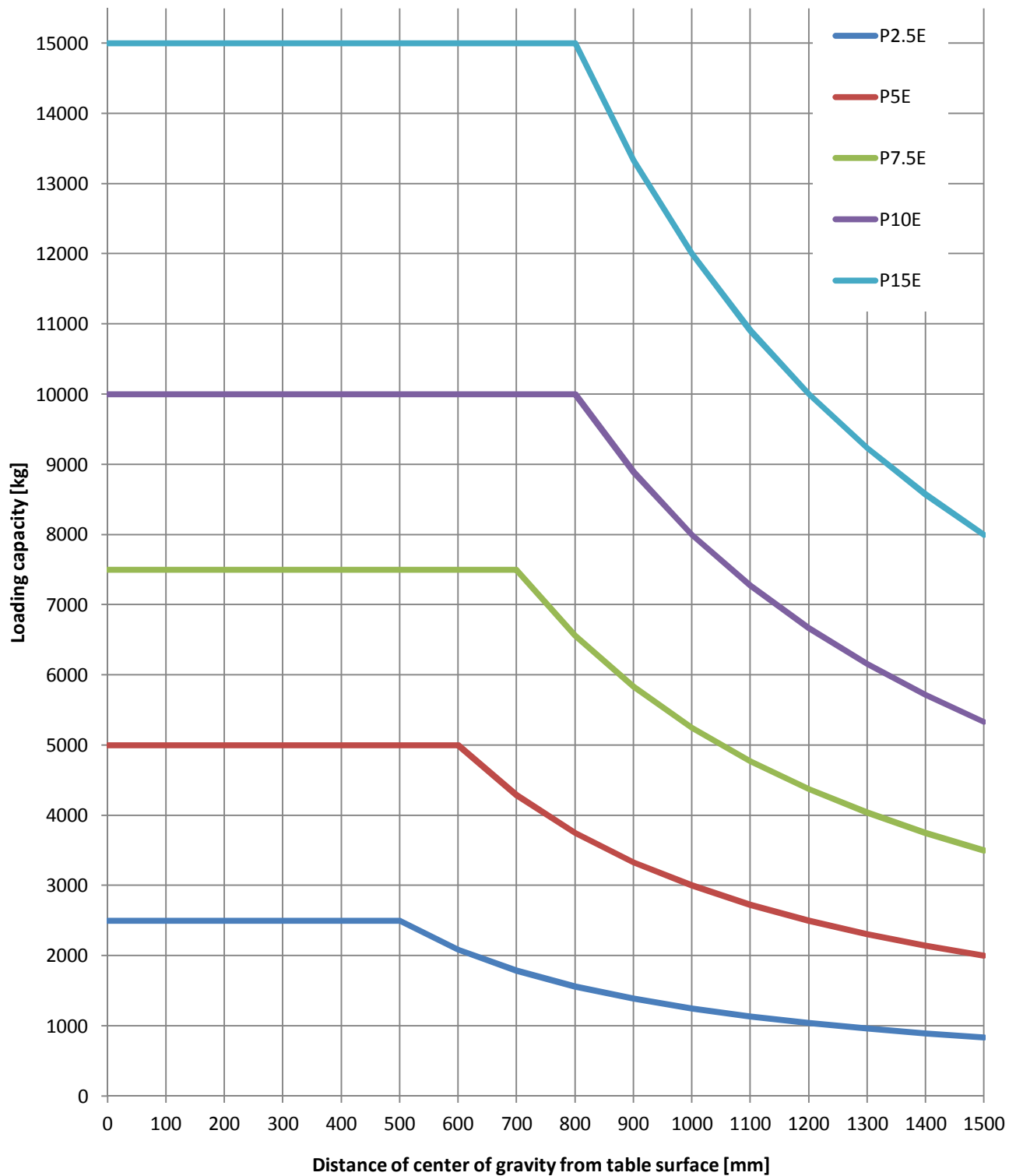
P/E Medium capacity elevating positioner

Standard product range

Testudo		P2.5E	P5E	P7.5E	P10E	P15E
Capacity	[kg]	2.500	5.000	7.500	10.000	15.000
Rated distance of center of gravity at maximum load	[mm]	500	600	700	800	800
Tilting moment (Available on table surface)	[kgm]	1.250	3.000	5..250	8.000	12.000
Rotation torque	[kgm]	375	750	1.125	1.500	2.250
Rated eccentricity of center of gravity at maximum load	[mm]	150 mm				
Max rotation speed	[rpm]	1,25	1,00	1,00	1,00	1,00
Table size	[mm]	Ø 1.500	Ø 1.700	Ø 1.800	Ø 1.900	Ø 2.000
Table eight from floor (with table placed horizontal)	[mm]	840÷1.690	840÷1.750	950÷2.300	1.100÷2.600	1.200÷2.750
Table rotation axis height from floor (with table placed vertical)	[mm]	1.150÷2.000	1.350÷2.250	1.350÷2.700	1.500÷3.000	1.600÷3.150
Tilting angle	[degr. °]	0÷120				
Welding current conduction link	[A]	900	1.500	1.500	1.500	1.500

Different capacities and features available on customer's request.

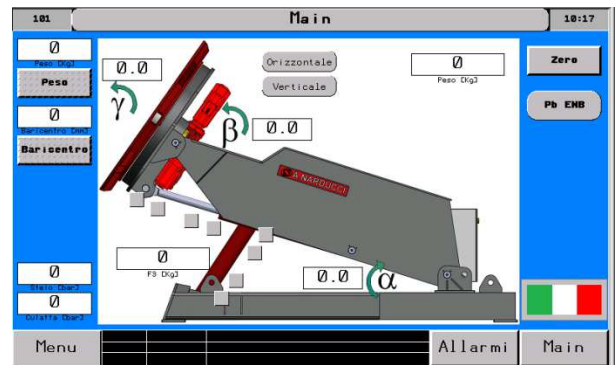
Diagram of tilting moment



Beside top standard performances of its product range **A.NARDUCCI** has a long experience in customized products and innovative features such as the following examples:

- **A.NARDUCCI workpiece weighting system**

A patented system capable to evaluate workpiece weight and center of gravity distance from table plate. An innovative step toward safety in order to avoid overload risk and an help to workshop proficiency with accurate workpiece mass calculation.



- **Table tilting control system**

The control system works also on the table tilting angle: the operator which can be constant during the working operation.

- **Industry 4.0 connection**

Alarms, overload conditions, loading history, working time..., rotation speed parameters and angles...: a factive help to workshop director, maintenance responsible, safety surveyor in order to have a precious control of workshop processes and equipments, with a particular attention to security of data transmission.



- **Wireless control**

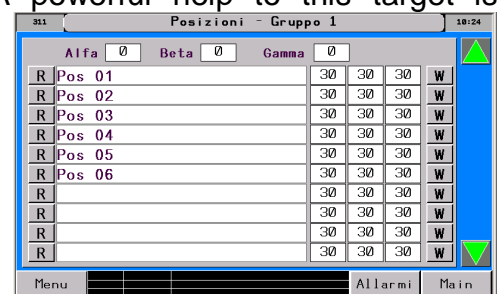
Every **A.NARDUCCI** machine is conceived in order to be fitted of a wireless control system. The options is a plug-in integration requiring no modification in wiring of control panel. Hence the flexibility to improve the machine and to resume it to standard features in case of fault.

- **Laser scanner guarded working area**

As safety in working place is an increasing issue, the working area in front of table positioner is a key point in accident prevention. A powerful help to this target is represented by a laser scanner suitable to be installed in front of the machine in order to avoid operator's intrusion in forbidden area between front base feet and below rotating table.

- **PLC self learning management**

In case of serial production process, electronic recipe system give the operator the possibility to track step by step the positioning phases of its work, in order to repeat them on the following workpieces.



	Alfa	Beta	Gamma	
R Pos 01	30	30	30	W
R Pos 02	30	30	30	W
R Pos 03	30	30	30	W
R Pos 04	30	30	30	W
R Pos 05	30	30	30	W
R Pos 06	30	30	30	W
R	30	30	30	W
R	30	30	30	W
R	30	30	30	W
R	30	30	30	W

Hydraulic linkage trough table plate, gas feeding, preheating devices, shielding equipments, special design machine?

Your strangest request are a chance for us to reach a new goal!