Application



PZM – Portal Twinbelt – Grinding Machine for preparation of Switch Cabinets

One of the biggest spanish manufacturers of electrical switch cabinets, terminal boxes and housings out of stainless steel and aluminum has invested in a Kuhlmeyer PZM Portal Twinbelt-Grinding Machine to optimize his production of a huge diversity of different parts.



The Portal Twinbelt–Grinding Machine PZM is designed for pre- and fine grinding on flat and large-volume components made of steel, stainless steel or aluminum. With the installed solution of the PZM 3.2, incl. a mobile lifting platform, tool automatic, workpiece handling unit and PLC – control system, the operator can use the full flexibility of the machine for the most of his entire product portfolio of small housings 90 x 90 x 80 mm up to the larger boxes of 2000 x 1600 x 500 mm. Corners, edges and surfaces can preworked manually and than finished with the automatic processes for the larger surfaces. The processing times for cabinets and enclosures can be clearly reduced. In addition, the operator can do further preparatory work in the automated processing periods. In the end, more finished parts, compared to manual processing, can be produced. Also a close to zero defect quality is achieved through repeatable program sequences.

The Kuhlmeyer Portal Twinbelt –Grinding Machine PZM combines the advantages of manual grinding with the automated portal solution to produce even very large workpieces of high quality and efficiency.



PZM - Portal Twinbelt - Grinding Machine

for preparation of electrical switch cabinets, terminal boxes, housings, hoods, furniture parts, frame parts in automotive and aircraft industry, in Waggon – Manufacturing, etc.







The delivered PZM has a total of 8 controlled axes. The Simatic S7 controller is equipped with a control panel and touch screen. All part-specific programs can be easily saved and reused. The necessary parameters such as speed, position, pressure settings etc. are shown on the display and can be adjusted in the program at any time. By using two individual abrasive belts for roughing and fining, we reach a high machine availability, due to the reduction of changing the grinding belts. Also we use adjustable tools, which can easily changed from automatic to manual mode . Thus a very high flexibility of the machine is achieved, in which the operator can optimize the process manually, if required.

Besides the standard machine equipment, there are many additional options such as motorized drive units for machine frame or lifter devices, rotators, turnovers and a fully automated solution, the PZM Robotec available.







