

EXAMPLES OF GOOD PRACTICES

1. Implementing an automatic feeding and transfer system for the parts to be machined at the lathes type KTSP 80

TASK:

The worker's task was: feeding the lathe with parts to be machined;

PROBLEM:

The existing solution required increased physical effort, repetitive movements, leans, storing the parts, clamping and unclamping the parts in/from the manual clamping device, manual transportation of the baskets with parts to the next machine, in the manufacturing flow.

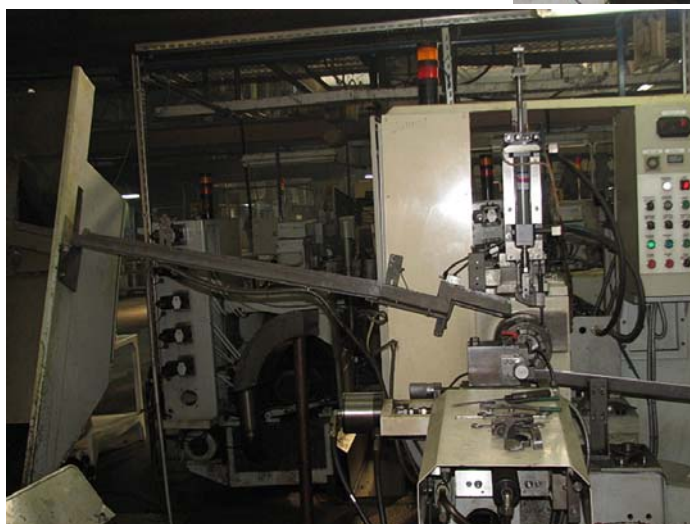
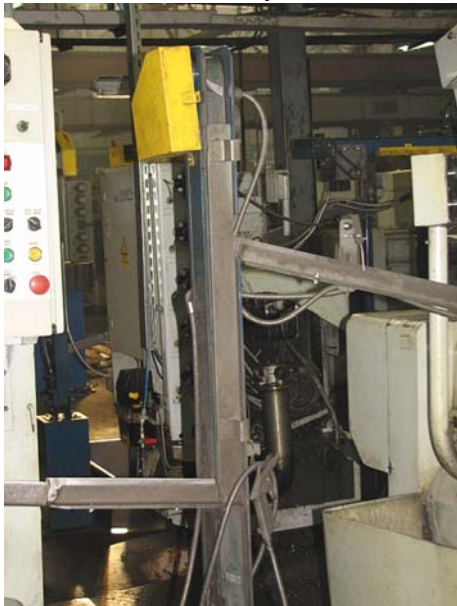
SOLUTION:

The situation was evaluated and it was designed and manufactured an automatic feeding and transfer system for the parts from one machine to another.

RESULTS:

The parts are stored in special containers with swivelling bottom, from where they are taken by a band conveyer which feeds the automatic feeding and transfer system for the parts from one machine to another, at the line of KTSP 80 lathes.

The operator monitors the lathes that work in automatic regime and intervenes for corrections only if it is necessary.



2. Implementing a band conveyer at the INTERSONIK type installation for washing the finished parts

TASK:

The worker's tasks were: feeding the tunnel type washing installation with parts and storing them in stacks, on interlaced rows, after the washing operation.

PROBLEM:

The existing solution required movement of the worker from the entrance of the parts into the washing tunnel to the other end of the washing installation, in order to take the washed parts, uncomfortable movements of the body, leans, lifting operations, repetitive movements.

SOLUTION:

It was designed and manufactured a return and transport band for the washed parts at the feeding point of the washing installation.

RESULTS:

The operator performs the activity in the same point, at the entrance of the tunnel for washing, the washed parts are brought back to the starting point by the return band and they are stored directly in containers in order to be taken and transported with mechanized means of transportation.



3. Implementing an automatic feeding system at the machines for plastic cold deformation/working of the bearing rings.

TASK:

The worker's task was: manual feeding, by setting the rings on the inclined chute, at the machines for plastic cold deformation/working of the bearing rings.

PROBLEM:

The existing solution required repetitive movements when feeding parts one by one, monotony of the activity, physical effort when carrying the baskets with parts.

SOLUTION:

We designed and manufactured a rotating table having a mechanical device which automatically and continuously distributes the parts to be machined towards a scraper conveyor, lifted and then transferred on the machine's feeding chute. Feeding the rotating table is done periodically, in proportion as the parts are machined. At the exit from the machine it was mounted a band for taking the machined parts and transporting them in a container in order to be taken with mechanized means of transportation.

RESULTS:

The work of the machines in automatic system, reducing the physical effort, eliminating the repetitive movements, reducing the work's monotony are the results of implementing this automatic feeding system.



4. Implementing some chutes with inclined plane for the transfer of the parts from one machine to another using the gravitational force.

TASK:

The worker's tasks were: transport and storing the parts to be machined from one machine to another during the manufacturing flow of the bearing rings.

PROBLEM:

The existing solution required increased physical effort, big weights, arms that are stretched, repetitive movements, leans, lifting.

SOLUTION:

There were manufactured chutes with inclined plane that ensure the transfer of the parts.

RESULTS:

The results are: reducing the physical effort consumed at storing, manual transportation of the parts with the carrier, leans, lifting, forced movements, catching the parts with the hands stretched, situations when the parts can not be kept as closer as possible to the body.

