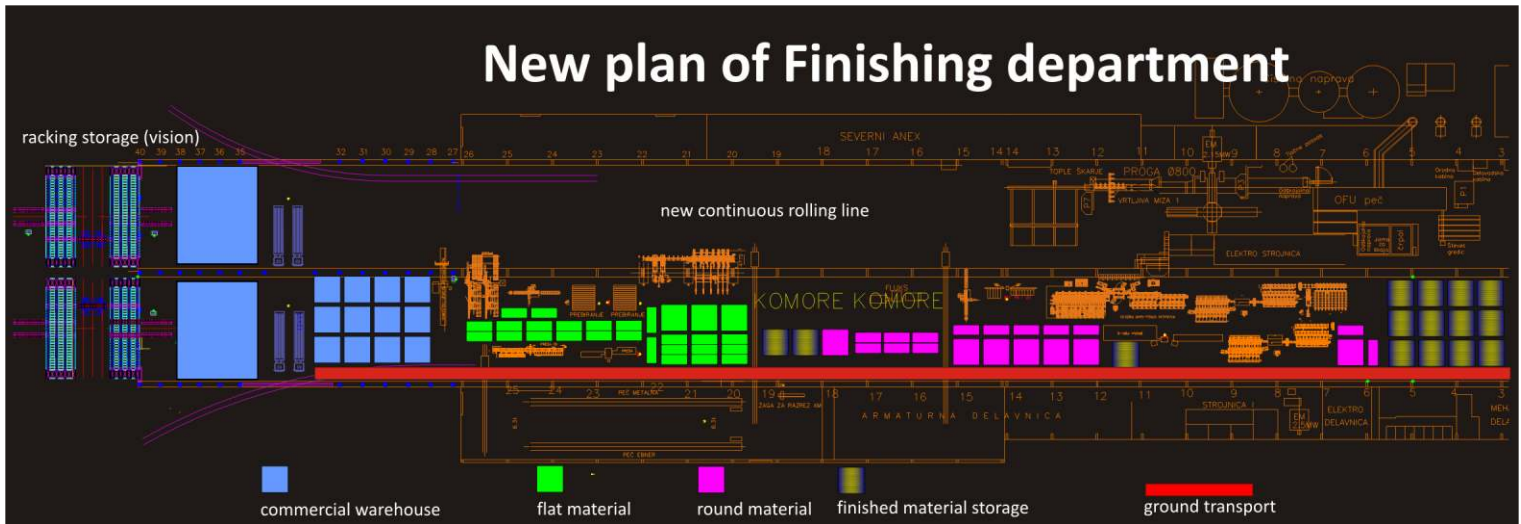


Rearranging the Finishing Department

After starting the new continuous line and demolition of the old 550 line, we gained some space, which allows a more rational – new plan of the Finishing department.



The space in the Finishing department and the space intended for intermediate and sales stock was reduced radically due to the needs for the setting of the new continuous line. Machines were deposited, stored and moved to where there was still place available. After starting the new continuous line and demolition of the old 550 line, we gained some space, which allows a more rational – new plan of the Finishing department, which will allow better material flow, better space efficiency for material storage and more flexibility at setting new and moving old machines. Studies in the past have proven that it is reasonable to separate finishing into two sections: one for flat and the other for round steel. Ground transport of material shall be used to overcome the problem with crossing paths and cranes making way to each other.

The new plan for the Finishing department is not a typical investment but more a set of minor interventions, which are needed to be carried out to restore the area of the 550 line, rational setting of existing and future machines and arrangement of the corresponding infrastructure.

Space release in the area of the old 550 line dictates a much-needed expansion of the Finishing department and an opportunity for its modernization, in the logistic meaning too.

Bundle arrival from the continuous line separates the BC hall into two parts. The left side of the Finishing department occupies a smaller area of the department and is connected to the sales warehouse. Because

there are larger areas on the right side, it is reasonable to place the round material finishing lines there. They are essentially longer and take over more space than the flat material finishing machines on the other hand.

This enables us to increase the areas for intermediate storage of round material in the right section due to the increasing share of round material trend. There is a problem of overcoming crossing of cranes and transport of finished material to the commercial warehouse. The solution was found in material transport by ground vehicles, which are planned to be purchased as a part of logistic arrangement of the company and which is closely connected to this project.

The stage, introduced in this text, includes the following major interventions:

- building the foundations for the finishing machines and paving the old 550 line area,
- moving the machines,
- installing computer workstations at the machines,
- additional containers for material storage,
- demolition of objects at the A line of pillars, where there are offices of foremen, nearby stacks, toilets and rest area,
- building a new foreman's office, nearby stacks, toilets and rest area on new locations,
- placement of additional energy installations (compressed air, gas, electricity).

Scheme above: new plan of the Finishing Department



The key effect of planned interventions is to provide conditions for a more efficient organisation and control, after-treatment and storage of rolled pieces. The area of the old 550 line is going to be used for an additional straightening and control line for round profiles. It also allows transport of rolled material cutting capacities from the Cold Finishing to the Rolling Mill and formation of logical process lines.

The new plan enables:

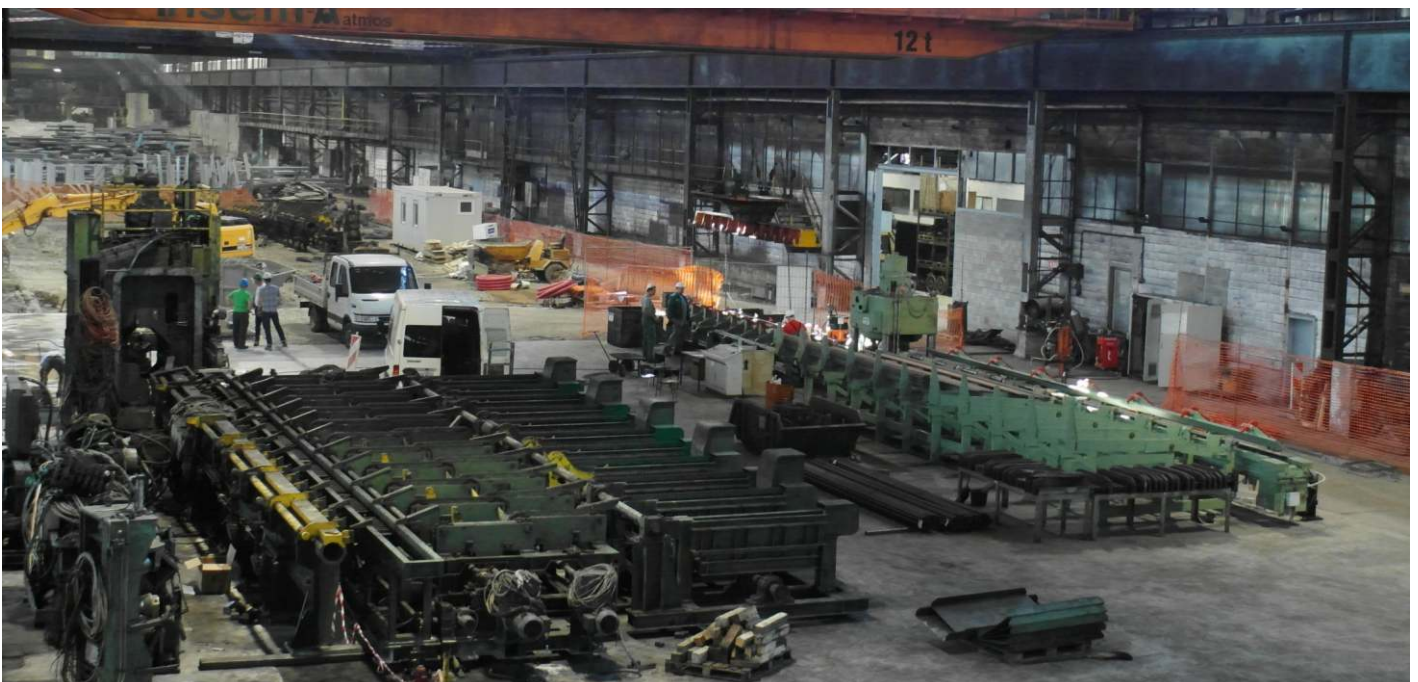
- increased productivity of the finishing machines (reduced time of material manipulation),
- possibility of production planning optimisation (coordination of material flow through after-treatment with rolling capacities),
- reduction of intermediate stock,
- risk reduction of material mix,
- improved safety of employees due to a more adequate way of storing material,
- increased sales warehouse area,
- ground vehicle transport of final products.

Individual interventions will be carried out through 2018; works are planned to be finished by the end of the first quarter 2019.

A new perspective and a new opportunity change the mentality of us as users, not only regarding our needs but also regarding our notion of the production process.

Operation of processing machines, feeding and transport are a part of a logically controlled comprehensive process, where all the participants communicate with each other to carry out tasks with the utmost efficiency.

Rolling Mill Manager
Čedomir Minić



Above: new foreman's office, below: new placement of the straightening machines Bronx and Mair