

Pipe-shop automation and workflow optimisation

AUTOMATED pipe pre-fabrication can be a complex and involved process, both during the constructive phase and during actual fabrication. Especially when sophisticated CNC machinery is used for tasks such as bending, flame-cutting or automated welding, it is important for the engineering department to prepare the spools in a way that makes optimal use of the capacities.

But the tasks involved go beyond the simple design and fabrication. It is important to properly plan the workflow and logistics, to avoid unnecessary transport and waiting times, as these can significantly impact fabrication costs. A machine that has to wait for material because of bottlenecks at an earlier position is frustrating and expensive, as is a machine that is idle because the operators have to calculate

the data they need to enter in order to fabricate the next job order.

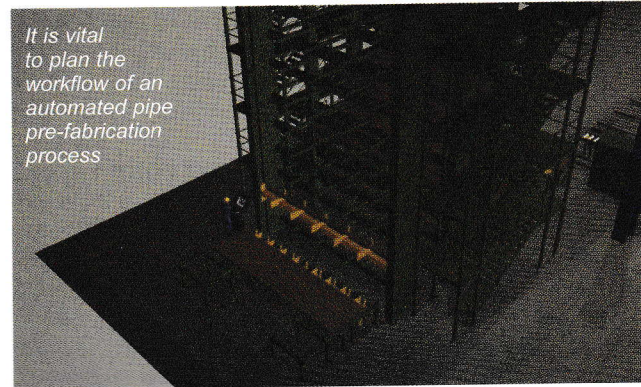
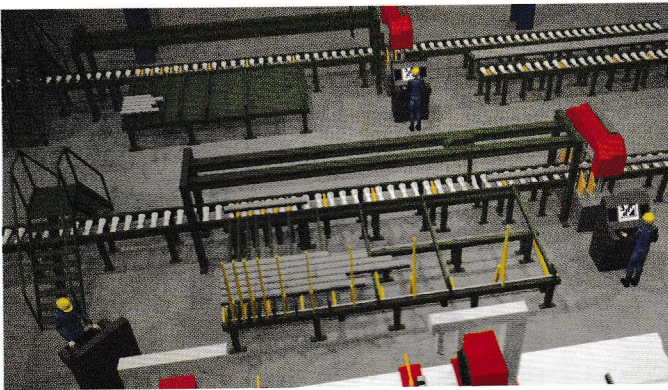
3R solutions specialises in workflow automation and planning. By examining not only the overall output quantity, but also the breakdown by dimensions, they can determine the ideal machine configuration and logistics arrangement for each individual customer. By streamlining the storage and transportation processes, idle times at the machines are eliminated as much as possible, since the material is delivered to the next station in the process right away, and the material for the next job is already waiting.

In addition to streamlined logistics and high-performance machines, 3R offers an integrated software framework for workflow management and balancing. All CNC data required for fabrication of

a spool are generated, as is a lead time for each machine. By combining multiple spools into a daily work package it is possible to increase each machine's efficiency, reduce scrap and double-handling, and track the fabrication status of each spool as it is processed in the shop.

Due to its extensive contacts to leading machine manufacturers 3R can offer not only standard machines, but also customisations adapted to each customer's requirements if necessary. Thus in addition to offering consultant services 3R also provides turnkey solutions, which can significantly increase efficiency and lower costs for its clients.

3R software solutions – Germany
Website: www.3-r.de



It is vital to plan the workflow of an automated pipe pre-fabrication process

Sawing and milling machines

LINSINGER'S success and rapid growth is founded on its milling, circular sawing and drilling technologies, which offer close tolerances and high output capacities.

The company is constantly growing the global network of contact facilitators with special knowledge of projects requiring high output capacity horizontal bed edge milling machines and carbide tip circular sawing machines. Typical areas of focus cover pipe mills, shipyards and rail networks.

Saw mill products for large pipes include plate edge milling machines for welding edge preparation, also suitable

for conical and trapezoidal plates, and pipe bevelling machines for bevelling on both ends simultaneously; and for spiral pipes, strip edge milling machines for spiral tube lines (strips up to 2,800mm width, 1¹/₈" thickness).

ERW mill products include strip edge milling machines for ERW lines (strips up to 2,200mm width, 1" thickness); multi-cut tube cut-off machines (up to Ø 24"); and speed-cut tube cut-off machines (up to Ø 245mm and speeds up to 80m/min).

The company's range for seamless tubes covers carbide circular sawing lines for steel billets (up to Ø 1,060mm),

single tubes (up to Ø 1,060mm) and tube layers (up to 2,000mm width); and tube cut-off machines for single tubes (Ø 200 to 426mm).

Linsinger also supplies carbide circular sawing lines for steel billets (up to Ø 1,060mm), Lincut® saw blades with screwable carbide tips for all kind of steels, and cutter heads in different diameters and for all bevel profiles.

Linsinger Maschinenbau GmbH – Austria

Fax: +43 7613 8840 951

Email: maschinenbau@linsinger.com

Website: www.linsinger.com