

Cranes as process integrators Unloading, transfer, feeding, storage, setup, loading



Smooth continuity versus stop-start

Whatever you manufacture or process, you are bound to have supplies or merchandise that need handling. By effectively interlinking the individual operations involved, namely

unloading
transfer
feeding
storage
setup
loading

the following major benefits could be yours:

- Increased efficiency
- Increased throughput
- Reduced costs
- Improved protection of products
- Better labour ergonomics

Complete solutions for maximum safety and reliability

If you want safe, reliable and costefficient process interlinkage, you need a supplier able to offer the following:

- detailed advice
- a thorough analysis of requirements
- tailored solution proposals
- a complete range of producs
- on-schedule delivery of all materials
- careful installation of all components
- comprehensive functional testing and inspection
- complete documentation
- competent acceptance by expert inspectors

Servicing of installed facilities: e.g. inspections, maintenance, aroundthe-clock hotline and an emergency spare parts capability.





Unloading...

Every consignment has to be

- quickly and carefully unloaded
- recorded
- allocated
- stored
- buffered
- supplied just in time to the manufacturing process.

Process interlinking involves providing an optimum material flow interface between the point of truck or rail car arrival and production. Raw materials or products arriving need to be individually and quickly unloaded.





In many cases, an intermediate buffer store has to be used before the products can be transferred into an automatic warehouse or directly to the processing or manufacturing operation. Depending on requirements, these operations can be performed manually, or under partial or full automation.

Demag offers a wide range of different load handling devices for gentle, efficient and reliable unloading.



...individual and fast



Transfer...

Process interlinkage in the supply of workstations requires:

- extensive protection of the workpieces and tools
- maximum precision and smooth relocation
- oscillation-free handling of loads of any weight







Thanks to their smooth and safe handling capability and gentle motion cycles, Demag cranes are able to ensure precise transfer to your various machining centres, machine tools, assembly facilities or test and inspection stations.

When transferring sophisticated machine parts or expensive components such as turbines and compressors to the various workstations, the priority is on precision rather than speed – and we can offer both.

...smooth and precise



Feeding...

Increasing throughput means:

reducing loading and setup times

- increasing the material flow rate
- integrating your production and organisational software

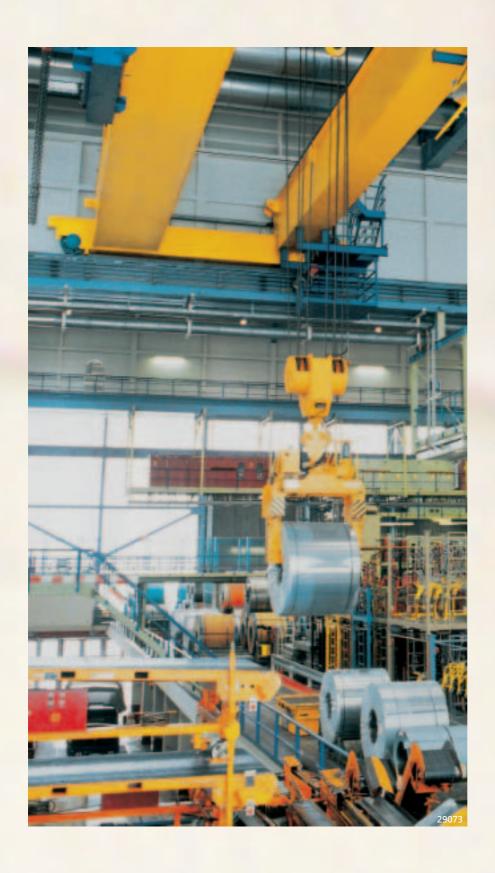




You want to increase your turnover rates, reduce your handling times and ensure gentle transfer operations.

So you need cranes that offer high load capacities and rapid travel speeds, achieved with the aid of reliable load sway damping and automatic positioning systems.

...high performers, always on time



Storage...

Every storage facility ties up capital. No matter what the warehouse type – it may be located between the receiving department and production, between production and the further processing area or between production and the goods-out department – the following factors are vital to profitability:

- efficient space utilisation
- real-time material flow tracking
- rapid access
- avoidance of storage-related damage
- just-in-time delivery to production machines or customers
- minimisation of capital tie-up



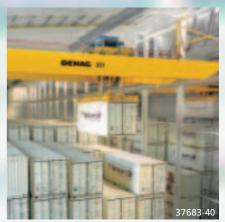
As an intermediate buffer between the various production stages, automatic warehouses ensure that the materials are provided right on time.

Permanent stock-keeping processes ensure that the stored products can be effectively and eliably tracked.

Optimum block storage strategies with co-ordinated automatic overhead load handling ensure maximum space utilisation.

The warehouse management computer performs process-aligned material consolidation and housekeeping operations during the quiet periods for increased efficiency when demand is at its peak.





...space-saving solutions



Setup...

Avoiding downtime means:

 providing tools punctually and in accordance with requirements for each new order

- returning tools from each completed order back to the stores
- performing all operations quickly and with maximum flexibility



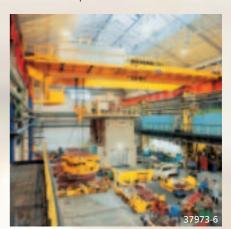




The setting-up of machine tools and other facilities involves two stations:

- the toolmaking shop
- the receiving machine

Pick-up, set-down, transfer, turning – these are all time-consuming and dangerous operations. But they can be effectively controlled with high-accuracy positioning systems, automated segments or fully automatic sequence control.



...orderly and order-specific



Loading...

With Demag cranes, loads of up to 400 t can be reliably and safely loaded within the shortest of periods:

- for just-in-time delivery
- with absolute precision
- with accurate registration







Fast and safe loading with no more than short stoppage times - the final stage of the production cycle, speeding your products on their way to yet another satisfied customer.

...careful precision





Demag Cranes & Components GmbH

P.O. Box 67 · D-58286 Wetter Telephone (+49 2335) 92-7229 Telefax (+49 2335) 92-2175 E-Mail processinterlinking@demagcranes.com www.cranes.demagcranes.com