

Innovative products need innovative manufacturing and logistics

At Siemens Medical Solutions, customer-focused processes and highly motivated teams ensure top performance and high customer satisfaction

The teams at AX division of Siemens Medical Solutions don't simply want to manufacture and deliver error-free systems. They really want to understand how their customers think, work and what is important to them.

The Supply Chain Management (SCM) at AX is responsible for the entire process from incoming order entry to material release, manufacturing, delivery, and final turn-over to the customer.

High Flexibility

AX SCM produces 21 different system types that can be configured in many different ways. Every system is specifically customized to customer requirements. The customer can change the technical configuration of a system up until two days before manufacturing starts.

Since there is usually some room preparation and construction work to be done at the hospital before the system can be installed, the whole process is coordinated by a project manager of the local Siemens organization. The project manager regularly visits the site and is therefore aware of the local situation. This way, AX starts system configuration at the last possible moment and ensures the site is ready for installation prior to delivery.

To further increase flexibility, the overall process time has been reduced significantly in recent years. For example, instead of using a production line, AX operates with X-ray isolated production bays. A system does not move from one workplace to another as manufacturing is being completed but remains in the bays during the entire production and testing period.





Should problems occur on one system, the production line is not blocked for all other systems in production. In these bays, AX SCM simulates the same power supply and IT-environment that exists in the hospital. That minimizes problems and installation time at the installation site.

To provide the highest quality, all systems have to undergo a fully automated overnight endurance test. This "Clinically Relevant Simulation Test" (CRST) simulates the same clinical procedures that are usually performed in the hospital in one week.

The number of orders processed at one time differs widely. In August 2006, for example, AX had by far the highest production numbers of all time. "We were substantially exceeding our production capacity right in the middle of the German vacation season," says Georg Schuldhaus, manager of the manufacturing department at SCM. His excitement about this achievement is evident. "This would not have been possible without the flexible working hours and the total commitment of the production teams," he continues. "The great motivation to always get things done, although it means a lot of extra hours and canceled vacations in order to finish the systems our customers are waiting for, is outstanding."

Integrated manufacturing

The SCM Process is well-integrated and connected within the entire AX organization. For example, SCM works closely together with product development in Product Lifecycle Management (PLM). This assures the SCM influence in all product development from early-stage product design to improvements in existing products. PLM greatly appreciates the qualified feedback from SCM. They know about SCM's long experience and value

the direct customer feedback SCM usually receives during installation.

Factory installations

Other central factors to increasing customer satisfaction as well as employee motivation are the "Factory Installations." The same employees who perform final and acceptance testing of a system in the factory start up the system in the hospital. This ensures that the AX logisticians place special emphasis on quality because they are the people facing the customer, should anything not function as intended. At the same time, AX can learn in the field and is able to directly introduce customer needs and requirements into the manufacturing process.

AX also emphasizes the fact that all members of management regularly participates in factory installations. This really helps to implement improvements and customer feedback into SCM processes quickly. It also increases management awareness of the difficulties our employees face in the field.

Oskar Schaffner, head of the Installations Management Team, just came back from a factory installation of an AXIOM Artis dFC at the Hospital de Santa Cruz in Caraxide, Portugal. "It was a great success," he says. "We took out the old system and installed and turned over the new system in just ten days. The team was very focused and worked to deliver an excellent system of outstanding quality on time." The customer was very pleased by the short installation time, which enabled him to resume patient care promptly. The excellent image quality, which was far better than that of the old system, was another reason for excitement. "Such customer feedback is the reward for hard work," he says. However, the team still had a one-page list of improvements to take back home and



they really want to work on these now. "Never be satisfied with the status quo," Schaffner continues, "there is always room for improvement."

Highly motivated teams make it possible

"The general positive atmosphere within the SCM process is hard to miss. We believe that the motivation and know-how of our employees is the basis for everything," Rudolf Glanzner, head of the AX SCM process, points out. They are all highly qualified and enjoy a continuous and demanding training plan. "The best motivation however comes from our customers,"

he says. Apart from the factory installations, AX employees regularly visit customers in hospitals to learn about their workflow and everyday clinical interventions. They usually come back freshly motivated and with big smiles on their faces. "Maybe they've just seen how the doctor saved someone's life with the help of our system," states Glanzner.

For more detailed information,
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