

ALBACETE HOSPITAL COMPLEX

THE OPTIMIZATION OF A HOSPITAL LAUNDRY FROM THE CONSTANT FLOW OF LINEN

Girbau have designed the remodeling and amplification of the Albacete Hospital Complex Laundry with two objectives in mind: to guarantee the maximum hygiene of the laundry and to optimize and make the production cost effective.

Hospital laundry management has become a fundamental point in any attendance centre. It is not only a matter of having the necessary linen available for both the patients and the professionals in the centre, but also that all the linen from a sanitary centre has to be considered to be contaminated by germs and as such must be treated in such a way that at the end of the cycle it can be supplied to the users and nurses free of any infectious pathogenic agents.

The laundry is one of the intervening factors in the fight to eliminate any source of microbiological contamination and the risk of recontamination to the patients.

Girbau knows that in the hospital, the laundry and its processing is not only a matter of management with the usual technical and economical consequences, but an integral part of the most important measures in the fight against infection in hospitals. The hygienic measures of the process applied and the suitable upkeep of the textiles have to be governed by the possible risk to the user.

The case of the Albacete Hospital Complex is a good example of how Girbau has met the demands of a centre, equally with regard to sanitation as production and have advised on how to establish a constant flow of laundry, guaranteeing the optimization of the installation.

A hospital complex with a 700 bed capacity

The Albacete Hospital complex is one of the attendance centres of Castilla-La Mancha. Comprised of the Albacete General Hospital (1985) and the Hospital Nuestra Señora del Perpetuo Socorro (1957), the Complex avails itself of a variety of medical specialties, obstetric, gynaecological and pediatric surgery, together with an excellent range of diagnostic support services which include the most up to date sanitary technology.

From the beginning, the hospital has had a centralized laundry within an independent building.

In the year 2001, the Albacete Hospital Complex management requested that the laundry installations be renovated.

The complex's laundry team and Girbau had an additional difficulty in that the installations modernization work had to be carried out in such a way that did not at any time affect the normal operation of the centre.

The successful completion of this modernization without affecting the laundry service at any time, was down to the good coordination between the two working teams, that of the hospital and that of Girbau.

How to avoid the intermediate storage of laundry

Following a close analysis of the Complex's washing requirements and taking into account the demands of the laundry team, Girbau's engineering team designed the installation with sanitary barriers with a well defined laundry flow which avoided the need for any intermediate storage of the laundry during the process. As a result, there is only a dirty linen storage at the entrance to the laundry and a clean linen storage at the exit. At no other point is there an accumulation of laundry other than those pre established, facilitating the circulation of the laundry and the workforce thus improving the effectiveness of the work processes.

In order to establish a good laundry flow circulation it is essential to calculate exactly the fine correlation between the equipment. For example, it is not possible to wash large quantities of laundry without that the dryers are capable of absorbing the said production, since it would provoke the accumulation of clean, but not dry laundry. Neither is it possible to wash and dry large quantities of laundry which has to be ironed, if the ironing system can not absorb the existent production in its entirety.

The figures: 24 employees, 7 hours per day, 365 days a year

In the Albacete Hospital Complex laundry they work every day of the year, 7 hours per day. There is a workforce of 24: 12 in the ironing area, 7 in the wash area, 2 for distribution and 3 repair seamstresses.

The dirty linen accumulates in the area prior to the classified sanitary barrier. Coloured uniforms are washed in the small 12kg washing machine. The rest is processed through the batch washer.

The **washing area** is equipped with: 1 TBS-50 10 module hospital batch washer; 2 washers with sanitary barrier and an HS-4012 washer- extractor.

The majority of the laundry is processed in the TBS-50 batch washer, with an intensive wash process. The laundry passes along the system through the soaking, pre-wash, wash, rinse and neutralizing phases.

In respect to the sanitary demands, the Girbau hospital batch washer model has an option to periodically activate a disinfection process within the system. With the batch washer unloaded but with water on the inside, the necessary chemical products and the injected vapour keep the batch washer at a constant 80°C during the programmed time.

In addition, the batch washer is capable of registering and certifying whichever wash program the conditions have to be carried out (time, temperature, dosing, etc.) guaranteeing that the demands relating to the sanitary hygiene are fulfilled.

An SP-50 water extraction press has been installed to the batch washer outlet which extracts a great deal of water from the laundry, leaving as a result, 50k lots of damp laundry ready to dry.

Behind the sanitary barriers: dryers, flatwork ironers and finishing equipment

The laundry coming from the batch washer and the press is automatically transferred to the SD-50dryers by means of an shuttle lifting conveyer.

By contrast, the laundry which has been washed in the sanitary barrier washers is dried in two small capacity existing dryers. (SM-45)

Afterwards, the laundry is distributed to the **ironing area**.

Girbau has installed two ironing systems to absorb the production from the drying area.

The laundry is introduced to the ironing system and afterwards passed through a PS-8033 3 roller flatwork ironer, folded and stacked automatically.

The ironing area is completed by a continuous Girbau Finte-800 finishing line: able to treat up to 750 pieces per hour (polyester-cotton) according to the type of laundry, the residual damp, and the vapour pressure. The pieces are transported to the interior of the system on hangers on a moving rail which automatically deposits them onto a waiting rod.

The automatic ironing process of uniforms is complete and for this reason the risk of contamination is minimal.

The installation is completed by a Saturno Mega 3 way folder for shaped laundry or clothing.

The re-stocking of laundry supplies to each hospital floor

The laundry process is completed by the distribution of the clean laundry. Each floor or area of the Albacete Hospital Complex is equipped with hermetically sealed storage trolleys in which the laundry always has to be agreed with the floor co-ordinator. The 2 distribution assistants who work in the laundry collect the storage trolleys daily from each of the floors and replace the required pieces to full stock levels.

The Albacete Hospital Complex laundry is a good example of the importance of a good project and advice regarding the organization of the system. Having the best equipment is fundamental, but not in itself sufficient. Girbau's slogan is clear: "A total solution, for a global market". The objective of this manufacturer, a leader in industrial laundry equipment, is not limited to the offer of an ample range of top quality products, but to offer the best solution.

Girbau not only manufactures the best equipment, but designs customized solutions. Each client is different and warrants a different project.

Further information on Girbau's solutions can be obtained from: www.girbau.com