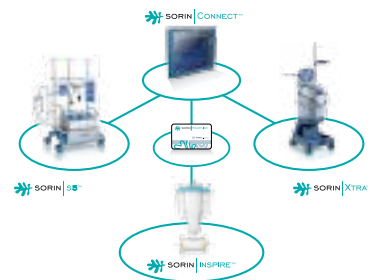


# THE GOAL DIRECTED PERFUSION SYSTEM



## EQUIPPED TO PERFORM

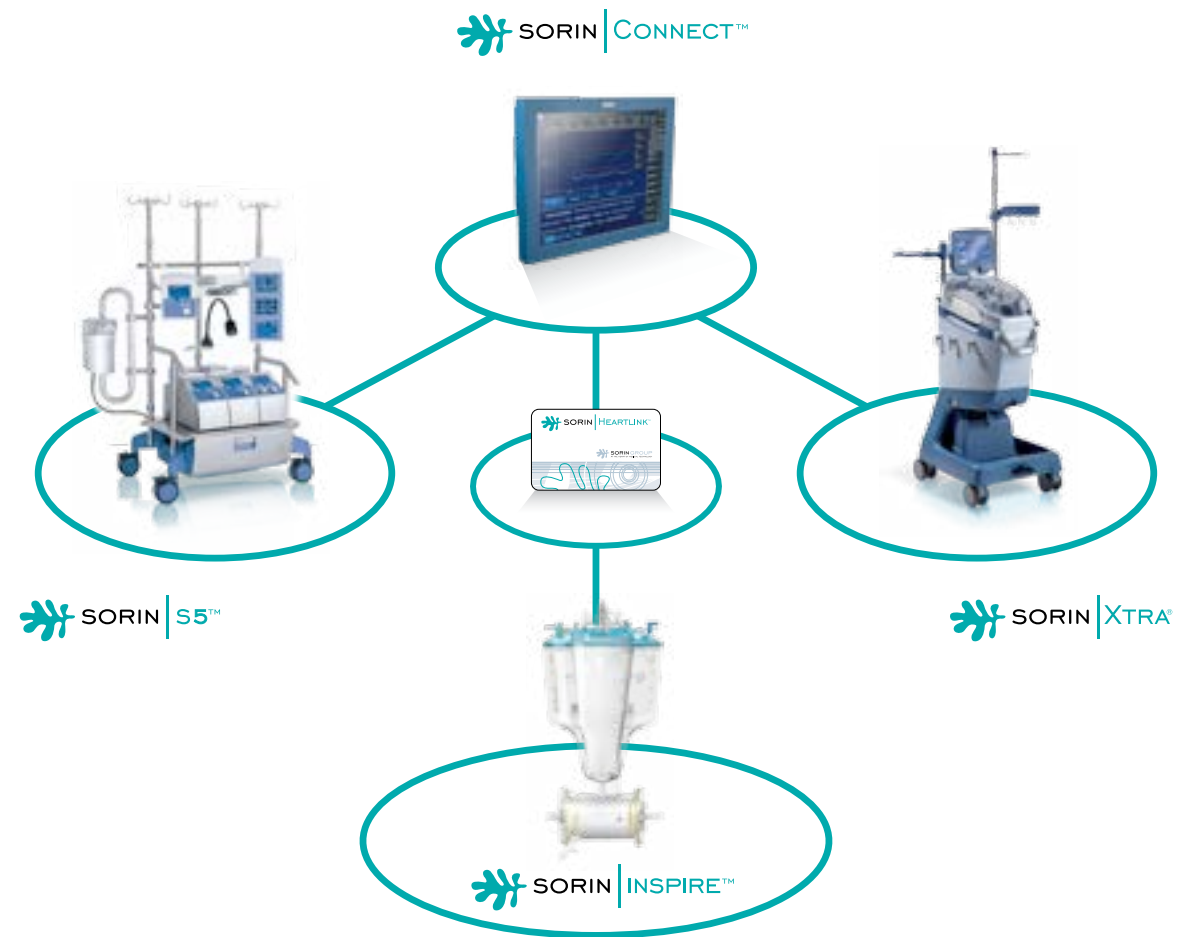
 **SORIN | HEARTLINK™**



PERFUSION SOLUTIONS

 **SORIN GROUP**  
AT THE HEART OF MEDICAL TECHNOLOGY

## SORIN GROUP HEARTLINK SYSTEM



## SORIN | HEARTLINK™

Sorin HeartLink™ is the first perfusion system automatically integrating perfusion data, critical patient parameters and product information to assist with implementation of Goal-Directed Perfusion, improved patient outcomes and increased clinical efficiency.

## SORIN HEARTLINK: THE GOAL DIRECTED PERFUSION SYSTEM

The objective of Goal-Directed Perfusion\* is to achieve a better outcome by adapting adequacy of perfusion to the patient thus reducing post-operative complications and Intensive Care Unit (ICU) and hospital length of stay.

The implementation of a Goal-Directed Perfusion\* has been associated with:

- lower occurrence of post-operative Acute Kidney Injury (AKI)
- potential reduction of homologous blood transfusions
- shorter hospital length of stay (LOS)

which can translate into both improved patient outcomes and lower cost of care.

The Sorin HeartLink™ system, via the interaction of its components, allows the implementation of Goal-Directed Perfusion as a routine in the daily practice of perfusion:

- CONNECT™ perfusion charting system, in conjunction with S5/C5 HLM, allows the continuous monitoring and display in real time of critical parameters while recording information for subsequent analysis and continuous practice improvement.
- INSPIRE™ oxygenator systems combine a rated blood flow up to 6 LPM and 8 LPM with lower hemodilution, powerful and consistent gas exchange performance and an effective control of gaseous micro-emboli (GME).
- GDP™ Monitor, enabled by Connect and Inspire, provides real time monitoring of critical parameters related to patient metabolism to effectively implement Goal Directed Perfusion during cardiopulmonary bypass (CPB).
- XTRA® allows intra-operative blood salvage providing highly concentrated, fresh, autologous, vital RBC's to the patient so contributing to maintaining optimal oxygen delivery.

## SORIN HEARTLINK:

### IMPROVED EFFICIENCY AND TRACEABILITY

The other goal of the HeartLink™ system is to assist with practice improvement and full traceability.

All data coming from the HeartLink system components (S5/C5, XTRA, INSPIRE) and the external monitoring devices connected to the HLM, are continuously acquired, displayed and recorded in the CONNECT database, translating in:

- Less need for manual input while providing a complete overview of the perfusion procedure.
- Data availability for retrospective analysis of quality of perfusion for practice improvement goals.
- Guaranteed data integrity in the data transfer process among the single components.
- Automatic creation of a detailed perfusion record including perfusion procedure, patient status and products traceability.

\*O<sub>2</sub> DELIVERY AND CO<sub>2</sub> PRODUCTION DURING CARDIOPULMONARY BYPASS AS DETERMINANTS OF ACUTE KIDNEY INJURY: TIME FOR A GOAL-DIRECTED PERFUSION MANAGEMENT? -de Somer F, Mulholland JW, Bryan MR, Aloisio T, Van Nooten GJ, Ranucci M., Crit Care. 2011

# EQUIPPED TO PERFORM





### READY TO MEET ANY CHALLENGE

The S5 heart lung machine is the culmination of more than 35 years of experience in extra corporeal perfusion system design and manufacturing. The implementation of users' wishes and the continual development of our technologies has led to the creation of a machine of practical design, high degree of modularity as well as numerous functions and safety features. S5 Heart Lung Machine represents the foundation of the HeartLink System.



### THE EXTRAORDINARILY INNOVATIVE, INTUITIVE AND POWERFUL ATS SYSTEM

For over 30 years, Sorin Group has treated more than 6.5 million patients with its ATS products. The experience and dedication towards research of innovative solutions allows Sorin Group to be recognized as a world leader in autotransfusion.

Sorin XTRA is the latest extraordinarily innovative, intuitive and powerful ATS system. It is a compact, ergonomic and robust ATS device with an attractive design, developed by the same designers of Sorin S5 and C5 heart lung machines.

The Xtra Autotransfusion system allows autologous blood collection and high quality processing. Xtra, used in conjunction with INSPIRE DUAL chamber HVR, easily allows the intra-operative treatment of activated suction blood.



### INNOVATIVE, INTUITIVE AND DESIGNED WITH GOAL DIRECTED PERFUSION IN MIND

Sorin CONNECT is an innovative and intuitive Perfusion charting system focused on real time and retrospective calculations / trending tools to assist with data management during and after CPB.

The CONNECT Recorder application effortlessly collects customized patient and case information during CPB. Information from the S5/C5 heart lung machine and other devices in the operating room are displayed in a variety of chart and table formats. Comments, drugs and volumes are easily entered into the case record via quick entry touch of the innovative tag cloud feature.

The CONNECT Manager application manages all case data in one central database and allows access to the information by the Perfusion team at anytime. Manager can be used for printing or exporting case reports as well as for conducting statistical analysis with the embedded clinical statistics and inventory feature.



### INSPIRED CHOICE. PERSONALISED PERFUSION

SORIN INSPIRE is a completely new family of adult oxygenators, designed from years of research and laboratory experience, input from clinical experts from around the world and the application of advanced manufacturing technologies that adhere to the highest quality standards.

The Inspire family, made of ten oxygenator systems, has been designed to be fully modular, allowing clinicians an unprecedented choice, including:

- Full size adult 8 LPM and optimized size adult 6 LPM oxygenator modules, both with and without integrated arterial filter.
- Single chamber Hard shell Venous Cardiomy Reservoir (HVR) and unique DUAL chamber HVR reservoirs for advanced perfusion practices.

### CREATING LINKS: CONNECT & S5/C5 HLM

The link between CONNECT™ and the S5/C5 Heart-Lung machine is the main link of the HeartLink™ system. Through this link the perfusion parameters and the patient data coming from the HLM, and from the external devices connected to it, are acquired and stored in Connect to be displayed in real time and saved in the perfusion record.



### CREATING LINKS: CONNECT & XTRA

Electronically linking XTRA and Connect allows to quickly and effortlessly transfer the autotransfusion data and integrate it with perfusion and patient data into one case record and one central database for documentation purpose and statistical goals.



### CREATING LINKS: CONNECT & INSPIRE

The link between INSPIRE oxygenator systems and CONNECT is created via the HeartLink card.

The HeartLink card is the key to different functionalities:

- GDP™ Monitor enabling in CONNECT user interface
- Instantaneous transfer of detailed information regarding INSPIRE and the other components\* of perfusion tubing systems (PTS) to support traceability reducing the need for manual input
- Data about INSPIRE and other disposables are stored in CONNECT database to efficiently document product usage and for statistical needs.





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