



Global experts  
in sugar milling and  
refining technology

# Critical success factors for sugar manufacturing

## OPERATIONAL EFFICIENCY

Improving sugar factory production processes.

SRI delivers short and long term strategies to minimise the resources used to manufacture sugar.

## FACTORY PRODUCTIVITY

Identifying effective operational and plant outcomes.

SRI identifies and analyses equipment and process 'pinch points' that constrain factory capacity.

## SUGAR RECOVERY

Maximising sucrose extraction and retention.

SRI applies cost effective techniques to maximise sugar retention during processing.

## Our client focus

### KNOWLEDGE

we use research and field testing to validate our technology

### INNOVATION

we apply our technology and expertise to solve operational issues

### QUALITY

we provide expert advice to ensure factories operate to a high standard

### SERVICE

we help our clients to cost effectively solve complex process problems

### PERFORMANCE

we understand that our clients' performance is our success

### SUSTAINABILITY

we recognise our clients' environmental commitments

# Our capabilities

## CONSULTING

SRI's wide range of defined and bespoke consulting, advisory and analytical services provide sugar clients worldwide with specialised advice, whether for an existing factory, a new factory or an investment analysis.

### SRI consulting services include:

- Feasibility Studies
- Process Design and Specification
- Process Optimisation
- Process Support
- Specialist Chemical Analysis
- Sugar Loss Audits
- Energy and Water Audits
- Performance Audits and Investigations
- Scale Control and Chemical Cleaning.

## DESIGNS

SRI's major equipment designs solve real operational issues with sugar processing technologies. SRI's designs are based on extensive scientific research, field testing and continuous improvement programs.

### SRI designs include:

- Direct Contact Juice Heaters
- Short Retention Juice Clarifiers
- Flash Tanks
- Flocculant Preparation Plants
- Lime Saccharate Preparation Plants
- Flotation Syrup Clarifiers
- Syrup and Liquor Clarification Systems
- Robert Evaporators
- Batch and Continuous Vacuum Pans
- Barometric Condensers
- Seed Crystal Conditioning Plants
- Masecuite Reheaters
- Cooling Crystallisers
- Bagasse Combustion Systems.

## PRODUCTS

SRI's range of instrumentation, automation and software products improve sugar output, reduce sugar losses and minimise production costs.

### SRI products include:

- Chute Height Sensors - control mill feed to maximise extraction
- Dbrix RF Transducers - control crystal growth in batch and continuous vacuum pans
- MILSET – software to calculate optimum milling train settings
- Colour and Turbidity Meters - measure and control juice clarifier performance
- Jigger Tube Systems - maximise heat transfer in batch and continuous vacuum pans
- Can Fibre Machines - measure cane fibre content for payment and efficiency calculations.

## TRAINING

SRI's high quality specialist sugar industry training services are designed to provide underpinning knowledge to factory operators, supervisors and managers for improving mill performance and operational efficiency.

### SRI training services include:

- SRI Sugar Tutorials - a video tutorials website for operators and factory staff to learn sugar mill concepts and processes using short, visually engaging course content mapped to vocational competencies.
- Instructor-led Classroom Courses - face-to-face training courses covering all aspects of sugar manufacturing: sugar mill engineering, steam generation and distribution, operations, process supervision, sugar chemistry, sugar factory efficiency, cane transport and laboratory procedures.
- Workshops - interactive workshops led by experienced facilitators designed to address factory specific issues and to identify breakthrough strategies.





## SRI: the science of sugar manufacturing

Australia's Sugar Research Institute (SRI) offers global expertise in sugar milling and refining technology.

SRI's understanding of the science of sugar processing helps sugar mills and refineries worldwide to maximise sugar recovery, and to deliver best practice in process efficiency and plant design.



Contact Sugar Research Institute

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