

Intelligent Debarking Control and Optimization System

In control of your process for higher value products

CRiQ
INNOVATION PARTNER

Designed to Debark Intelligently

A self-adjusting system that detects log characteristics and learns

The system comprises three specific modules. The first one “sees” the characteristics of each individual log. The second provides the debarker with the optimal pressure, feed speed and rotor speed for each specific log. The third module examines the results for each log and “learns” in order to improve subsequent performance.

Our intelligent debarking control and optimization system ensures minimal fibre loss while delivering maximum value and enables you to control the bark volume in wood chips.

In productivity mode, the system will learn in order to determine the optimal feed speed, rotor speed and pressure that are required to ensure the highest possible output while maintaining adequate quality.

The system constantly monitors the operation of the debarker and immediately sends a notification if some malfunction occurs.



Log Qualification is Key

Precision in log qualification
before and after the
debarking process...

Length

Bow

Diameters along the log

Taper

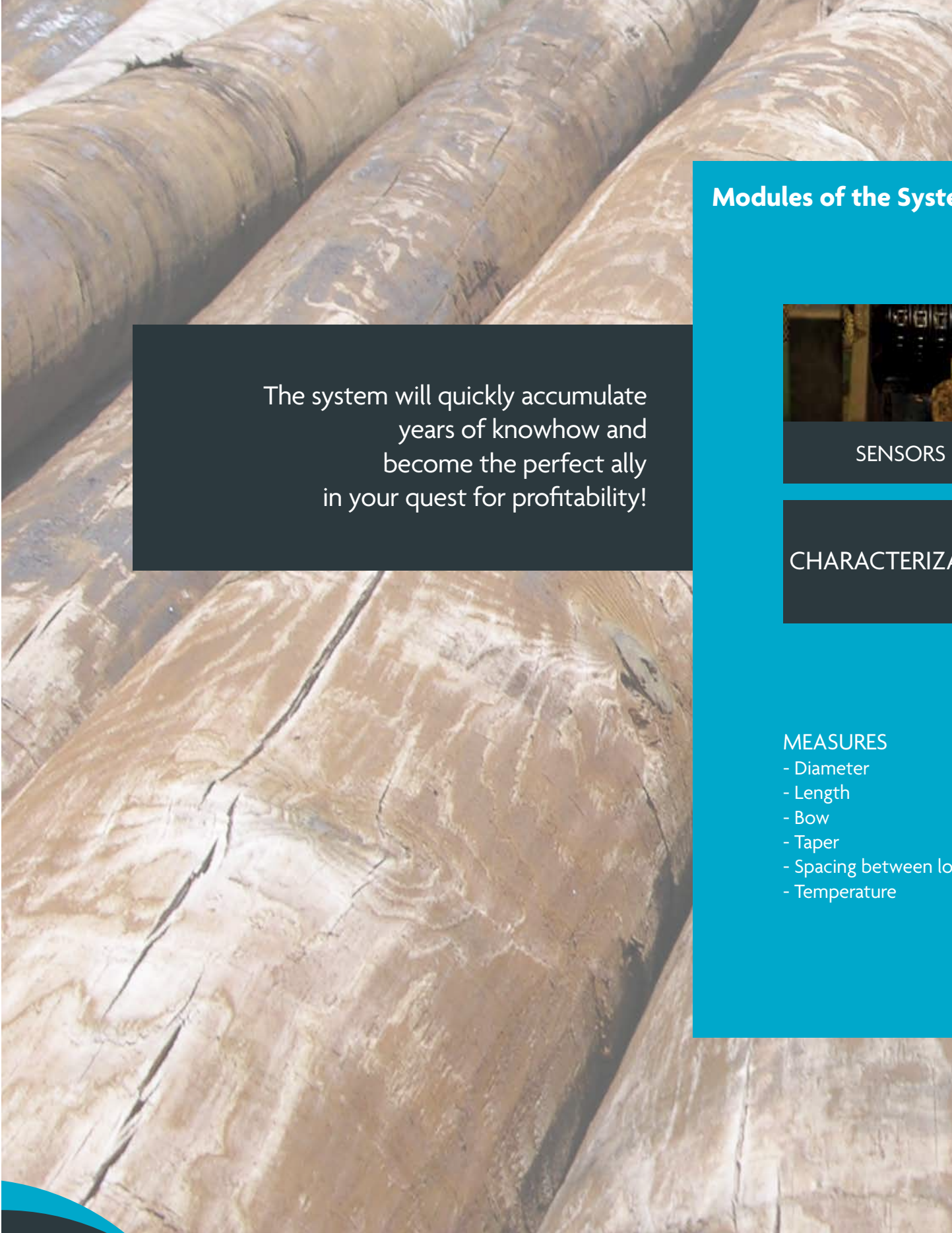
**...will enable you to provide
the best**

Knife pressure (P)

Feed speed (Sf)

Rotor speed (Sr)





The system will quickly accumulate years of knowhow and become the perfect ally in your quest for profitability!

Modules of the System

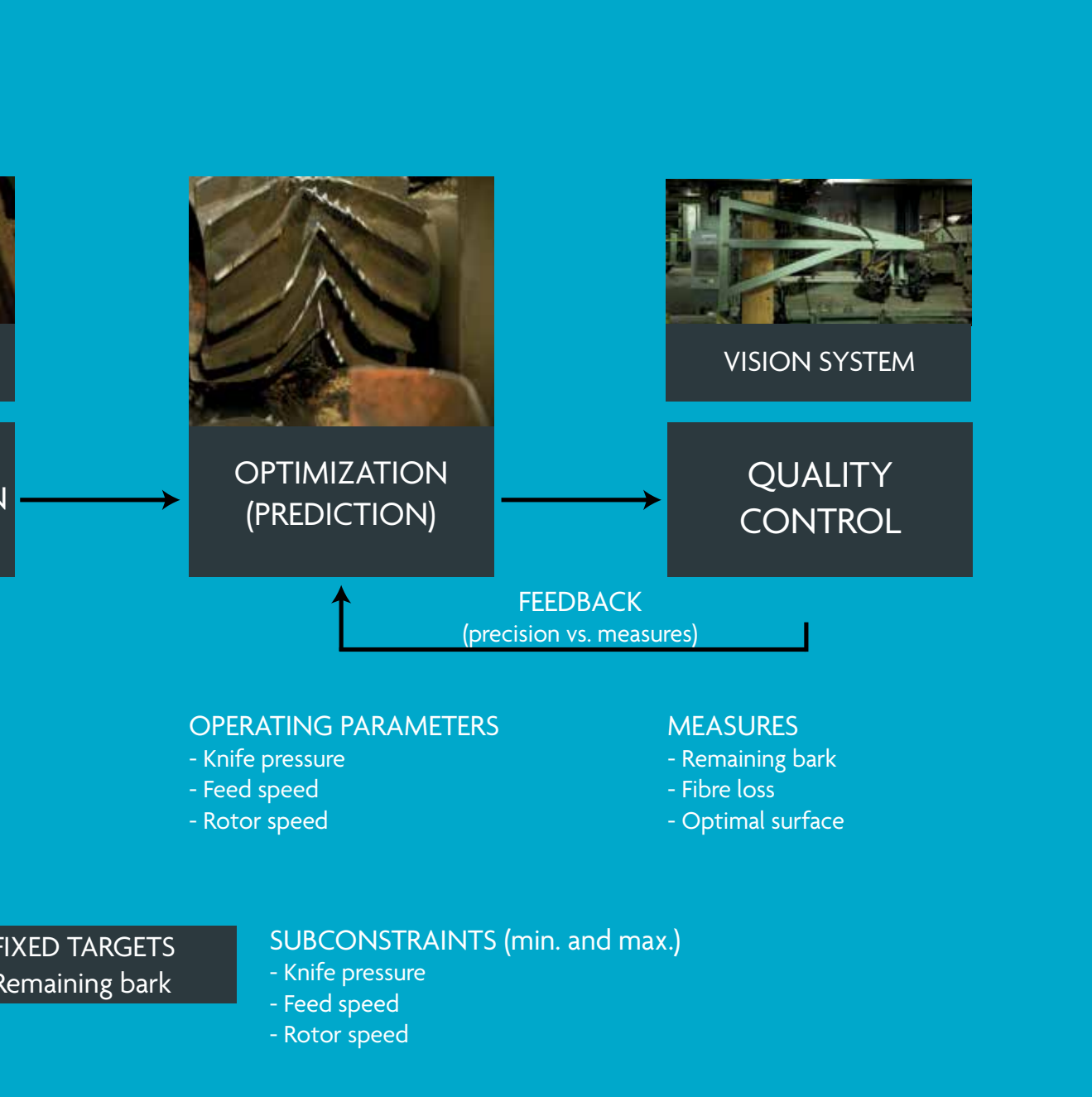


SENSORS

CHARACTERIZATION

MEASURES

- Diameter
- Length
- Bow
- Taper
- Spacing between logs
- Temperature



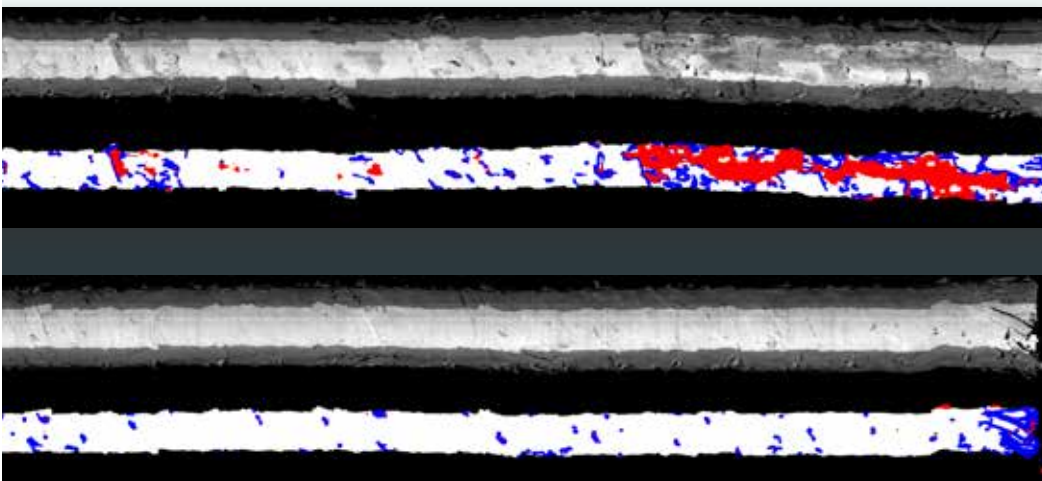
Years of Knowledge

Optimization

The intelligent debarking control and optimization system will quickly accumulate knowledge on your process. It will also “learn” the logs’ characteristics and the parameters you set in order to provide you with the highest quality debarking or the best log output.

Quality control

Each log is divided into different areas
See log area data or images sorted by logs, logs groups or time periods
Accurate and comprehensive database
Alarms generated according various thresholds
Trend calculations displayed according to the historical production



Detects on logs after debarking

Remaining bark (red)
Fibre tear-out (blue)
Optimal debarking (white)

Technical Data

Input Technical Specifications

Tree species	Spruce, fir, pine
Minimal and maximum diameters	3.0 inches to 22.0 inches
Minimal length	6.0 feet
Maximal length	18.0 feet
Minimal spacing between logs	1 foot
Max. logs per minute	40

Log feeding

Maximal log feeding speed in the vision system	450 linear feet/minute
Feeding in the vision system	Random diameter and length Logs move on a conveyor belt

Vision system

Dimensions of the vision system	Lenght : approx. 3 feet Width : approx. 3 feet Height : approx. 5 feet
Positioning of the vision system	At the output end of the debarker, above a belt conveyor

An Experienced Team

CRIQ highlights:

- Over 40 specialists under the same roof
- More than 50 vision systems delivered over the past ten years
- Renowned and demonstrated expertise with regards to the wood flooring processing industry



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