

ABB Review 4/2006

Innovations highlights

Robotic highlights

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FlexLean

Robots may be good at repetition and precision, but when it comes to flexibility, manual labor is still unbeaten – except by ABB's FlexLean robot cells.

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Taming the robot

Robots make excellent workers, but is it safe to let them mix with humans? With SafeMove, it is. ABB's new software package allows man and machine to work together in safety.

26

Data pipeline

A radio link that is immune to interference may forever remain a pipe dream – ABB has taken the idea one step further.

30

More than meets the eye

Setting a standard by complying to one. For ABB researchers, the IEC 61850 standard is more than just a substation communication standard.

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Power semiconductors

From drives to power networks, innovation has a powerful driver – progress in power semiconductors.

Innovation highlights

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Best innovations 2006

This series of 11 short stories looks at just a few of ABB's innovations of 2006. They highlight ABB's ingenuity in the fields of communication, automation and safety.

Sensing and controlling

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Reflecting on color

For most consumers, white paper is just an unwritten sheet. For papermakers it is the product of a colorful process.

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Color kitchen

Cooking up colors from colorants.

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Shedding light on color

Measuring the color of paper shows that blank is not always white.

Power highlights

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Vision for a self-healing power grid

On a power transmission network, things will go wrong – but ABB technology ensures that not every incident ends in a blackout.



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Color control in real time

The control problem behind a process that is so easily taken for granted.

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The cutting edge

How many ways are there to cut up a roll of paper?
And why does it matter?

59

Cementing profitability

Optimization – ABB's answer to increased competition and narrowing margins in processing industries.

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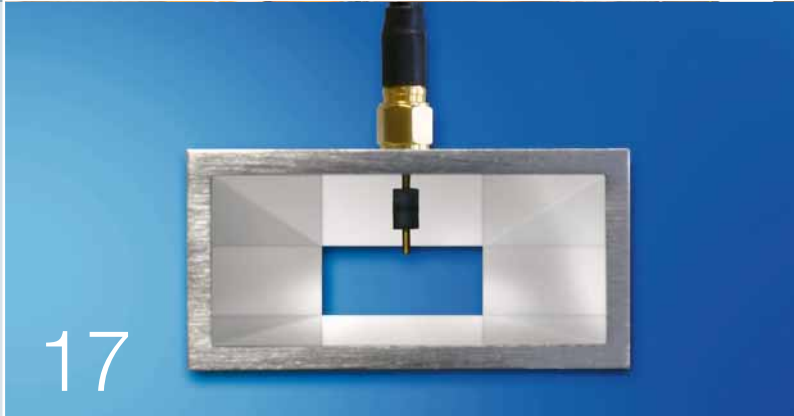
Knowing your asset

A new asset optimization and conditioning monitoring system from ABB is helping one company turn downtime into steel.

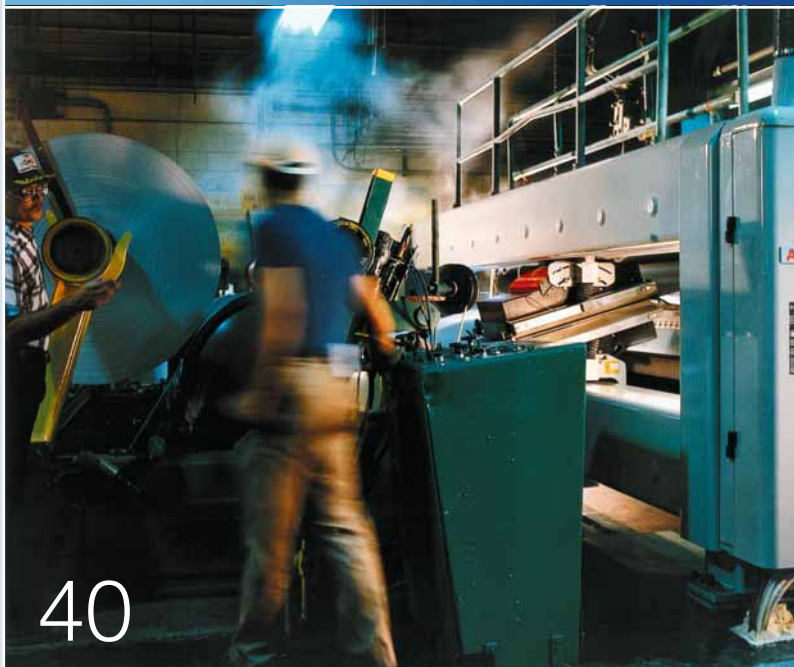
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Microsystems at work

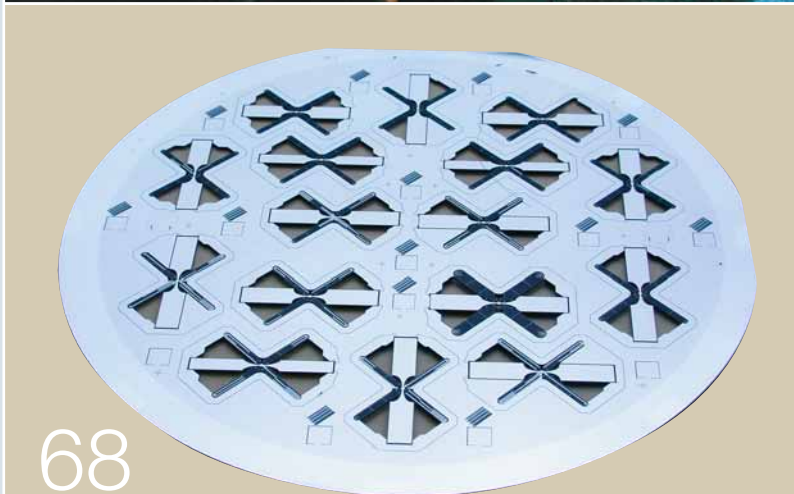
ABB's new oxygen sensor is a breath of fresh air in the field of continuous gas analysis. Its enhanced performance and reduced cost will change the way oxygen concentration is measured.



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