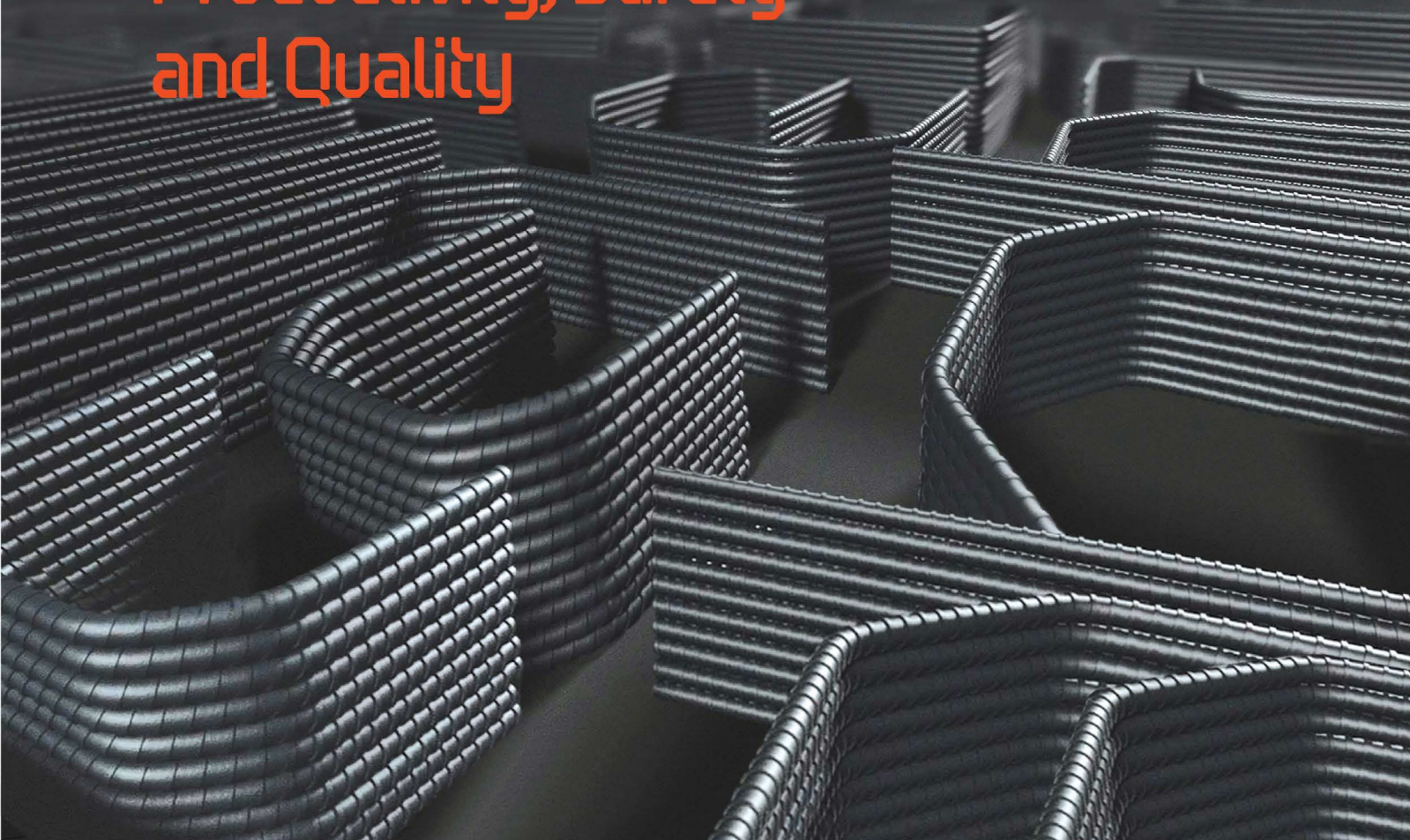
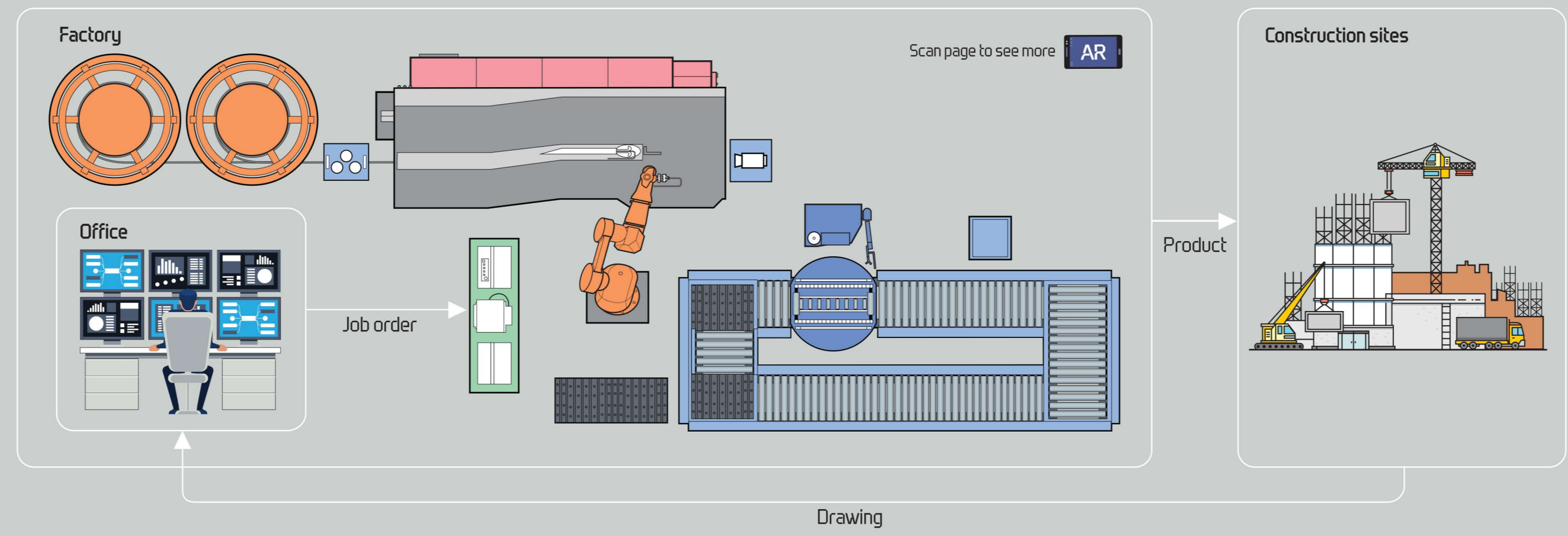


ARON solution focuses on Productivity, Safety and Quality



Schematic Diagram of ARON



Productivity

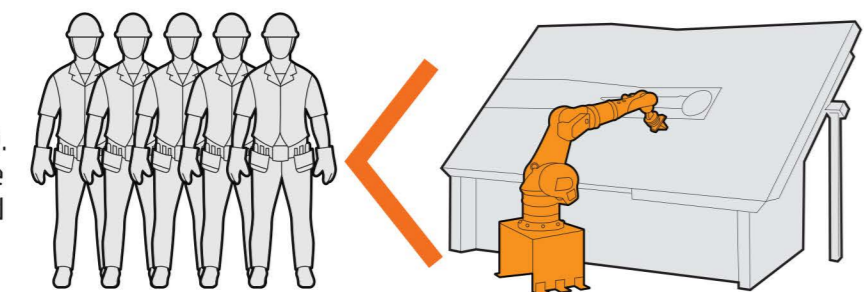
ARON can operate constantly and continuously due to the automatic robot controlled system. It leads to the drastic reduction of non-valuable time in non-automated system and therefore not only increases productivity but also minimizes labor and equipment cost.

Safety

Because ARON is a robot controlled system, it can minimize labor and ensures greater safety due to no operator on the cut & bend machine.

Quality

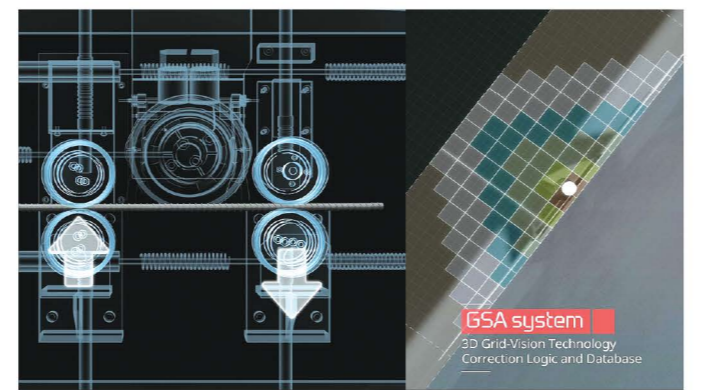
ARON uses the real-time automatic straightening adjustment system, GSA(Grid-vision Straightening Adjustment). There's no need for operators to calibrate rebar straightening during production and it ensures high quality of straightened processing rebar.



ITEM CODE	G2002	Bar Information	
Barcode No.		Length	Angle
		Kind	D4 A 90
		Thickness	D10 B 950 90
		Length	1,130 C 90 45
		Weight	20 D
		Quantity	32 E
		Slot	1 F
Production Quantity		Not Work	5%

MES(Manufacturing Execution System)

- Work order instructions and management at the office (w/o barcode tagging)
- Work order optimization to minimize losses of processed rebar
- Web-based real-time monitoring of production and logistics status



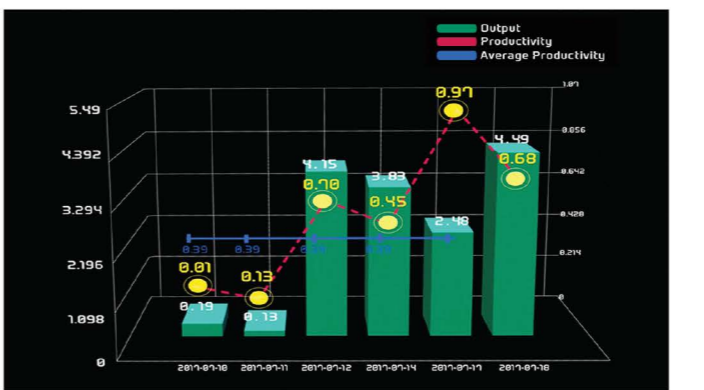
GSA(Grid-vision Straightening Adjustment)system

- Automatic calibration system of rebar straightening in a cut & bend machine
- Real-time adjustment in conjunction with production of processed rebar
- Patented calibration working algorithm



Automated picking and stacking

- Automatic robot able to pick and stack straight bars or stirrups of variable shape and size (up to about 30,000) directly from the cut & bend machine
- Patented special gripper applied
- Able to stack in various forms, i.e. guided carrier, cages, ton bag, etc.



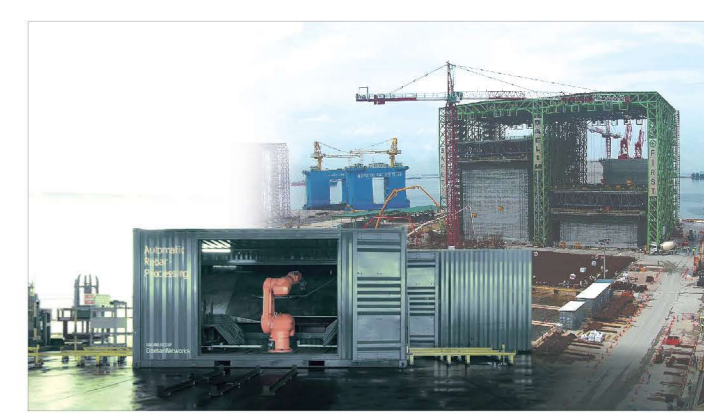
Production data analysis & monitoring system

- APM (Automation Processed-rebar Manager) S/W installed
- Reporting and analyzing production and performance index
- Monitoring real-time status of automation equipment including robot at the office

ARON can be installed in any places



Factory



Construction site