DATALOGIC
INDUSTRIAL AUTOMATION

PRODUCT***ANNOUNCEMENT***

LASER MARKING

New AREX 30W

Datalogic Industrial Automation Laser Marking has the pleasure to announce the new **AREX 30W**, new entry on AREX family Fiber Laser markers.

With high-power 30W fiber laser source, improved scan head, new rack design and advanced LIGHTER Software features, the new **AREX 30W** increases performance in term of **high-speed marking**, **reliability**, **simplicity of installation.**

AREX30 extends DLA product portfolio offering the benefits of a complete range of Fiber Laser products in the categories of 10W, 20W and 30W.

Through a **increased output power** the new **AREX 30W** enables superior deep engraving performance on metal parts and perform high-speed marking especially for annealing process on metal surfaces.

The new **IP54 new scan head with focus beam integrated** ensures maximum protection and reliability even in harsh environments and the allows fast focusing of the laser beam during setup.

Thanks to **New rack** design, Embedded Marker Controller (EMC) platform with new software **Lighter Suite 6.0**, installation and system safeguard are improved, laser marker setup and operation are most easy.

New **AREX 30W** head and rack maintains each mechanical dimension unchanged respect actual AREX products. The compatibility, mechanical, electrical and functional, is fully guaranteed thus offering a line filling to the fiber laser marking product offer.

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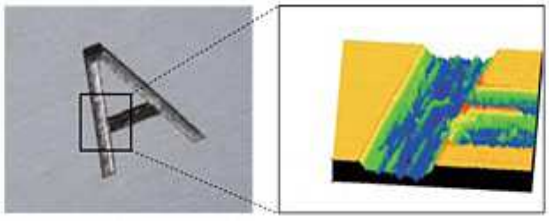
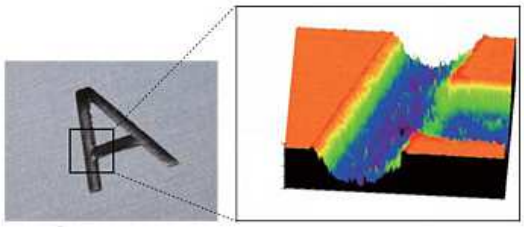
Features and Benefits

High power 30W output

30W high-power fiber laser **increase marking performance on engraving process.**
With more energy applied on the metal workpiece deeper printing is possible
Here an example of engraving test depth on steel; with same parameter and same process time, we comparing the engraved depth.

20W model with F 160S	new **AREX 30W** with F 160S
PARAMETERS: • Power: 100% • Frequency 30KHz • Scan Speed: 500 mm/sec • Process time 10’	PARAMETERS: • Power: 100% • Frequency 30KHz • Scan Speed: 500 mm/sec • Process time 10’
engraved depth 600um	engraved depth **1000um**
	
	
	40% more engraved depth

More power, more speed for enhanced productivity.

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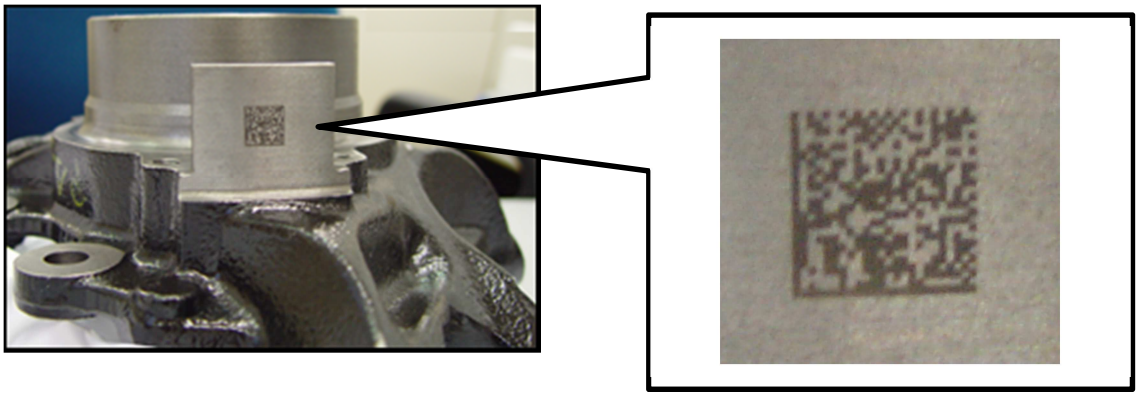
High-power 30W output **allows for high-speed marking** so significant improvements in productivity can be expected using new **AREX 30W.**
Here an example of Black Laser Annealing test speed on steel tool

20W model with F 254S	new **AREX 30W** with F 254S
PARAMETERS: • Power: 90% • Frequency 98KHz • Scan Speed: 500 mm/sec	PARAMETERS: • Power: 90% • Frequency 98KHz • Scan Speed: 800 mm/sec
Process time 19 sec	Process time 13 sec
	more than 35 % speed printing

Typically application:
2D codes marking on automotive parts:



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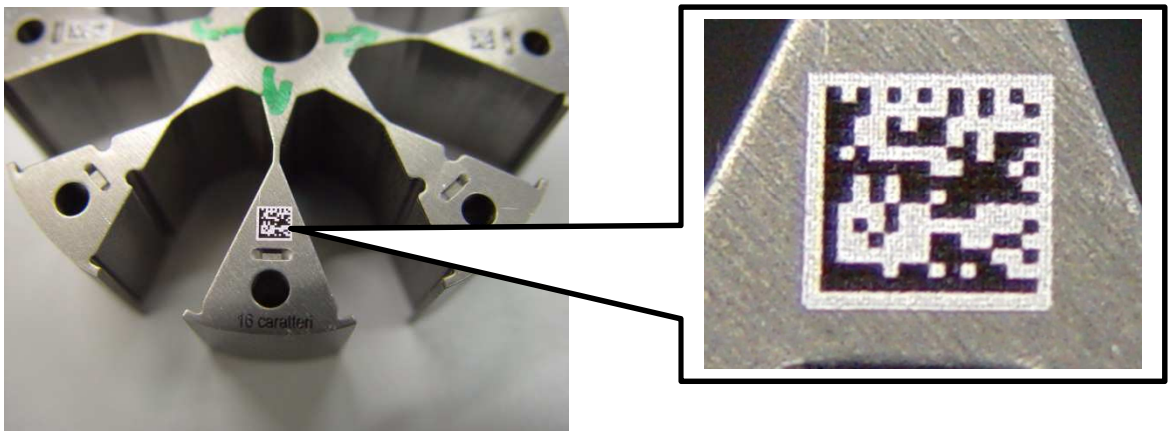
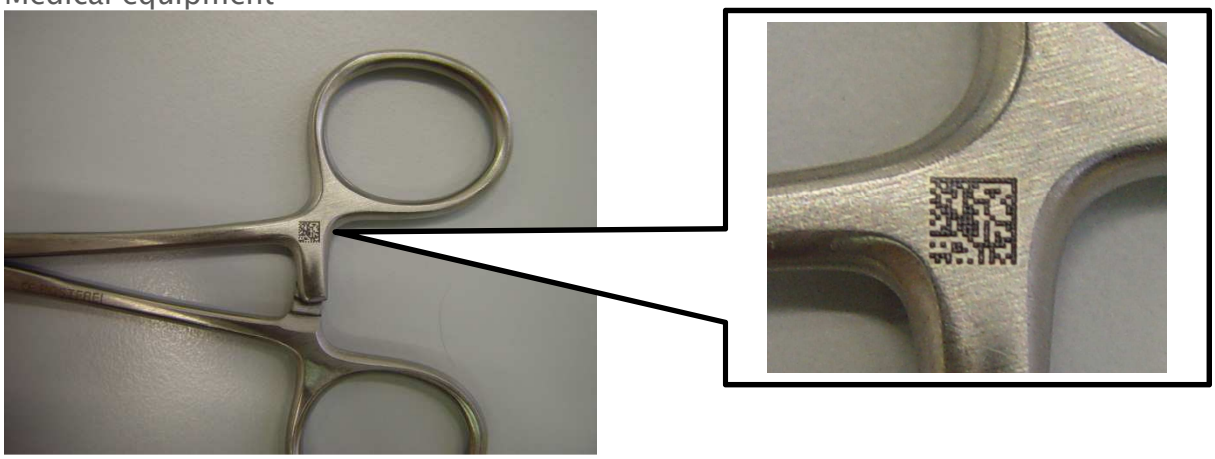


Annealing on precision metal components as bearing, tools and medical equipment

Tools

Medical equipment



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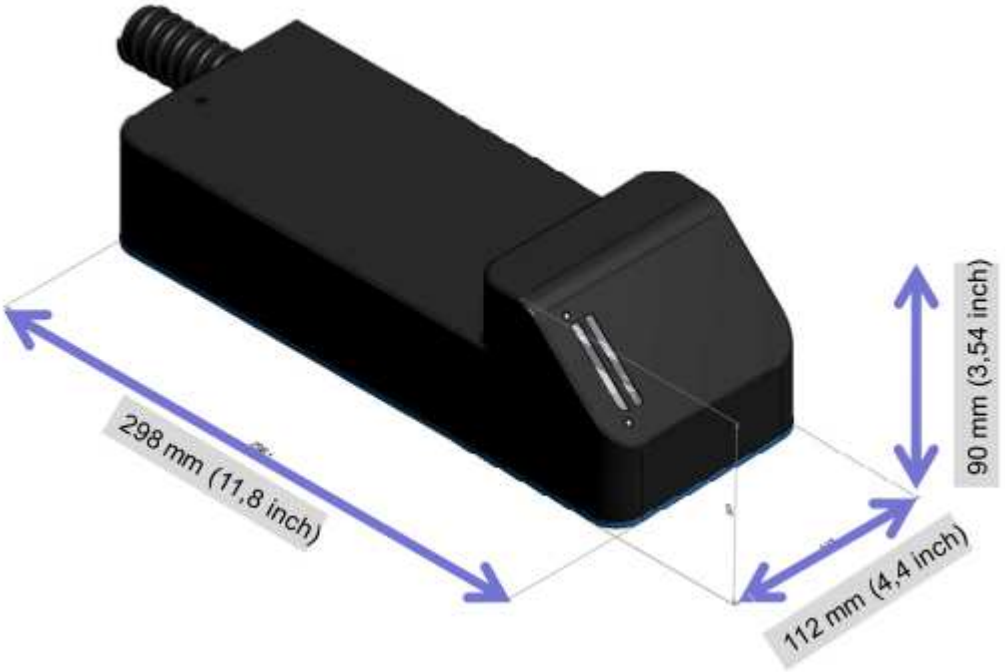
IP54 new scan head

The same small head foot-print but with new features



IP54 protection degree guarantee full protection of scan head from harsh environments:

	Dust-proof	Waterproof
IP	5	4
	Prevent chips from entering inside the scan-head	Prevent water from entering inside the scan-head

The **IP54 new scan head** of new **AREX 30W** in the same small head foot-print implement new **focus beam red pointer** allows the operator to check the correct work distance position for the best focus of laser beam. With this new feature the system setup and maintenance gets easier.

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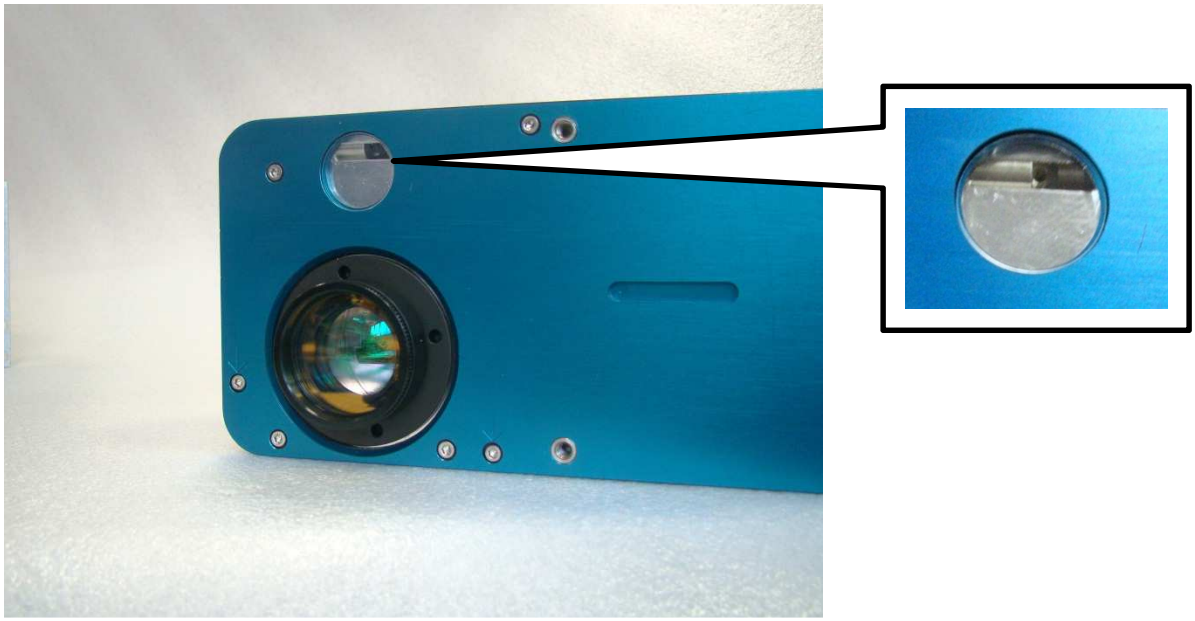

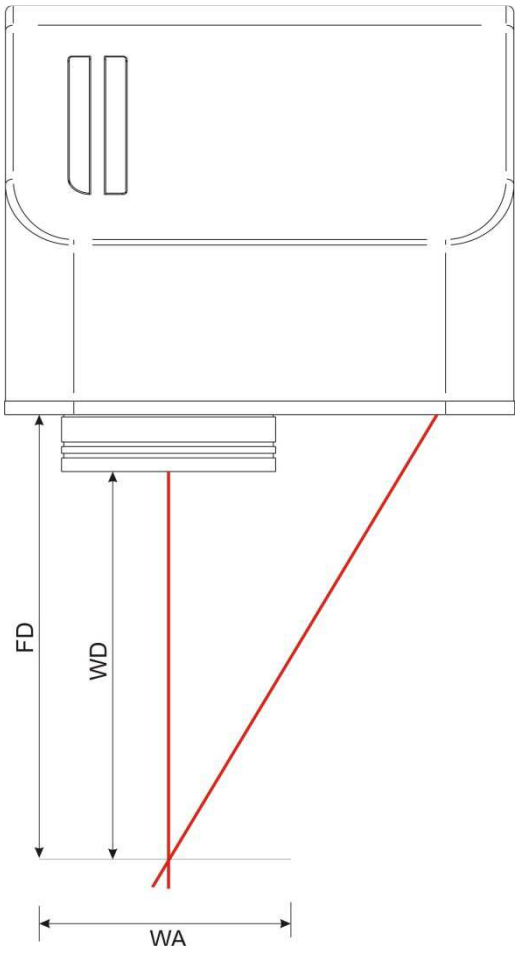

Aiming beam + Focus beam work distance reference function

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New **AREX 30W** is offering a modular configuration with 2 optional F-Theta lens that provide different focus distance and working area

1) 160 mm F-Theta: working area = 100 x 100 mm
2) 254 mm F-Theta: working area= 140 x 140 mm

Other optical lenses (M39 or M85) can be applied on specific request.

New rack design

New design of front panel with only 1 USB connector for USB Flash drive and the main laser commands key and enable.

The cooling air channel have the **removable dust filter** easy to access for maintenance

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All connection are on back panel; now the integration is most easier.

- New plug with CORD RETAINING

- 3 USB Connectors for mouse keyboard and mass storage device
- LAN, VGA and RS232 Connectors
- Photocell and Encoder Connectors
- DB25 female for for laser and marking control I/O end DB25 male for user I/O and/or axis control.
- New Interlock

  The 4 way **interlock connector** implements the **double and redundancy safety interlock** input to simplify the integration of new **AREX 30W** Fiber laser marking system.

new **AREX 30W** is equipped with up to 4 independent axis controls (X,Y,Z, relative axis) to implement Multi-Layers and Rotating Marking and to change marking head position. Dedicated encoder input is applied for Marking On Fly even in accelerated and un-constant speed conditions.

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Embedded Marker Controller (EMC) with Lighter suite 6.0

New **AREX 30W** implements the Embedded Marker Controller (EMC) platform with new version 6.0 of Lighter Suite

Lighter suit 6.0 ease of use HMI, operator can design any kind of label, with logo, text, data matrix, barcodes.

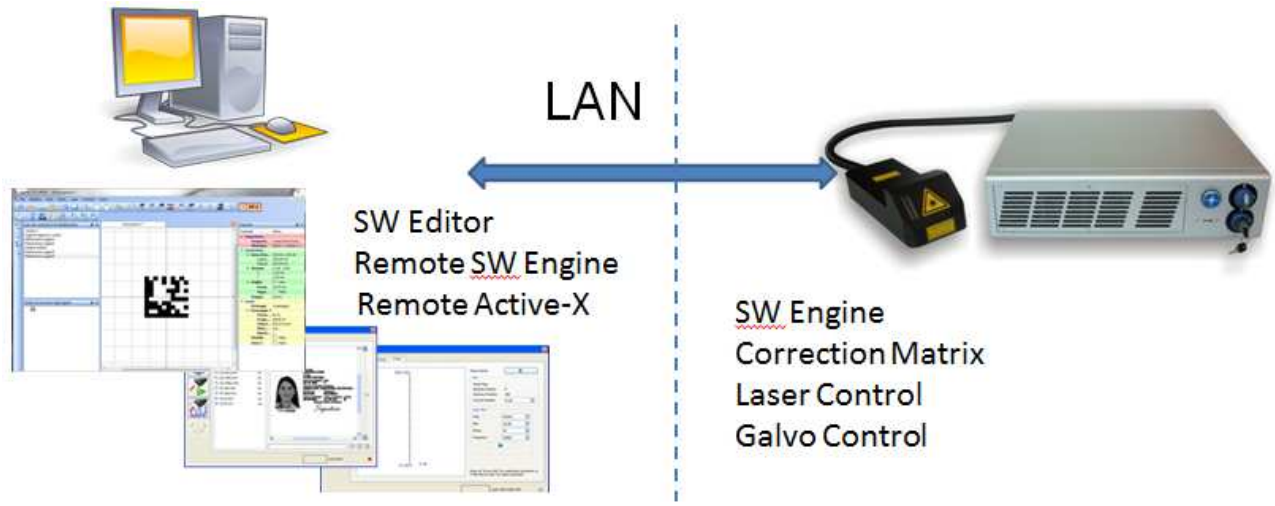
Lighter suite 6.0 have the **Full Engine control via Laser Editor** :

- **Graphical Layout, Laser parameters, MOF; key & serial codes**
- **Full Remote laser diagnostic**
- **Full Remote I/O & axis control**
- **Remote laser test & setup**
- **Autodiscover IP**
- **Remote ActiveX**

are available from editor icon:

Thanks to this new approach the new **AREX 30W** can be fully controlled by LAN.

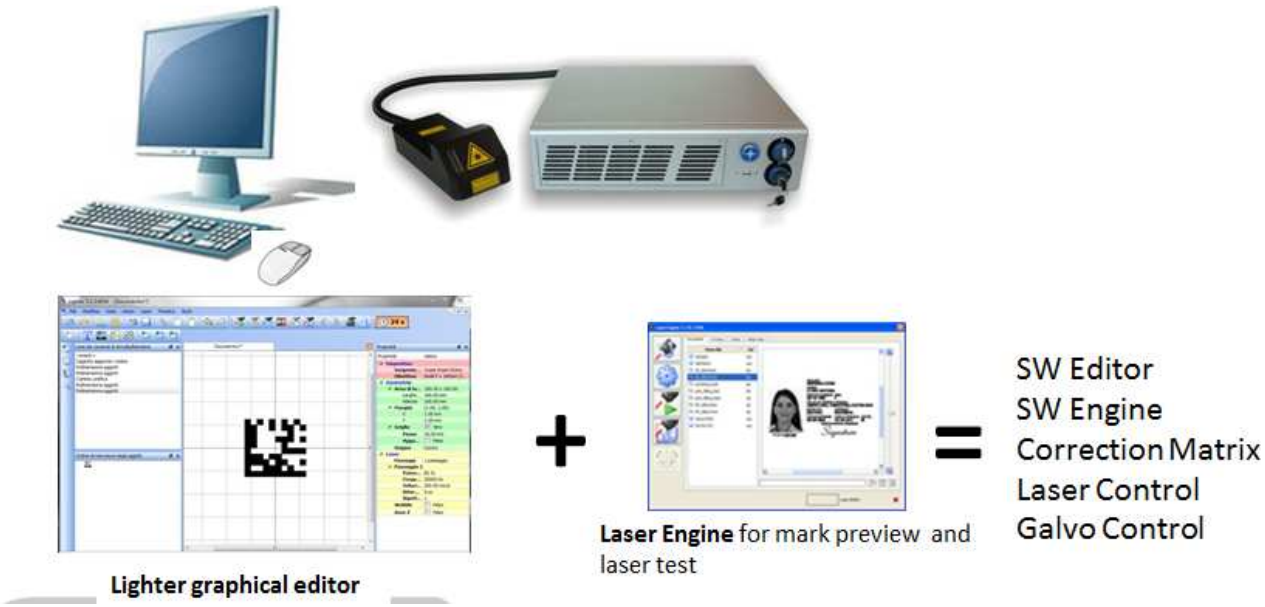
MASTER-SLAVE mode



With this configuration keyboard, mouse and monitor are not necessary.

STAND-ALONE mode

The STAND-ALONE mode (with monitor, keyboard and mouse connected) is also possible for that application where the ALL-IN-ONE Rack architecture offers benefits in term of Plug & Play solution and ease of integration



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TECHNICAL FEATURES

	NEW AREX 30W F-Theta 160S	NEW AREX 30W F-Theta 254S
Nominal power	30W	
Pulse energy (max)	1.0 mJ	
Peak power (max)	10 kW	
Head cable Lenght	3 m standard	
Wavelength	1060 – 1080 nm	
Laser source	Pulsed Fiber Laser	
Modulation	30 kHz ÷ 100 kHz	
Pulsewidth	100 nsec	
Working area	100x100 mm	140x140 mm
Working distance	181 mm (fixing distance 196 mm)	290 mm (fixing distance 309 mm)
Marking capabilities	Standing, Rotary axis, On the fly (marking in motion)	
Integration	Up to 4 mechanical axis driving capabilities (stepper motor)	
	Up to 10 digital inputs and 10 digital output fully programmable	
	1 dedicated connector for Dual line high resolution encoder and 1	
Interface	Ethernet, RS 232, USB	
Aiming Beam	Class 2M red diode laser 635nm	
Focus Beam	Class 2M red diode laser 635nm	
Protection degree	Head: IP54	
Temperature Range	Operative 10°C to 35°C	
Cooling	Air cooled	
Power Supply	100/240 VAC – 50/60 Hz	
Head Dimension & Weight	mm 90x112x298kg 2	
Rack Dimension & Weight	mm 106x430x370 kg 16	

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Models & Accessories

Here is the list of standard models and accessories

Order Number	Description	Availability
985180003	AREX 1300-1341-000 Fiber IR System	November 2012
985180006	AREX 1300-1361-000 Fiber IR System	November 2012

Product Availability

The new **AREX 30W** will be available for sales starting from November 1th.
From that time on purchase orders can be entered in SAP system according the standard procedures.
Standard service level is 8 weeks.

Warranty

Standard warranty for the new **AREX 30W** is 24 months.

Sales conditions

List price	Please refer to the Corporate End User Price List here enclosed
General Conditions	Standard conditions for Datalogic Automation Product and Accessories

Training

Sales training on new **AREX 30W** will take place starting from 15 November 2012.
Web Training Sessions (Webinar) will be hold from November 15th to December 14th for customers, subsidiaries and technical staff targeted to provide the necessary information about the new Product Features.
Also for dedicated training please contact Laser marking APLAB for additional information: aplab-dla-lasermarking@datalogic.com

Promotional material

Complete set of promotional material is available including PA, Product Presentation, Datasheet and Videos.

Product Presentation	October 30th
Videos	November 12th
Leaflet AREX New Generation family	December

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