

## REMOTE SYSTEM FOR WIRELESS COUNTERS



PATENTED SOLUTION:

Convenient and wireless counter reading.

Quick and error-free data transmision.

Cycle time tracking.

Preventive maintenance checks and reminders.

Tool temperature tracking.

Remote preview of an external production plants.



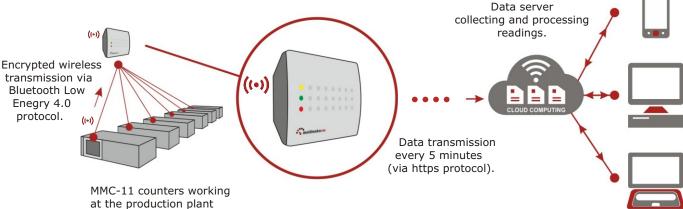
#### **COMMON CONFIGURATIONS**

(one counter per each tool).

#### **Solution 1**

#### **FULLY AUTOMATED**

MMCD Concentrator buffering and relay device (version LAN or GSM). Automated and maintenance-free device. In case of lack of internet it collects data in its internal memory to maintain data continuity. End-user devices enabling logging into the system.

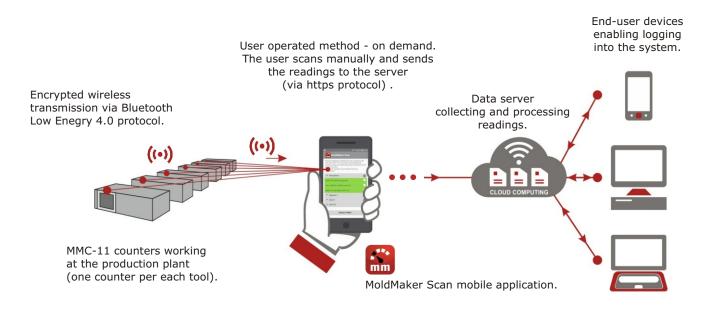




The solution is most used by corporations and large companies that value convenience and error-free operation, as well as maintenance-free implementation, which translates into quick action, full functionalities and the greatest benefits.

#### **Solution 2**

#### **USER OPERATED**





A start-up solution for manufacturing companies that want to enjoy wireless reading functionality, which eliminates the need to manually read data, ensures no mistakes and quick counter reading along with the full functionality of preventive maintenance supervision.

## WIRELESS CYCLE COUNTERS



#### **MMC-11**

Type STANDARD	
Transmitter range [guaranteed-maximum]	30-120 m 100 - 400 ft
Battery life [minimum]	5 years
Work temperature [min-max]	-20°C ÷ +85°C
Count frequency [maximum]	3,5 Hz
LCD Display	8-digit
Maximum indication [wirelessly]	4 000 000 000
Disassembly sensor	Yes
Maintenance cards, reminders, efficiency	Yes
International Protection Rating	IP62



A versatile solution for injection & stamping tools. If you are undecided - pick this proven one!

# The last of the la

For high temperature tools.

#### **MMC-11 HT**

Type High Temperature		
Transmitter range [guaranteed-maximum]	30-120 m 100 - 400 ft	
Battery life [minimum]	5 years	
Work temperature [min-max]	125 °C (256°F)	
Count frequency [maximum]	3,5 Hz	
LCD Display [none]	only wireles reading	
Maximum indication [wirelessly]	4 000 000 000	
Disassembly sensor	Yes	
Maintenance cards, reminders, efficiency	Yes	
International Protection Rating	IP62	

#### MMC-11 Mini

Type Minor functionality	
Transmitter range [guaranteed-maximum]	30-120 m 100 - 400 ft
Battery life [minimum]	5 years
Work temperature [min-max]	-20°C ÷ +85°C
Count frequency [maximum]	3,5 Hz
LCD Display [none]	4 000 000 000
International Protection Rating	IP62



Simple but effective solution.

## WIRELESS CYCLE COUNTERS WITH INCREASED TEMPERTURE RESISTANCE

#### **MMC-12 HT**

<b>Type</b> High temperature		
Transmitter range [guaranteed-maximum]	30-120 m 100 - 400 ft	
Battery life [minimum]	4 years	
Work temperature [min-max]	150 °C (300°F)	
Count frequency [maximum]	3,5 Hz	
LCD Display	8-digit	
Maximum indication [wirelessly]	4 000 000 000	
Disassembly sensor	Yes	
Maintenance cards, reminders, efficiency	Yes	
International Protection Rating	IP62	



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Counter for oil heated molds and for tools with higher operating temperatures.

The counter design protects the electronics with double-layer housing, insulating air chambers ensuring good air circulation and distance fixing screws.

The counter has a fully functional disassembly sensor.



Vulcanization molds for rubber and other tools with the highest working temperature.

The counter design protects the electronics with double-layer housing, insulating air chambers ensuring good air circulation and distance fixing screws.

The counter has no disassembly sensor.

#### MMC-12 UHT

		,
Type Ultra High Temperature		
Transmitter	range [guaranteed-maximum]	30-120 m 100 - 400 ft
Battery life [minimum]		4 years
Work temp	erature [min-max]	205 °C (400°F)
Count frequ	uency [maximum]	3,5 Hz
LCD Displa	ay [none]	only wireless reading
Maximum i	ndication [wirelessly]	4 000 000 000
Disassemb	oly sensor	No
Maintenand	e cards, reminders, efficiency	Yes
Internationa	al Protection Rating	IP62

#### **MMC-24**

Typ For injection machines	
Transmitter range [guaranteed-maximum]	30-120 m 100 - 400 ft
Battery life [minimum]	5 years
Work temperature [min-max]	-20°C ÷ +85°C
Count frequency [maximum]	3,5 Hz
LCD display	8-digit
Maximum indication [wirelessly]	4 000 000 000
Input voltage [nominal]	24 V
Maintenance cards, reminders, efficiency	Yes
International Protection Rating	IP62

## WIRELESS CYCLE COUNTERS ACCESORIES



The counter allows counting the working cycles of an injection machine or a press machine after connecting to the machine controller with a cable. The input accepts 24V pulses, which are transmitted wirelessly to the Moldmaker system. The system assigns them to the mould or die that is currently working on the machine.



MMCD Concentrator LAN version A maintenance-free receiving device acting as a terminal, buffer and an automatic relay of information received from the counters to the data collecting server.

#### **MMCD Concentrator**

1	Version LAN	
100	Transmitter range [guaranteed-maximum]	30-120 m 100 - 400 ft
	Power supply [110/230V]	POE 48V
	Number of operated counters [maximum]	750
	Data transfer frequency [to the server]	every 5 min
noidmaker to	International Protection Rating	IP32
	Version GSM	
	Transmitter range [guaranteed-maximum]	30-120 m
	Power supply [110/230V]	110÷230V
	Number of operated counters [maximum]	750
	Data transfer frequency [to the server]	every 5 min
MMCD Concentrator GSM version	International Protection Rating	IP34

### WIRELESS CYCLE COUNTERS MOUNTING ACCESSORIES

#### MM-SB-01xx

Type	<b>Protection bracket</b>	- slim ver.
Compatibilit	у	MMC-11 Standard MMC-11 HT MMC-11 Mini, MMC-24
Thread vers	ions	MM-SB-01EU (EU) MM-SB-01US (US)
Material		Anodized aluminum
Ensures the	disassembly sensor operation	Yes
Protection agelement	gainst disassembly of the movable	Breakable seal
Work tempe	rature	-20°C ÷ +125°C

25.08 mm 0.35.0 mm 0.35.1 mm 0.35.0 mm 0.35.0 mm

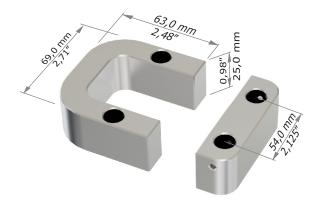
Protective narrow housing of increased height for building counters outside the tool. Protects the counter against accidental damage. Total height of 35.0 mm with the counter.

Fixed element assembly - 2 M6 x 16 screws (1/4 "-20 x 0.62")
Moving element assembly - 2 M6 x 20 (1/4 "-20 x 3/4") screws + breakable seal
Installation of the counter in a pocket - 2 M4 x 30 screws (No.8-32 x 1.15 ")

(screws not included)

The design ensures the operation of the counter disassembly sensor.







#### **MM-SB-02**

Type	<b>Protection bracket</b>	- wide ver.
Compatibility		MMC-11 Standard MMC-11 HT MMC-11 Mini, MMC-24
Material		Anodized aluminum
Ensures the	disassembly sensor operation	Yes
Protection aga element	ainst disassembly of the movable	Breakable seal
Work tempera	ature	-20°C ÷ +125°C

The protective wide housing for counters is intended for installation outside the tool. Protects the counter against accidental damage. Housing height equal to the height of the meter (25.0 mm).

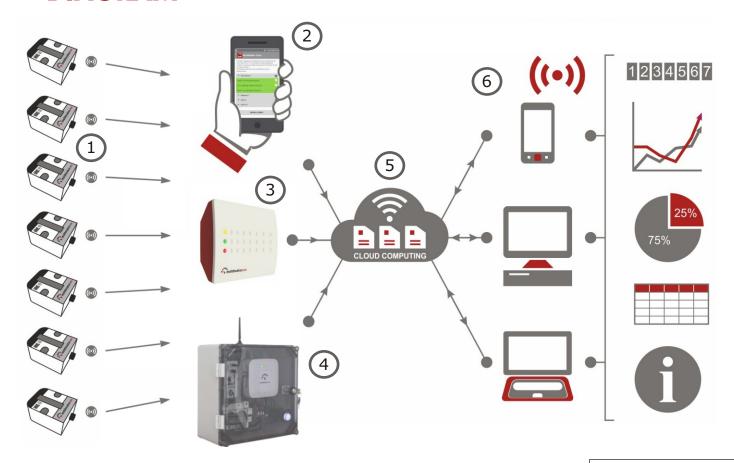
Fixed element assembly - 2 M6 x 16 screws (1/4 "-20 x 0.62")
Moving element assembly - 2 M6 x 20 (1/4 "-20 x 3/4") screws + breakable seal
Installation of the counter in a pocket - 2 M4 x 30 screws (No.8-32 x 1.15 ")

(screws not included)

The design ensures the operation of the counter disassembly sensor.

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### DATA FLOW DIAGRAM



The MoldMaker system is a tool for monitoring working injection tools, stamping dies or high pressure tools. Statistics are generated for individual tools and the entire factory.

The MoldMaker system is designed for remote monitoring of external suppliers carrying out production on entrusted tools. It provides unprecedented visibility over your in-house & outsourced manufacturing through data transparency and tighten your relationship with your internal & external suppliers.

#### Description

- **1** counters working at the production plant
- 2 mobile application
- 3 Concentrator LAN
- 4 Concentrator GSM
- **5** Central server
- 6 End-user units

#### **SYSTEM CHARACTERISTICS**

Work ranges	
Devices range [guaranteed-maximum]	30-120 m 100-400 ft
Area coverage [guaranteed-maximum]	2800 m² - 45000 m² 30000 ft² - 480000 ft²
Number of counters operated per 1 MMCD Concentartor	750
Maximum number of counters operated in the system	Unlimited
Number of system users [per 1 company]	Unlimited
Number of external plants [per 1 company]	Unlimited
Preventive maintenance, reminders, efficiency	Yes
Disassembly alarms	Yes
Consulting service	Unlimited

Near Field Comunication Functionality!



Mold Maker counters are equipped with modern NFC and Bluetooth functionality enabling contactless configuration and data transmission.



## A breakthrough in express cycle counter reading







