



# NAATBATT 2023

## YOUR LITHIUM TEST EQUIPMENT AND SERVICE PARTNER

BJOERN STOLL, PRESIDENT & CEO DIGATRON USA,  
SHELTON CT,    

## ABOUT US

Digatron is an international group of companies with headquarters in Aachen (Germany), with global manufacturing facilities in USA, China, India & Italy.

We are considered as the electronic innovators within the battery industry. Our core purpose has always been energising the battery world with our advanced turn-key power electronic solutions and making the future of tomorrow available today.

For over half a century, we have been developing and producing electronic test and formation systems for all types of batteries, ranging from lithium-ion pouch, cylindrical & prismatic cells for a vast array of applications.



# WHY DIGATRON?



## OVER 50 YEARS OF EXPERIENCE

Since 1968, we have been defining new industry standards for battery testing and formation systems.



## MADE IN USA

With our production and development in Shelton CT, we follow the highest quality standards.



## PERFECTLY ADAPTED TO YOU

Our comprehensive portfolio offers tailor-made complete solutions for every test scenario.



## SUPPORT HOTLINE

You receive support over the entire product life cycle.



## STRONG PARTNER NETWORK

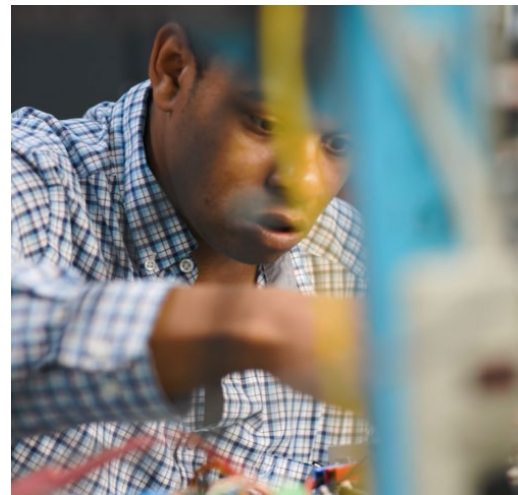
Together with our long-standing partners, we develop outstanding solutions for you.



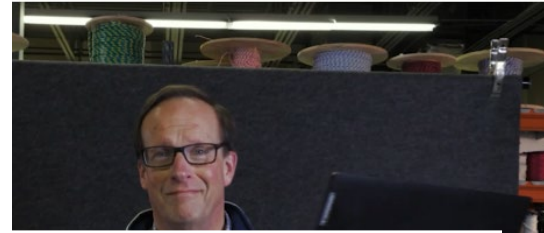
## EVERYTHING FROM A SINGLE SOURCE

Project consulting, test installation, suitable accessories and service & support are our competence.





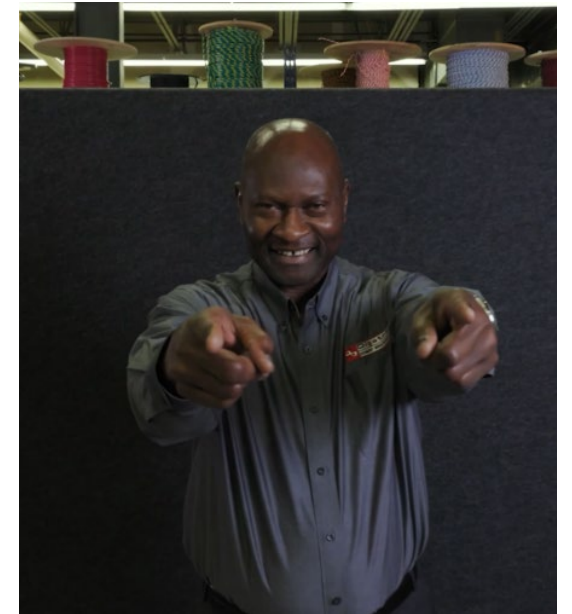
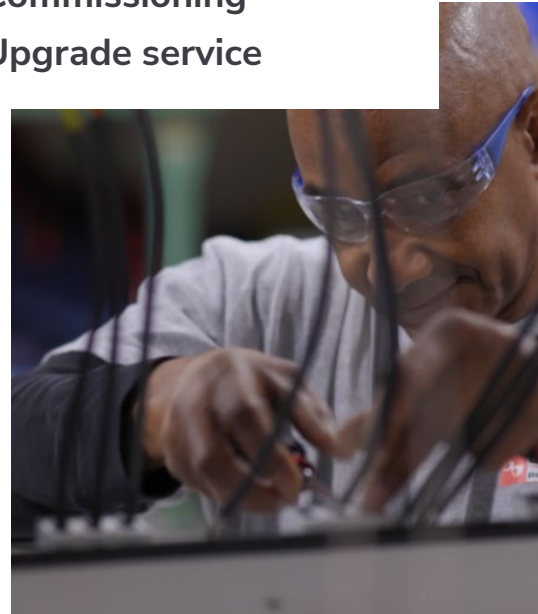




## CUSTOMER SERVICE



- Support hotline
- Training courses
- Repairs
- Spare parts service
- Calibration
- Commissioning
- Upgrade service



## GETTING CLOSER 2023:

- HEADQUARTER SHELTON, CT
  - NEW SALES OFFICE, PHOENIX, AZ
  - NEW SERVICE CENTER, MONTERREY
  - INCREASING OUR SERVICE TEAM
- 





## WHAT WE DO AS YOUR LITHIUM TEST EQUIPMENT AND SERVICE PARTNER

Battery Testing



Cell Testing (6V, 2A-1800A)  
Regenerative



Module Testing  
(12-150V, 10-8000A)



Pack Testing  
(600-1500V, Up to 2 MW)



Safety

EIS  
Meter

Data  
Logger

Cell  
Contacting

Climatic  
Chamber

Interfaces



Battery Manager  
Software

BATTERY  
CELL

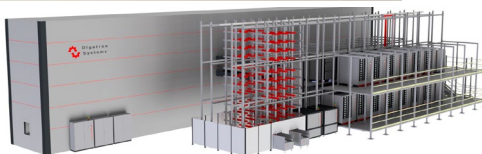
BATTERY  
MODULE

BATTERY  
PACK

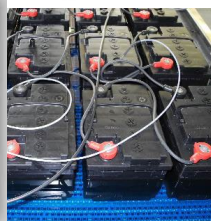
Battery Production



Cell Assembly Line



Lead Battery Formation



End-of-Line Testing

# DIGATRON MCT<sub>SERIES</sub>

## TECHNICAL DATA

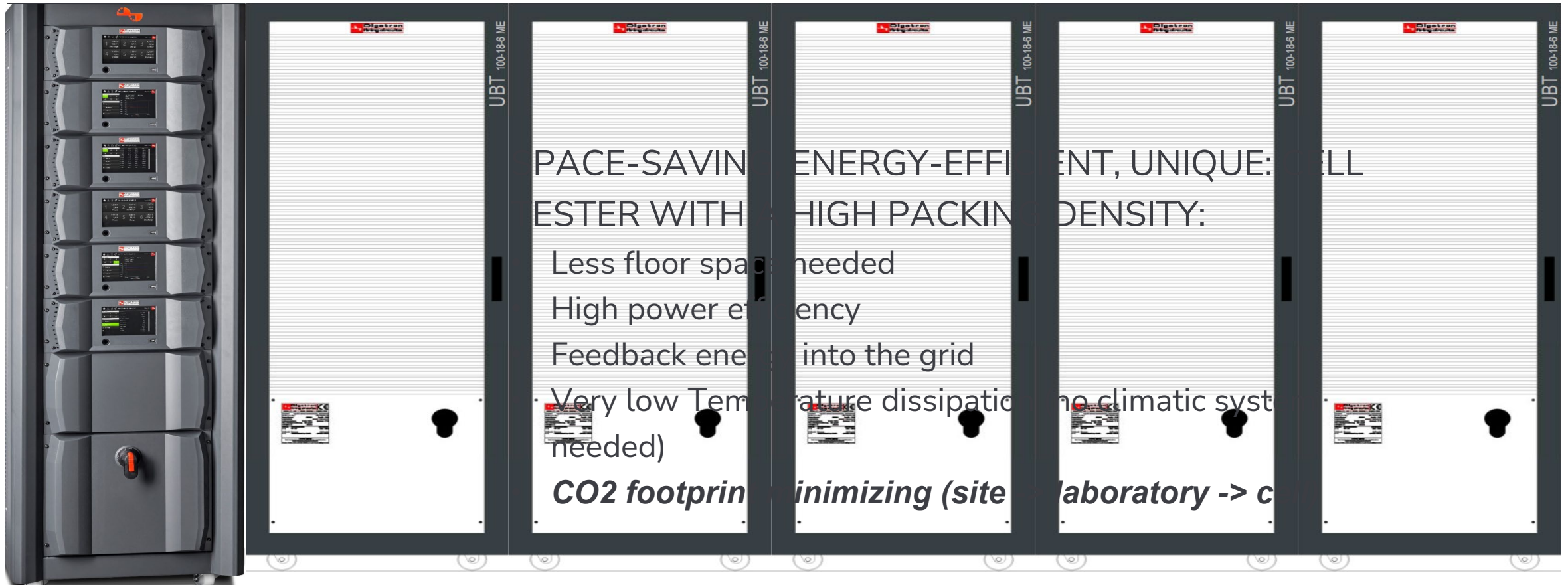


	MCT-HD 2A	MCT-HD 5A	MCT-HD 10A	MCT-ME	MCT-RE
Charge Voltage	-0.2V to 6V	-0.2V to 6V	-0.2V to 6V	0 to 6V	-6V to +6V
Discharge Voltage	6V to 0.5V	6V to 0.5V	6V to 0.7V	0 to 6V	-6V to +6V
Max. output current	<b>2A</b>	<b>5A</b>	<b>10A</b>	<b>50A upto 250A</b>	<b>250A / 300A</b>
# of Current Ranges	4	4	4	No	2
Accuracy, current	0.025 % FS	0.025 % FS	0.05 % FS	< ± 0.1 % fs	< ± 0.05 % fs
Acucracy, voltage	0.025 % FS	0.025 % FS	0.025 % FS	< ± 0.1 % fs	< ± 0.1% fs (<± 0.05 % fs opt.)
regenerative	Yes	Yes	Yes	No	Yes

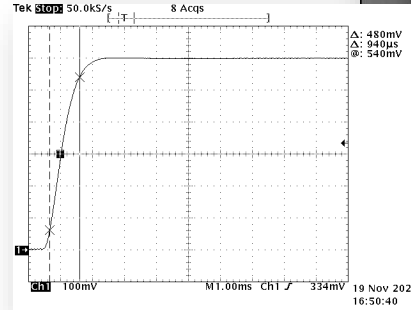


## COMPARISON – CABINET SIZE

HEAT DISSIPATING TECHNOLOGY (LINEAR) VERSUS REGENERATIVE TECHNOLOGY (SIC MOSFET)



# EXISTING EV PACK TESTER PORTFOLIO



	600 volt	800 volt	1,000 volt
Voltage range	0 V up to 600 V	0 V up to 800 V	50 V up to 1,000 volt
Current per module	300 A / 400 A peak	300 A	200 A
Power per module	80 kW / 135 kW peak	80 kW	80 kW
Paralleling of circuits	Yes	Yes	Yes
Accuracy $U_{DC}$	$< \pm 0.1 \% fs$	$< \pm 0.1 \% fs$	$< \pm 0.1 \% fs$
Accuracy $I_{DC}$	$< \pm 0.1 \% fs$	$< \pm 0.1 \% fs$	$< \pm 0.1 \% fs$
Resolution I, U	$\pm 20 \text{ mA} / \pm 40 \text{ mV}$	$\pm 15 \text{ mA} / \pm 40 \text{ mV}$	$\pm 10 \text{ mA} / \pm 50 \text{ mV}$



# OUR NEW 1500V PACK TESTER

- 2x 750V, 500A, 125kW (160kW peak) per module
- Single, parallel or serial operation
- Up to 1,500V DC
- Up to 1,000A DC per module
- Up to 250kW (320kW peak) per module
- Higher current & power through paralleling modules
- Watercooled
- High energy efficiency SiC design
- Available 2023, Q4

A graphic on the right side of the slide featuring a red background with a white, torn-paper-like shape in the center. Inside the white shape, the words 'SNEAK PEEK' are written vertically in black, bold, sans-serif capital letters.

SNEAK PEEK

# EXAMPLE OF FULL INTEGRATION





## Single Station Machines for Pouch, Cylindrical, Prismatic Cell Assembly



**LABORATORY / SMALL PRODUCTION**  
Defined product, available with different version level and options

**MASS PRODUCTION**  
Concept products to be customized according to customer process and productivity needs

**SINGLE STATION MACHINES FOR POUCH CELL PRODUCTION**

**FORMATION AND AGING AUTOMATED PLANTS**

**ASSEMBLY LINES FOR POUCH CELL PRODUCTION**

**PRODUCTION LINES FOR MODULE ASSEMBLY**



### CELL ASSEMBLING

**ELECTRODE CUTTING**

**CELL STACKING**

**TAB WELDING**

**POUCH FORMING**

**POUCH SEALING**

**CELL FILLING**

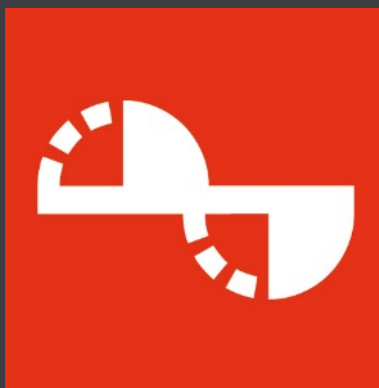




QUENCH  
JUICE FOR ELECTRIC AUTOMOBILES







# THANK YOU!

For USA more information, please contact...



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