metravib

Xpander

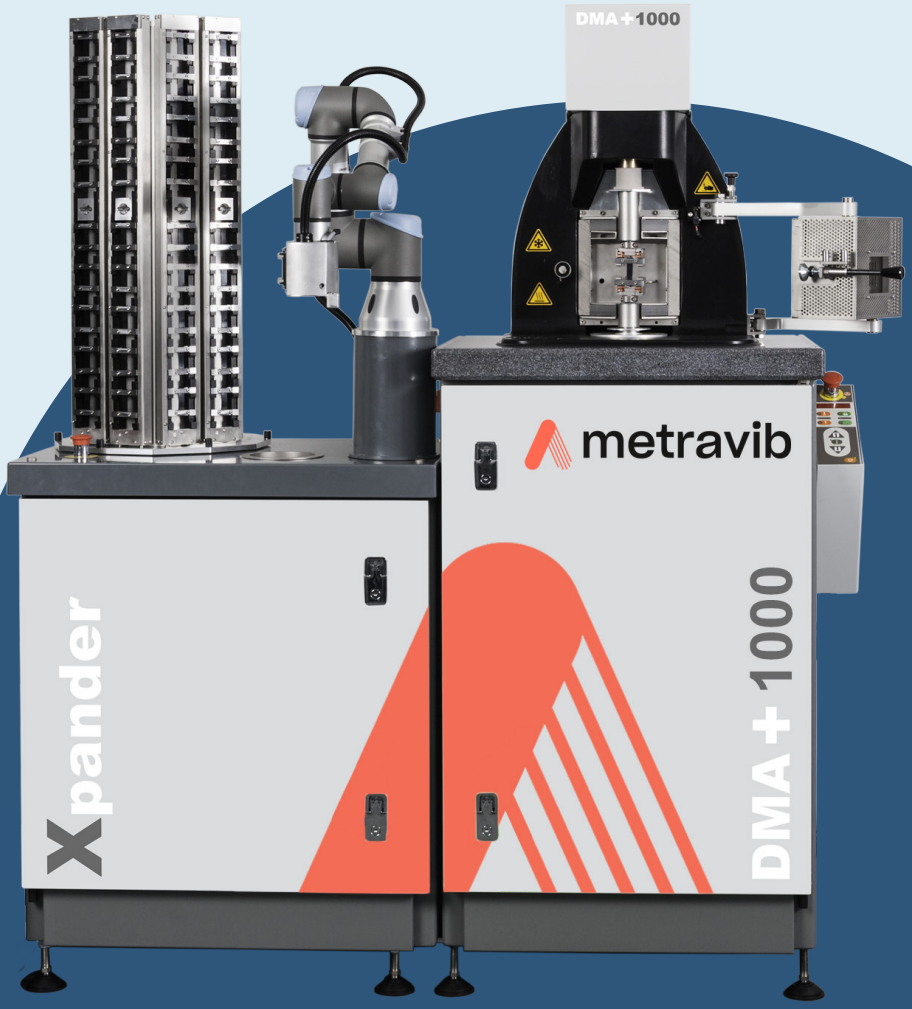
Automated specimen handling system for DMA+ series

BOOST YOUR DMA TESTING PRODUCTIVITY WITH THE LATEST ROBOTIC TECHNOLOGY!

Xpander is designed to expand your DMA+ test productivity.

The combination of Xpander with DMA+1000 or DMA+2000 offers unique capabilities to match the increasing DMA testing need of rubber and polymer industry.

metravib-design.com



SMART TECHNOLOGIES

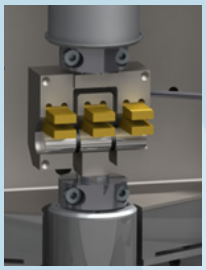
Since 1999, Metravib is supplying robust and high performance automated DMA, adopted by leaders of the rubber and tire industry.

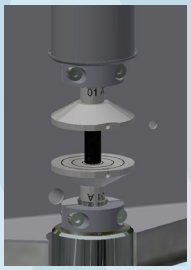
With Xpander, METRAVIB introduces a new generation of automated systems to fulfill the increasing throughput requirement of testing laboratories.

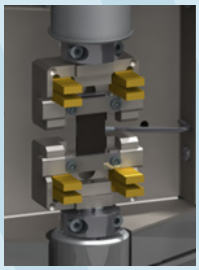
Its collaborative robot arm allows Xpander to run among human neighborhood without specific safety area.

The conversion to manual mode is then greatly facilitated.

A smart robotic toolbox ensures specimen gripping and superior clamping required for optimal DMA testing.







MAIN ASSETS

- Designed for continuous testing 24/7/365
- Eliminates human error by fully automating testing
- Improves reliability and reproducibility of DMA test results
- High specimen storage capability
- Fast adaptation to various specimen geometries & sizes
- Fast conversion to various testing modes: compression, tension, shear
- Fast conversion to manual use
- Modular design to address customized testing requirements
- Cost effective
- Reduced foot print

MAIN USES

- Automated DMA and fatigue tests
- Industrial routine tests
- Quality control tests
- Rubber and polymer testing

XPANDER: REPEATABILITY, RELIABILITY AND PRODUCTIVITY

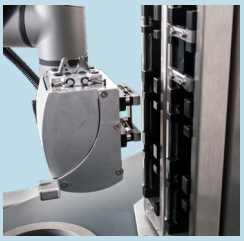
HOW DOES XPANDER OPERATE?

A 6 axis robot arm takes out the specimen from the carousel to the DMA+ test station, loads the specimen into the DMA+ holders, closes the thermal chamber and launches the test under controlled dynamic excitation, static load and thermal conditions.

Loading specimens in the removable racks, outside of the system, makes possible uninterrupted tests.

The Xpander software module of DYNATEST allows:

- rapid test definition
- data exportation
- operator alert by text or phone message, when test stops.



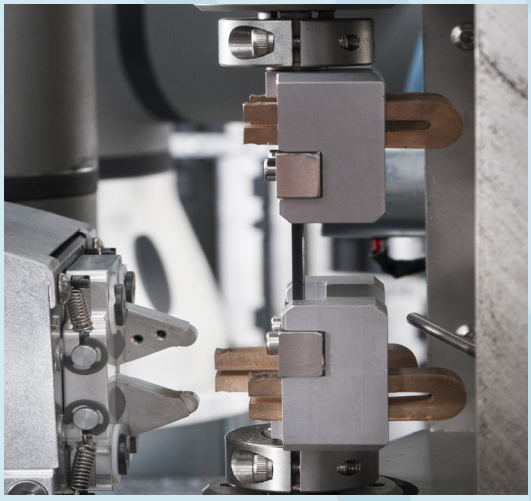
COMPOSITION

- 6 Axis robot arm (collaborative robot technology)
- Smart robotic toolbox for specimens gripping and clamping
- Carousel equipped with 12 removable racks
- DYNATEST Xpander software module
- Robot arm calibration program

AUTOMATED DMA WITH UNIQUE FEATURES

Xpander increases the number of specimens tested per day, taking advantages of DMA+ high performances:

- Unrivalled accuracy
- Extended force and strain ranges
- High frequency testing up to 1kHz
- No transducer change needed
- Future proof technologies



MAIN SPECIFICATIONS

Dimensions	
Height	1700 mmm
Width	752 mm
Depth	520 mm
Weight	250 kg

Supplies	
Voltage	220 V
Frequency	50 Hz - 60 Hz
Power	300 W
Compressed air network	4,5 bars

Storage (max)	
Tension	108 specimens
Compression	300 specimens
Shear	420 specimens

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