

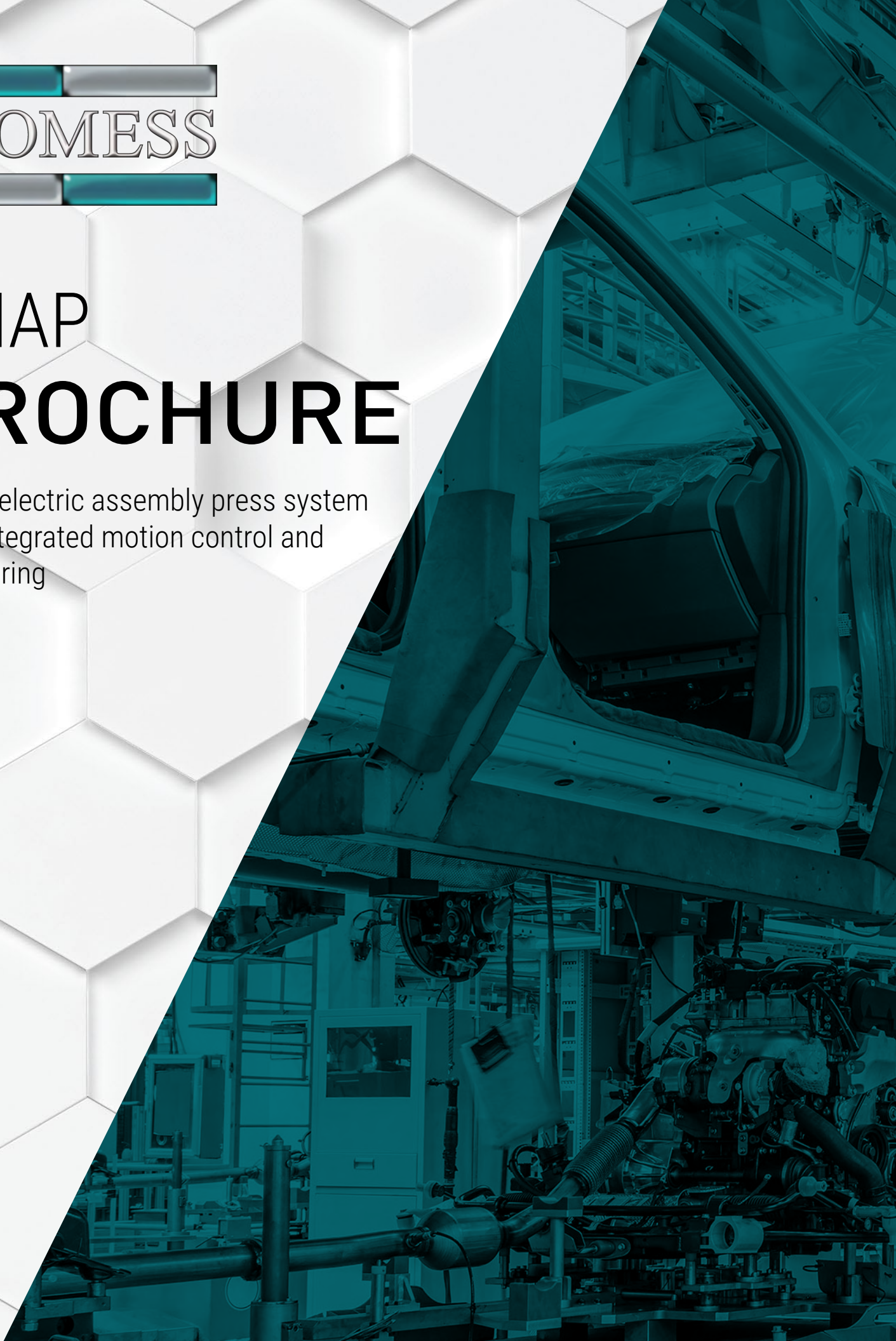


PROMESS



EMAP BROCHURE

A fully electric assembly press system
with integrated motion control and
monitoring



EMAP

If you need to push, pull, position, monitor and control every aspect of your assembly process, Promess has the solution for you. The Electro-Mechanical Assembly Press (EMAP) System.

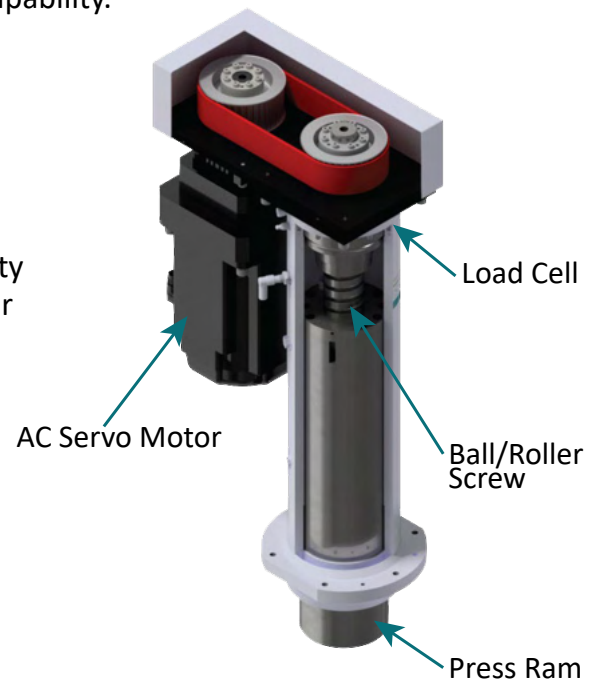
The Promess EMAP systems combine our servo-driven ball screw press technology with our single or multi-axis fully programmable controls and software to provide a high precision, closed-loop press system with integrated signature analysis and gauging capability.

KEY FEATURES:

- + Ball screw design that features dynamic press load capacity 2.5 to 3 times greater than the stated load capacity
- + Integrated load cell
- + Servo system is sized to reach press load capacity within the continuous current zone of the motor and drive
- + Push or pull with equal accuracy
- + Any mounting orientation

MONITORING & TEST CAPABILITIES:

- + Force vs. position signature monitoring with advanced curve analysis
- + Customized algorithms



EMAP Sizes	Force		Travel		Speed
	kN	Lbs	mm	inch	mm/sec
EMAP 0.2kN	0.2	45	100	3.9	200
EMAP 01kN	1	225	100/300	3.9/11.8	200/150
EMAP 03kN	3	675	100/300	3.9/11.8	200
EMAP 05kN	5	1,125	200/350	8/13.8	200
EMAP 08kN	8	1,800	200/350/500	8/13.8/19	200
EMAP 12kN	12	2,700	200/350/500	8/13.8/19	200
EMAP 20kN	20	4,500	180/350/550	7/13.8/21.6	200
EMAP 30kN	30	6,750	180/350/550	7/13.8/21.6	200
EMAP 40kN	40	9,000	330/660	13/26	200
EMAP 60kN	60	13,500	330/660	13/26	200
EMAP 80kN	80	18,000	330/660	13/26	175
EMAP 100kN	100	22,500	330/660	13/26	200
EMAP 120kN	120	27,000	330/660	13/26	175
EMAP 160kN	160	36,000	400	15.75	125
EMAP 200kN	200	45,000	400	15.75	100
EMAP 300kN	300	67,500	400	15.75	100
EMAP 500kN	500	112,000	400	15.75	70
EMAP 1,000kN	1000	225,000	400	15.75	40

+ Other sizes, stroke lengths and speeds available

SAMPLE APPLICATIONS



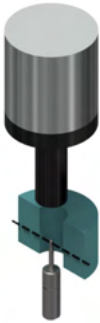
PRESS TO SHOULDER:

- + Press to a programmable force
- + Press to rate of change
- + Gauge and press to shoulder
- + Gauge force and position



PRESS TO POSITION:

- + Press to a programmable position
- + Press to external sensor
- + Press to torque
- + Press to offset



PRESS TO EXTERNAL TRANSDUCER:

- + Press to dimension (external probe)
- + Press to flow
- + Press to external force
- + Press to torque



CRIMING / STAKING:

- + Crimp to a programmable force
- + Crimp to a relative distance from a touch point
- + Stake to a dimension
- + Single or multiple staking points



RIVETING:

- + Upset rivet to a force
- + Upset rivet to a position
- + Upset rivet to a relative dimension on that part
- + Upset rivet to a functional specification



SPRING TESTING:

- + Measure spring rate
- + Measure spring height at defined force
- + Measure spring free height
- + Measure spring retention

WORK STATION

The Promess Work Station is a stand-alone system featuring a Promess motion controller and either a Promess Electro-Mechanical Assembly Press (EMAP), a TorquePRO motorized torque system or a Rotational Electro-Mechanical Assembly Press (REMAP), depending on application requirements. The Work Station provides a flexible foundation for use in assembly, test and lab applications.

Electric Press Work Station Includes:

- + Promess servo press with integrated force and position feedback
- + Promess motion controller
- + Press stand with C-frame or 4-post frame
- + Light curtain for operator safety
- + Programming software



PROCESS DEVELOPMENT CENTER



Promess would like to invite you to our Process Development Center. The PDC is available to help you develop your processes and confirm the Promess technology that is best suited for your application. In addition to in-person testing, you are also encouraged to send in your parts to be tested by our expert Application Engineers.

