

# Regenerative DC

## Dynamometers and Systems



## Features

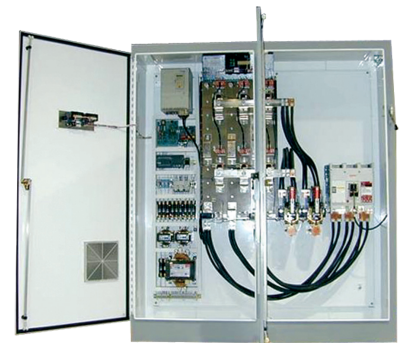
- Regenerative systems from 1 to 1,200 Horsepower
- New manufacturing of DC drives
- Remanufacturing of used DC dynamometers
- Control design allows for extensive customization
- Dynamometer Soft Start and Stop, under all conditions
- Up to +/-200% rated current limit and armature current slew rate of +100% to -100% in 40ms
- Regenerative Braking for fault trips - Dynamic Braking available as an option
- Armature Over-Voltage and Over-Current trips
- Phase Loss / Under Voltage trip
- Phase-Insensitive Power Converter
- Wrong Direction Protection
- Individual SCR fuses for high current dynamometers

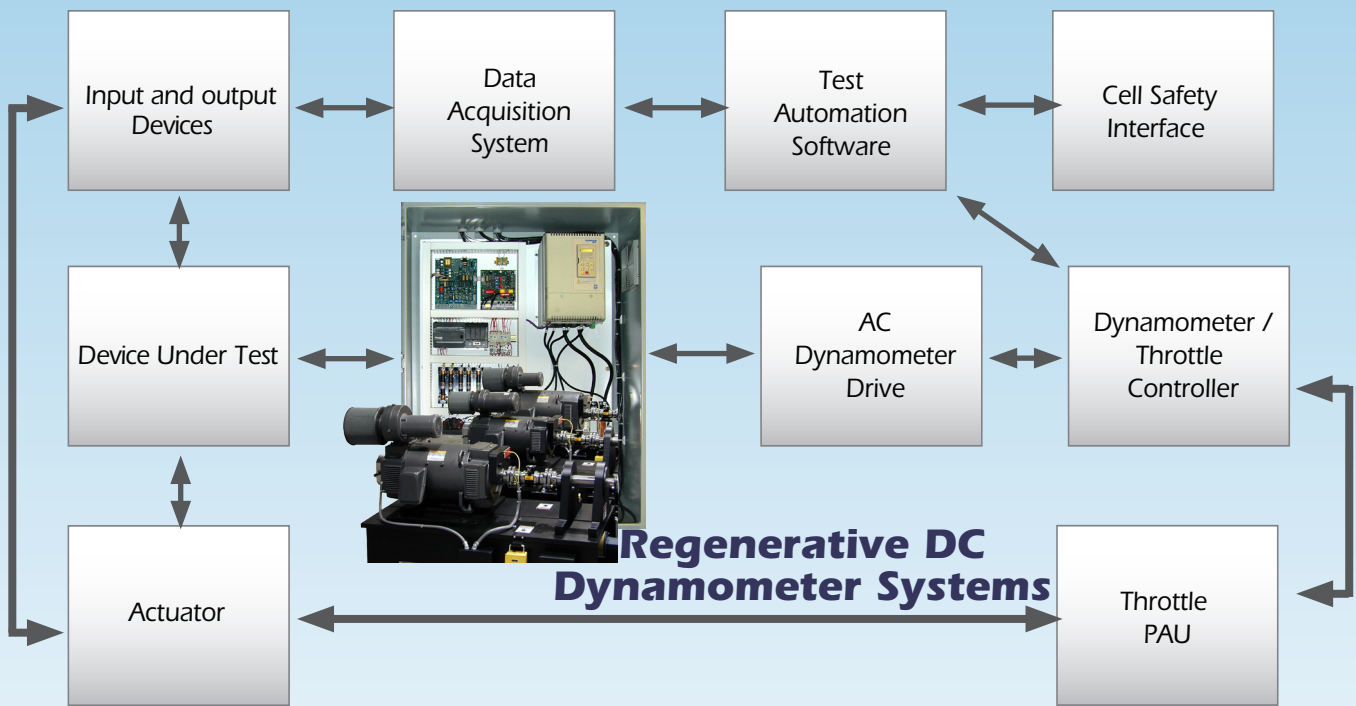
Dyne Systems Static DC 4-Quadrant Dynamometer Controls utilize either the Inter-Loc V or the Dyn-Loc IV digital dyno controllers to control RPM (speed) and torque. Includes wide-band 4SCR regenerative, current source field amplifier with bidirectional forcing for fast field control when operating above dynamometer base speed.



## Testing Applications

- Engine
- Electric Motor / Alternator / Generator
- Transmission / Transaxle / Differential
- Component / Gear Box / Lubricants





## Dyne Systems Product Line

### Closed Multi-Loop Dynamometer & Throttle Control

- Inter-Loc V
- DS630 Inter-Loc V Throttle Controller

### Closed Single-Loop Dynamometer Control

- Dyn-Loc IV
- Dyn-Loc V

### Closed Loop Throttle Control

- DTC-1
- DS830 Stand-Alone Throttle Controller

### Open Loop Dynamometer Control

- DS820 Eddy Current PAU

### Closed Loop Water Flow Control

- EWC-1

### 5-Gas Exhaust Analyzer

- XM2000

### Data Acquisition

- Companion II: Dyne Systems proprietary
- Companion III: Yokogawa based
- Companion IV: NI cRIO based

### Test Automation Software

- Cell Assistant for Windows
- Cell Assistant for LabVIEW™ (VeriStand™)

### Test Cell Safety PLC Interface

- CIA I: Automation Direct / Koyo
- CIA II: Horner
- CIA III: ABB
- CIA IV: Allen-Bradley

### Throttle Accessories

- Actuator, Remote Pendant, Cables

### Eddy Current Dynamometers

- 5–5000 Hp

### AC Dynamometers and Drives

- 5–1600 Hp

### DC Dynamometers and Drives

- 5–1200 Hp