

DYNAMIC CES PRESS DRIVES AND DIGITAL CONTROLS

The constant energy system (CES) Mechanical Press Drive is a combination of an air-cooled variable speed drive, a brake, a belt ring flywheel and a shaft-mounted tachometer in a common housing.

CES press drives can function within a wide stroking range while exercising full control of the slide within individual strokes. The press drive can produce sufficient inertia for normal, double and triple action press applications

CES Press Drive features can be fully utilized by blanking, deep draw transfer, progressive die, follower, synchronized and multiple action presses.

Clutch/brake design of the CES Press Drive help avoid "tearing" of pressed metal parts, optimizes parts per minute production.

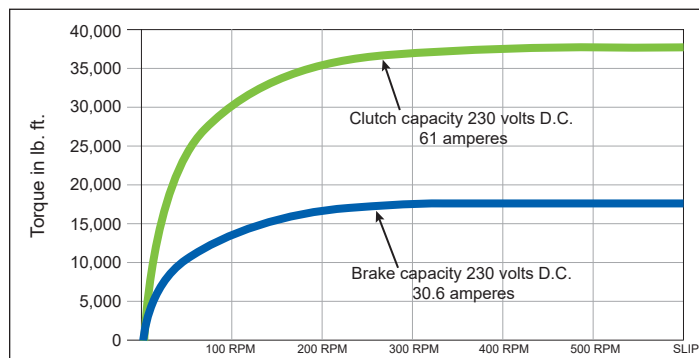
Single CES system saves capital and maintenance costs compared to multiple servomotor design



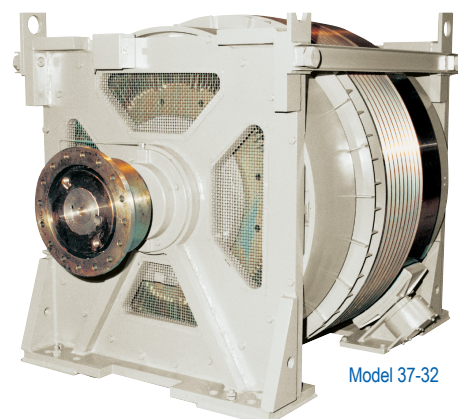
Dynamic® specifications and engineering data

Press Drive Model #	Peak-Torque (lb. ft)		Coil Current @ Peak Torque		Continuous Clutch Heat Dissipation Capacity @ Max Rated Flywheel Speed (2)	Max Rated Flywheel Speed (3)		Flywheel Energy (inch tons) (4)	Inertia (lb. ft)	
	Clutch	Brake	Clutch Amps (1)	Brake Amps (1)		RPM	FPM		Flywheel	Output
30-21	6300	3150	18	9	40 HP @ 600 RPM	600	7470	3550	8000	350
30-32	9375	6250	27	18	60 HP @ 600 RPM	600	7470	4960	11150	540
30-42	12700	6350	36	18	75 HP @ 600 RPM	600	7470	6290	14250	650
37-21	17950	8975	30	15	80 HP @ 600 RPM	500	7350	5400	17500	1700
37-32	27500	18330	45	30	120 HP @ 600 RPM	500	7350	7260	23500	2300
37-42	37500	18750	60	30	150 HP @ 600 RPM	500	7350	9670	30500	2700
49-42	65000	32500	90	45	220 HP @ 600 RPM	435	7520	16200	69000	7350
49-63	95000	47500	135	68	280 HP @ 600 RPM	410	7520	29000	140000	11000

Typical speed torque curve for Model 37-42



- 1) Normal intermittent ratings shown
- 2) Dissipation capacities vary linearly with flywheel RPM
- 3) Max rated flywheel speed corresponds to 7500 ft/min belt speed when using bonded sets of multiple V-Belts
- 4) Total energy stored in the flywheel at 110% rated flywheel RPM



Dynamic®
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www.dynanatic.com

Your complete source for:

- New digital control upgrades
- Quick-ship control board repair service
- Full line of drop-in replacement control options
- Certified original CES parts

Dynamatic® digital CES press drive controllers

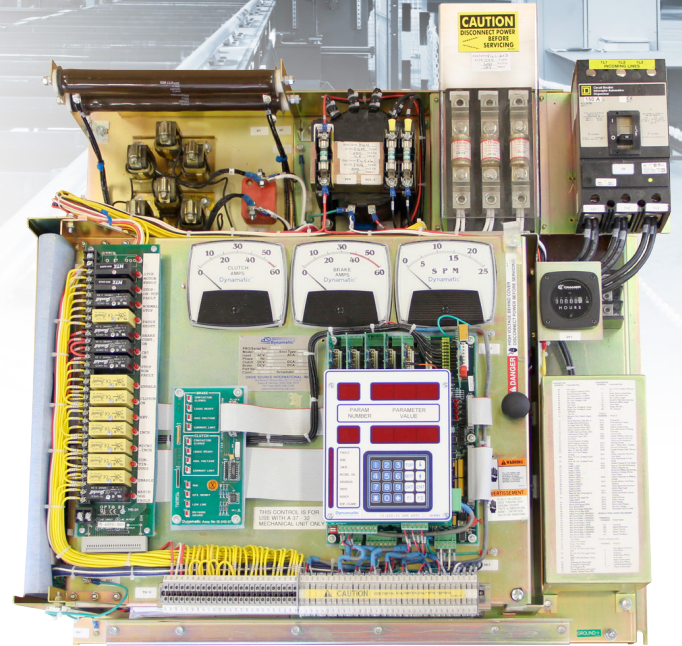
Dynamatic® CES Press Drive controllers are solid state closed loop velocity controllers specifically designed for Eddy Current CES mechanical press drives, creating a simple, safe, and reliable drive system.

The CES controller is readily adaptable to position control in large production presses. The system utilizes a position transducer (digital shaft encoder) to measure press position (crank angle) and compares this feedback information with a digital position reference.

Easily applied to single or multiple action presses where speed control is desirable. The system offers many unique features not available with other press drive designs for use on draw presses, blanking presses, transfer presses and on synchronized presses with automated handling equipment

Dynamatic®

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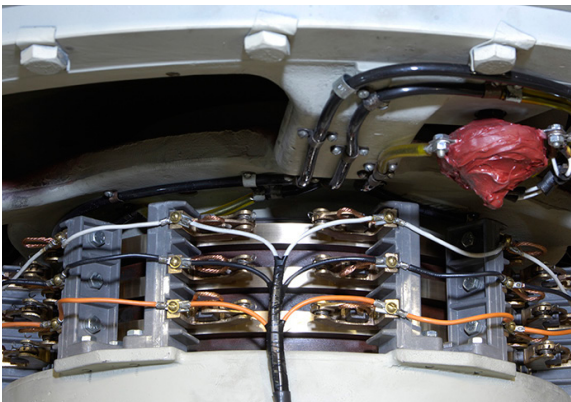


100% Factory Tested

Only Dynamatic digital CES press drive controls and all individual components are 100% factory tested under simulated load-operating press control conditions using a custom-built burn in test chamber designed to operate at all voltages, under full load, using actual coils from a working CES mechanical drive. The test chamber exposes the controller to rigorous vibration and extreme heat similar to the working press environments, meeting or exceeding the highest industry standards on any press drive controllers available today.

Accept no alternatives
Specify Dynamatic® CES quality products.

- Servo control in 1 simple package
- Microprocessor based control ensures maximum operation flexibility and reliability
- Maximum production with minimum scrap... precision speed control maintains fixed flywheel up to a 5:1 speed range
- Press logic safety circuits protect both operator and machinery
- Low speed controls with no additional cooling, eliminates the need for die setup motor.
- Intra stroke speed changing permits deep drawing without waste or excessive lubricant.



Don't trust the heart of your press to just anyone... insist on Dynamatic® quality

Certified Factory Re-manufacturing

Drive Source International offers quality re-manufacture and repair for all Eddy Current drives and controllers. We have been designing, building and refurbishing systems for over 65 years and know more about our equipment than anyone else. We have original specifications, drawings, documentation, test requirements and update information. To keep your business running strong, you need the kind or re-manufacture/repair that only the original manufacturer can offer.

- All Eddy Current drives and controllers
- Our experienced drive technicians dismantle and assess your drive and all individual components
- Replace all damaged & worn components with new factory warranted parts
- Circuit board analysis, repair and testing per Dynamatic standards