

AIDA

GLOBAL METALFORMING SOLUTIONS

STRAIGHTSIDE PRESSES **MCX SERIES**

MODULAR CONFIGURATION SERIES



MCX SERIES

MAXIMIZED VERSATILITY | MAXIMIZED FLEXIBILITY

MAXIMIZED PRODUCTION MAXIMIZED PROFIT

The choice is yours: Single or Double Gear, 1/4 or 1/2 inch rating points, Mechanical or Servo. The **MCX Series** from AIDA offers the highest level of customization through multiple configurations. What does this mean for your stamping operation?
MAXIMIZED PRODUCTION AND MAXIMIZED PROFITS.

FIVE DRIVE OPTIONS

Mechanical Press Drive:

- Single gear 1/4" rating
- Single gear 1/2" rating
- Double gear 1/2" rating



SERVO PRO

Servo Press Drive:

- Single gear
- Double gear



STANDARD FEATURES

a Highly Rigid Frame

Frame components are massive steel fabrications to reduce deflection under load

b Counter-Rotating Eccentric Gears

Counter-rotating gears eliminate side thrust under load

c Self-Contained Counterbalance Cylinders

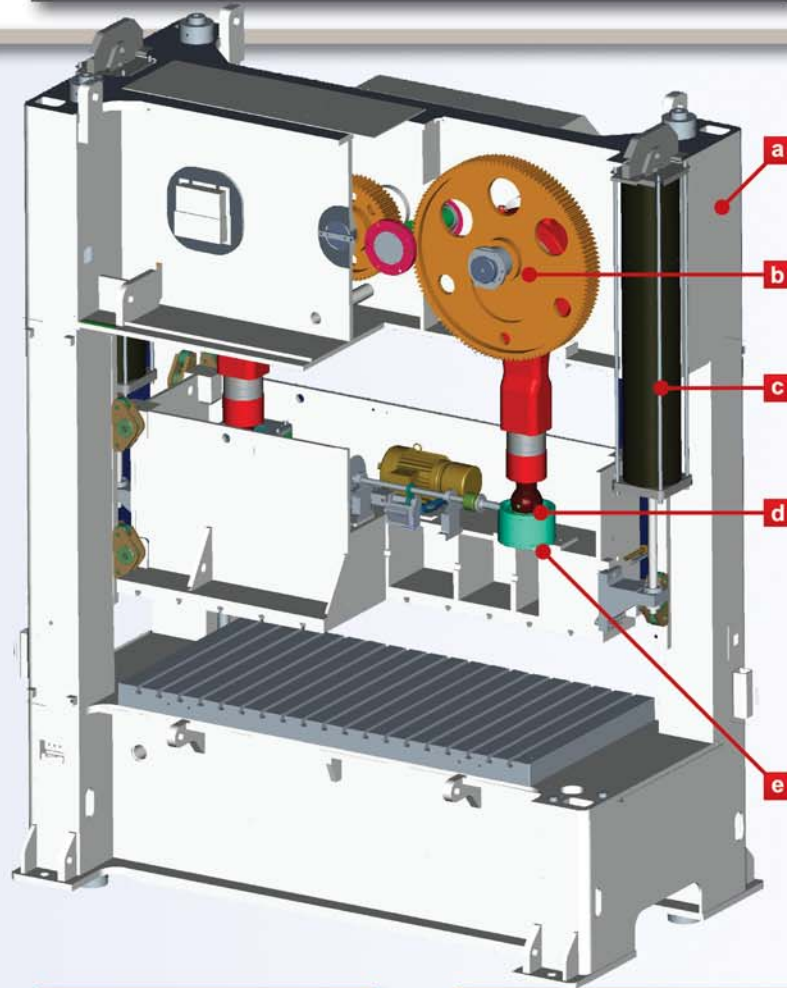
Cast carbon fiber cylinder reduces packing wear which results in lower maintenance and elimination of air leaks

d Ball and Socket Connections

The AIDA ball screw slide suspension has approximately 1/3 the clearance of a wrist pin design

e Hydraulic Overload Protection (HOLP)

AIDA's patented metal seal type hydraulic overload protection system is 7 - 10 times faster than conventional relief valve systems



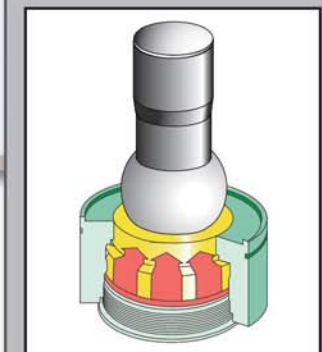
COUNTER-ROTATING ECCENTRIC GEARS



BALL & SOCKET CONNECTIONS



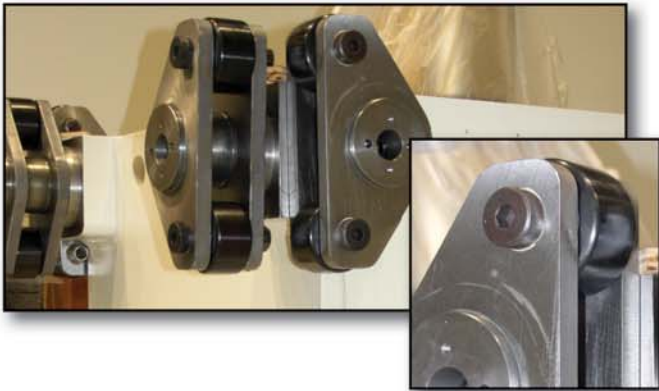
HOLP | HYDRAULIC OVERLOAD PROTECTION



VERSATILE 8 POINT SLIDE GUIDE OPTIONS

■ Preloaded, Swivel Mount Roller Guides (standard)

Zero clearance, no lubrication required minimizing the possibility of either contamination in the die space or die lubrication into press lube system



■ Bronze Oil Film Slide Guides (optional)

Full guiding contact throughout the entire stroke length at any adjustment setting



MECHANICAL DRIVE OPTION

MECHANICAL DRIVE OPTION

■ Combination Clutch and Brake

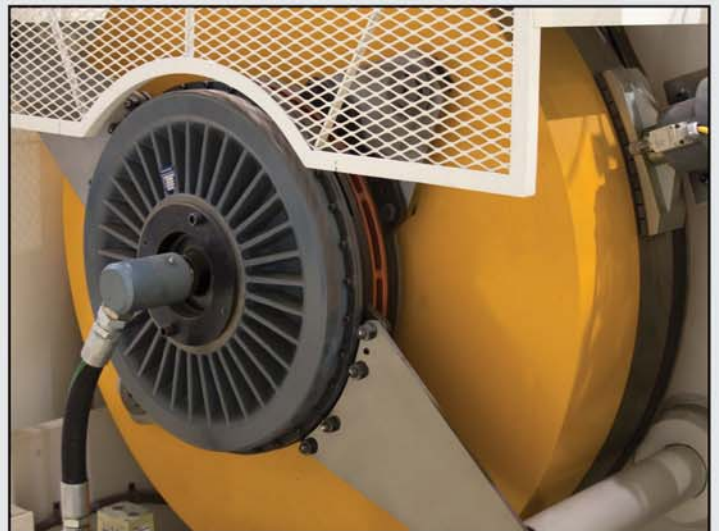
High-performance air-friction unit mounted outside of the flywheel allows for easy maintenance

■ Medium or High Energy Quill Mounted Flywheel

Quill mounting allows larger flywheel bearings providing a significant increase in bearing life

The high energy version includes an oversized flywheel and main drive motor, which provides high energy capacity for heavy forming or deep drawing

FLYWHEEL, CLUTCH, & BRAKE



MECHANICAL PRESS CONTROL

- Allen Bradley based PLC
- Large touch panel display for easy viewing and improved operability
- Crank angle meter with digital display
- Pilz Safety PLC clutch/brake control
- Data bank for job settings storage
- Optional control platforms:
Mitsubishi PLC, Siemens S7 (CE Mark), Link, & Wintriss

ACCESS CONTROL

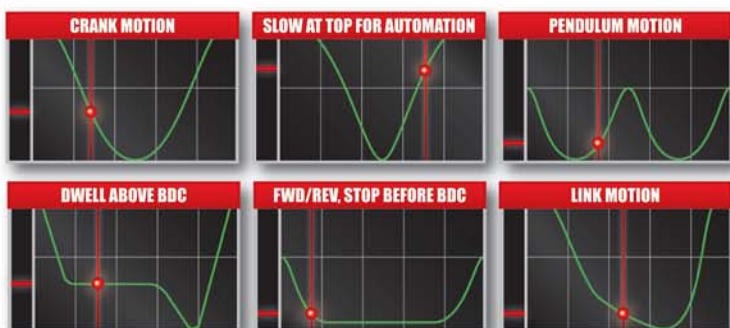




SERVO PRESS POWER MANAGEMENT

- Lower operating cost compared to mechanical or hydraulic presses
- Excess energy thru the non-working part of the stroke is stored in the capacitor bank
- Energy regeneration reduces peak power loads
- Power regeneration through non-working part of stroke
- While the press idles, power consumption is minimal

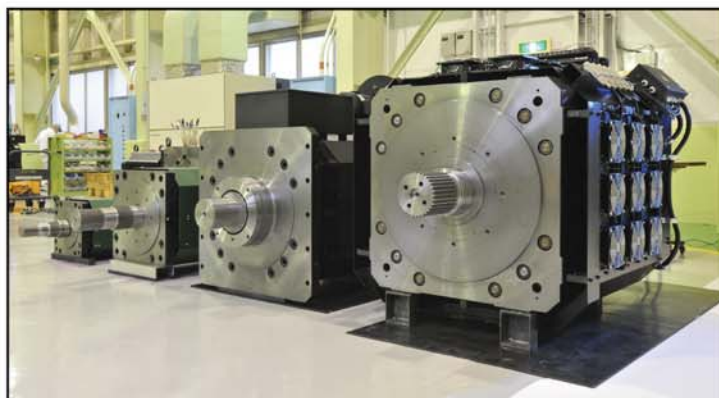
INFINITELY PROGRAMMABLE STROKE



■ Infinitely Programmable Stroke and Velocity Profiles

Ability to program constant velocity for forming applications, ease of use of standard programs for new users/processes, increased production rates at shorter stroke lengths

AIDA PROPRIETARY SERVO MOTOR



■ High Torque, Low RPM Servo Motors

Direct drive, optimal air-cooled design, the use of rare-earth magnets greatly increases the magnetic energy

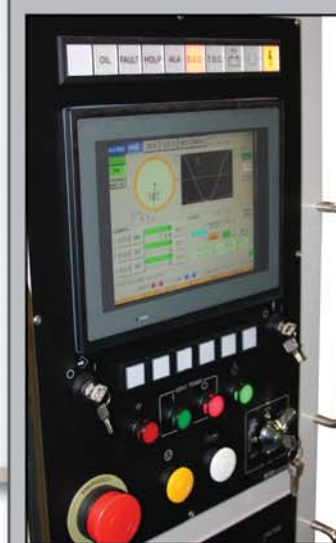
SERVO PRESS CONTROL

- 10.4" Operator Panel
- 99 Job Recipe
- Teach Position Capability
- Electronic Crank Angle Indicator
- Motion Graphs on Run Screen
- 16 Programmable Timing Switches (Cams)
- 14 Programmable Die Protection Inputs
- 3 Production Counters / 1 Maintenance Counter

MANUAL STEP FEED



SERVO CONTROL



CRITICAL AIDA SERVOPRO® - SERVO PRESS TECHNOLOGY - FEATURES & BENEFITS

■ AIDA High Torque, Low RPM Servo-Motor

Direct drive
Minimal components compared to mechanical drive
High torque curve (same as standard mechanical drive)

■ Amplifier/Servo-Controller

Compact
No secondary cooling equipment

■ Capacitor Banks

Electrical storage of excess servo motor energy
Energy efficient
Minimal power source capacity requirements
Full energy at 1 SPM

■ Manual Step Feed

Handwheel control of slide position
Eases die set-up and tryout with full energy capability to 1 SPM
Teach function for ease of programming
Ability to dwell under load

■ Standard Mechanical Drivetrain

Proven mechanical drive
Die interchangeability between mechanical and servo presses
Extremely small overall clearances in comparison to competitors

■ Mechanical Safety Brake

Promotes operator safety for unintended slide motion and interlocked with emergency stop push-button and light curtains

■ AIDA Patented Metal-Seal Type Hydraulic Overload Protection (HOLP) System

Zero pressure in 10 milliseconds - 7 times faster than relief valve type HOLP
Reset in 30-45 seconds when inched to top of stroke
No wear components, seals, O-Rings or wipers

■ Light Curtains Across Die Space Area with Mechanical Side Guards

Full point of operation guarding included for operator safety in compliance with OSHA and ANSI standards

■ Full Recirculating Oil Lubrication System

No regular maintenance required as for lost grease or lost oil system
Fewer and less lubricants requiring disposal

■ CNC Control with Color HMI

Large programming capability
Operator ease of programming new part programs
Operator ease of understanding stroke position and job program profile
Communication capability with secondary devices such as feeders
Die protection for part quality

■ Infinitely Programmable Stroke Profile Control

Ability to program constant velocity for forming applications
Ease of use of standard programs for new users/processes
Increased production rates at shorter programmable stroke lengths

ALL OF THE FEATURES BELOW AVAILABLE FROM ONE FRAME DESIGN

MAXIMIZED VERSATILITY | MAXIMIZED FLEXIBILITY

MAXIMIZED PRODUCTION

MAXIMIZED PROFIT

MAXIMUM FLEXIBILITY IN PRESS SPECIFICATION SELECTION

■ Single or Double Eccentric Gear Drive

■ Standard or High Continuous Working

Energy Capacity

■ 6.35 mm (0.25 in) or 12.7 mm (0.5 in) Rating Point

■ Mechanical or Servo Drive Packages

■ Wide Variety of Stroke Length & Die Height Choices

Available in each Tonnage Capacity

■ Zero Clearance Roller-Type Slide Guides with Oil Film

Version as an Option

■ Standard AIDA Control or Optional 3rd Party Control

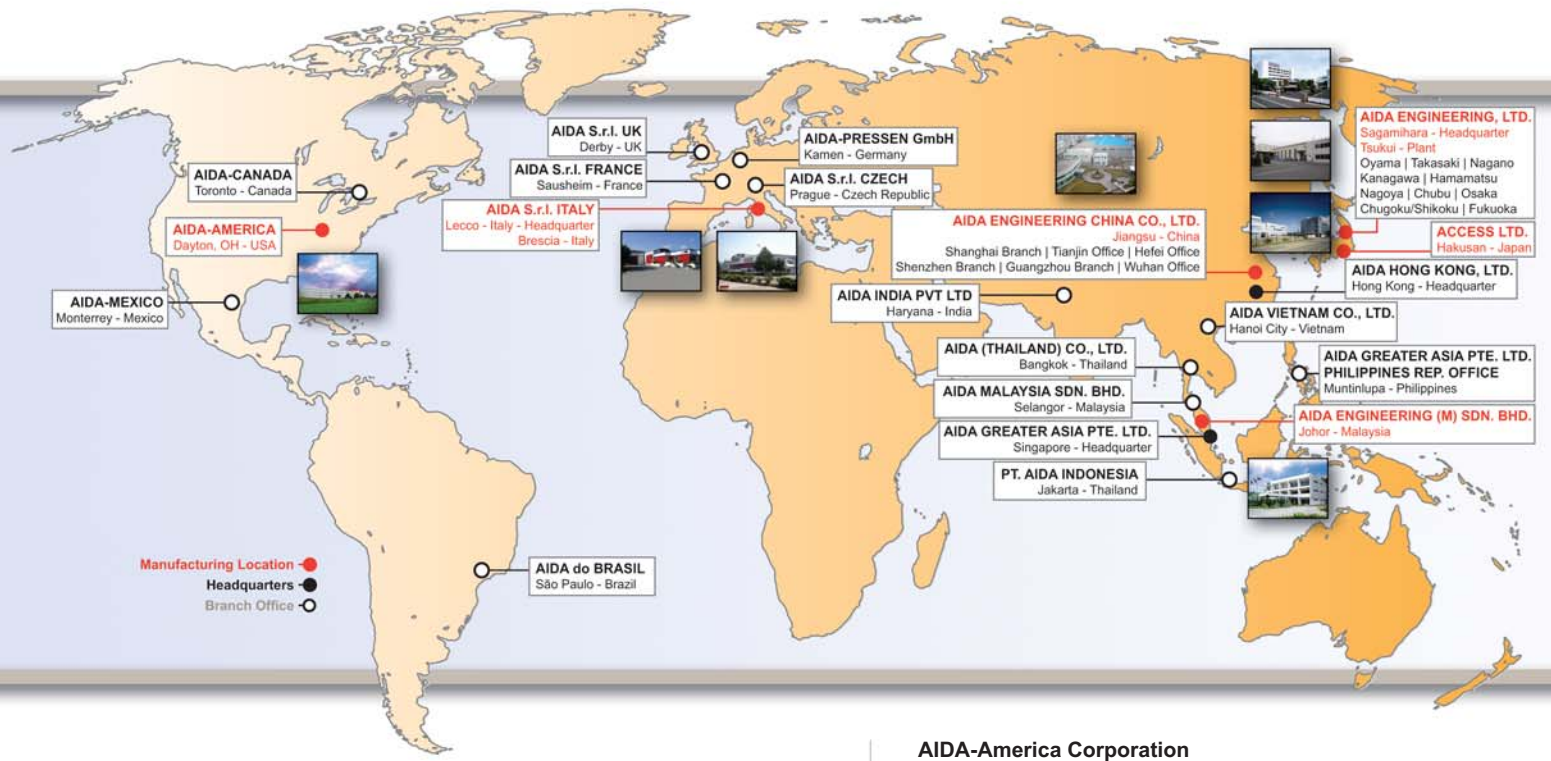
(mechanical presses only)



AIDA ENGINEERING, LTD. GLOBAL GROUP COMPANIES

The Metalforming Industry's Largest Worldwide Network of
**MANUFACTURING, SALES
 SERVICE & SUPPORT**

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Metal Stamping Presses & Automation
 Servo & Mechanical
 35 - 4000 Tons | 1 - 1500 SPM

AIDA After Market Support (AMS)
 Parts, Service, Pressroom Relocation, Refurbishment
 Modernization, Certified Used Presses