

HIGH-SPEED PRESSES  
FOR MOTOR CORES LAMINATION

## HMX / MSP Series



# HMX Series

## Hypromax Presses



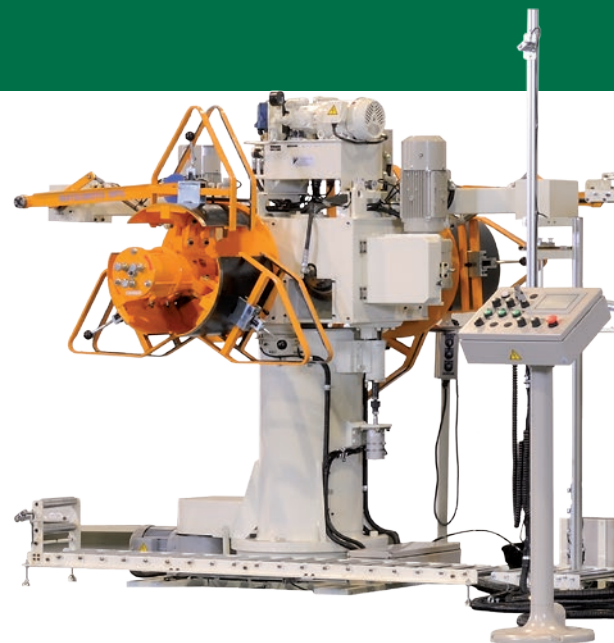
With superior construction and the absence of any stroke adjustment mechanisms, the HMX guarantees unsurpassed accuracy and the **longest die life thanks to the lowest deflection characteristics of any other high-speed press** on the market.

**Thermal control** ensures that operating temperatures remain consistent for **precise BDC control and accurate part production**. HMX presses are equipped with a Dynamic Balance Unit to counterbalance the reciprocating motion of the slide and upper die. By simply eliminating the unnecessary parts required for stroke adjustment, both **maintenance and initial costs are significantly reduced**. Front-back and left-right slide movement is minimised by **long slide guiding comprised of pre-loaded, eight-sided, right-angle slide guides**.

In addition, the **AIDA HMX offers significant improvements** in areas directly linked to your productivity and profits such as **accuracy, maintenance, reliability and costs**.

### Press features and benefits

- Highly rigid frame
- Dynamic balancer
- Hydraulic stick release device
- Oil temperature control unit
- Anti-vibration mounts
- 8-point slide guide





# MSP Series

## Multi-Suspension Points Presses

The **AIDA MSP** presses allows to produce **high precision and high value-added motors** such as **EV motors, HEV motors** and energy-efficient home appliances motors.

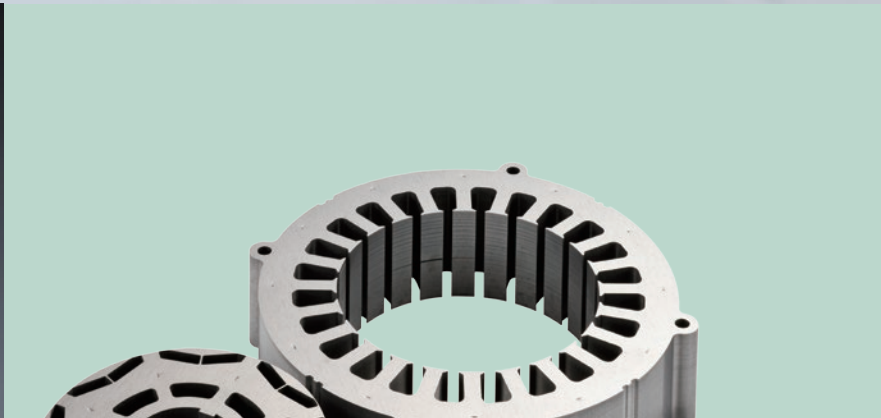
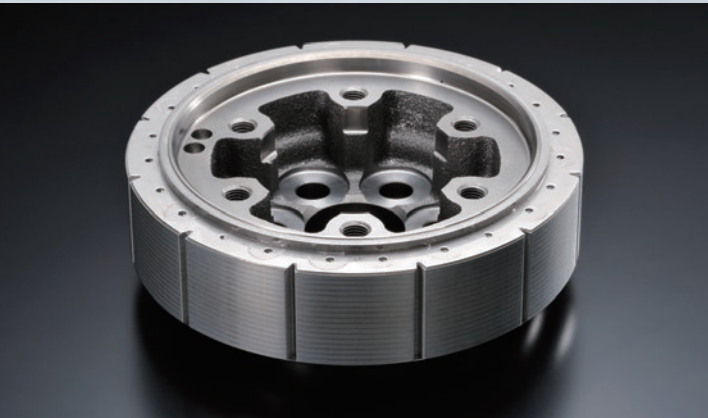
The dynamic accuracy is significantly improved thanks to the **compact design and multiple suspension points architecture**. Balance between **high rigidity and wide bed area** is brought to a higher level using the latest technologies. Moreover, the areas that transmit the press the forming loads, such as the **connecting rod bearings and the crankshaft bearings** are all made from special metals selected to avoid heat deformations.

Ultra precision dies that require a large bed area are necessary for the **production of high-efficiency motors**, such as motors for hybrid cars or for energy saving. Responding to these needs, AIDA applied innovative technologies to achieve increased precision with the **AIDA MSP Series High Speed Stamping Presses**.

### Press features and benefits

- Ideal for production of parts featuring thicknesses less than 0,20 mm
- Multiple suspension points
- Oil temperature control unit
- Caliper type clutch and brake
- Highly rigid frame
- Highly rigid guidepost
- Adjust In Motion function (AIM)





# HMX Series

## Technical Specifications

Press Model		HMX-1250	HMX-2000	HMX-3000	HMX-3000W
Number of points	-	2	2	2	2
Capacity	kN	1.250	2.000	3.000	3.000
Tonnage rating point (above BDC)	mm	3,2	3,2	3,2	3,2
Stroke length	mm	30	30	30	30
Continuous working energy	J	1.200	2.000	3.000	3.000
Strokes per minute	min <sup>-1</sup>	200 ÷ 800	200 ÷ 600	160 ÷ 500	120 ÷ 410
Micro-inching	min <sup>-1</sup>	~ 60	~ 60	~ 60	~ 60
Die height (available range)	mm	380 ÷ 430	400 ÷ 480	420 ÷ 520	420 ÷ 520
Slide adjustment	mm	40	50	60	50
Slide area (L/R x F/B)	mm	1.300 x 600	1.700 x 650	2.000 x 750	2.300 x 1.000
Bolster area (L/R x F/B)	mm	1.300 x 850	1.700 x 950	2.000 x 1.000	2.300 x 1.200
Bolster thickness	mm	160 ÷ 210	180 ÷ 260	200	200
Max. upper die weight	t	0,5	0,9	1,3	1,5
Side opening	mm	350	460	560	560
Bed opening (L/R x F/B)	mm	1.100 x 280	1.500 x 350	1.700 x 400	1.800 x 420

## STANDARD EQUIPMENT

- Press control panel (HMI)
- Infinite variable-speed drive
- Flywheel brake
- Motorised slide adjustment device (digital read-out)
- Main motor reversing device
- Antivibration mounts
- Dynamic countbalancers
- Crank angle indicator
- Manual front and rear guards
- Oil temperature control unit (heater and cooler)
- Timing switches
- Production and preset counters
- Tool receptacle
- Air outlets
- Micro-inching
- Unsticker
- Die light
- Hour meter
- Production data bank system

## OPTIONS

- Die claspers and die lifters
- Coil line (decoiler and leveler)
- Coil end welding unit
- NC roll feeder
- Material thickness detector
- Scrap cutter
- Scrap chute
- Scrap conveyor
- Oil coating device
- Sound enclosure
- Pneumatic circuit for auxiliaries
- Electrical circuit for auxiliaries
- Quick die change system

# MSP Series

## Technical Specifications

Press Model		MSP-3000-230	MSP-3000-270	MSP-3000-330	MSP-3000-370	MSP-4000-330
Number of points	-	3	3	4	4	4
Capacity	kN	3.000	3.000	3.000	3.000	4.000
Tonnage rating point (above BDC)	mm	3,2	3,2	3,2	3,2	3,2
Stroke length	mm	30	30	30	30	30
Continuous working energy	J	3.000	3.000	3.000	3.000	4.000
Strokes per minute	min <sup>-1</sup>	120 ÷ 450	100 ÷ 420	100 ÷ 350	100 ÷ 300	100 ÷ 300
Micro-inching	min <sup>-1</sup>	~ 60	~ 60	~ 60	~ 60	~ 60
Die height (available range)	mm	420 ÷ 520	470 ÷ 520	520 ÷ 620	520 ÷ 620	600 ÷ 700
Slide adjustment	mm	60	60	60	60	60
Slide area (L/R x F/B)	mm	2.300 x 800	2.700 x 800	3.300 x 900	3.700 x 1.000	3.300 x 900
Bolster area (L/R x F/B)	mm	2.300 x 1.000	2.700 x 1.000	3.300 x 1.000	3.700 x 1.200	3.300 x 1.200
Bolster thickness	mm	210 ÷ 260	250 ÷ 300	250 ÷ 300	250 ÷ 300	250 ÷ 300
Max. upper die weight	t	2,0	2,3	2,8	3,2	3,0
Side opening	mm	490	490	530	530	980
Bed opening (L/R x F/B)	mm	2.000 x 400	2.400 x 400	3.000 x 500	3.200 x 500	3.000 x 500

## STANDARD EQUIPMENT

- Press Control Panel (HMI)
- Infinite variable-speed drive
- Die height counter (0,01 mm units; digital display)
- Main motor reversing device
- Pneumatic antivibration absorber
- Dynamic counterbalancers
- Crank angle indicator
- Motorised front and rear guards
- Oil temperature control unit (heater and cooler)
- Four-post plunger guides
- Timing switches
- Production and preset counters
- Tool receptacle
- Air outlets
- Micro-inching
- Unsticker
- Die light
- Hour meter
- Production data bank system

## OPTIONS

- Adjust In Motion function (AIM)
- Die claspers and die lifters
- Coil line (decoiler and leveler)
- Coil end welding unit
- NC roll feeder
- Material thickness detector
- Scrap cutter
- Scrap chute
- Scrap conveyor
- Oil coating device
- Sound enclosure
- Pneumatic circuit for auxiliaries
- Electrical circuit for auxiliaries
- Quick die change system

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