

MF Eco Machine Certification System Registry (Press Machines) Registered: December 11, 2012
 Revised: March 12, 2013
 Revised: December. 2, 2014
 Revised: June. 2, 2015
 Revised: December 1, 2015
 Revised: December 4, 2018

Certified registration no. & registered product name	MF-P007 Mechanical Servo	Product Scope	Hybrid AC Servo Press H1F35,45,60,80,110-2,150-2,200-2
Registered name of corporation	Komatsu Industries Corp.	Certified product	H1F35/45/60/80/110-2/150-2/200-2
Reference model & Production time	OBS35(-),OBS45 (-),OBS60(-) OBS80 (-), OBS110-2 (-), OBS150 (-), OBS200 (-)		

Requirements & environment factors		Evaluation item	Evaluation criteria	Evaluation result and/or remarks						
(1) Essential requirement			H1F vs OBS	H1F35 vs OBS35	H1F45 vs OBS45	H1F60 vs OBS60	H1F80 vs OBS80	H1F110-2 vs OBS110	H1F150-2 vs OBS150	H1F200-2 vs OBS200
Energy saving	Energy consumption	Reduction ratio	Reduce more than 15%	58%	43%	25%	33%	57%	37%	49%
based on JFMA criteria										

(2) Selective requirement		H1F vs OBS		H1F35 vs OBS35	H1F45 vs OBS45	H1F60 vs OBS60	H1F80 vs OBS80	H1F110-2 vs OBS110	H1F150-2 vs OBS150	H1F200-2 vs OBS200
Resources saving	Compactification	Number of air/hydraulic parts	10% or more reduced	X	X	X	X	X	X	X
	Air	Total consumption	10% or more reduced	X	X	X	X	X	X	X
Environment conservation	Safety	Safety standard	Applicable set standard	X	X	X	X	X	X	X
Minimum selective requirement		3 items or more		3 items						

(3) Recommendation requirement		Names of equipped devices/functions	Summary of effects on environmental burden reduction
Environment factor (atmosphere, soil)	Energy saving, durability, long life, display/management of environment info., vibration/noise, emission	Stop monitor function	Constantly monitors inclination at the time of stop by the brake.
		Powerful mechanical brake	holds brake torque, exceeding the maximum torque of main motor.
		Small capacity servo motor	Adoption of link mechanism enables smaller capacity of servo motor.
		Photoelectric safety device	Equipped as the standard equipment
		Elimination of clutches	No wear and tear of lining enables longer life.
Minimum requirement		3 items or more	5 items

Remarks;

- (1) Revised on March 12, 2013: additon of 2 items (H1F35,60)
- (2) Revised on December 8, 2014: change of 1 items (H1F200-2)
- (3) Revised on June 2, 2015: change of 1 items (H1F150-2)