

UBEMAX-UF Series Main Spec Sheet

ITEM	UNIT	UF650W				UF850W				UF1000W				UF1300			
Mold Clamping System	—	Double Toggle				Double Toggle				Double Toggle				Double Toggle			
Mold Clamping Force	kN	6,370				8,330				9,800				12,740			
Distance Between Tie Bars(H×V)	mm	1,100×1,100				1,320×1,320				1,400×1,400				1,450×1,450			
Platen Size(H×V)	mm	1,540×1,540				1,840×1,840				1,900×1,900				1,900×1,900			
Mold Opening Stroke	mm	1,000				1,200				1,400				1,400			
Mold Height(Min/Max)	mm	400/1,040				500/1,240				500/1,240				500/1,240			
Daylight	mm	2,040				2,440				2,640				2,640			
Ejector Force	kN	196				245				245				245			
Ejector Stroke	mm	200				200				200				250			
Injection Type	—	i55		i74		i55		i74		i74		i100		i74		i100	
Screw Type (●:Std)	—	A (●)	B	A	B	A (●)	B	A (●)	B	A (●)	B	A	B	A	B	A (●)	B
Screw Dia.	mm	90	100	100	112	90	100	100	112	100	112	112	120	100	112	112	120
Calculated Injection Volume	cm <sup>3</sup>	2,862	3,534	3,927	4,926	2,862	3,534	3,927	4,926	3,927	4,926	5,517	6,333	3,927	4,926	5,517	6,333
Injection Weight(PS)	g	2,633	3,251	3,613	4,532	2,633	3,251	3,613	4,532	3,613	4,532	5,076	5,826	3,613	4,532	5,076	5,826
Max. Injection Pressure	MPa	185	150	180	150	185	150	180	150	180	150	175	150	180	150	175	150
Max. Holding Pressure	MPa	167	135	162	135	167	135	162	135	162	135	158	135	162	135	158	135
Injection Rate	cm <sup>3</sup> /s	954	982	1,100	1,182	954	982	1,100	1,182	1,100	1,182	1,477	1,527	1,100	1,182	1,477	1,527
Screw Speed	min <sup>-1</sup>	165		147		165		147		147		130		147		130	
Plasticizing Capacity(PS)	kg/h	445	462	540	560	445	462	540	560	540	560	625	655	540	560	625	655
Heater Capacity	kW	39.0		51.0		39.0		51.0		51.0		52.0		51.0		52.0	
Cooling Water Volume	L/min	20×32°C				20×32°C				20×32°C				20×32°C			
Nozzle Center Height (without grout)	mm	1,485				1,575				1,575				1,666			
Machine Size	L	10.64		11.08		11.21		11.34		12.08		12.74		12.38		12.94	
	W	2.68				2.97				2.99				3.30			
	H	2.63				2.81				2.81				3.10			
Machine Weight	ton	44		47		55		58		60		64		73		77	

ITEM	UNIT	UF1400HW				UF1800				UF3000HW							
Clamping System	—	Double Toggle				Double Toggle				Double Toggle							
Clamping Force	kN	13,720				17,640				29,400							
Tie-Bar Space(H×V)	mm	1,830×1,510				1,850×1,660				2,170×1,780							
Platen size(H×V)	mm	2,480×1,970				2,856×2,413				3,175×2,630							
Clamping Stroke	mm	1,500				1,700				1,800							
Die Height(Min/Max)	mm	650/1,300				800/1,500				900/2,060							
Daylight	mm	2,800				3,200				3,860							
Ejector Force	kN	294				294				392							
Ejector Stroke	mm	250				300				350							
Injection Type	—	i74		i100		i128		i128		i161		i200		i161		i200	
Screw Type (●:Std)	—	A	B	A	B	A (●)	B	A	B	A (●)	B	A	B	A	B	A (●)	B
Screw Dia.	mm	100	112	112	120	120	132	120	132	132	140	140	150	132	140	140	150
Theoretical Injection Volume	cm <sup>3</sup>	3,927	4,926	5,517	6,333	6,786	8,211	6,786	8,211	9,032	10,160	10,775	12,370	9,032	10,160	10,775	12,370
Injection Weight (PS)	g	3,613	4,532	5,076	5,826	6,243	7,554	6,243	7,554	8,309	9,347	9,913	11,380	8,309	9,347	9,913	11,380
Max. Injection Pressure	MPa	180	150	175	150	180	150	180	150	175	155	182	155	175	155	182	155
Max. Hold Pressure	MPa	162	135	158	135	162	135	162	135	158	140	164	140	158	140	164	140
Injection Rate	cm <sup>3</sup> /s	1,100	1,182	1,477	1,527	1,493	1,505	1,493	1,505	1,807	2,032	2,031	2,332	1,807	2,032	2,031	2,332
Screw RPM	min <sup>-1</sup>	147		130		130		130		120		110		120		110	
Plasticating Capacity(PS)	kg/h	540	560	625	655	650	630	650	630	700	680	750	730	700	680	750	730
Heater Capacity	kW	51.0		52.0		54.0		56.0		60.0		71.0		75.0		80.0	
Cooling Water Volume	L/min	20×32°C				20×32°C				30×32°C				30×32°C			
Nozzle Center Height (without grout)	mm	1,750				1,950				2,100				2,100			
Machine Size	L	12.56		13.12		13.56		15.28		16.07		16.24		17.24		17.42	
	W	4.10				4.10				4.10				4.60			
	H	3.10				3.10				3.80				4.00			
Machine Weight	ton	85		89		90		180		200		200		260		260	

- Re) 1.SI unit is used for the above spec sheet.  
 2.Theoretical injection Volume is (Screw Dia. Cross section area) × (Screw stroke)  
 3.Injection Volume is calculated for PS, which would be almost 92% of the theoretical injection volume.  
 4.Plasticating volume is assumed with PS material.  
 5.Max. Injection Pressure and hold pressure might be limited due to the Injection conditions.  
 6.These above values are subject to changed without prior notice.



Ultra Large All Electric Injection Molding Machines(1,300t ~ 3,500t)



MD1300HW



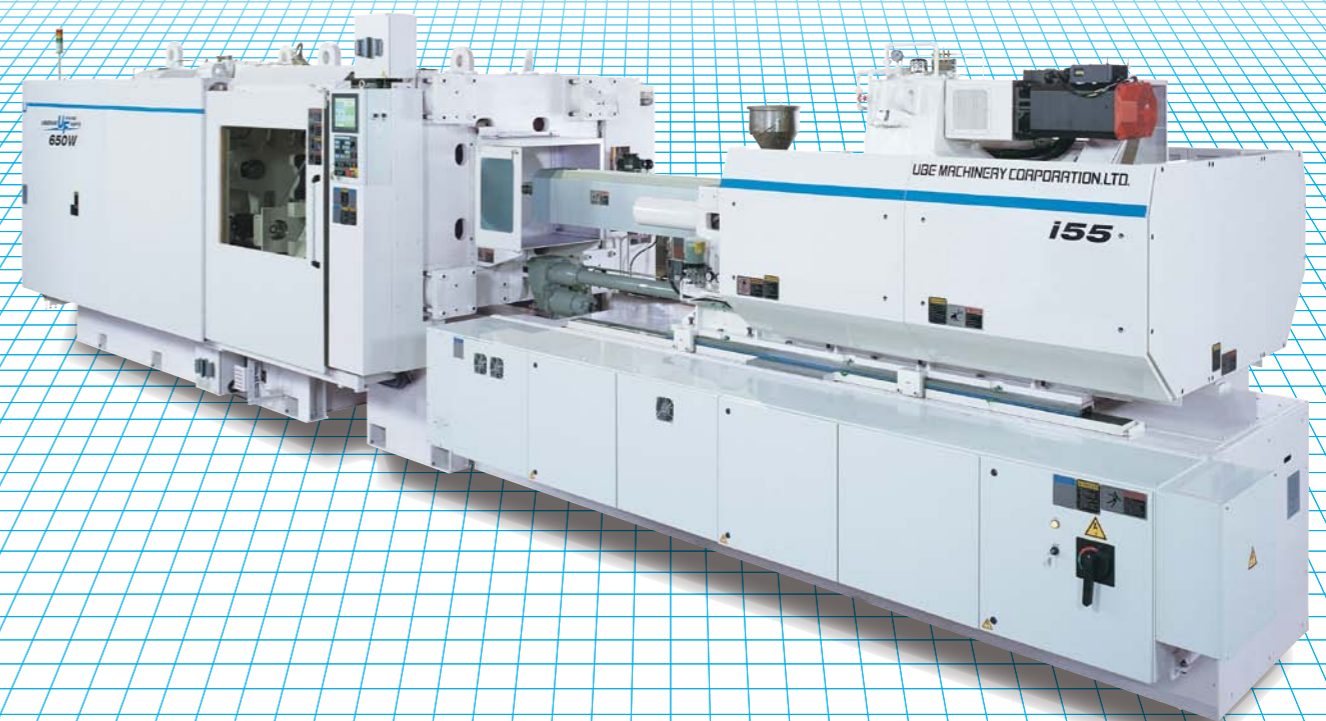
UF1600



MD3000HW

All Electric Injection Molding Machine

**UBEMAX** **UF** *Universal Flagship*  
**Series**





## Useful & Flexible

The UF Series is a multi-purpose electric machine designed to fit the needs of injection molders worldwide.



UF1600

## User Friendly

Easy to Operate and Maintain



UF650W

## New e-HUMMA Controller

e-HUMMA offers simple operation for complete utilization



\*Mold-Link is Exclusive to UBE Information Systems, Inc. in Japan



Main Menu    Injection Profile    Clamp Open / Close Profile

Heat Profile    Statistics Monitor    Overview

Profile Monitor    Maintenance    Memory Storage

### [Compact Design Operation Panel]

- \*High Resolution large TFT Color Touch Screen with High End Graphics.
- \*Accessible Switches provide easy, safe, user friendly operation.

### [Main Menu Short Cuts]

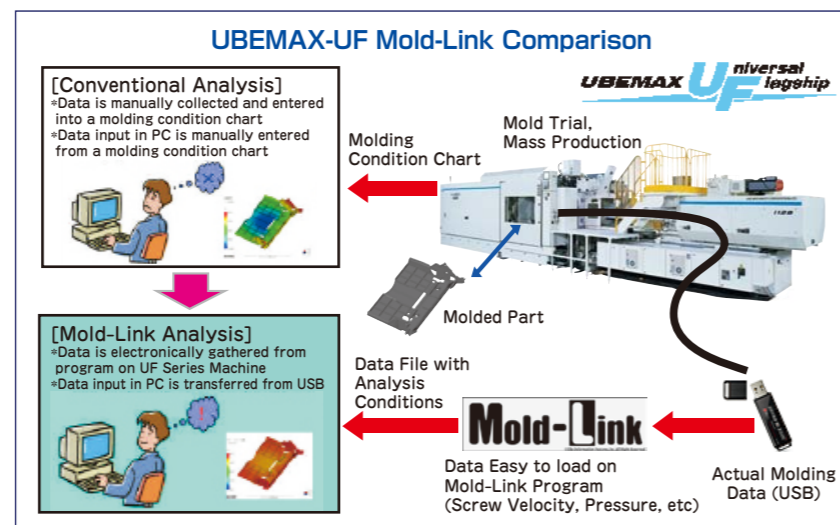
- \*Quick Access to All Screens from the Main Menu Icons

### [Control System]

- \*The newly designed control system is capable to add future options at any time with ease.

### [CAE Analysis Software (optional item)]

- \*Mold-Link(CAE Analysis Software), exclusively designed by UBE Information System Co., is an interactive software that analyzes actual molding conditions.



## Rigid Clamp Design "TAF clamp"

**TAF clamp : Increase Rigidity**

**60% Deflection Reduction**

**50% Deflection Reduction**

**Machine Base Stability Comparison**

**Platen Deflection Comparison**

UBE's proven "Box Sleeve" designed platens have achieved a 60% reduction on platen deflection.

## New Advanced Ball Screw Design

Improved ball screw seals reduce grease volume by 90% from conventional design. The improved design also increases durability to enhance ball screw life. Grease distribution control reduces both grease consumption and improves ball screw wear. The new design offers you many competitive advantages, the improved cleanliness of the plant environment along with the reduction of grease usage are only a few.

**Ball Screw**  
**Cross Head**  
**Guide Rod**

**Ball Screw for Toggle**

## Accurate and Consistent Injection Process Control "Flex Servo"

UBE's newly developed "Flex Servo" control is based on advanced control logic, therefore achieving a more reliable injection molding process that is both accurate and consistent.

**Control Comparison**

Conventional "PID" Control vs "Flex Servo" Control

## Distinguished Energy Saving

Recycling energy heat loss which occurs at servo motor's deceleration provides you substantial energy saving.

## Electric Power Safety Gate (Optional Item)

UBE UF Series all electric machines offer electric belt driven safety operator gates as an option. When equipped with this option, the cycle time is improved, as well as, safe operating conditions.

## Value Added Process Technologies (Optional Item)

**Cav-Change**  
 Cav-Change device

**DIEPREST**  
 DIEPREST Foam

**Cav-Change System**

**Cav-Change with DIPREST Foam**