

UB-iV Series Main Specifications

Items		Units	UB1250V-J	UB1250V-W	UB1650V-J	UB2250V-J	UB2250V-W	UB2500V-J	UB2800V-J	UB3050V-J	UB3550V-J	
Clamping	Clamping force	kN	12,500	12,500	16,500	22,500	22,500	25,000	28,000	30,500	35,500	
	Dimension of die plate (L x W)	mm	1,930 x 1,800	2,030 x 2,335	2,260 x 2,060	2,370 x 2,330	2,400 x 2,500	2,515 x 2,500	2,640 x 2,590	2,640 x 2,590	2,800 x 2,750	
	Read between tie bars (L x W)	mm	1,250 x 1,120	1,250 x 1,525	1,500 x 1,300	1,500 x 1,400	1,500 x 1,550	1,700 x 1,600	1,700 x 1,600	1,690 x 1,590	1,750 x 1,750	
	Die stroke	mm	900	900	1,000	1,180	1,180	1,300	1,300	1,300	1,500	
	Die thickness (min. to max.)	mm	750~1,500	750~1,500	800~1,600	850~1,700	850~1,700	850~1,700	850~1,700	850~1,700	1,000~2,000	
	Die height adjustment speed	mm/min	50~150	50~150	50~150	50~150	50~150	50~150	50~150	50~150	50~150	
Injection	Injection force max. (Nominal)	S	820	820	1,044	1,294	1,294	1,294	1,458	1,458	1,691	
		M	1,044	1,044	1,294	1,458	1,458	1,458	1,691	1,691	1,941	
		L	1,294	1,294	1,458	1,691	1,691	1,691	1,941	1,941	2,493	
	Plunger stroke	mm	950	950	1,000	1,120	1,120	1,120	1,250	1,250	1,250	
	Tip projection stroke	mm	375	375	400	450	450	450	500	500	500	
	Shot position	mm	-300	-300	-350	-350	-350	-350	-350	-350	-400	
	Injection speed	m/sec	0.1~10.0									
	Plunger tip diameter	Small	mm	90	90	100	120	120	120	120	120	120
		Standard	mm	110	110	120	130	130	130	140	140	140
Large		mm	130	130	140	140	140	140	170	170	170	
Ejection	Ejector force	kN	588	588	657	784	784	833	833	833	980	
	Ejector stroke	mm	150	150	160	180	180	180	180	180	200	
General	Motor for hydraulic pump	kW	50 x 1	50 x 1	75 x 1	75 x 1	75 x 1	75 x 1	75 x 1	75 x 1	50 x 2	
	Machine weight	ton	80	90	110	145	145	150	170	175	200	

Note: Appearance, Specifications, Numerical Data of die casting machine may change for improvement without notice

Medium/Large Size die casting machine Lineup (3750kN~40000kN)



Hydraulic die casting machine : UB-iS2 Series



Two platen hybrid die casting machine : UH Series

Large size Die Casting Machine

UB-iV Series

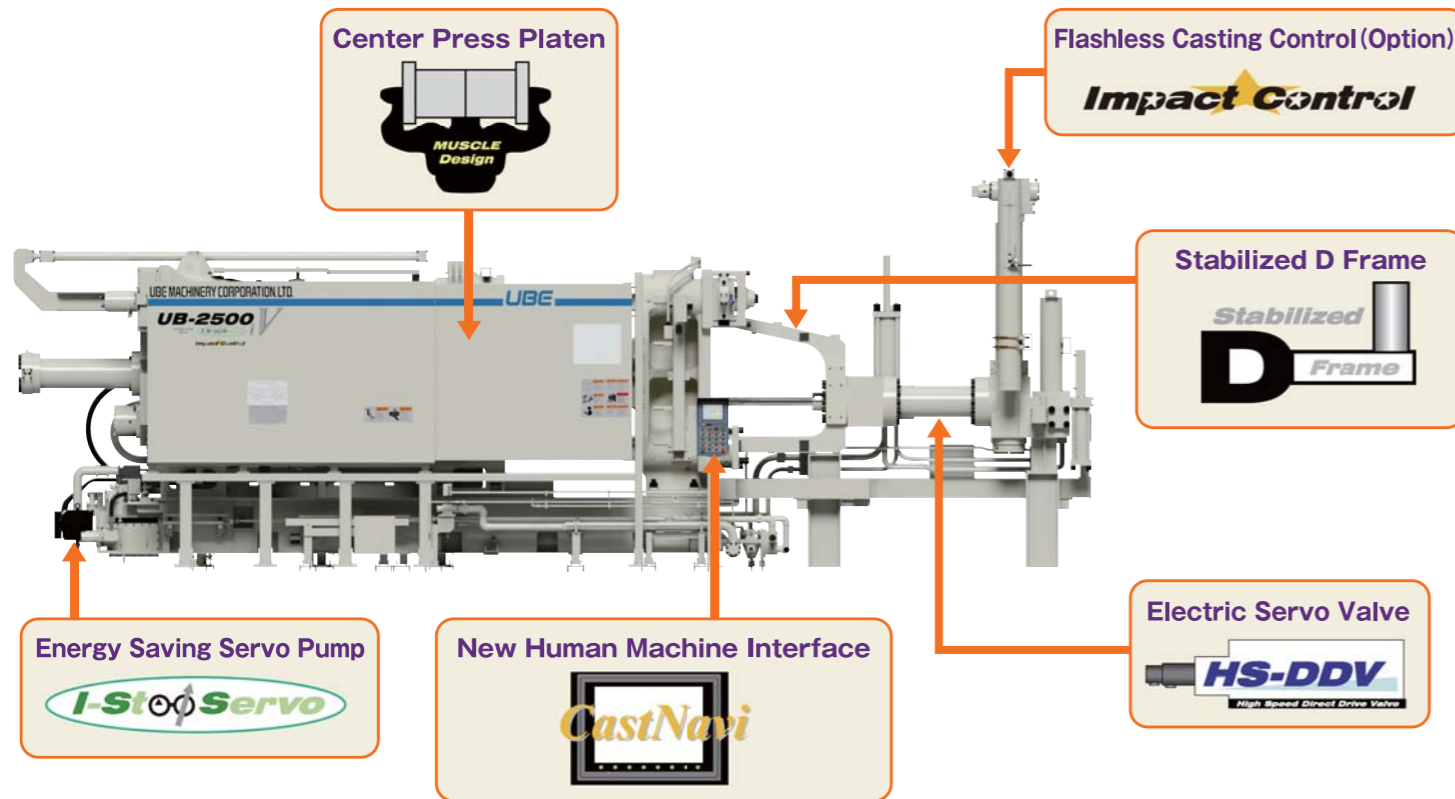


Global Standard Die Casting Machine

UB-iV Series

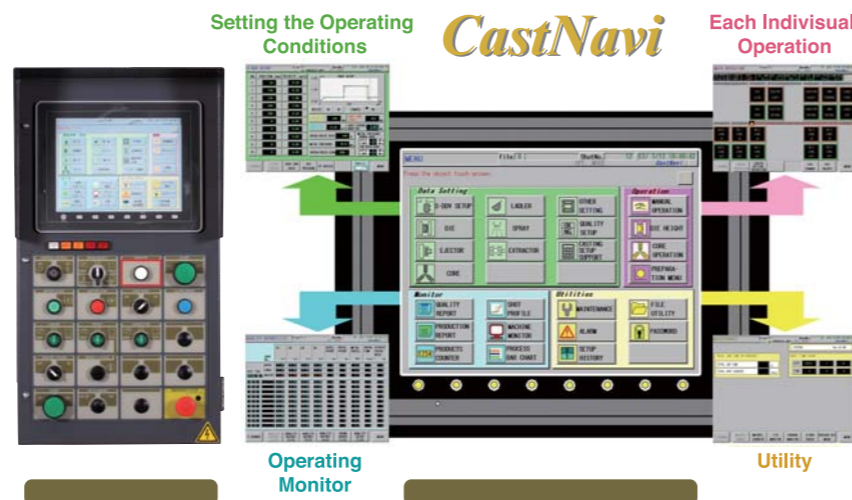
Global standard machine UB-iV series, equipped with new technology first in its class and exclusive technology.

Adoption of new technology for UB-iV series



New Human Machine Interface CastNavi®

- Adoption of large 12.1 inch color touch panel on operation panel of human machine interface.
- Simplified operation panel reducing hard switches which are shifted to screen panel.
- Achieved visibility and operability by using graphic symbols, being independent from language.
- Identifiable background color by category.
- Friendly and memorable design of screen.
- Touch panel displays operating condition of each unit on the same layout on the screen as actual valves location. That enable operator to see screen display easy and find machine troubles early.
- 8 step easy-setting of casting condition on newly developed interactive setting mode.



Center Press Platen

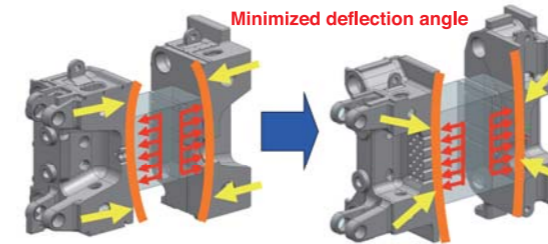


- With center press technology, an equal clamping force is distributed through out the die. It reduces flash, exert an effect on low pressure casting & reducing clamping force.
- High level CAE analysis and optimum shape design reduce the deflection and achieve high rigidity.



Moving Platen

MUSCLE Design platen structure



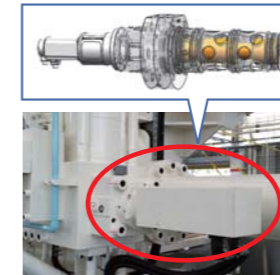
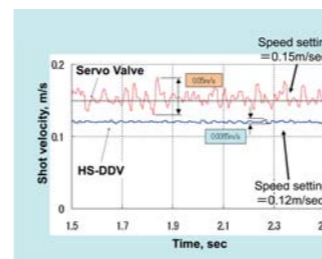
Electric Servo Valve

HS-DDV® High Speed Direct Drive Valve



- Adoption of Servo motor driven valve which is die casting environment proof. Tremendous improvement of contamination resistance.
- All digitalized New control logic.
- Outstanding stability of Low Speed.
- Achievement of energy saving by elimination of hydraulic pilot line.

Comparison of low speed stability



HS-DDV

Energy Saving Servo Pump I-Stop Servo®

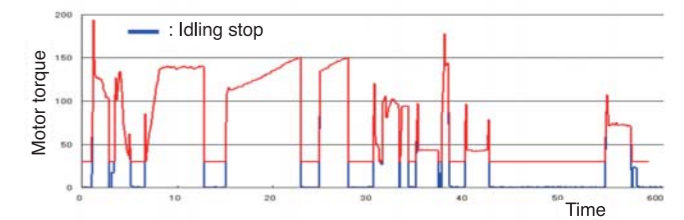


- First in its class! Servo motor for the main pump with "Idling stop" & "Rotational Speed Control" is equipped as standard and it achieves tremendous energy saving!
- Cut unnecessary consumed power by stopping motor during unloading of pump. This feature is more effective for the product which requires longer cycle time by more cooling and spray time.
- Contributes reduction of cycle time by the maximum rotation=2,000rpm.



Servo Pump

Idling stop and servo pump control

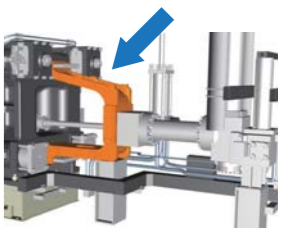
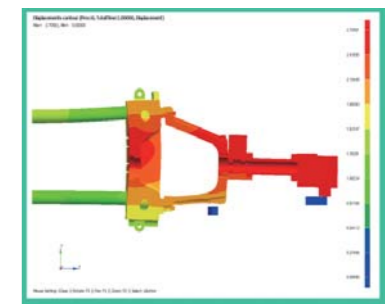


Stabilized D Frame



- Modeling clamp unit and shot unit. Through high level CAE (ADVC), movement of shot unit is quantitatively-analyzed. Optimally-designed injection D shape frame brings longer life of tip & sleeve.

Sample picture by high level analysis



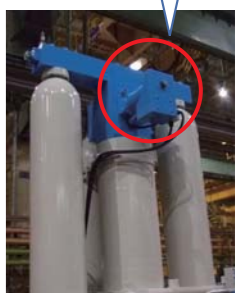
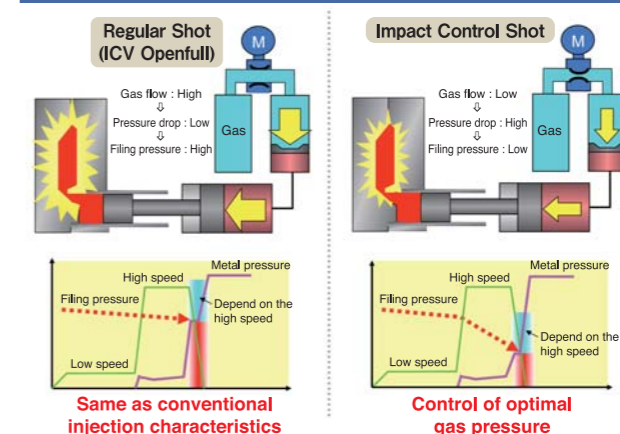
Stabilized D Frame

Flashless Casting Control (Option) Impact Control®



- The first in its class! Flashless casting technology as an option.
- It enables to maintain flashless and good quality by controlling impact pressure without changing speed.
- It controls gas pressure by changing degree of opening of valve which is newly set between accumulator and gas bottle and is remote controlled.
- To achieve further flashless casting incorporated with Center Press Platen.

Mechanism of Impact Control



Impact Control Valve