

TECHMIRE introduces an **INNOVATIVE SYSTEM** for insert die casting to overmold wheel weights.

With a track record of more than 30 years as the **world leader in die casting innovation and installations in over 30 countries**, Techmire introduces an innovative fully automatic insert die casting system to overmold wheel weight of various sizes up to 5" of length and a maximum part-weight of 60g with the possibility of eliminating secondary operations.

Our hallmark is the capacity to offer a full range of solutions in every aspect of the die casting lifecycle. Compared with conventional machines, the multiple-slide technology and parting-line injection features driving every Techmire machine generate faster cycle speeds and a higher percentage of material utilization. The overall result is a super efficient system that provides the lowest cost per part on the market.

- fully automatic
- simple to use
- tight tolerance
- high productivity

High repeatability:

- Stability and alignment of the Clip Feeding System;
- Calculation of volume & density from 3D drawing;
- Innovative solutions in mold and system design:
 - o SEAL-OFF;
 - o Flow and temperature analysis;
 - o CPK evaluation to ensure tight tolerances in weight and gap dimension.

What we do:

- Machine Design & Manufacturing;
- On site & Field Training,
- Spare Parts Distribution,
- Automated Turnkey Systems



22 Wheel Weight System



66 Wheel Weight System

	US		Metric	
Die size	2.5"x2.5"	63.50mm x 63.5mm	6.3"x6.3"	160mm x 160mm
Number of functions	4		5	
Cavity	2		6	
Cycle speed*	14 to 18 CPM		6 to 9 CPM	
Productivity*	Up to 2,160 parts/hr		Up to 3,240 parts/hr	
Part weight	5g to 35g		5g to 60g	
Part size	2.125"	53.9750 mm	5"	127.0000 cm
Bowl Capacity (approx.)	1,500 clips to be overmolded**		Up to 36 hrs of production**	
Auto-degating to eliminate secondary operations available on the 66 Wheel Weight System.				

* Depending on size of weight. ** Automatically fed into the die.



MACHINE MODEL SPECIFICATIONS*	22 Wheel Weight System		66 Wheel Weight System	
	US	Metric	US	Metric
SLIDES				
Number of die motions	4	4	2	2
Die size (nominal)	2.50 in x 2.50 in	63.50 mm x 63.50 mm	6.30 x 6.30 in	160 mm x 160 mm
Stroke of each die section	3 x 0.75 in	3 x 19.00 mm	3.15 in	80.0 mm
	1 x 1.50 in	1 x 38.10 mm		
Ejector stroke	0.375 in to 0.720 in	9.53 mm to 18.29 mm	1.34 in	34.00 mm
Maximum total die opening	3.00 in	76.2 mm	6.30 in	160.00 mm
INJECTION				
Injection plunger diameter	1.00 in	25.40 mm	1.625 in	41.27 mm
Injection cylinder diameter	2.00 in	50.80 mm	3.25 in	82.55 mm
Injection plunger stroke	2.36 in	60.00 mm	2.36 in	60.00 mm
Maximum dry shot speed	150 in/sec	3.81 m/sec	55 in/sec	1.40 m/sec
at 1,000 psi (70 bars)				
Injection capacity (max. theoretical)	6.6 oz	187 g	17.3 oz	490g
Shot weight (max. recommended)	3.3 oz	93 g	8.65 oz	245 g
Metal pressure (max. recommended)	4,000 psi	275.8 bars	4,000 psi	275.8 bars
Nozzle heaters (total power)	3.2 kW	3.2 kW	3.2 kW	3.2 kW
HYDRAULICS				
Line pressure (max. recommended)	1,060 psi	73 bars	1,350 psi	93 bars
Reservoir capacity	30 gallons	113.5 litres	30 gallons	113.5 litres
Clamping force (max)	7.9 tons	7.2 tonnes	45 tons	40.8 tonnes
Dry cycle speed / hour	4,500	4,500	2,700	2,700
Motor power	10 HP	7.46 kW	15 HP	11.2 kW
MELT POT (electric)				
Heaters	14.5 kW	14.5 kW	25.2 kW	25.2 kW
Capacity of melt pot	280 lbs	127 kg	400lbs	181 kg
Melt rate	132 lbs/hr	60 kg/hr	218 lbs/hr	99kg/hr
MELT POT (gas)				
Burner	75,000 Btu/hour	21.9 kW	110,000 Btu/hr	32.2 kW
Capacity of melt pot	280 lbs	127 kg	400 lbs	181 kg
Melt rate	138 lbs/hr	63 kg/hr	232 lbs/hr	105 kg/hr

* All data are based on 60 Hz power supply

Techmire reserves the right to modify specifications at any time without notice

Multiple-Slide Die Casting

Main Features:

- Parting-Line Injection
- Crosshead Design
- Multiple Moving Die Segments
- Easy-To-Use Windows-Based Controls and Software.

Advantages:

- High Precision
- Flash-free
- Fast cycle speeds
- Elimination/Reduction of secondary operations
- In-die de-gating
- Quick die changeovers
- Saving in material, energy & labor
- Complex geometry parts
- Repeatability

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TECHMIRE

die casting solutions