

TECHMIRE

die casting solutions

LATEST MULTIPLE-SLIDE-TECHNOLOGY



1212NTX

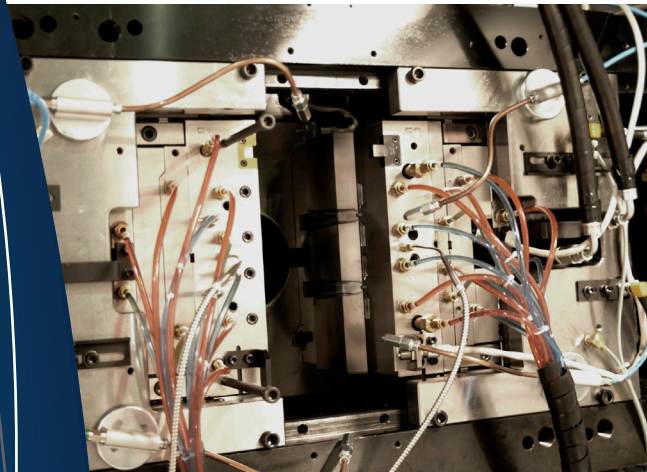
Building on its expertise as the world's leading producer of high speed, multiple-slide die casting machines, TECHMIRE has introduced the 1212 NTX model, featuring a larger die size of 12" x 12" (305 x 305 mm) with a greater clamping force of 65 tons, extending its technology to offer the benefit of parting-line injection to a larger shot size.

The machine features a die size ideal for producing zinc components weighing up to 17.6 oz (500 grams) with tight tolerances at fast cycle speeds.

The 1212 NTX is equipped with a precise quick die change system which allows die changeover in less than 15 minutes.

1212NTX

advanced process controls



CLAMPING SYSTEM

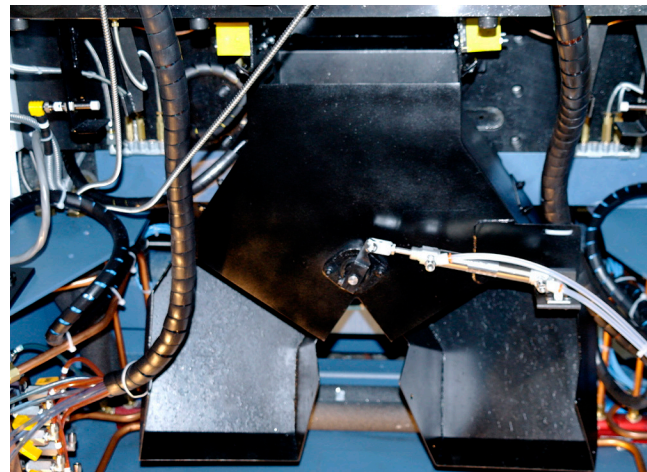
The clamping system and toggles on the 1212 NTX machine are designed for maximum durability and stability. The clamping system consists of two double-acting toggle mechanisms mounted on the left and right sides that are actuated by hydraulic cylinders. The system is designed to operate at a maximum clamping force of 65 tons. The toggle mechanisms are designed with an auto lubrication system, which reduces the requirement of operator intervention, thereby diminishing the maintenance cost. Tight tolerance slide guiding mechanisms with wear plates, cover and shanks are included.

larger die size

AUTOMATIC DEGATING AND SEPARATION

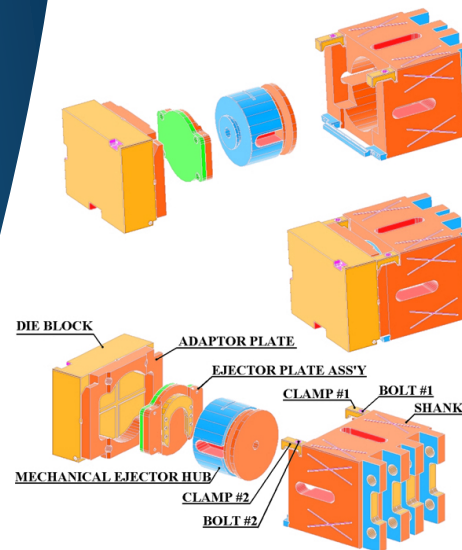
Automatic degating can be designed into Techmire's dies. When used in conjunction with the separation feature of the Techmire Process Parameters Control System (PPCS*), parts and runners can be segregated automatically at the machine, without any manual intervention.

* Techmire Process Parameters Control Systems



QUICK DIE CHANGE SYSTEM

The standard quick die change system built into the 1212 NTX machine provides fast and efficient die changes in less than 15 minutes. Tooling cost is reduced as the 1212 NTX comes standard with two shanks, two intermediate adapter plates, four quick-connect clamps and one mechanical ejector hub assembly. An optional ejector hub is offered for automatic degating purposes

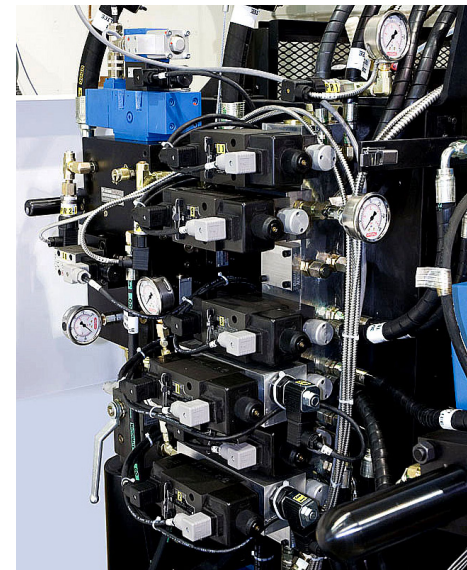


COMPUTER BASED CONTROL SYSTEM

The controls of all Techmire NT and NTX machines are based on a PC with Windows based operating system. Proprietary software has been developed by Techmire for control of sequencing and timing of both the injection process and up to eight functions or movements.

CLOSED LOOP CONTROL OF THE INJECTION SYSTEM

The Techmire system permits real time control of the injection process from start to finish, resulting in stable system performance and premium part quality. Typically, the closed loop control system helps reduce flash caused by peak metal pressure at the end of the injection cycle and reduces cavity fill time.



HYDRAULIC SYSTEM

A fully integrated hydraulic system incorporating high flow rate and rapid response valves ensures fast cycle speeds. Clamping is controlled by the function manifold, which also controls the movements of the slides and the gooseneck. There are six hydraulic functions available to incorporate core pulls and two pneumatic functions to facilitate automation.

faster cycle speeds

INJECTION SYSTEM

The entire injection system is designed for high performance and repeatability, resulting in maximum process capability. A double piston injection system reduces porosity. All Techmire machines are equipped with a precision-machined, steel gooseneck designed for maximum life and consistent performance.



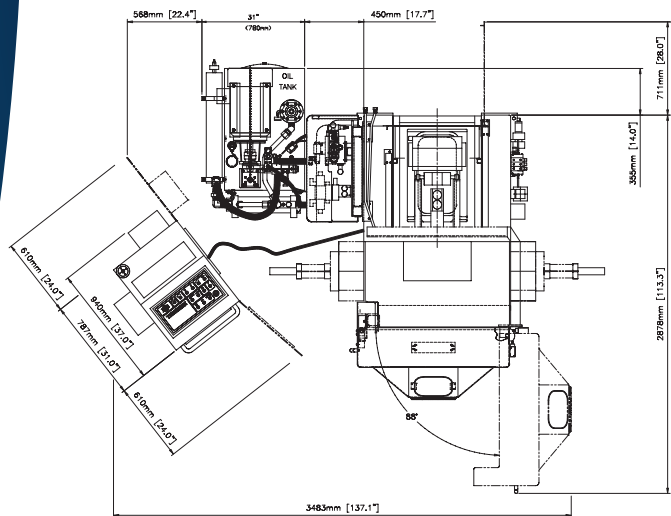
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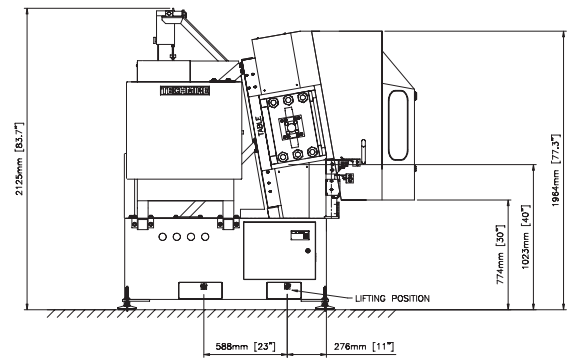
1212NTX

		STANDART		OPTIONAL
SLIDES	Number of Die Motions	2		8
	Die Size	12 x 12 in	304.8 x 304.8 mm	
	Stroke of Each Die Section	3.15 in	80 mm	
	Ejector Stroke	1.45 in	36.825 mm	
	Maximum Total Die Opening	6.3 in	160 mm	
INJECTION	Injection Plunger Diameter	1.875 in	47.625 mm	
	Injection Cylinder Diameter	3.25 in	82.55 mm	
	Injection Plunger Stroke	4.72 in	120 mm	
	Maximum Dry Shot Speed at 1,000 psi/70 bars*	55 in/sec	1.41 m/sec	
	Injection Capacity (max.theoretical)*	35.3 oz	1000 gr	
	Shot Weight (max.recommended)*	17.6 oz	500 gr	
	Metal Pressure (max.recommended)*	4500 psi	310 bar	
	Nozzle Heater	3.2 kW		
HYDRAULICS*	Hydraulic Line Pressure (max)	1867 psi	128.7 bar	
	Hydraulic Tank Capacity	30 US Gal	113.5 liters	
	Clamping Force	65 tons	59 T	
	Dry Cycle Speed / Hour	1200		
MELT POT (electric)	Heaters	48 kW		
	Capacity of Melt Pot	1100 lbs	500 kg	
	Melt Rate / Hour	396 lbs	180 kg	
MOTOR	Motor Power	30 HP	22.37 kW	

* Dependent upon machine configuration



TOP VIEW



LEFT SIDE VIEW

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