## CLAIMS

1. A die casting system positioned relative to a surface, comprising:

a die comprised of a plurality of die components that define a die cavity;

a shot tube in fluid communication with said die cavity;

a shot tube plunger moveable within said shot tube to communicate molten metal into said die cavity, wherein each of said die, said shot tube and said shot tube plunger are inclined at an angle relative to the surface during injection of said molten metal into said die cavity; and

a vacuum source configured to apply a vacuum within a vacuum chamber, at least one of said die, said shot tube and saidshot tube plunger positioned within said vacuum chamber.

2. The system as recited in claim 1, wherein said angle is between 5° and 85°.

3. The system as recited in claim 1, wherein said angle is between 30° and 45°.

4. The system as recited in claim 1, comprising a positioning system that selectively positions said die, said shot tube and said shot tube plunger at said angle.

5. The system as recited in claim 4, wherein said positioning system includes cylinders actuable to position said die, said shot tube and said shot tube plunger at said angle.

## CLAIMS

1. A die casting system positioned relative to a surface, comprising:

a die comprised of a plurality of die components that define a die cavity;

a shot tube in fluid communication with said die cavity;

a shot tube plunger moveable within said shot tube to communicate molten metal into said die cavity, wherein each of said die, said shot tube and said shot tube plunger are inclined at an angle relative to the surface during injection of said molten metal into said die cavity; and

a vacuum source configured to apply a vacuum within a vacuum chamber, said vacuum chamber encompassing an entirety of the die casting system.

2. The system as recited in claim 1, wherein said angle is between 5° and 85°.

3. The system as recited in claim 1, wherein said angle is between 30° and 45°.

4. The system as recited in claim 1, comprising a positioning system that selectively positions said die, said shot tube and said shot tube plunger at said angle.

5. The system as recited in claim 4, wherein said positioning system includes cylinders actuable to position said die, said shot tube and said shot tube plunger at said angle.