



DE
INTRODUCTION & PARAMETERS

TEDERIC



WECHAT

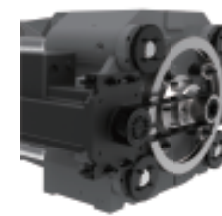
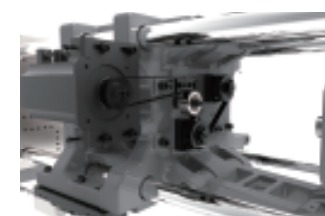
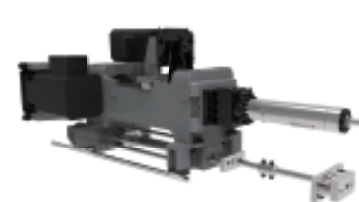


WEB

TEDERIC MACHINERY MOLDING DREAMS

DE series

Full-electric Machine



www.tederic-cn.com

TEDERIC

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TE2016.07-DE-05-HZ



Product platform

D:DREAM

D(T)

D(T)/i

D(T)/M

D(T)/Ji

D(T)/Jii

DH

DH/i

DH/Ji

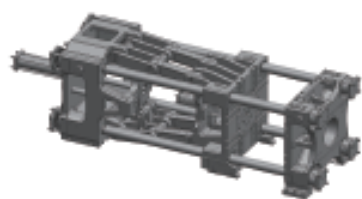
DH/Jii

DH/M

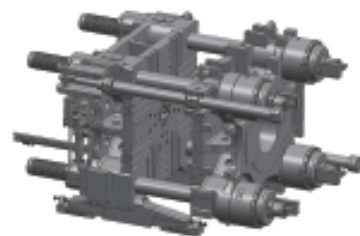
DE

DE/E

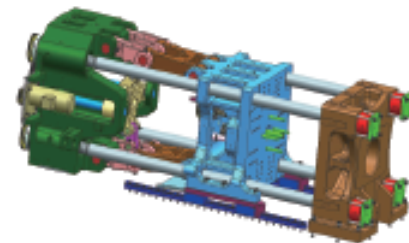
Prime code of clamping unit



T: Hydraulic toggle type three-platen clamping structure



H: Hydraulic locking two-platen clamping structure



E: Electric toggle type three-platen clamping structure

Prime code of injection unit



i: Two-cylinder injection reciprocating screw structure



M: Single-cylinder injection reciprocating screw structure



J: Extruded injection structure



E: Electric injection structure



DE series Full-electric injection molding machines based on TEDERIC innovative dream platform

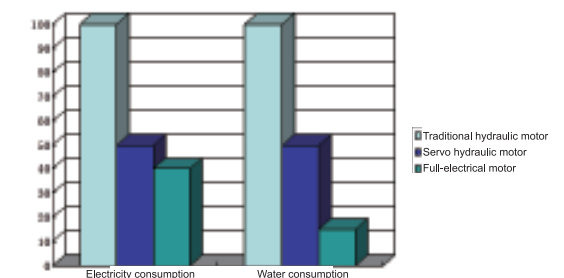
Highly responsive and precise driving technology

The latest solutions for industries of the aseptic environment medical, package, optics and auto parts, etc

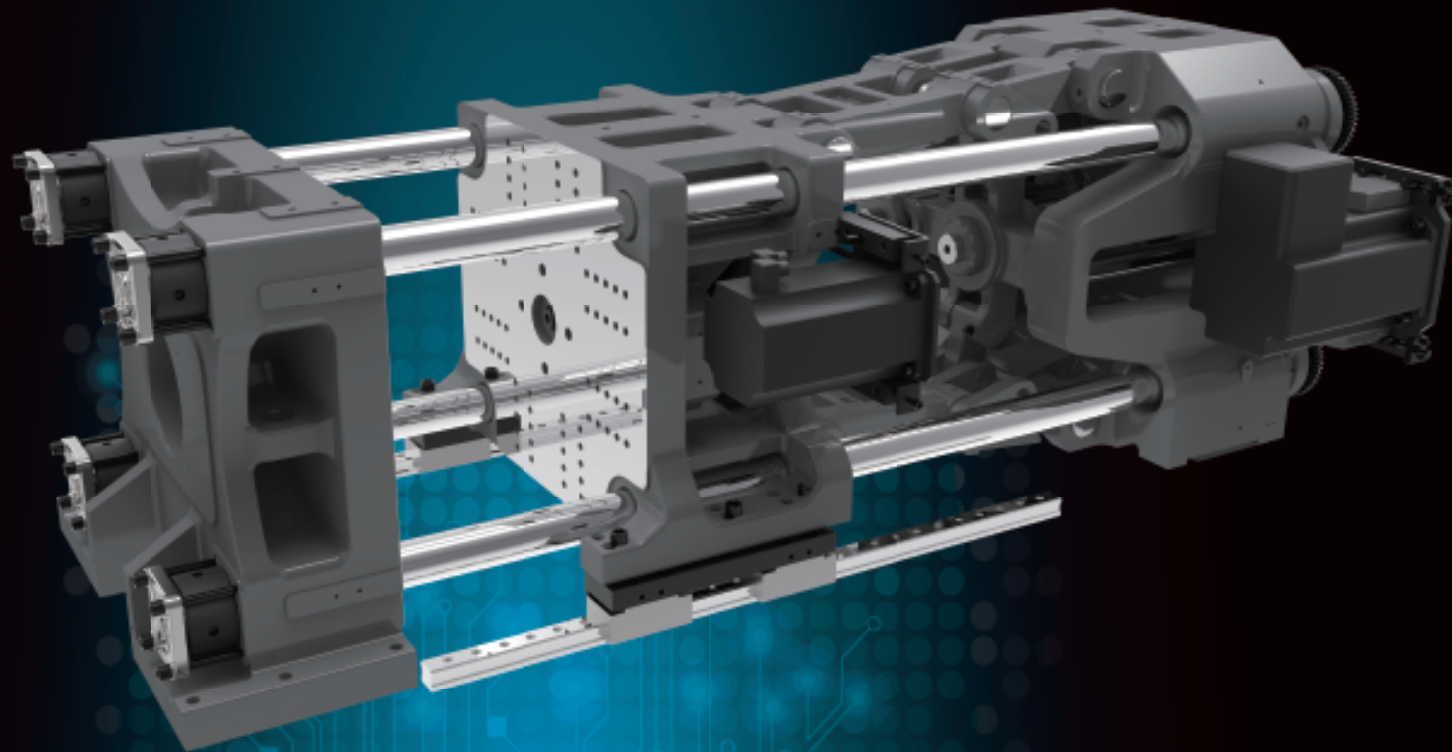
Clamping force from 55 – 460 ton



- ◎ **Environmental protection:** realize the clean working condition by non-use of hydraulic oil.
- ◎ **Rapidity:** synchronized multiple movement, cycle time.
- ◎ **Accuracy:** stroke precision up to 0.01mm, mold protection and production quality are guaranteed .
- ◎ **High precision:** low unacceptability on products, superior repeatability in production with high efficiency.
- ◎ **Tranquility:** Low noise with more comfortable enviroment.
- ◎ **Energy-saving:** economize 25-80% water consumption and 80-90% electricity consumption than traditional hydraulic motor.

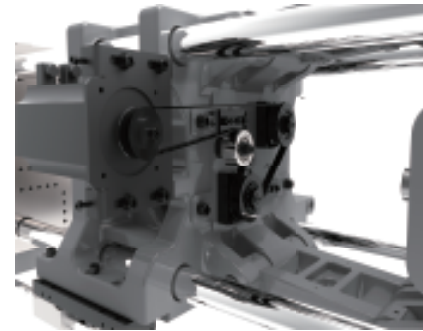


- ◎ Belt connection between servo motor and transmission ball screw
- ◎ Toggle structure with 5 pins and self-lock
- ◎ Heavy loaded guider device supported by linear track
- ◎ Diagonally designed ejection structure
- ◎ Clamping structure with high rigidity
- ◎ Automatic mold adjustment with accuracy



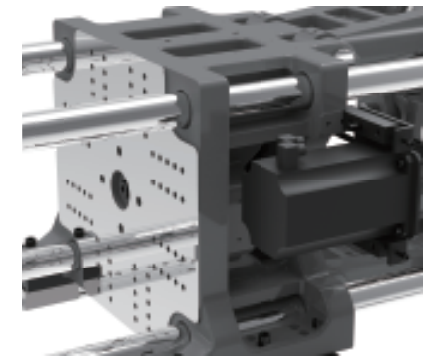
◎ Diagonally designed ejection structure

Diagonally designed ejection structure driven by servo motor, move tranquilly and precisely.



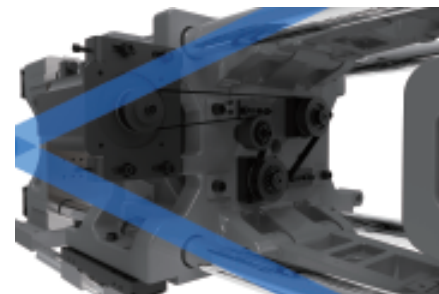
◎ Huge mold capacity

Reinforced platen along with enlarged tie-bar clearance support high mold weights and dimensions



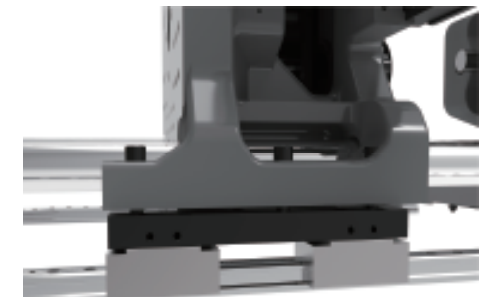
◎ V type clamping system

The central pressure created V-type toggle mechanism can remain consistent around the mold, keep the as low clamping force as possible.



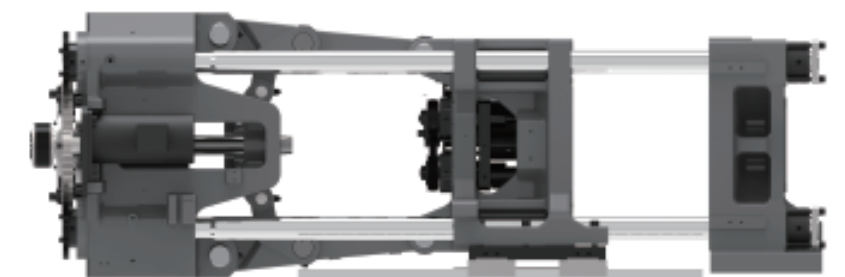
◎ Utilization of cylindrical roller linear guide

Utilization of cylindrical roller linear guide that up-level the parallelism between molds, and improve the cleanliness circumstance around mold by lubrication-free on tie bar for its guider function has been replaced.

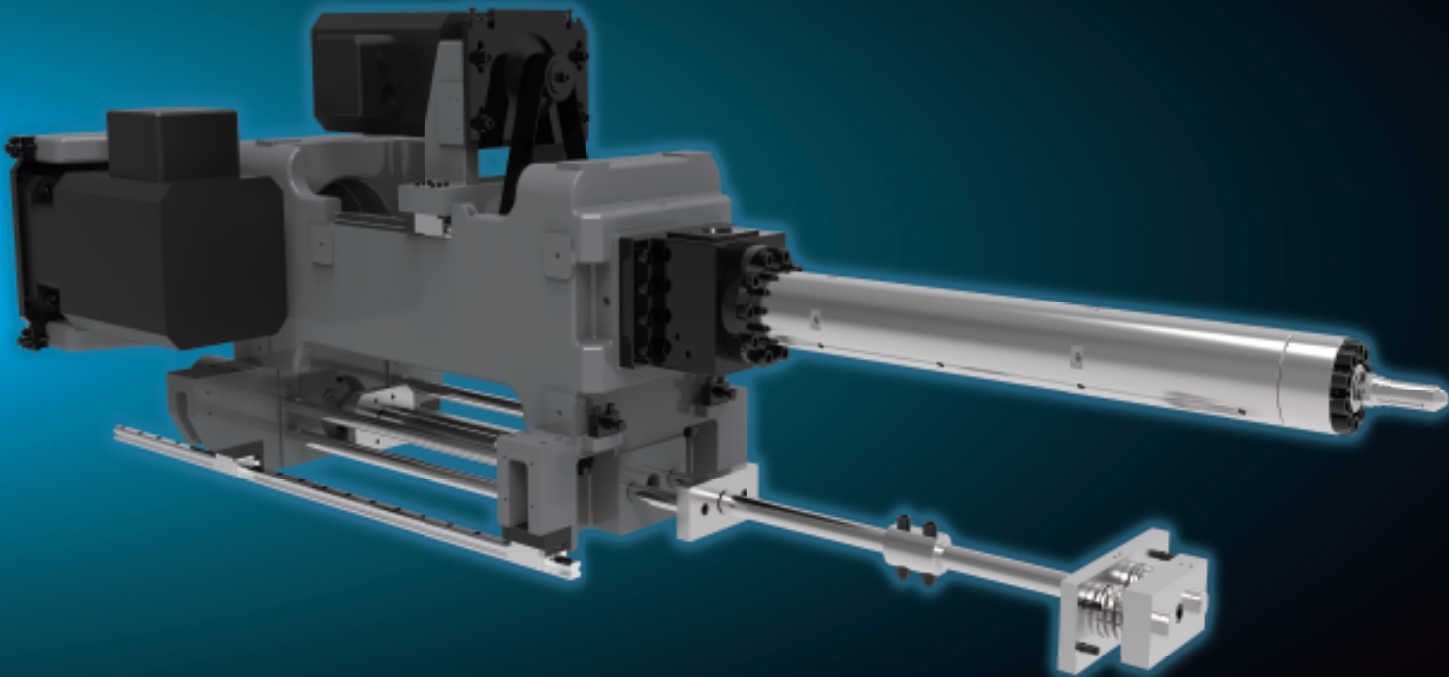


◎ Toggle structure with 5 point and self-lock

Toggle structure with 5 pins and self-lock, lead to smooth mold open/close. Structure self-lock after high-pressure clamping, lengthen the service life of clamping ball screw.

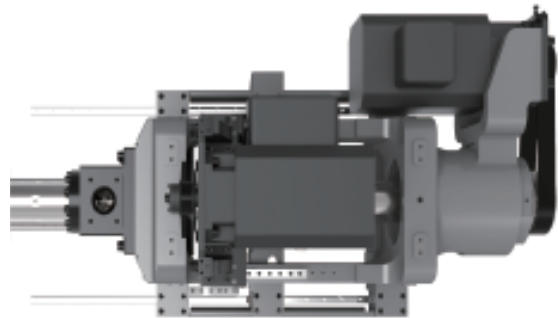


- ◎ Patented One-piece Die-casting injection frame design
- ◎ Flexible connection between servo motor and ballscrew, suitable for different plastic
- ◎ Low friction and precise movement by LM guide
- ◎ Long service life by NSK ballscrew and bearing



◎ Screw driven by servo motor and transmission belt

Screw driven by servo motor and transmission belt, flexible structure of tough adaptation.



◎ One piece casting design

Long service life, less spare part.



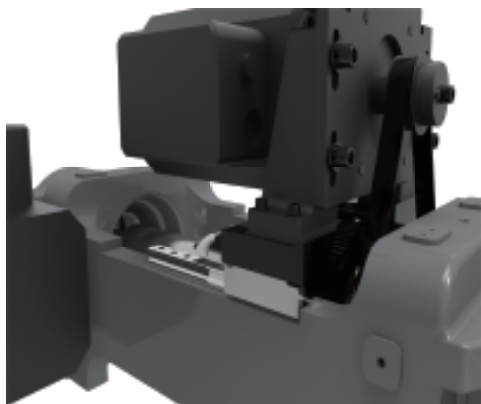
◎ NSK ballscrew & bearing for injection and clamping movement

Supported by the world leading supplier, ensure the reliability.



◎ Zero-torque injection guider structure

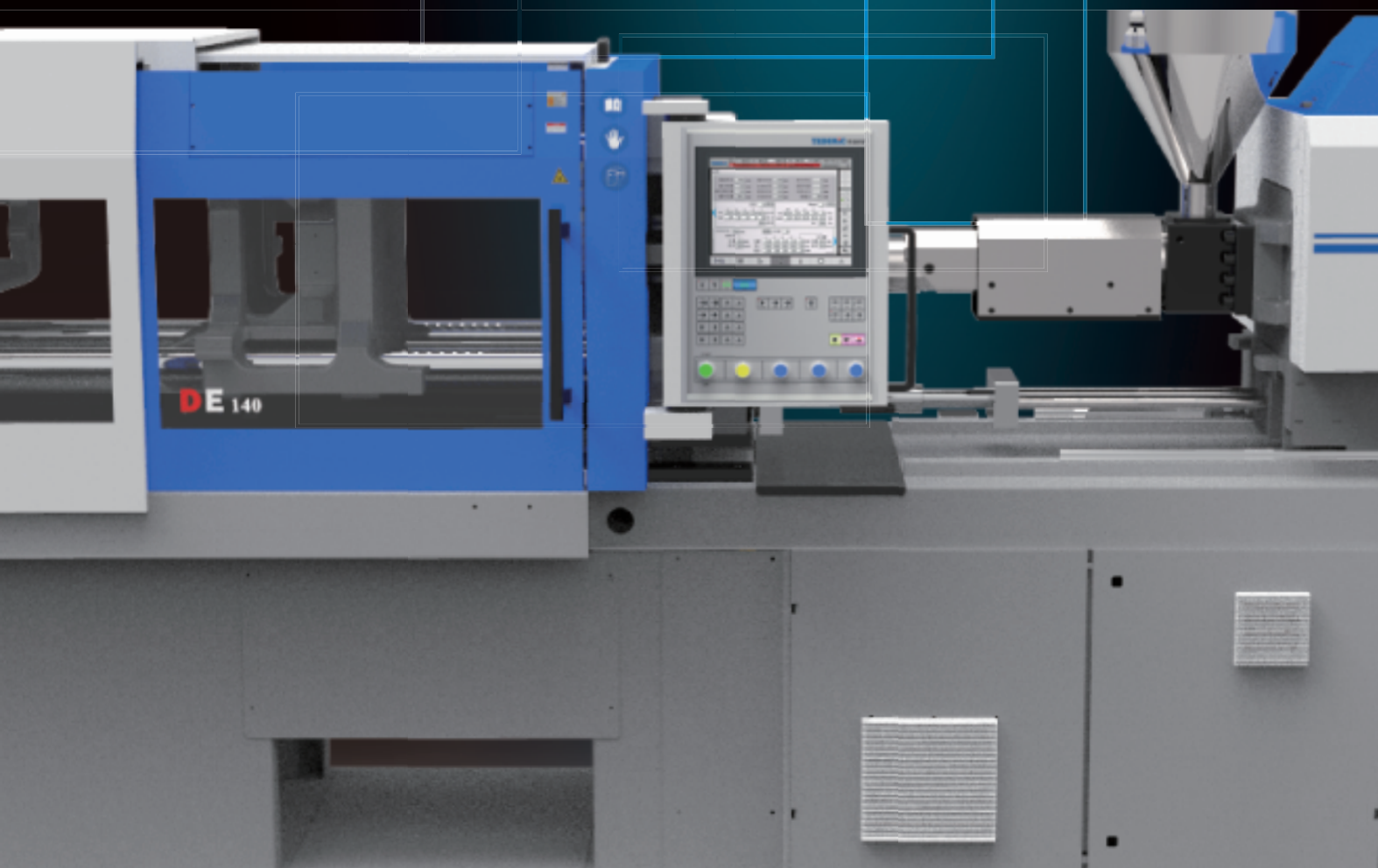
Heavy loaded guider device supported by linear track, less friction, faster system response and more smooth operation. Guider and injection unit at the same horizontal, extend the service life of injection unit.



Variety screw barrel combination for different material process

| Application | High speed thin-wall packaging | Optical & Transparent Parts | High temperature & precise parts | Special engineering plastic A (Corrosive & Abrasive) | Special engineering plastic B (Highly corrosive & abrasive ,High temperature) |
|----------------------|----------------------------------|----------------------------------|----------------------------------|--|---|
| Barrel | Nitrided | Bimetallic | Bimetallic | Bimetallic (with 40% Wolfram Carbon) | Ceramics |
| Screw | Full-Hardening Powder metallurgy | Full-Hardening Powder metallurgy | Full-Hardening Powder metallurgy | Wolfram carbid spray coating | Ceramics |
| Applicable materials | PP, PS, TPU, PE, PET | Transparent PC, PMMA | 20% GF, LCP, PEI, PEEK, ABS, PA | 40% GF, PA, PPS, PSU | 65% GF, porcelain powder, Halogen-free material |

- ◎ High performance controller
- ◎ Common DC bus drive system
- ◎ Precision feedback components
- ◎ Program specialized for Full-electrical injection molding machine



◎ Features of control unit

12" Color Touch Screen.

CPU main frequency up to 1GHz, the program scan cycle shortened to 1ms.

Controller of modularization, I/O points could be arranged according requirement.

Industrial Ethernet technology, remote monitoring, cluster networking.



◎ Driver system

Loop-closed control of allocation, velocity and pressure, scan cycle shortened to 250μs, more efficient response, and higher precision.



◎ High repeating precision injection

Optimized injection algorithm increase the repeatability and Consistency of injection, injection position repeatability within 0.02mm.



◎ Mold protection function

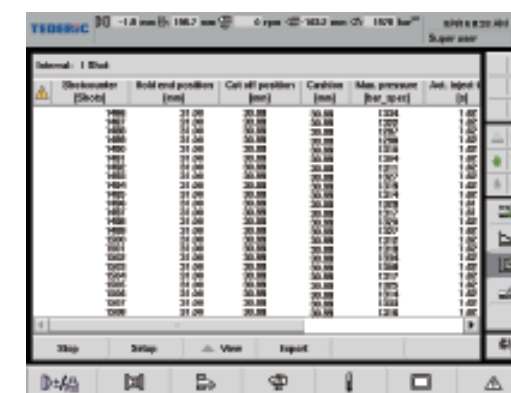
Mold protection function by load torque monitor. Instant advanced stop of clamping at mold piece jammed.

[Paper Cup test by monitor range 1%]



◎ Synchronous heating function

Synchronize the heating process of heating zone on the barrel. Prevent the overheating for the temperature sensitive material.



- Humanized and safety operation.

