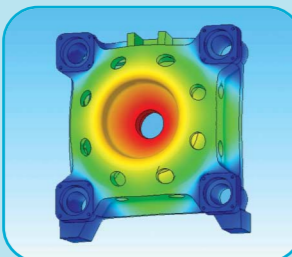


POTENZA SERIES PRECISION INJECTION MOLDING MACHINE

Clamping Part



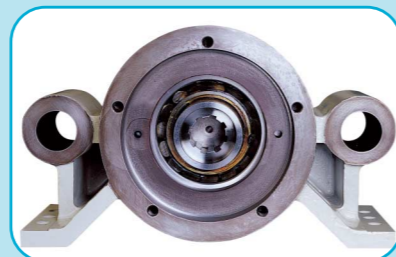
Clamping unit with high rigidity, high strength and high precision to reduce deformation of mold and protect mold, also to realize precision production to satisfy our customer needs.



All high strength parts use COSMOS finite element analysis for simulation, which makes it reliable rigidity and strength, long working life.



Mechanical safety lock ensures safety on the operators and the molds; also it is convenient for the mold setup.



Connection between the driving shafts were adopted a ball bearing and automatic self-align bearing assembly, which can adjust the best position of screw's center automatically; it is better to improve product quality and prolong the working life of screw assembly.

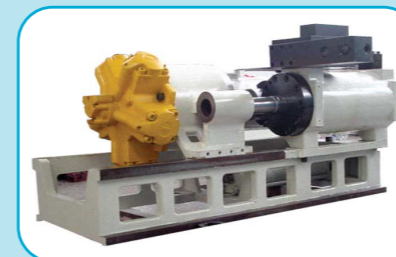
Injection Part



Injection unit driven by hydraulic system with compact structure, it is simple to operate and easy to change the barrel assembly and maintenance.



Designed the centre gravity of injection and melting to the lowest point, which reduces inertia impact during the machine operation to protect the accurate of injection position, provide the most stable and smallest melting back pressure, which produce better quality products.



Screw and driving shaft are in special design, which can provide enough space to adjust the centering to reduce abrasion from the connection.

Equipment Part

Standard

Clamping part

- Toggle clamping structure
- Hydraulic ejection structure
- Automatic mold height adjustment function
- High speed clamping function
- Mold opening with back-pressure control
- Centering flange for mold
- Electric and mechanic safety locks equipment
- Multi-water cooling equipment
- Front safety door, back safety door
- Prevention for clamping stroke exceeding device
- Transducer control for clamping and opening
- Proximity switch control for ejection
- Screw type platen
- Core pull device

Injection part

- Double cylinder design for injection
- Rotary equipment with hydraulic motor driven
- Sliding hopper base
- Suck back function
- Auto-purge function
- Digital back pressure control for melting
- Hopper cooling device
- Transducer control for injection
- Nitride treatment screw assembly
- Special design for carriage cylinder assembly

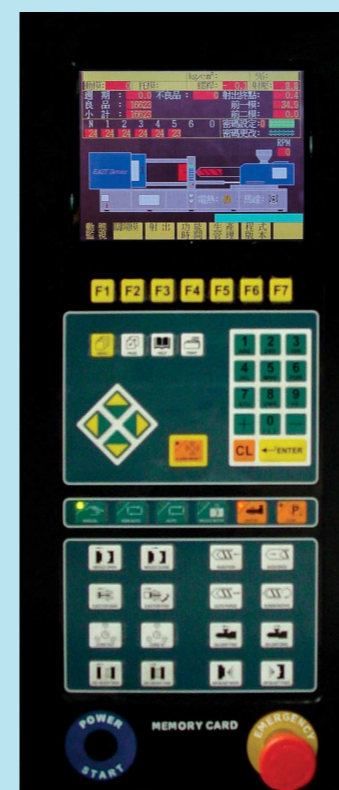
Hydraulic part

- Europe and America imported double fixed pump
- Europe and America imported hydraulic valve
- Indicator for oil temperature and oil level
- Hydraulic oil cooler
- Automatic hydraulic oil clean system
- Pump units selection function
- Hydraulic pump station allocation function

Control part

- Fast response, high precision
- Computer control system
- Liquid crystal color display
- Europe and Japan imported electric components
- Emergency stop button
- PID temperature control
- 3 color alarm lamp
- Maintenance alarm
- Injection pressure monitoring function
- Injection molding parameter checking and memorizing function
- Manage curve and statistics function
- Production monitor function
- Working schedule display function

Control Part



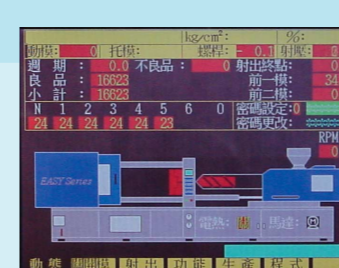
Production data statistics



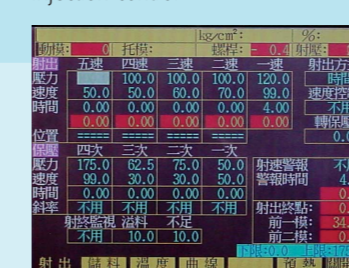
Clamping control



Injection control



Full action control

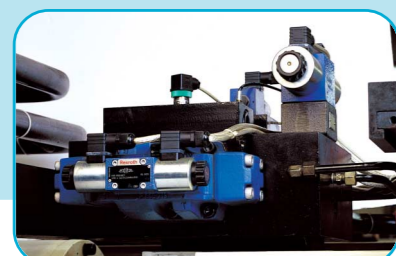


SPC statistics diagram

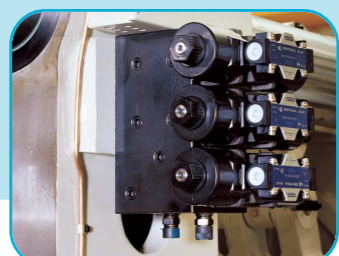
Hydraulic Part



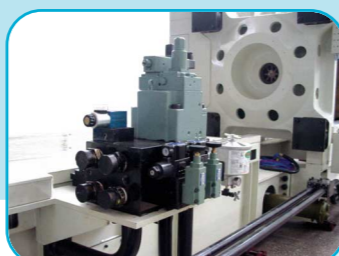
Fast clamping and back-pressure control for mold opening make the machine running in smooth and fast to shorten the period of the cycle.



Digital back pressure control for melt setting function, convenient and user friendly control to improve stability of high quality product.



Put the manifold on the movable platen, also the injection stationary platen to achieve short distance control path, fast response, less pressure loss and lower energy consumption that benefits for high precision molding.



Hydraulic system adopted optimize design to achieve effective power output, energy-saving and improve productive efficiency.

Optional

Clamping Unit

- Pneumatic safety door
- T-slot platen design
- Core device (Additional)
- Mold cooling hose
- Air blast device
- Increase max. daylight
- Hydraulic safety lock device
- Product landing confirm device
- Mold cooling temperature

Injection Unit

- Wear and corrosion resistant screw
- Wear and corrosion resistant hopper
- Additional length of nozzle
- Barrel thermal cover
- Air blast thermal cover
- Hydraulic nozzle shut-off
- Spring loaded nozzle shut-off
- Special use screw (PC, PMMA, PVC, etc.)
- Nozzle safety cover
- Plasticizing counter
- Material adding ladder

Hydraulic Unit

- Low level oil alarm function
- High level oil alarm function
- Cooling water control function
- High reaction close loop control
- Magnetic filter in oil tank

Electric Unit

- Voltage stabilizer
- Central networking system
- Heater wire broken alarm
- Printer port
- Lack material monitor in hopper
- External power socket
- Mold temperature control function
- Heat flow rate control function

Others

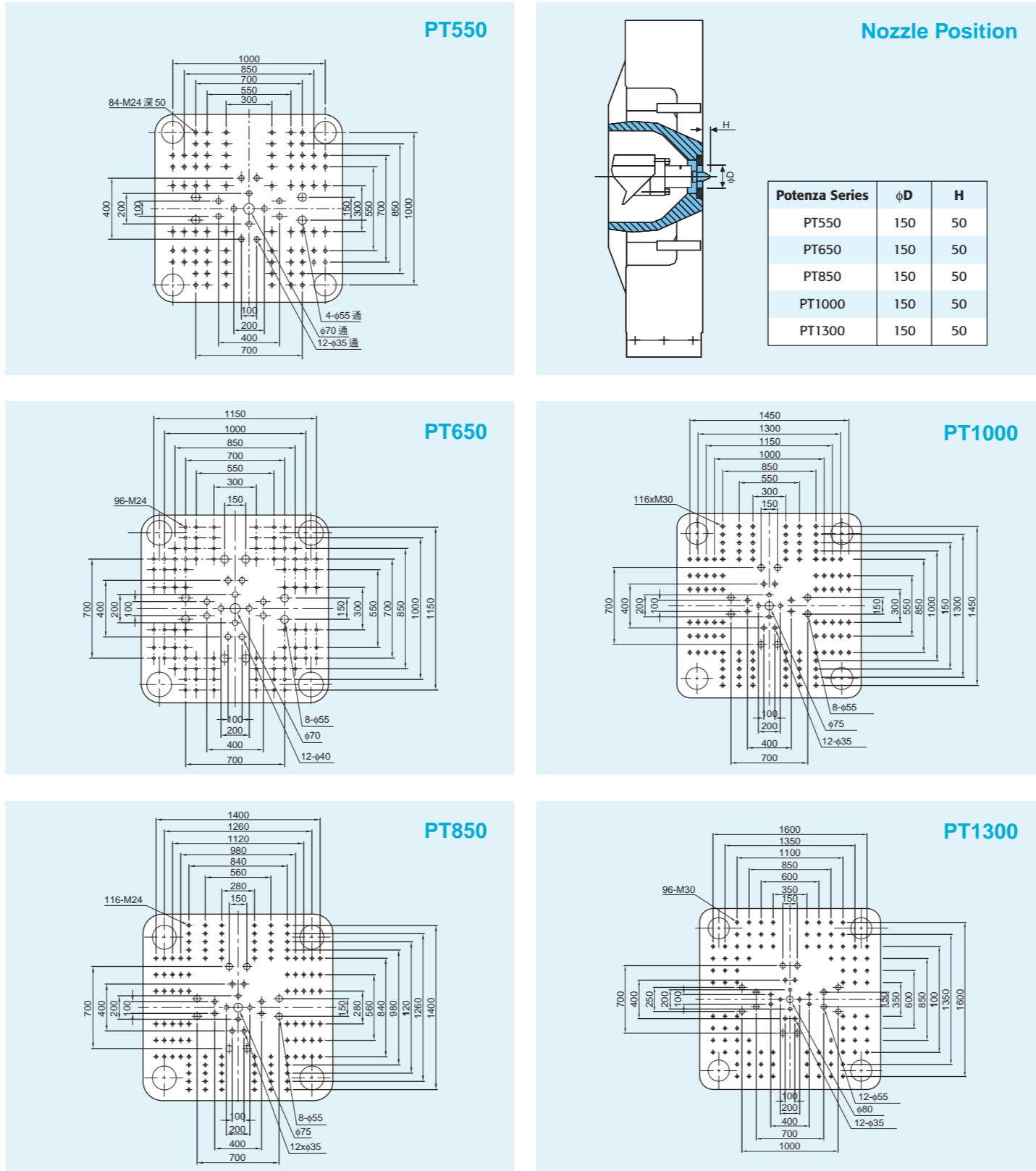
- Hopper Dryer
- Material loading machine
- Mold temperature controller
- Air cool water chiller
- Material Crusher
- Color mixture machine
- Conveyor
- Customer assigned machine color

| ITEM | UNIT | POTENZA SERIES SPECIFICATION | | | | | | | | | | | | | | | | | | | |
|---------------------------|------|------------------------------|-------|----------------|--------|-----------------|------|-----------------|--------|-----------------|------|-----------------|--------|-----------------|--------|-----------------|--------|-----------------|--------|-----------------|------|
| | | PT550 | PT650 | PT850 | PT1000 | PT1300 | | | | | | | | | | | | | | | |
| Shot Weight (ps) | g | 1708 | 2197 | 2460 | 3038 | 2058 | 2605 | 3216 | 3691 | 2750 | 3395 | 4108 | 4889 | 3931 | 4756.6 | 5660 | 6643 | 5359 | 6377 | 7484 | 8680 |
| | oz | 60.4 | 77.6 | 87 | 107.3 | 72.7 | 92 | 113.6 | 137.5 | 97 | 120 | 145 | 172.8 | 138.7 | 167.8 | 199.7 | 234.3 | 189 | 225 | 264 | 306 |
| Screw Diameter | mm | 75 | 85 | 90 | 100 | 80 | 90 | 100 | 110 | 90 | 100 | 110 | 120 | 100 | 110 | 120 | 130 | 110 | 120 | 130 | 140 |
| Injection Pressure | MPa | 225 | 175 | 156 | 126 | 235 | 186 | 151 | 125 | 229 | 185 | 153 | 129 | 220 | 182 | 153 | 130 | 214 | 180 | 153 | 132 |
| Shot Volume | cc | 1878 | 2412 | 2704 | 3338 | 2262 | 2863 | 3534 | 4276 | 3022 | 3751 | 4514 | 5372 | 4320 | 5227 | 6220 | 7300 | 5889 | 7008 | 8225 | 9539 |
| Screw L/D Ratio | | 22:1 | 20:1 | 19:1 | 17:1 | 23:1 | 21:1 | 19:1 | 17:2:1 | 23:1 | 21:1 | 19:1 | 17:5:1 | 23:1 | 21:1 | 19:1 | 17:8:1 | 23:1 | 21:1 | 19:4:1 | 18:1 |
| Plasticizing Capacity | kg/h | 261 | 379 | 450 | 613 | 293 | 422 | 584 | 767 | 413 | 570 | 750 | 986 | 626 | 811.8 | 1030 | 1285 | 775.8 | 982 | 1225 | 1504 |
| Injection Rate | cc/s | 472.7 | 607 | 681 | 840 | 556 | 704 | 869 | 1072 | 706 | 872 | 1055 | 1255 | 874.5 | 1058 | 1259.3 | 1478 | 1028 | 1223.5 | 1435.9 | 1665 |
| Screw Speed | rpm | 0-188 | | 0-179 | | 0-175 | | 0-175 | | 0-175 | | 0-175 | | 0-175 | | 0-175 | | 0-175 | | 0-175 | |
| Hopper Capacity | L | 200 | | 250 | | 300 | | 300 | | 300 | | 300 | | 300 | | 300 | | 300 | | 300 | |
| Locking Force | kN | 5500 | | 6500 | | 8500 | | 8500 | | 8500 | | 8500 | | 8500 | | 8500 | | 8500 | | 8500 | |
| Mold Height (min-max) | mm | 350-850 | | 350-920 | | 400-1100 | | 400-1100 | | 400-1100 | | 400-1100 | | 400-1100 | | 400-1100 | | 400-1100 | | 400-1100 | |
| Max. Daylight | mm | 170 | | 1820 | | 2200 | | 2200 | | 2200 | | 2200 | | 2200 | | 2200 | | 2200 | | 2200 | |
| Opening Stroke | mm | 850 | | 900 | | 1100 | | 1100 | | 1100 | | 1100 | | 1100 | | 1100 | | 1100 | | 1100 | |
| Space Between Tie Bar | mm | 860x680 | | 910x910 | | 1080x1020 | | 1080x1020 | | 1080x1020 | | 1080x1020 | | 1080x1020 | | 1080x1020 | | 1080x1020 | | 1080x1020 | |
| Platen Size (HXV) | mm | 1230x1230 | | 1320x1320 | | 1540x1480 | | 1540x1480 | | 1540x1480 | | 1540x1480 | | 1540x1480 | | 1540x1480 | | 1540x1480 | | 1540x1480 | |
| Ejector Stroke | mm | 240 | | 270 | | 300 | | 300 | | 300 | | 300 | | 300 | | 300 | | 300 | | 300 | |
| Ejector Force | kN | 166 | | 215 | | 270 | | 270 | | 270 | | 270 | | 270 | | 270 | | 270 | | 270 | |
| Pump Motor | kW | 55 | | 55 | | 30x2 | | 30x2 | | 30x2 | | 30x2 | | 30x2 | | 30x2 | | 30x2 | | 30x2 | |
| Working pressure | MPa | 17.5 | | 17.5 | | 17.5 | | 17.5 | | 17.5 | | 17.5 | | 17.5 | | 17.5 | | 17.5 | | 17.5 | |
| Tank Capacity | L | 1100 | | 1400 | | 1600 | | 1600 | | 1600 | | 1600 | | 1600 | | 1600 | | 1600 | | 1600 | |
| Heating Capacity | kW | 31.3 | | 33 | | 40 | | 40 | | 40 | | 40 | | 40 | | 40 | | 40 | | 40 | |
| Heating Zones | | 5+N | | 5+N | | 6+N | | 6+N | | 6+N | | 6+N | | 6+N | | 6+N | | 6+N | | 6+N | |
| Machine Dimension (LXWXH) | mm | 8650x2100x2500 | | 9800x2300x2500 | | 11300x2600x2730 | | 11300x2600x2730 | | 11300x2600x2730 | | 11300x2600x2730 | | 11300x2600x2730 | | 11300x2600x2730 | | 11300x2600x2730 | | 11300x2600x2730 | |
| Machine Weight | kg | 30000 | | 36000 | | 45000 | | 45000 | | 45000 | | 45000 | | 45000 | | 45000 | | 45000 | | 45000 | |

Option

* Data are based on theoretical calculation under 50Hz operation.
 * We reserve the right to make any technical improvement without further notice.

POTENZA SERIES PLATEN SIZE

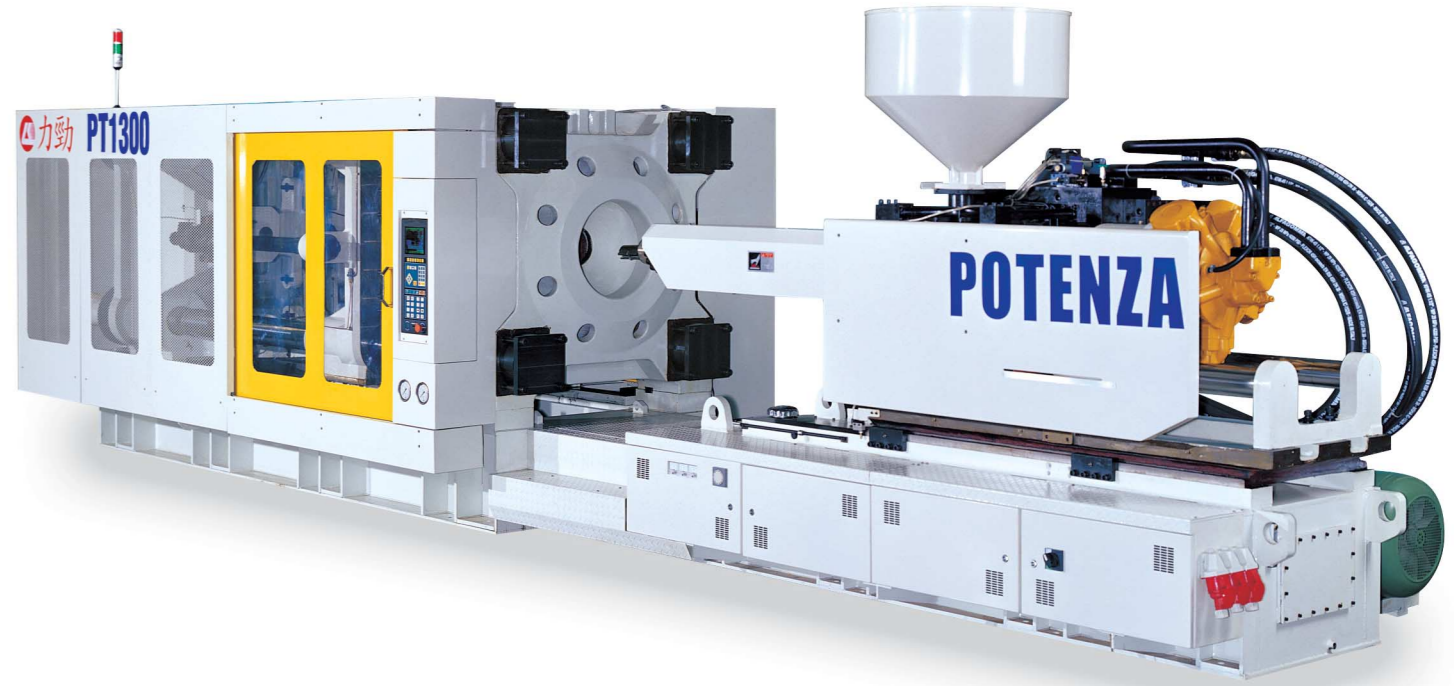


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POTENZA SERIES

PRECISION INJECTION MOLDING MACHINE



ISO 9001: 2000
FM 37608

CAT. NO. C07/10/01

Sales Agent:



Unit A, G/F, & Unit A, 8/F, Mai Wah Industrial Building,
 1-7 Wah Sing St., Kwai Chung, N.T. Hong Kong.
 Tel: (852) 3412 5500 Fax: (852) 3412 5511
 Website: www.lkmachinery.com
 E-mail: sales@lkmachinery.com

