

Made in Taiwan / Global Patent
CE FDA Certified



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3D Tube Laser Cutting LS150 & LS220 Series

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ADVANTAGES

- Innovative and unique design. Dozens of international design patents.
- Humanized design. The machines are easy to operate and maintain.
- The machines are energy saving, high performance, environmental friendly.
- All key components are produced by CSM under comprehensive quality control.
- All machines have complete production records.
- Standing stock for important spare parts, preparing for immediate needs.
- The machines are CE / FDA certified.



R&D



Precision parts machining



Parts machining



Quality Control



Parts machining



Warehouse management



Machine frame machining



Machine assembly

PROFILE

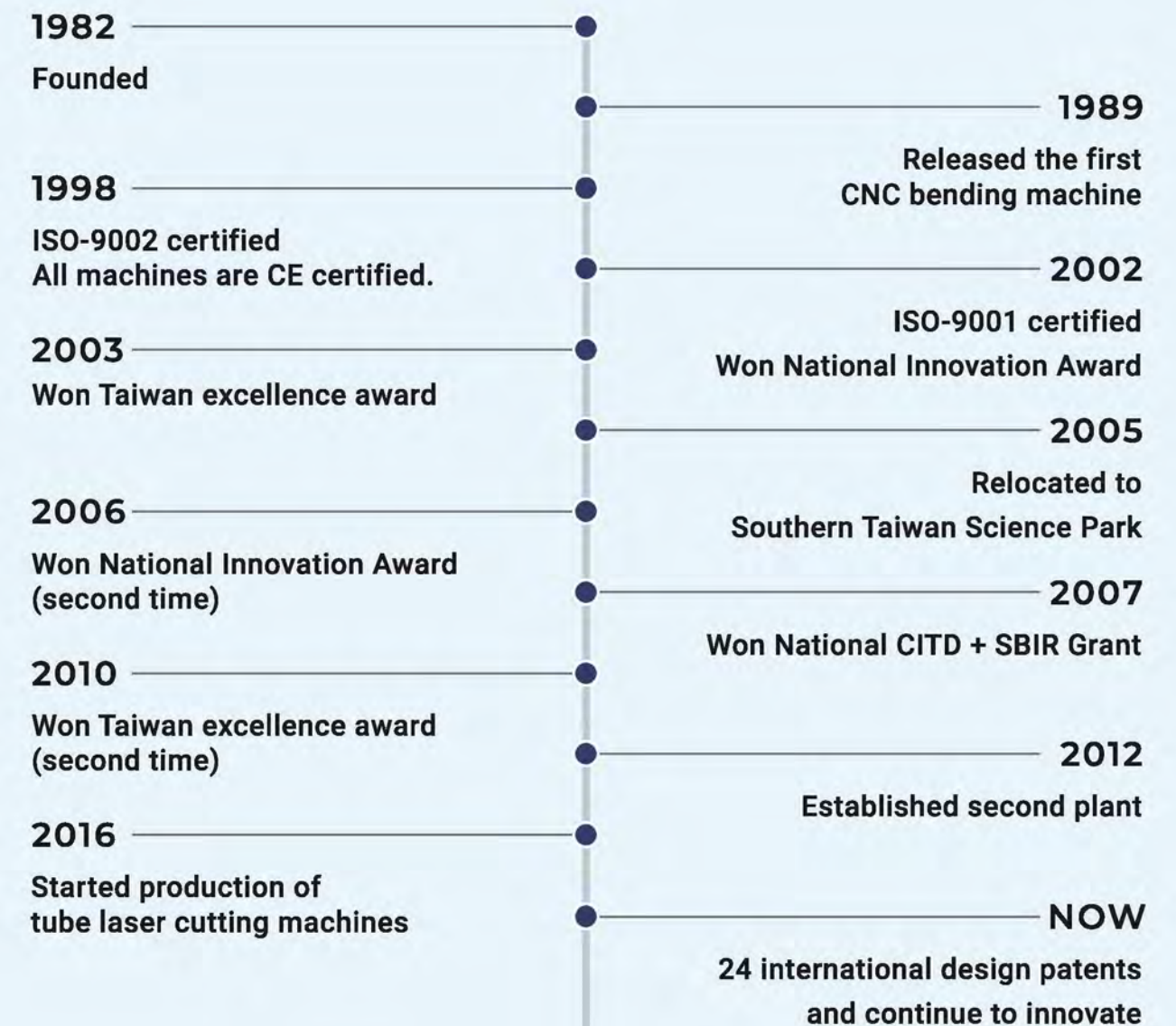
CSM, CHIAO SHENG MACHINERY, headquartered in Taiwan, is a world-renowned manufacturer of CNC tube benders and tube laser cutting machines.

With more than 40 years of technology and experience accumulation, CSM has dozens of international design patents. CSM continues to develop and innovate, and is committed to provide more efficient, energy-saving and environmentally friendly equipment.

CSM employs patented planetary gear transmission systems in the machines. The tube benders can bend metal tube fittings within an outer diameter of 6-254 mm. The tube laser cutting machines can cut metal tube fittings within an outer diameter of 12-220 mm.

The tube laser cutting machines have international design patents. The 4-axis and 5-axis servo driven models are available to meet various needs.

HISTORY



LS150-4C Series

2D cutting with dual chuck system
Equipped with short-scrap function



Safety guard System

- Protect operators
- Convenient for maintenance.

Laser System

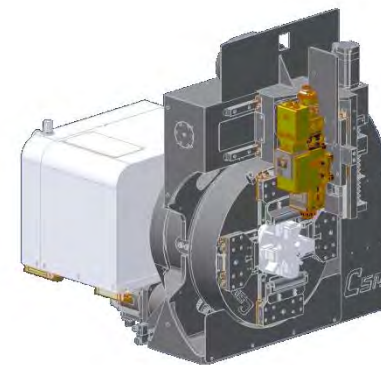
- IPG fiber laser power source, and some more brands for option.
- Precitec high speed 3D laser head.
- Tube laser cutting control system, worldwide remote control.

Automatic Loading System

- Tubes can be loaded in bundles.
- Automatic diameter and length check. Seam detection available for option.
- Round and square tubes, I and H beams and shaped tubes can be auto-loaded.
- Semi auto-loading system is an available for option.

Dual Chuck System

- Global design patents.
- Rear chuck can pass through cutting chuck Equipped with short-scrap function.
- Servo positioning chucks, with 4-cylinder circuit of each.
- No adjustment needed within OD18~152.4mm.
- Small diameter, lightweight, low inertia, big strength. High-speed and high-precision positioning can be achieved.
- Excellent dust-proof design. Reduce maintenance work.

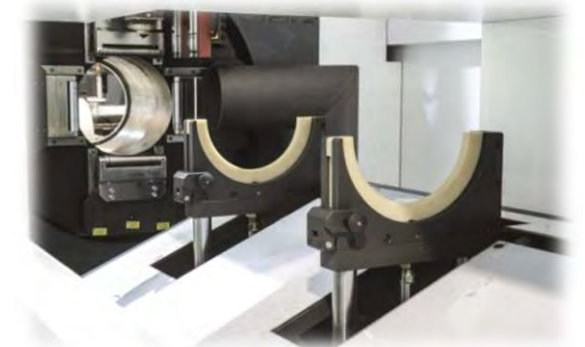


| Specification (3-chuck model, product length 3m) | | Unit | LS150-4C-63 | LS150-4C-70 |
|--|----------------|------|----------------------------------|--------------|
| Processes of tube OD. | | mm | 18~152.4 | |
| Max. loading length (standard option) | | mm | 6300 | 7000 |
| Min. waste material length (wide gripper) | | mm | 75 | |
| Min. waste material length (small gripper) | | mm | 50 | |
| Max. path weight | | kg/m | 22 | |
| Max. product length (standard option) | | mm | 3000 / 4000 / 5000 / 6000 / 7000 | |
| Stroke of each axis | X (laser head) | mm | 200 | |
| | Y (rear chuck) | mm | 6900 | 7600 |
| | B1&B2 (chucks) | deg | ∞ | |
| Linear axis accuracy | | mm | ±0.03 | |
| Machine weight (Including loader, standard shield) | | kg | 8100 | 8500 |
| Machine dimensions | | m | 11.1x3.3x2.1 | 11.8x3.3x2.1 |
| Max. Storage Capacity (Automatic loading system) | | kg | 1300 | 1300 |

*The data in the above table is subject to the latest machine.

Unloading System

- Various unloading plates are made for different shapes and diameters.



LS150-5E Series

3D cutting with multi chuck system
Equipped with zero-waste function



Laser System

- IPG fiber laser power source, and some more brands for option.
- Precitec high speed 3D laser head.
- Tube laser cutting control system, worldwide remote control.

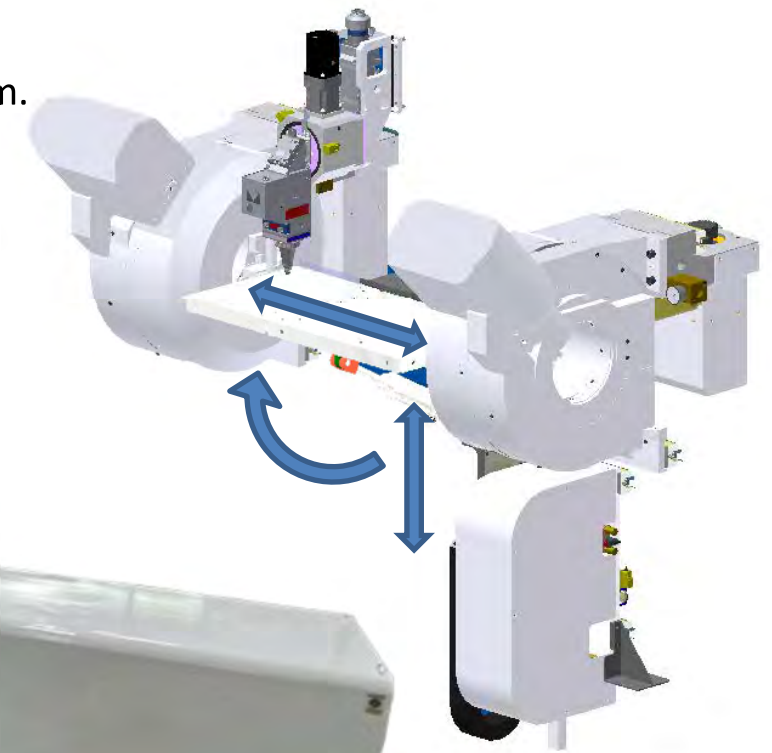
Automatic Loading System

- Tubes can be loaded in bundles.
- Automatic diameter and length check. Seam detection available for option.
- Round and square tubes, I and H beams and shaped tubes can be auto-loaded.
- Semi auto-loading system is an available for option.



Floating Support System

- Servo controlled floating support system.
- Tube gravity can be tracked.
- Equipped with unloading to stations.
- Avoid drop collision and noise.

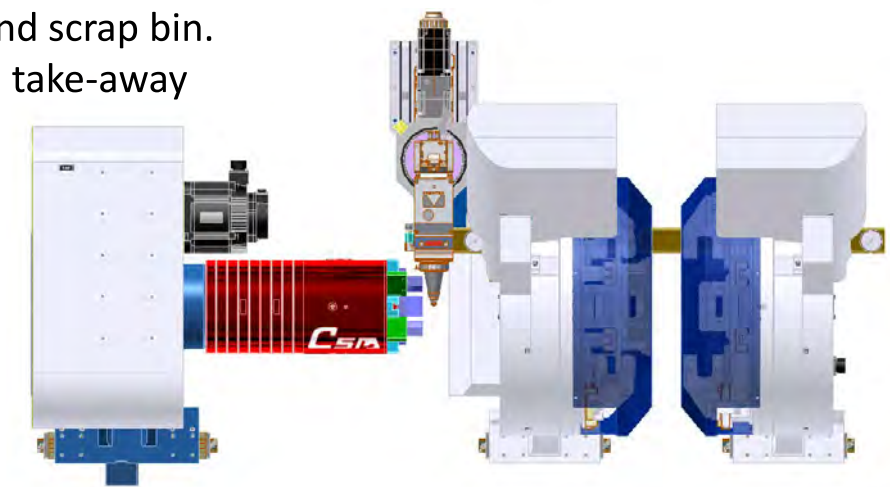


| Specification (3-chuck model, product length 3.05m) | | Unit | LS150-5E-63 | LS150-5E-73 | LS150-5E-83 |
|--|----------------------|------|---|--------------|--------------|
| Processes of tube OD. | | mm | 16~152.4 | | |
| Max. loading length (standard option) | | mm | 6300 | 7320 | 8300 |
| Min. waste material length (wide gripper) | | mm | 75 | | |
| Min. waste material length (small gripper) | | mm | 50 | | |
| Min. zero waste cutting material length | | mm | 580 | | |
| Max. path weight | | kg/m | 22 | | |
| Max. product length (standard option) | | mm | 3050 / 4000 / 5000 / 6100 / 7050 / 8000 | | |
| Stroke of each axis | X (laser head) | mm | 160 | | |
| | Y1 (rear chuck) | mm | 7000 | 7980 | 9100 |
| | Y2 (cutting chuck) | mm | 4340 | 4820 | 5340 |
| | Y3 (unloading chuck) | mm | 2910 | 2910 | 2910 |
| | A (laser head) | deg | ±45 | | |
| | B1&B2&B3 (chucks) | deg | ∞ | | |
| Linear axis accuracy | | mm | ±0.03 | | |
| Machine weight (Including loader, standard shield) | | kg | 9100 | 9700 | 10300 |
| Machine dimensions (Including loader, standard shield) | | m | 11.3x2.8x2.6 | 12.3x2.8x2.6 | 13.3x2.8x2.6 |
| Max. Storage Capacity (Automatic loading system) | | kg | 1200 | 1200 | 1200 |

*The data in the above table is subject to the latest machine.

Automatic Unloading System

- Equipped with unloading table and scrap bin.
- Unloading conveyors and a scrap take-away conveyor are for option.



Multi Chuck System

- 5E models provided with 2,3, and 4-chuck system for option.
- 3 and 4-chuck systems equipped with zero waste cutting function.
- Servo positioning chucks, 4-cylinder circuit of each, combined with cross-lapped grippers, which generate extremely stable clamping force to all shapes of tubes.
- Small diameter, light weight, low inertia, big strength. High-speed and high-precision positioning can be achieved.
- No adjustment needed within OD16~152.4mm.
- Excellent dust-proof design. Reduce regular maintenance work.

LS220-5E Series

3D cutting with multi chuck system
Equipped with zero-waste function



Laser System

- IPG fiber laser power source, and some more brands for option.
- Precitec high speed 3D laser head.
- Tube laser cutting control system, worldwide remote control.

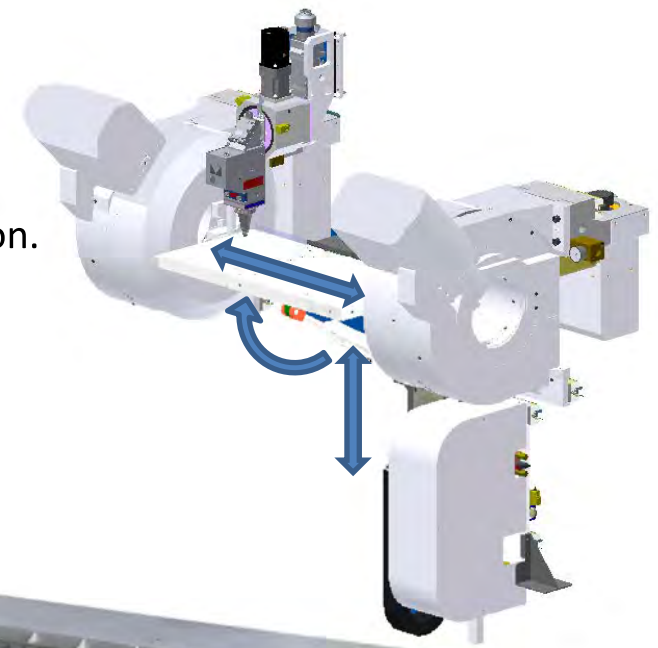
Semi Auto Loading System - particularly for heavy duty

- Automatic diameter and length check. Seam detection available for option.
- Round and square tubes, I and H beams and shaped tubes can be auto-loaded.
- Auto loading system (loaded in bundles) is for option.



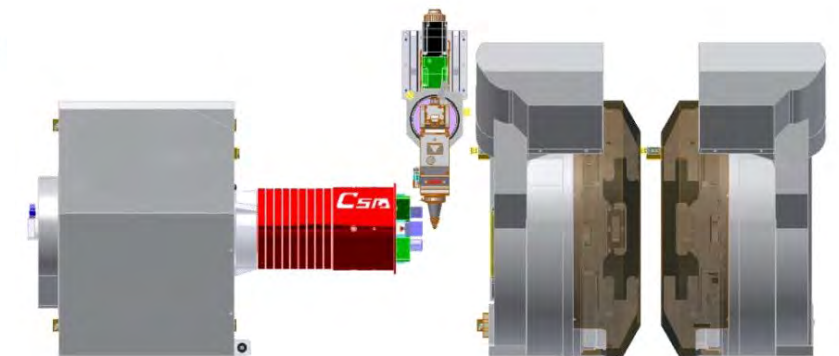
Floating Support System

- Servo controlled floating support system.
- Tube center of gravity can be tracked.
- Equipped with partition unloading function.
- Avoid drop collision and noise.



Automatic Unloading System

- Equipped with unloading table and scrap bin.
- Unloading machines and a scrap take-away conveyor are for option.



Multi Chuck System

- 5E models provided with 2,3, and 4-chuck system for option. 3 and 4-chuck systems equipped with zero waste cutting function.
- Servo positioning chucks, 4-cylinder circuit of each, combined with cross-lapped grippers, which generate extremely stable clamping force to all shapes of tubes.
- Small diameter, light weight, low inertia, big strength. High-speed and high-precision positioning can be achieved.
- No adjustment needed within OD18~152.4mm.
- Excellent dust-proof design. Reduce regular maintenance work.

| Specification (3-chuck model, product length 3m) | Unit | LS220-5E-63 | LS220-5E-73 | LS220-5E-83 | |
|---|----------------------|---|--------------|--------------|------|
| Processes of tube OD. | mm | 18~220 | | | |
| Max. loading length (standard option) | mm | 6300 | 7320 | 8300 | |
| Min. waste material length (wide gripper) | mm | 90 | | | |
| Min. waste material length (small gripper) | mm | 50 | | | |
| Min. zero waste cutting material length | mm | 625 | | | |
| Max. path weight | kg/m | 40 | | | |
| Max. product length (standard option) | mm | 3000 / 4000 / 5000 / 6000 / 7000 / 8000 | | | |
| Stroke of each axis | X (laser head) | mm | 270 | | |
| | Y1 (rear chuck) | mm | 6960 | 7960 | 8960 |
| | Y2 (cutting chuck) | mm | 5000 | 5500 | 6000 |
| | Y3 (unloading chuck) | mm | 3570 | 3570 | 3570 |
| | A (laser head) | deg | ±45 | | |
| | B1&B2&B3 (chucks) | deg | ∞ | | |
| Linear axis accuracy | mm | ±0.03 | | | |
| Machine weight (Including loader, unloader, standard shield) | kg | 10800 | 11150 | 11800 | |
| Machine dimensions (Including loader, unloader, standard shield) | m | 12.4x3.8x2.7 | 13.4x3.8x2.7 | 14.4x3.8x2.7 | |
| Max. Storage Capacity (Array auto loading system) | kg | 2500 | 2500 | 2500 | |

*The data in the above table is subject to the latest machine.