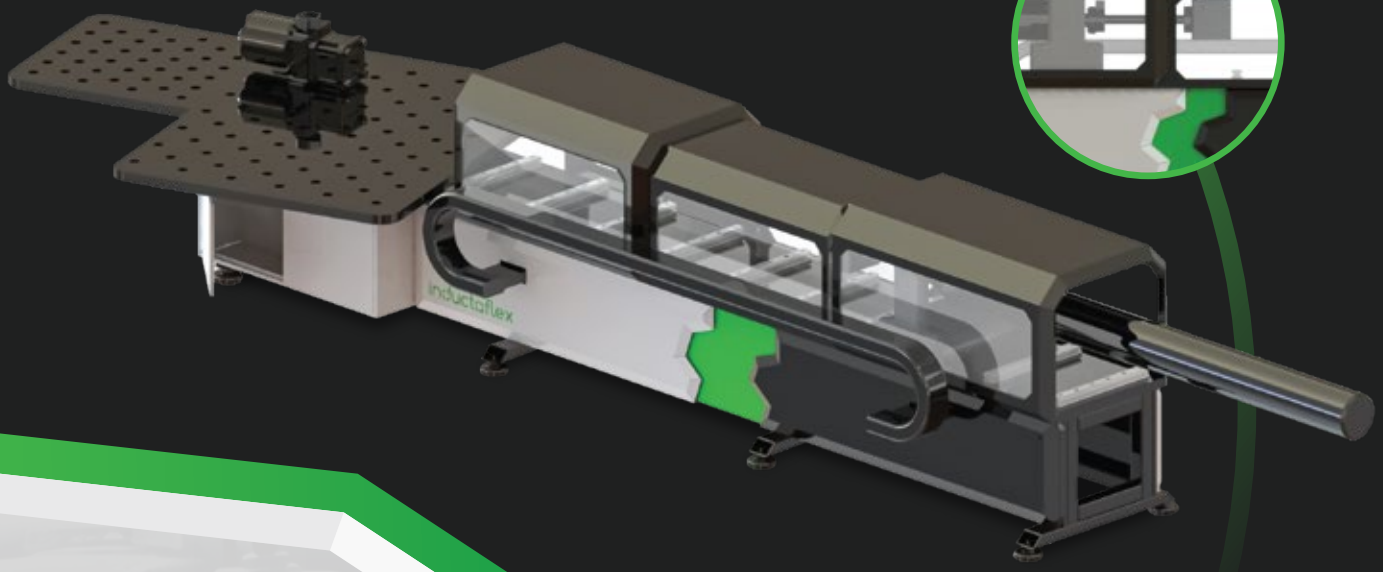
inductaflex



ROTARY STRETCH FORMING

New Bending Process

INTRODUCTION

WHO ARE WE?

Aluminum profile forming machine manufacturer with the widest range of machines in the World to produce the best result.

8 styles of bending machine,
traditional roller benders
die benders
stretch formers

SUSTAINABILITY

- Our machines are all servo or servo/ hybrid 70% power saving
- Faster achievement of Net Zero
- Industry 4.0 capable

Inductaflex produces no hazardous waste
95% of our own machines are servo electric
We hit Net Zero by 2029 at all sites.

RANGE OF SOLUTIONS

We bend in 2 and 3 dimensions.
Simple CNC benders
Complex bend and machining cells

LOCATIONS

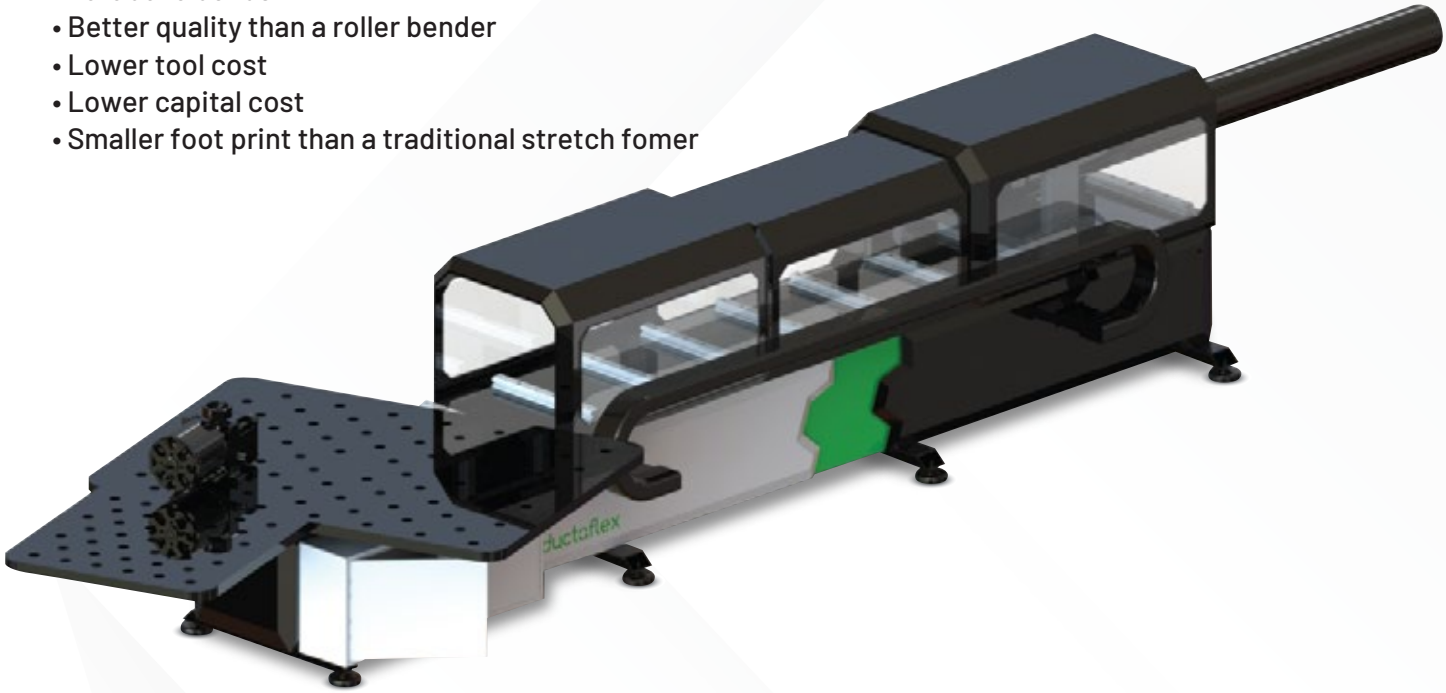
We design and manufacture from 3 locations around the World.

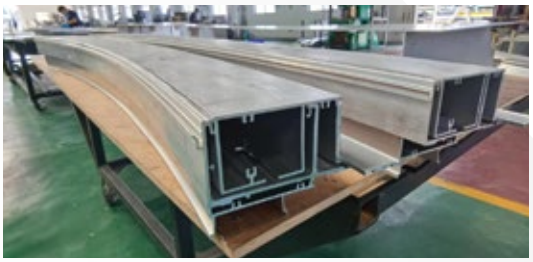
UK - large Induction Benders
Vietnam – Roller Benders and Bend Cells
USA – Robot Development and Stretch formers
South China – Machine frames

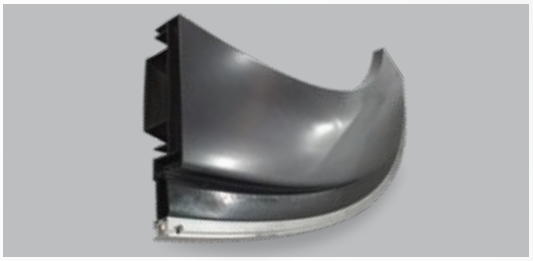
ROTARY STRETCH FORMER

Why buy a rotary stretch former?

- Tighter bends than a traditional stretch former
- Parabolic bends
- Better quality than a roller bender
- Lower tool cost
- Lower capital cost
- Smaller foot print than a traditional stretch fomer





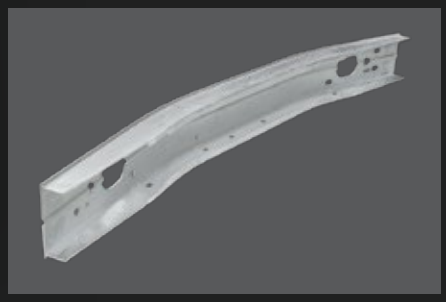
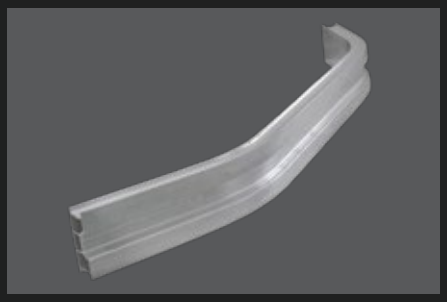


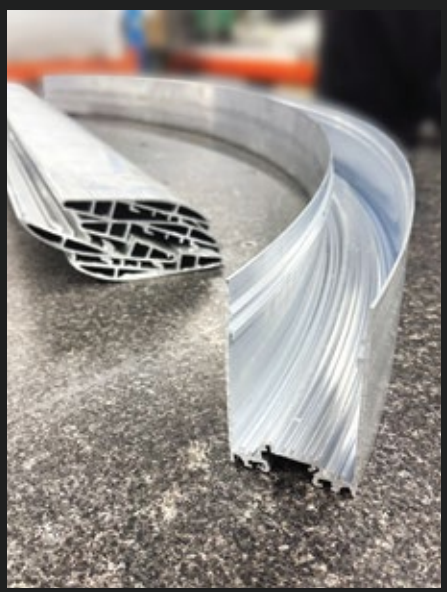
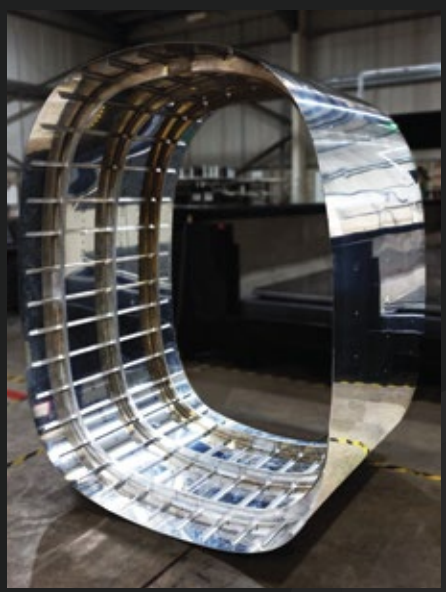
INDUCTAFLEX ROLLER INFORMATION

	RS-15	RS-25	RS-35	RS-50	RS-75
X-axis					
Bending force X-axis	15T	25T	35T	50T	75T
Drive of twist axis	Hybrid, servo hydraulic, clean, low noise - 70% energy savings	Hybrid, servo hydraulic, clean, low noise - 70% energy savings	Hybrid, servo hydraulic, clean, low noise - 70% energy savings	Hybrid, servo hydraulic, clean, low noise - 70% energy savings	Hybrid, servo hydraulic, clean, low noise - 70% energy savings
Bend length	3000mm	4000mm	4000mm	5000mm	6000mm
Maximum part width	100 x 100	120 x 120	150 x 150	200 x 200	300 x 300
Control / Software:					
Machine control	Siemens HMI, Inductaflex Control	Siemens HMI, Inductaflex Control	Siemens HMI, Inductaflex Control	Siemens HMI, Inductaflex Control	Siemens HMI, Inductaflex Control
General technical data:					
KW	2.4kW	3kW	4.4kW	4.7kW	12.3kW
Power supply connection	3 x 400 / 480v, 50 / 60Hz				
Length / Width	6000 x 3000mm	7000 x 3500mm	7000 x 3500mm	9000 x 4500mm	10000 x 5000mm
Weight	9000kg	12000kg	15000kg	25000kg	45000kg
Transportability of the machine	6000 x 3000mm	7000 x 3500mm	7000 x 3500mm	9000 x 4500mm	10000 x 5000mm
Hydraulic oil volume	60L	100L	180L	240L	320L
Profile capacity:					
Minimum radius	2.5D to 50metres				

PRODUCTS

BENDING PRODUCTS

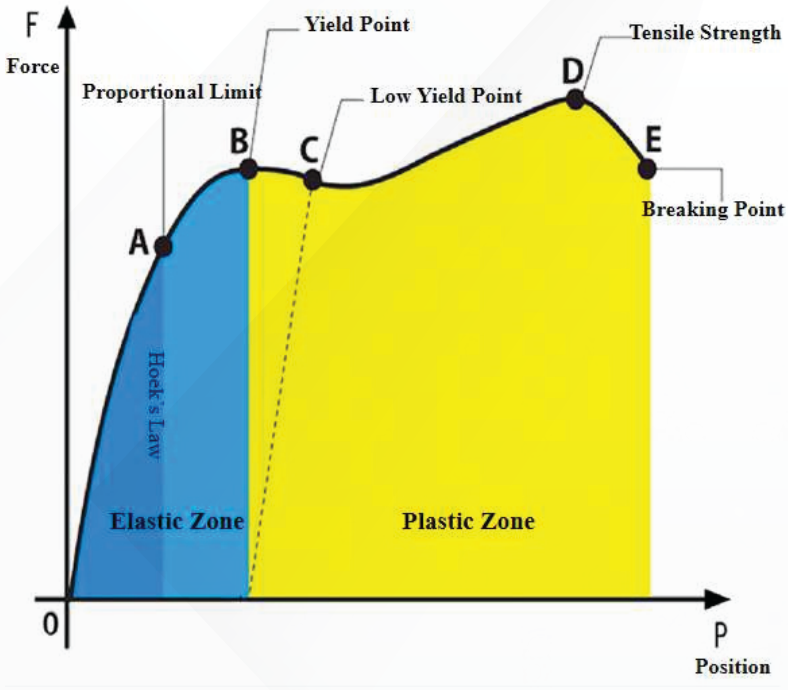



PRINCIPLE OF STRETCH BENDING

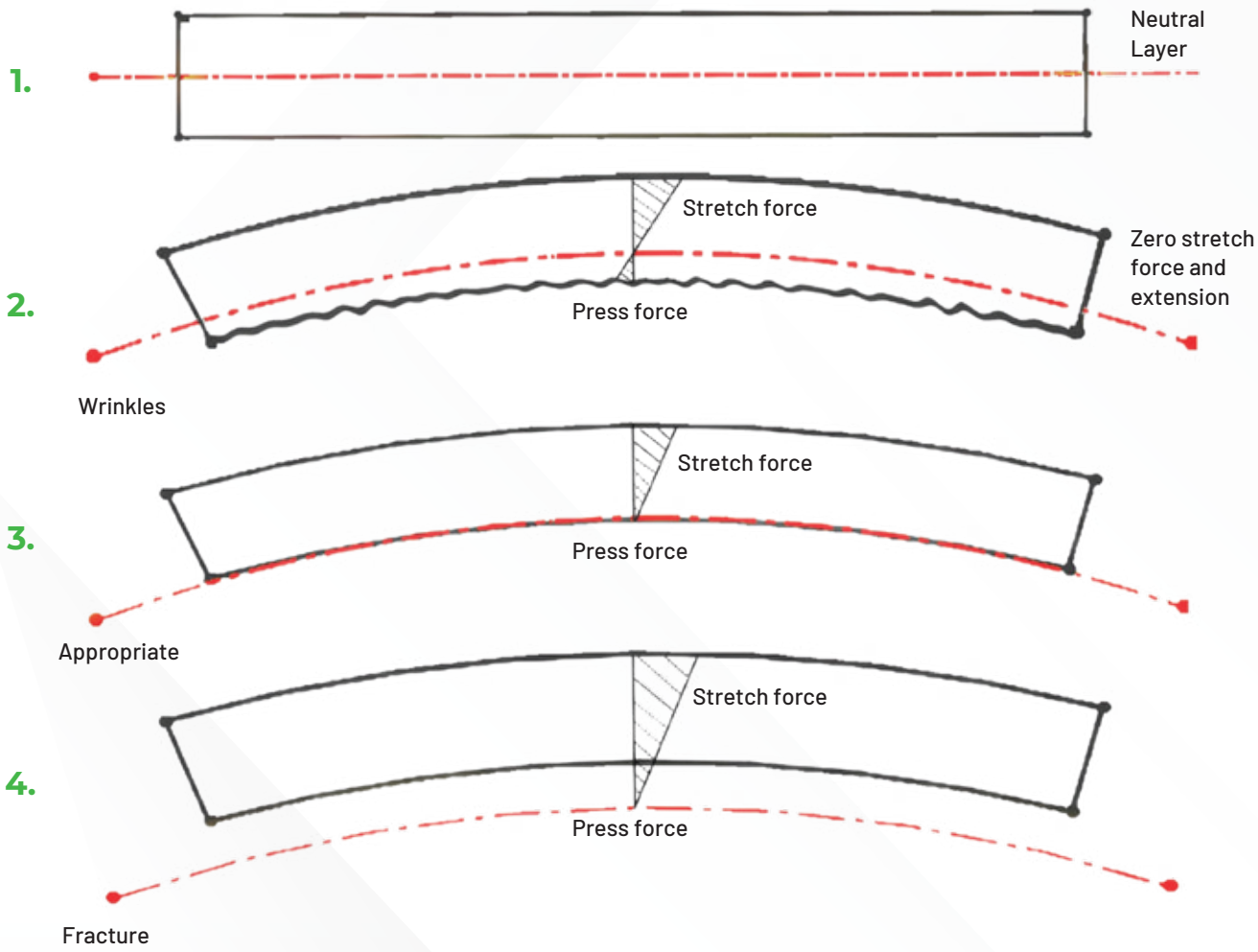
1. Each axis individually servo control, accurate real-time control of tensile force and displacement;
2. Bending can be set in stretching mode and the displacement mode;
3. Automatically detect the material yield strength, and adjust the stretch force;
4. CNC program independent learning, automatic generation of tooling parameters;
5. Bending product quality and stability, accuracy are always
6. No need to rely on the experience of skilled workers;
7. Energy saving, environmental protection. The heating problem of the hydraulic system is solved.

1. Solve the problem of bending and forming stability for unstable materials.

2. It can pull and bend materials with a tensile force of 85T, and can also bend materials with a tensile force of 1 kg!



PRINCIPLE OF STRETCH BENDING NEUTRAL LAYER CONTROL



Total length of the material remains unchanged after bending.

Automatic generate parameters of stretch length, bending angle.

1. **Original state:** neutral layer in the center.
2. Non-numerical control bending:

   Insufficient bending, bottom surface wrinkles.

3. **CNC bending**

   The neutral layer is just at the very bottom.

   Digitally controlled, no wrinkles.

   Minimum cross section deformation, meeting the state of yielding.

4. Non-numerical control bending.

   Overstretching, material deformation, fracture.

inductaflex

Vietnam: B1/7 Nguyen Huu Tri, Tan Tuc Town, Binh Chanh District, Ho Chi Minh City, Vietnam

UK: Inductaflex Limited, Unit 1, Highbridge Court, Telford, TF3 3BD, United Kingdom

Phone: +44 333 939 8888
Email: sales@inductaflex.com

Company Reg No. 9182114
Vat No. GB 209 3749 93