

Suzhou Newlead Augmented Intelligence Equipment Co.Ltd ER4043 ER4047 ER5356 ER5183 ER1100 ER5087 All Kinds Of Alloy 0.8-4.0mm Mig Tig Aluminum Welding Wire manufacturing whole line Note: This quotation includes technical guidance, we provide a complete solutions to help customers produce high quality welding wire

Capacity

N o	Products	Diameter (mm)	Working hours	(Tons/year)
1	(MIG)	1.2	20hours/day	500
2	(MIT)	2.4/3.2	20hours/day	500
	Total			1000

The latest advanced production technology whole line solutions

The	The latest advanced production technology whole line solutions					
No	Name	QTY	Inlet	Outlet	USD/set	Amount
			(mm)	(mm)		
1	NL560/7 straight	1	9.5	4.5~5.5		
	line drawing		4.5~5.5	2.4~3.5		
	machine		6.0	2.4~3.5		
2	NL400/8 Medium	1	2.2~3.0	1.0~1.6		
	size drawing					
3	SP1000 Shaving	2	1.0~2.4	0.8~2.0		
4	NL-5D Layer	2	0.8~2.0			
	rewinding					
5	SCE500 Straighter,	1	2.0~5.0			
	cutting and					
	embossing					
6	Annealing Furnace	1	2T/ furnace			
7	PND800 Metal	30	Loading 250kg			
	bobbin					
8	PND800 Annealing	20	Loading 250kg			
	Metal bobbin					
9		1				
10.		1				
11.	Cold welding	1				
	machine for					
	4.0-9.5mm					
12	Cold welding	1				
	machine for					
	1.0-3.5mm					
13						
	Total					

Equipment introduction:

Drawing Video site:https://youtu.be/4omoThHlU-0



1.NL560/7straight line drawing machine:

Equipment composition:

No	Item	QTY	Specification
1	payoff	1	Cylinder driven lifting rod, easy
			threading
2	560/7 drawing	1	560 capstans, Horizontal,7pcs
3	350 Dancer	1	Aluminum alloy spraying, ceramic
			guide wheel, displacement sensor
3	800 take up	1	Frequency control, DIN800
5	Cabinet	1	PLC control, touch screen, frequency
			control
	TOtal	6	

Main parameters:

No	Item	parameters
1	Speed	Max 8 m/s, running 4~8m/s.
2	Inlet	1. Inlet7.0~9.5mm, outlet 4.5~5.5mm.



	2. Inlet 4.5~6.0mm, outlet 2.4~3.5mm.
Capacity	5000T/YEAR (4.5mm, 5 m/s)
	1800T/YEAR (2.4mm, 6.5 m/s)
Payoff rod	ID580, OD1300, 2T/Coil
Raw	Pure aluminum, aluminum magnesium,
	aluminum silicon welding wire, tensile
	$strength \le 300mpa$
Maximum	Total compression ratio of
compression ratio	equipment≤80%
Drawing dies	OD40mm, T 25mm.
Reel size	DIN800
Direction	Left or right options
Power	18.5*3+22*4+7.5=151KW
Voltage	380V/50Hz (OEM options)
	Payoff rod Raw Maximum compression ratio Drawing dies Reel size Direction Power

[1] Equipment description:

(1). Pull up pay off (as shown in the right figure):

The equipment adopts lifting and pulling method to pay off, and the swing rod of pay off rack is driven by cylinder to lift, which is convenient for threading. The equipment is equipped with disordered line and broken line parking mechanism.

(2) 560/7 straight drawing:

<1>\ Capstans: The diameter is 560mm, the working surface is



sprayed with WC Cemented Carbide, HRC ≥ 58, and the capstans is water-cooled₀

- (2). Drawing dies box: the box body is divided into oil lubrication cavity and cooling water cavity. The mold box can be adjusted in the transverse and angular direction according to the needs. The drawing die of die box adopts water cooling to cool the drawing die.
- <3>. Tuning roller: pneumatic back tension tuning, tension adjustable. The displacement sensor is used to monitor the tension change in the whole process
- <4>. Transmission system: one or two-stage strong narrow V-belt transmission, stable and reliable, convenient maintenance. The power of the first three motors is 18.5kw, and the power of the last four motors is 22KW



(3), 350 Dancer:

<1>\(\). The tension machine adopts box structure, front and rear

safety doors, double light bar guide rail guide, straight bearing, flexible and convenient operation, easy to replace and maintain.

- <2>. The tension machine adopts aluminum alloy spraying ceramic guide wheel, and adopts the upper, lower and second configuration. The constant tension is controlled by pneumatic, and the tension is adjustable.
- <3>. Equipped with displacement detection switch and broken line detection switch.

(4), 800 TAKE UP:

It adopts frame structure, integral boring processing, pneumatic top mounted I-wheel, pneumatic driving I-wheel translation, easy unwinding, including pressure loss protection device and air brake. Frequency conversion speed regulation, motor power 7.5kw, wire arrangement part adopts GP40 light bar wire traverse device, wire traversing stroke and pitch are flexibly adjustable, equipped with air brake.



(5), Electrical control:

The control system adopts AC variable frequency drive, PLC program Office:No 2401 Jingchang TECH park ,CaiXiang road ,Suzhou city. Whatspp:008618913191585 Factory:No 50 Jin san jiao north road,wujing district,Changzhou city www.newleadgroup.com



control, touch screen control, touch screen display speed, wire diameter and other working parameters. Each machine is equipped with inching, front linkage, rear linkage, start, stop, emergency stop and other functions. The man-machine interface of the main console has length preset display and speed preset display. The equipment has the function of die jumping, which can draw wire according to the practical situation.

Free spare parts list

1.Buttons 5 pcs

2.Passes wire wheels 5 pcs

3.Guide pulleys 3pcs

4. Foot switch 2 pcs

5.Two sets drawing dies for 1.35 8pcs

6.Pointing machine 4-10mm 1 set

2. NL400/8 Individual motors straight wire drawing machine:

[1] Equipment composition:

NO	NAME	QTY	Note	
1	800 payoff	1	Pneumatic clamping and brake.	
2	400/8 Drawing	1	400 Capstans, horizontal wire	
			drawing machine	
3	250 Dancer	1	Aluminum alloy spraying, ceramic	
			guide wheel, displacement sensor	
4	800 take up	1	Frequency control, 800 metal boobin	
			take-up	
5	Cabinet	1	PLC control, touch screen, frequency	
			control	
	Total	5		





[1], Parameters:

No	Item	Parameters	
1	Inlet	2.0-3.2mm	
2	Outlet	1.0-1.6mm	
3	Speed	Max 15m/s	
4	Capacity	900T/year (1.35mm)	
4	Material	Pure aluminum, aluminum magnesium,	
		aluminum silicon welding wire, tensile strength	
		≤ 350Mpa.	
6	Maximum	Total compression ratio of equipment ≤ 85%	
	compression		
	ratio		
7	Drawing dies	OD 40mm, T 25mm.	
8	Metal bobbin	800mm	
9	Direction	L or R options	
10	Power	7.5KW*8+11KW=71kw	

[2] Equipment Description:

(1), 800 pay off:

The bottom frame of fuselage adopts frame structure and passive setting out. Make it



work stably during normal start and stop. Pneumatic top mounted I-wheel, pneumatic driving I-wheel translation, easy unwinding, equipped with loss of voltage protection device. The equipment adopts pneumatic brake mechanism and mechanical damping mechanism with adjustable damping.

(2) 400 / 8 drawing machine:

- <1> Roller: the diameter is 400mm, the working surface is sprayed with tungsten carbide, $HRC \ge 58$, and the roller is water-cooled.
- <2> Mold box: the mold box body is divided into oil lubrication cavity and cooling water cavity. The mold box can be adjusted in the transverse and angular direction according to the needs. The drawing die of die box adopts water cooling to cool the drawing die.
- <3> Tuning roller: pneumatic back tension tuning, tension adjustable. The displacement sensor is used to monitor the tension change in the whole process.
- <4> Transmission system: one or two-stage strong narrow V-belt transmission, stable and reliable, convenient maintenance. The power of each motor is 7.5kW.

(3) 250 tension machine:

- <1> The tension machine adopts box structure, equipped with safety doors at the front and rear, double light bar guide rail guide, and linear bearing, which makes it flexible and convenient to operate, and easy to replace and maintain.
- <2> The tension machine adopts aluminum alloy spraying ceramic guide wheel, and adopts upper three and lower two configuration. Pneumatic control constant tension, tension adjustable. Pneumatic control constant tension, tension adjustable.
- <3> It is equipped with displacement detection switch and disconnection detection switch.

(4) 800 take-up:

The fuselage adopts frame structure, integral boring processing, pneumatic top mounted I-wheel, pneumatic driving I-wheel translation, easy unwinding, including pressure loss protection device and air brake. Variable frequency speed regulation, Office:No 2401 Jingchang TECH park ,CaiXiang road ,Suzhou city. Whatspp:008618913191585 Factory:No 50 Jin san jiao north road,wujing district,Changzhou city www.newleadgroup.com



motor power 11kw, wire arrangement part adopts independent motor drive ball screw reciprocating wire arrangement, wire arrangement stroke and pitch are flexible and adjustable, equipped with air brake.

(5) Electrical control:

The control system adopts AC variable frequency drive, PLC program control, touch screen control, touch screen display speed, wire diameter and other working parameters. Each machine is equipped with inching, front linkage, rear linkage, start, stop, emergency stop and other functions. The man-machine interface of the main console has length preset display and speed preset display. The equipment has the function of die jumping, which can draw wire according to the practical situation.

Free spare parts list

- 1.Buttons 5 pcs
- 2. Passes wire wheels 5 pcs
- 3.Guide pulleys 3pcs
- 4. Foot switch 2 pcs
- 5.Two sets drawing dies for 1.35 8pcs
- 6. Pointing machine 2-6.0mm. 1set
- 3:Annealing





Structure: Hot air recycling aluminum rod homogenization furnace is mainly used for aluminum bar, aluminum ingots were hot and nonferrous metal alloy tube, rod aging. Can also be used for general metal parts at low temperature homogenizationheat treatment. Is a kind of aging effect is good, relatively conventional heat energy saving

processing equipment.

processing equipment.	
Material	Aluminum alloy
Capacity	2Tons (L 3.9M*W 2.8M*H 2.9M)
Max temperature	650 °C
Temperature uniformity	±3 °C
Heating way	Electric heating
Temperature control	Automatic temperature
	control,display,record,alarm
Hot air circulation	Horizontal high temperature axial flow
	fan forced circulation
Temperature of furnace wall	Less 15°C except heating brigde
Heat efficiency	Above 65%
Loading way	Rail trolley
Power	100KW

4: SP1000 Shaving :Video site: https://youtu.be/Gwm86aBlwIo





Component:

- 1. PND800 payoff
- 2.Dancer 01
- 3. Shaving machine
- 4. Shoelace cleaning
- **5.Dancer 02**
- 6.PND800 take up.
- 7. Electrical cabinet with PLC and HMI
- 8. Shoelace rewinding machine

Main parameter:

No	Name	Parameter
1	Speed	Max:6m/s, running: 3~5m/s
2	Shaving diameter	0.9~4.0mm
3	Dies size	Φ40×25mm
4	Centre height	1150mm
5	Direction	Right hand

6 Install pov	ver 23KW/380V, 50HZ	
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1.Payoff: PND800 bobbin, pneumatic clamping with a pressure loss protection device, which is equipped with mechanical damping and pneumatic brake mechanism, and the damping is adjustable in size.

2.Dancer 01

- [1] Adopt high-quality MC nylon, and the guide wheel adopts upper 3 lower 2 configuration.
 - [2] Pneumatic control tension control, adjustable tension,
- [3] Adopt the displacement detection switch to detect the tension change in the whole process and automatically control the constant tension, which is more suitable for the setting out requirements of aluminum welding wire and prevents the wire diameter deformation caused by the excessive tension.
- 3. Shaving and polishing with leading and straighter

Shaving: straight device, shaving part, pump station, leading wheel.

- (1). The peeling knife frame adopts two pour peeling method, and the peeling knife holder can be adjusted conveniently, so that the peeling is even. The tool post is equipped with two pumping stations of cooling pump station and lubricating pump station, which is used for cooling of peeling dies and surface polishing.
- (2). The 500 mm traction roller, roller surface spraying tungsten, lapping and polishing, HRC = 55, excellent wear resistance, traction motor power 11KW

4. Shoelace cleaning

- [1] the equipment is composed of power part, belt releasing and retracting system, cleaning part, cleaning liquid heating and supply system, and electrical control system. After twice cleaning, the welding wire is cleaner.
- [2] the liquid supply system requires that the liquid is non corrosive, and the maximum temperature is 60 °C.



- [3] PLC control, touch screen display and input parameters are adopted for the equipment
- 6.Dancer 02: adopt wear-resisting nylon material, guide wheel outer diameter 230mm, pneumatic control tension, and tension adjustable

7.PND800 Take up

- [1] Designed and manufactured with PND800 metal bobbin;
- [2] Adopts the hydraulic top mounted I-shaped wheel, under which the pneumatic driven trolley plate is set, which can realize the lifting and horizontal translation of the trolley plate and facilitate the loading and unloading of the I-shaped wheel.
- [3] Traverse: the ball screw wire arrangement mechanism driven by step motor is used for wire arrangement, which is reliable and stable. It can also adjust the width and pitch of cable arrangement flexibly.
- [4] Adopts frequency conversion speed regulation, motor power is 7.5kW, constant tension take-up.
 - [5] With pressure loss protection mechanism, pneumatic brake mechanism
 - 8. Electrical cabinet with PLC and HMI

Electric control system: the equipment is installed in centralized cabinet, which is easy to maintain and overhaul. HMI,PLC control, variable frequency speed regulation, with linkage, joint stop and emergency stop function, easy to operate.

Main brand

No	Name	Brand
1	Inverter	Inovance
2	PLC/touch screen	Delta
3	Low voltage electrical	Delixi
	apparatus	
4	Motor	Meng niu



5	Bearing	HRB

Free spare parts list

1.Buttons 5 pcs

2.Straight pulleys 5 pcs

3.Motor belts 3pcs

4. Foot switch 2 pcs

5. Shaving dies two sets for 0.9mm and 1.2mm 8pcs

5: NL-5DA Precision wire layer winding machine with automatic pneumatic clamping spool. Video site: https://youtu.be/pNJu6MZX_P4

Component:

- 1. PND800 payoff
- 2.Dancer 01
- 3. layer winding machine
- 4. Electrical cabinet with PLC and HMI



For the layer winding of metal wires such as MIG wire, flux cored wires, aluminum wires, spray wires,

aluminum alloys wires, copper alloy wires, nickle alloy wires. Packing on plastic spools, wire spool or spool coils.

During the production of different diameter of wires, just input the data on touch screen, no need to do mechanical adjustment.

Different fixtures are optional for different packing demand.



Fixture for plastic spool

Fixture for wire spool



Fixture for plastic spool

Different kind of packing



Description	wire precision layer winding machine with auto-matic	
	pneumatic clamping spool	
Model	NL-5DA	
Usage	Layer winding for aluminum alloy wire	
Packing	spool 270/300	
Wire Dia	Ф0.8mm-Ф1.2mm	
Max. Speed	20m/s	
Take up power	5.5KW	
Payoff power	11KW(for 800mm metal reel)	

Free spare parts

1.Buttons 3 pcs

2. Spooling and coiling clamping tool:4 pcs

3.Straight pulleys
4 pcs
4.Motor belts
2 pcs
5.Traverse wheel
1 pcs



6.Ceramic wheels 2pcs

6:Straight cutting embossing line

Video site: https://youtu.be/2gQKB9lxZNA



[1], Equipment composition

		•		
No	Item	QTY	Specification	
1	800 payoff	1	Passive setting out, setting out damping	
			force is adjustable	
2	500 shaving	1	500WC Capstan, branching wire wheel	
3	350 dancer	1	Aluminum alloy spraying, ceramic guide	
			wheel, displacement sensor	
4	Cutting	1	Frequency control, servo motor	
5	Loading box	1	Stainless steel with PVC cushion	
6	Cabinet	1	PLC control, touch screen, frequency	
			control	
7	Tools	1	Three sets of cutting and embossing tool	
	Total	7		



[2] Main parameters

No	Item	Parameters	
1	Speed	Vmax=2m/,running 0.5~1.5 m/s.	
2	MIT	$\Phi 2\sim 5.0 \text{mm}$.	
3	Capacity	500T/YEAR (2.4mm, 2 m/s)	
4	Reels	DIN800	
5	Power	16KW	
6	Voltage	Three phase AC Industrial 380V/50Hz	

[3] Equipment description:

(1) 800 Payoff:

The bottom frame of fuselage adopts frame structure and passive setting out. Make it work stably during normal start and stop. Pneumatic top mounted I-wheel, pneumatic driving I-wheel translation, easy unwinding, equipped with loss of voltage protection device. The equipment adopts pneumatic brake mechanism. The equipment adopts passive setting out mode and mechanical damping mechanism, with adjustable damping.

(2), SP1100 Shaving:

<1> Integral steel groove structure, CNC machining of turret, split structure, 2-die wire drawing and 2-way peeling are adopted to peel off the surface of welding wire effectively.

<2> The diameter of the traction roller is 500mm, the working surface of the roller is sprayed with WC, and the nylon dividing wheel is matched under the traction roller. The equipment is driven by frequency conversion speed regulation, the motor power is 7.5kW, and the pedal inching switch is set to facilitate threading.

<3> The equipment is equipped with circulation system, one for peeling tool circulation cooling, the other for drawing oil circulation lubrication, each Office:No 2401 Jingchang TECH park ,CaiXiang road ,Suzhou city. Whatspp:008618913191585 Factory:No 50 Jin san jiao north road,wujing district,Changzhou city www.newleadgroup.com

circulation system is equipped with circulation pump and lower box.

(3)350 Dancer:

- The tension machine adopts box structure, equipped with safety doors at the front and rear, double light bar guide rail guide, and linear bearing, which makes it flexible and convenient to operate, and easy to replace and maintain.
- <2>. The tension machine adopts aluminum alloy spraying ceramic guide wheel, and adopts upper three and lower two configuration. Pneumatic control constant tension, tension adjustable.
- (3). It is equipped with displacement detection switch and disconnection detection switch.

(4) . host:

The equipment adopts belt push device, double straightening system, and push motor 3KW. Rotary cutting device, servo motor drive, motor power 4kw.

(5) Cutting tools: the equipment is equipped with 3 sets of molds (including 3 cutting tools and 3 pressing molds), and the pressing specifications of molds are specified by the demander, including 5356, 4043 and 4047.

(6) Electrical control:

The equipment adopts PLC control, touch screen control and variable frequency speed regulation. The servo motor drives the shearing system, and the action is accurate and stable.

Main brand

No	Name	Brand
1	Inverter	Inovance
2	PLC/touch screen	Delta

3	Low voltage electrical	Delixi
	apparatus	
4	Motor	Meng niu
5	Bearing	HRB

Free spare parts list

1.Buttons 5 pcs

2.Straight pulleys 5 pcs

3.Motor belts 3pcs

4.Foot switch 2 pcs

5. Shaving dies two sets for 2.4mm 4pcs

7. Aluminum wire drawing oil Full automatic sludge discharge centrifugal filter





Device name	Full automatic slag discharge centrifugal filter	The total power	4. 2kw
Model / type	FL-1500	Import pipe diameter	DN25
Filtering way	Centrifugal separation	Outlet pipe diameter	DN65
Slag discharge way	self-discharging	Air pressure The scope of	0.4-0.6MPa
Maximum capacity	150L/min	Start the way	The inverter Start th
Recommended handling capacity	100-120L/min	The control panel	The touch panel
speed	3200r/min	The control mode	Automatic/manual
Centrifugal force G	1700G	The equipment size	1400*680*1820 (mm)
The main motor	4kw2P. 380V	Working temperature	0~100°C
Vice motor	0. 2kw4P. 380V	Storage temperature	−20~80°C
		Equipment weight	550kg

Others.

Direction: right equipment operation

2 Paint: Paint after rustproof production according to NEWLEAD standards or according to user's requirement.

3. The period of guarantee:

12 months for mechanical part (excluding the consumables) after the shipment;

6 months for electrical parts after the shipment

Permanent maintenances (charge)

- 4. Commission:
- A. Idle-running test will be carried out at our plant with no rough material fed.

 An acceptance test will be carried out with rough material fed at buyer's request.
 - B. Running-test is carried out at buyers' plant; all of the charge for the testers including flight ticket, traffic, salary, accommodation outside makers' plant shall be paid by the buyer.(USD100/DAY)
- C. The buyer supplies all the material for the test, such as Bobbin(Drum), gear oil, Lubricant oil, Dies, Butt welder, Raw Material, Air compressor, test equipment, etc. are excluded.
- Maintenance: NEWLEAD offers long-distance mechanical support for free; if the engineers are needed to be in the buyer's company for maintenance, the buyer offers flight ticket (SHANGHAI), board and lodging. (USD100/DAY)
- 6. Wooden pallets packing for shipping

SPECAIL STATEMENT

All information above are carefully checked, our company reserve explain right if any printing mistake or any misunderstanding.



Another: Sorry for noting no advanced notice for the techniques improvement or upgrade on the machine; Any change on the appearance or color, please refer to the real object

Pictures for reference: