

Specification: 16 wires multi wire drawing machine with annealer

DB120-22-16/DTH140-3000-16/2*DWS630BA
16 wires multi wire drawing machine with annealer

一、 It consist of :

main part		
Description		Qty
DFX1000-16 Payoff stand		1 set
DB 22-16 Drawing machine		1 set
DTH 3000-16 Annealer		1 set
DWS630BA single spooler with dancer		2 sets
MC 100/1.5 Copper powder filtering system (One filter, one heat exchanger and pump included, drawing emulsion tank and connected pipes excluded)		1 set
Pointing machine		1 set
Cold welding machine with dies (0.19-0.40mm)		1 set
PND630 bobbin		60 pcs
Pumps (4 pcs) for drawing and annealer with 2 sets plat type heat exchanger, and the connected pipes and fittings		1 set
Drawing dies and wipes dies(the customer should tell all of the copper wire size)		1 set
50T cooling tower		1 set
Drawing oil (15 drums) and annealer liquid(200kg)		1 set
Electrical control system		1 set
Auxiliary part		
Installation fittings	One set of connection cable for the production line (The method of wire arrangement is underground channel, excluding the inlet wire of main power supply. The length of cable is as the standard foundation drawing, and the user shall bear the cost beyond the standard part of the supplier. Others are allocated by unit equipment.)	1 set
	foundation bolts	1 batch
technical documents	Operation manual (including operation instruction, dies series chart, install instrument, error solution, maintenance, easy to wear parts drawing, electrical wire connection diagram)	1 copy
	main electrical part operation manual	1 copy

	Foundation drawing (including water ,air, power connection indication diagram, based on supplier's requirement, this drawing shall be confirmed within 30 days when contract becomes effective)	1 copy
	Bobbin drawing shall be confirmed with 30 days from the effective day	1 copy
Machine color		
Main part		■√
Mechanical part	Blue, RAL 5015	
Electrical part	Gray, RAL 7035	
Protection door ,cover and rotating part	Orange	
Stainless steel part	Original color	
Operation direction:	Left side for inlet of wire and right side for taking up while operator faces to the drawing machine.	

Speed for reference :

Inlet diameter (mm)	outlet diameter (mm)	speed for annealed wire (m/min)	annealing elongation		Production capacity (8 hours running)KG
16*1.83	16*0.19	1300	22%~30%		2500
16*1.83	16*0.25	1100	22%~30%		3600
16*1.83	16*0.30	800	25%~33%		3800
16*1.83	16*0.40	650	Jump mode	25%~33%	5000
8*1.83	8*0.40	1200		25%~33%	4600

DFX1000-16 payoff stand specifications	
Inlet pulley diameter	Φ126mm
Guide pulley diameter	Φ126mm
speed	Max 250m/min
wire passing method	ladder and platform
basket changeover by	Manually
max diameter for basket	Φ1050mm
Max qty for basket	16pcs
wire Adjustable pulley diameter	Φ38mm

weight	2450kg
L*W*H Reference dimensions	11220mm*2170mm*4000mm
Main parts	
Inlet pulley	Nylon material
Guide pulley	Nylon material
Bearings	Chinese domestic bearing

DB 120-22-16 Drawing unit specifications	
outlet wire size range	16*Φ0.19mm~Φ0.40 mm 8*Φ0.41mm~Φ0.68 mm;
inlet wire size range	Max 16*Φ1.83mmmm (tensile strength 250N/mm ²)
Max mechanical speed	1800 m/min
Applicable material	low oxygen/zero oxygen round copper rod (The raw materials for Copper rod should be from Cathode)
Drawing motor power	45 KW+110KW
Capstan motor power	55KW
Control method	AC control
Drawing cone diameter/Qty	120 mm 21 in total
capstan cone diameter	120 mm
transmission method	Gear transmission
max passes	22
Drawing die diameter * Thickness	Φ25 mm*12mm
Drawing wheel arrangement method	horizontal arrangement
Drawing lubricant cooling method	High pressure spray (high pressure hole for both dies and drawing wheels)
machine body structure	welded with A3 steel plate
drawing wheel cooling method	High pressure oil spraying (driven by gear pump with oil cooling device)
Operation direction	Left side for inlet of wire and right side for taking up while operator faces to the drawing machine.
weight	about 8000 kg
L*W*H Reference dimension	5200mm*1200mm*1450mm
install power	220kVA
Main parts	
main motor	China famous brand
capstan motor	China famous brand
drawing cone ring	Zirconia material (China local brand)

capstan cone ring	Zirconia material (China local brand)
main shaft bearing	NSK brand
main low voltage devices	Schneider and China famous brand
Inverter	Inovance ,China famous brand
PLC	Inovance ,China famous brand
Touch screen	Inovance ,China famous brand
spare parts	
Copper powder filtering system	1set
heat exchanger	1 set
pump	1 set
working condition requirement (prepared by user)	
Applicable ambient temperature	0 ~40
Applicable ambient humidity	≤85% (when temperature is at 20 ±5)
Apply to an altitude of	≤1000m
power supply condition	Three phase : 3×380V (-5%~+10%)
	single phase : 220V (-5%~+10%)
	Frequency : 50Hz (±2%)
Drawing emulsion parameter	concentration : 6%~10%
	PH value : 8.5~9
	working pressure : 0.1~0.2 Mpa
	Inlet liquid temperature : ≤35
	flowing rate : 45m³/h
	Electric conductivity ratio for medium of drawing emulsion : ≤10μS/cm
	conductivity : ≤3000μS/cm
cooling water parameter	working pressure : 0.2~0.4 Mpa
	Inlet liquid temperature : ≤30
	PH value : 7
	(5m³/h for gear oil cooling and 35m³/h for drawing emulsion cooling)
	Hardness : ≤8dH
	Basic requirement: The cooling water shall not include suspended substances, mineral matters, metal impurities, non-soluble matters and corrosive matters.
gear oil parameter	brand : BP-Energol GR-XP100(for reference)
	Qty : about 640L
Dies and other necessary device (for reference only, prepare by customer)	Drawing dies, The customer should tell us all of size for finished copper wire want to produce, so we can prepare from China(this item included our offer)

	50T Cooling tower, we can prepare from China(this item included our offer)
	6m ³ drawing emulsion tank, prepared by customer.
	10m ³ clean water tank, prepared by customer.

DTH140-3000-16 Annealer	
Applicable material	low oxygen/zero oxygen copper rod
working size range	16*Φ0.19mm~Φ0.40mm 8*Φ0.41mm~Φ0.68 mm;
max mechanical speed	1800 m/min
contacting wheel diameter	140 mm
Wiper die diameter * thickness	Φ4mm*4mm
annealing current	Max 3000A DC
annealing voltage	Max 55V DC
annealing capacity	165KVA
annealing method	DC with contacting
driven by	capstan motor via flat belt
electricity conductive wheel cooling method	water type
protection air	Steam Pressure: 0.4 bar Flow: 8kg/h
machine body structure	welded by A3 steel plate
electricity conductive wheel cooling system	0.3m ³ stainless steel tank
	3m ² heat exchanger
	1HP centrifugal type pump
annealing emulsion cooling system	0.5m ³ water tank
	12m ² heat exchanger
	3HP centrifugal type pump
Operation direction	Left side for inlet of wire and right side for taking up while operator faces to the drawing machine.
weight	4800kg
L*W*H Reference dimension	21700mm*1350mm*2240mm
install power	165kVA
main parts	
Annealing controller	Inlet or equivalent brand
Transformer	aiyuede or equivalent brand
main low voltage devices	Schneider or equivalent brand
main shaft bearing	NSK brand

flat belt	Habasit or other equivalent brand
contract ring	nickel alloy
guide pulley	ceramic coated on working surface of groove
spare parts	
copper bus	1 batch
annealing sleeve	1 piece
annealing carbon brush	8 pieces
Note: Copper bus length depends on the seller's standard foundation drawing.	
working condition requirement (prepared by user)	
Applicable ambient temperature	0 ~40
Applicable ambient humidity	≤85% (when temperature is at 20 ±5)
Apply to an altitude of	≤1000m
power supply condition	Three phase : 3×380V (-5%~+10%)
	single phase : 220V (-5%~+10%)
	Frequency : 50Hz (±2%)
Compressed air requirements	Working pressure : 0.6~0.7Mpa
	Fluctuating value : ±0.02Mpa
	Dew point : -25
	flowing rate : 30 m ³ /h
Annealing emulsion	concentration : 0.6%~1%
	PH value : 7.5~8
	Working pressure : 0.2~0.4 Mpa
	inlet liquid temperature : ≤35
	flowing rate : 24 m ³ /h
	conductivity : ≤300μS/cm
	Electric conductivity ratio for medium of drawing emulsion : ≤10μS/cm
electricity conductive wheel coolant	Complete deionized water+glycol solution concentration : 2%
	Complete deionized water)
	PH value : 6.7~7.5
	conductivity : ≤140μS/cm
	total hardness : about 4 degrees
	carbonate hardness : about 2 degrees
	Working pressure : 0.3 Mpa
inlet liquid temperature : ≤30	
cooling water	flowing rate : 5 m ³ /h
	working pressure : 0.2~0.4 Mpa
	inlet liquid temperature : ≤30

	PH value : 7
	flowing rate : (3m ³ /h for electricity conductive wheel cooling and 24m ³ /h for Annealing emulsion cooling)
	Hardness : ≤8dH
	Basic requirement : The cooling water shall not include suspended substances, mineral matters, metal impurities, non-soluble matters and corrosive matters.
dies and other necessary device (for reference only)	wiper dies-Included our offer
	15m ³ clean water tank—prepared by customer.

DWS630BA single spooler with dancer specifications	
working size range	16*Φ0.19mm~Φ0.40 mm; 8*Φ0.41mm~Φ0.68 mm;
Max mechanical speed	1800 m/min
take-up motor power	AC 15kW
control method	AC control
servo traverse motor power	550 W
positioning motor power	15 W
Bobbin capacity(MAX)	500 kg copper
Bobbin size	PND630
brake method	pneumatic
Bobbin loading method	pneumatic(two thimble clamp type)
Operation direction	depends on drawing unit
install power	17kVA
Weight	2500 kg
L*W*H reference Dimension	2050mm*1350mm*2030mm
Main parts	
Guide pulley	ceramic coated on working surface of groove
Main motor	China famous brand
Main shaft bearing	NSK brand or equivalent brand
Main low voltage element	Schneider brand or equivalent brand
Main drive Inverter	Inovance ,China
Main pneumatic element	Taiwan brand or equivalent brand
Spare parts	

Traverse sheaves	1 piece
working condition requirement (prepared by user)	
Applicable ambient temperature	0 ~40
Applicable ambient humidity	≤85% (when temperature is at 20 ±5)
Apply to an altitude of	≤1000m
power supply condition	Three phase : 3×380 V (-5%~+5%)
	single phase : 220 V (±10%)
	Frequency : 50 Hz (±2%)
compressed air requirement (prepared by buyer)	working pressure : 0.6~0.7Mpa
	Fluctuating value : ±0.02Mpa
	Dew point : -25
	Flowing rate : 3m ³ /h
	Note: Compressed air shall be dry, clean and no oil polluted.

The pictures for reference:



