

FOR APPROVAL

SPECIFICATIONFORM/S MNI, (USA)MODEL: HTS05LINE : ROLL FEEDER LINESPEC. No. : 1796K032-RE580410LINE DWG No. : S1-4175FND DWG No. : Q1-2075STANDARD : U. S. A

REV	DATE	DESCRIPTION
<1>		
<2>		
<3>		

* To the Customer *

Please review this Specification, then return to ORII with the Customer's Approval by 'YY. MM. DD..

CUSTOMER'S APPROVAL / DATE

MADE	CHKD	APPD
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1. STOCK SPECIFICATION

Material : SPC
 Surface Treatment : None
 Thickness mm : 0.3 ~ 2.3
 Width mm : 100 ~ 500
 Coil I.D. mm : ϕ 508
 Coil O.D. mm : Max. ϕ 1400
 Coil Weight kgf : Max. 5000
 (Refer to Straightening Performance below)

2. PRESS SPECIFICATION

Manufacture : AIDA
 Model : NC1-150(2)
 Capacity ton : 150
 Press Stroke SPM : 45 (Constant)
 Control Voltage V : 100

2. LINE SPECIFICATION

Max. Line Speed m/min : 20
 Max. Feed Length mm : 700
 Feed Direction : Left to Right
 Pass Line Height mm : 1190 ± 50
 Control Voltage : 24V D.C / 100V A.C
 Power Supply V x Hz x kVA : $460 \pm 10\%$ x 60 x 22
 Step Down Transformer : Provided by ORII (460/220 V)
 Air Supply kgf/cm² : 5 Min.
 Air Consumption Nl/min : 100 (at 20 SPM Releasing)
 Repeatability mm : ± 0.1
 (except for Hard Chrome Feed Roll)
 Finish Color Main Body : ORII NO. 10
 Moving Parts : ORII NO. 05
 Operation Panel : J6-359 : Japanese Standard
 Feed Performance : Refer to Feed Performance
 Max. Releasing Speed SPM : 80
 Straightening Performance

Tensile Strength (Kgf/mm ²)	Stock Thickness (mm)													
	0.3	0.4	0.6	0.8	1.0	1.2	1.4	1.6	1.8	2.0	2.3	2.5	2.8	3.2
40	500	500	500	500	500	500	500	500	500	500	500			
50	K	500	500	500	500	500	500	500	500	500	458			
60	K	K	500	500	500	500	500	500	439	390	333			

K : Stock may not be straightened, due to mechanical limitation..

4. EQUIPMENT SPECIFICATION

4-1 COIL CAR

Coil Car is designed and manufactured to load the next Coiled Stock on the Skid to shorten set-up time, and is provided with the following Devices.

Model	: GC-01H14L05
Lifting Mechanism	: Hydraulic Cylinder ϕ 125 mm $\times$ st 350 mm
Coil Table	: V Skid with Plastic Layer
Electric Supply	: Flexible Cable Duct
Traverse Speed m/sec	: 0.096
Traverse Mechanism	: Electric
Traverse Motor kW	: 0.75
Coil Rotation Device	: None
Coil Side Guide	: Slide Guide
Coil Center Detector	: Manual Push Button
Coil O.D Spacer	: None
Operation Switch	: Hoist Type with 3 m Cable
Rail Scope of Supply	: Supplied by ORII and Installed by the Customer
Rail Installation	: Embedding in Foundation by the Customer : Anchor Bolt by Customer

4-2 UNCOILER (SINGLE)

Uncoiler is designed and manufactured to hold and release inside of coiled stock(s) on the Mandrel by Expansion and Contraction, and to pay off the stock in accordance with Loop Control Signal by Rotary Mechanism.

Model : MW-05HKAA-DZX
Coil Supporting : Single Side
Uncoiler Rotation : None
Mandrel Expansion : Hydraulic
Mandrel Drive Motor : Provided 0.75 kW
Rotation Speed RPM : 6 RPM
Brake : Pneumatic Clutch Brake
Expansion Range mm : 440 ~ 520 mm
Mandrel Center Height: 975 mm
Coil I.D Spacer : None
Coil I.D Spacer Width:
Centering Mechanism : None
Centering Operation : None

* Optional Items *

Name Plate : English
Warning Plate : English

4-3 COIL SIDE GUIDE

Coil Side Guide is designed and manufactured to hold both side of Coiled Stock, and is provided with the following Devices.

Type	: Arm
Setting	: Manual
Adjustment	: Manual

4-4 COIL HOLD DOWN

Coil Hold Down is designed and manufactured to hold top side of Coiled Stock, and is provided with the following Devices.

Model	: GRB
Type	: Straightener
Aux. Coil Hold Down	: None
Mechanism	: Pneumatic
Roll Drive	: Provided
Roll Brake	: None
Roll Specification	: Urethan Coating

4-5 ENTRANCE UNIT

Entrance Unit is designed and manufactured to ease Coil Threading to Straightener, and is provided with the following Devices.

Model	: GU-05
Opener	: Provided / Pneumatic
Knife	: Provided / Pneumatic
Side Guide	: Provided / Handle (1 Layer)
Edge Threading	: Provided / Swing Opener

Straightener is designed and manufactured to straighten coiled stock, and to feed stock to Loop.

ORII Straightener is designed and manufactured to straighten Coiled Stock sufficient for Press Stamping purpose, therefore, uneven partial bent or residual stress may not be removed.

Model	: LHJ05BCAB-X
Transmmision	: Side Gear
Main Motor	: 3.7 kW Variable Speed Motor
Straightening Speed	: 24 m/min. Variable Speed
No. of Work Roll	: Upper 3 / Lower 4
Roll Specification	O.D Length Surface Treatment
Pinch Roll	: ϕ 84 mm x 520 mm Hard Crome Plated
Work Roll	: ϕ 64 mm x 520 mm Hard Crome Plated
Pilot Roll	: None
Back up Roll	: ϕ 66 mm x 80 mm Polished
Straightening Adjustment	: Manual
Straightening Indicator	: Dial Indicator
R Guide Roll	: Urethan

* Optional Items *

Alligator head	: Provided
Name Plate	: English

4-7 LOOP CONTROL

Loop Controller is designed and manufactured to enable Feeder to intermittent operation by keeping proper looped stock between Uncoiler and Straightener.

Loop Controller is provided with sensors to monitor, and to initiate Uncoiler paying off.

Loop Controller : Photo Switch
No. of Controller : 3

4-8 LOOP TABLE

Model : GLM05AAX
Type : Pneumatic Swing
Main Motor : None
Table Surface : Hard Chrome Plated

Feeder is designed and manufactured to feed stock to Press, and is provided with a NC Controller to preset a required length, and to synchronize with Press operation.

Model	:	ACB05JAFX	
Top Speed	m/sec :	1.45	
Acc + Deacc Time	sec :	0.6	
NC Controller	:	CCS H2	
Main Motor	:	2.0 kW AC Servo Motor	
Roll Specification	O.D	Length	Surface Treatment
Upper Feed Roll	:	ϕ 136 mm x 520 mm	Polished
Lower Feed Roll	:	ϕ 68 mm x 520 mm	Polished
Measure Roll	:	None	
Feed Roll Pressure	:	Spring	
Releasing Mechanism	:	Pneumatic	
R Guide Roll	:	Urethan	
Entrance Stock Guide	:	Handle (2 Layer)	

* Optional Items *

Exit Stock Guide	:	None
Remote Switch	:	Hoist Type (3 m Cable)
Feed Master	:	Feed Master only
Step Down Transformer	:	Provided by ORII (460/220 V)
Name Plate	:	English

FEED PERFORMANCE

《FOR CRANK MOTION PRESS》

** INPUT DATA **

TOP SPD	1.457 m/s	ACC/DEC TIME	0.6 sec
MIN. PRESS SPEED	45 rpm	MIN. FEED LENGTH	50 mm
MAX. PRESS SPEED	45 rpm	MAX. FEED LENGTH	400 mm
MAX. FEED ANGLE	0 deg	MAX. LINE SPEED	20.0 m/min
START TIME LAG	0.04 sec	POSITIONING TIME	0.04 sec

** OUTPUT DATA **

FEED LENGTH (mm)	FEED TIME (sec)	FEED ANGLE (deg)	PRESS SPEED (SPM)	FEED SPEED (SPM)	LINE SPEED (m/min)	
50	0.28	0.0	45.0	33.0	1.7	d
75	0.33	0.0	45.0	32.2	2.4	d
100	0.37	0.0	45.0	31.6	3.2	d
125	0.40	0.0	45.0	31.0	3.9	d
150	0.43	0.0	45.0	30.5	4.6	d
175	0.46	0.0	45.0	30.1	5.3	d
200	0.49	0.0	45.0	29.7	5.9	d
225	0.51	0.0	45.0	29.4	6.6	d
250	0.53	0.0	45.0	29.0	7.3	d
275	0.56	0.0	45.0	28.7	7.9	d
300	0.58	0.0	45.0	28.4	8.5	d
325	0.60	0.0	45.0	28.2	9.2	d
350	0.62	0.0	45.0	27.9	9.8	d
375	0.64	0.0	45.0	27.7	10.4	d
400	0.65	0.0	45.0	27.4	11.0	d

a : CONTINUOUS AT MAX. PRESS SPD.

b : CONTINUOUS AT MAX. FEED ANGLE

c : CONTINUOUS AT MAX. LINE SPD.

d : FEED MASTER AT MAX. PRESS SPD.

e.: FEED MASTER AT MAX. LINE SPD.

f : FEED MASTER WITH HALT TIME

REFER TO PRESS SPEC FOR THE MAX SINGLE CYCLE SPEED
IN FEED MASTER OPERATION.

FEED PERFORMANCE

《FOR CRANK MOTION PRESS》

** INPUT DATA **

TOP SPD	0.400 m/s	ACC/DEC TIME	0.6 sec
MIN. PRESS SPEED	45 rpm	MIN. FEED LENGTH	425 mm
MAX. PRESS SPEED	45 rpm	MAX. FEED LENGTH	700 mm
MAX. FEED ANGLE	0 deg	MAX. LINE SPEED	20.0 m/min
START TIME LAG	0.04 sec	POSITIONING TIME	0.04 sec

** OUTPUT DATA **

FEED LENGTH (mm)	FEED TIME (sec)	FEED ANGLE (deg)	PRESS SPEED (SPM)	FEED SPEED (SPM)	LINE SPEED (m/min)	
425	1.44	0.0	45.0	20.2	8.6	d
450	1.51	0.0	45.0	19.7	8.9	d
475	1.57	0.0	45.0	19.3	9.2	d
500	1.63	0.0	45.0	19.0	9.5	d
525	1.69	0.0	45.0	18.6	9.8	d
550	1.76	0.0	45.0	18.2	10.0	d
575	1.82	0.0	45.0	17.9	10.3	d
600	1.88	0.0	45.0	17.6	10.5	d
625	1.94	0.0	45.0	17.3	10.8	d
650	2.01	0.0	45.0	17.0	11.0	d
675	2.07	0.0	45.0	16.7	11.2	d
700	2.13	0.0	45.0	16.4	11.5	d

a : CONTINUOUS AT MAX. PRESS SPD.

b : CONTINUOUS AT MAX. FEED ANGLE

c : CONTINUOUS AT MAX. LINE SPD.

d : FEED MASTER AT MAX. PRESS SPD.

e.: FEED MASTER AT MAX. LINE SPD.

f : FEED MASTER WITH HALT TIME

REFER TO PRESS SPEC FOR THE MAX SINGLE CYCLE SPEED
IN FEED MASTER OPERATION.