



# PAN-PIONEER Co., Ltd.

民鋒股份有限公司

## Specification

### 1. 630mm-61B Tandem Rigid Stranding Machine & Steel Wire Amouring With Side Auto-Loading Equipment [CCCS System]

#### 1.] Machine composition:

- 1.1.) 630mm center pay off stand ..... 1 set
- 1.2.) 6B cage of stranding rotor ..... 1 set
- 1.3.) 12B cage of stranding rotor ..... 1 set
- 1.4.) 18B cage of stranding rotor ..... 1 set
- 1.5.) 24B cage of stranding rotor ..... 1 set
- 1.6.) Die stand for stranding. .... 4 sets
- 1.7.) Fully Auto-loading/unloading fork lifter ..... 4 sets
- 1.8.) Positioning control system with rail way ..... 1 set
- 1.9.) 2000mm dual wheel capstan..... 1 set
- 1.10.) 2600mm floor gate type take-up..... 1 set
- 1.11.) Operation control panel ..... 1 set
- 1.12.) Driving motors. .... 1 set
- 1.13.) Standard spare parts..... 1 set
- 1.14.) CCCS control system (MMI)..... 1 set
- 1.15.) Electrical shaft linking control ..... 1 set
- 1.16.) Modbus control system ..... 1 set
- 1.17.) Wire broken detector ..... 61 sets
- 1.18.) Tension control system..... 61 sets

#### 2.] Main specification:

- 2.1.) Type of machine: Tandem rigid type (Non back twist), independent motor for each cage with electrical shaft linking control.  
Synchronization with capstan motor 75HP through CCCS system control with high speed modbus communication control .
- 2.2.) Application:
  - 2.2.1.) Stranding for round or round compact conductor
    - a.) Copper wire:1.5-4.0mm dia
    - b.) Aluminum wire:1.5-5.0mm
    - c.) Number of conductors: For 7,19,37, 61 and 91 wires
- 2.3.) Cable diameter: 80mm Max.
- 2.4.) Bobbin & drum size:
  - 2.4.1.) Core pay off drum: 2600mm(for 91 wires stranding) is option
  - 2.4.2.) 630mm core wire payoff stand is standard.
  - 2.4.3.) Cradle Bobbin: 630mm DIN standard
  - 2.4.4.) Take up drum: 3000mm/OD.



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#### 2.5.) Pay-off bobbin tension:

- 2.5.1.) Standard: Precision adjustable by tension control system.
- 2.5.2.) Option1: Electrical adjustable Powder brake (standard)
- 2.5.3.) Option2: Electrical adjustable Hysterisis brake.

#### 2.6.) Bobbin loading/unloading: by Auto-front fork lifter

- 2.6.1.) Hydraulic lifter type with high accuracy, speed and low noise.
- 2.6.2.) Fully automatically / manual mode selectable.
- 2.6.3.) Positioning control system
- 2.6.4.) Bobbin positioning plate with rail way and sensors.

#### 2.7.) Lay pitch: Controled by the CCCS system. Pictch can be set via MMI and synchronization automatically.

#### 2.8.) Wire broken detector

- 2.8.1.) PLC control with sensors for each bobbins.

#### 2.9.) Rotation speed:

No.of cage	RPM/Aluminum	Horse Power
(1) 6B ROTOR	320Rpm	HP
(2) 12B ROTOR	240Rpm	HP
(3) 18B ROTOR	200Rpm	HP
(4) 24B ROTOR	150Rpm	HP

#### 2.10.) Arrangement of stranding:

- 2.10.1.) 1<sup>st</sup> process: 1B+6B+12B+18B+24B=61 wires
- 2.10.2.) 2<sup>nd</sup> process: 61B+30B=91 wires (2600mm payoff required)

#### 2.11.) Arrangement of armoring: 6B+12B+18B+24B=60 wires

#### 2.12.) Driving motor:

##### 2.12.1.) Main stranding motor:

- a.) 6B cage :HP AC motor with Vector type inverter
- b.) 12B cage : HP AC motor with Vector type inverter
- c.) 18B cage: HP AC motor with Vector type inverter
- d.) 24B cage: HP AC motor with Vector type inverter
- e.) Capstan motor: HP AC motor with Vector type inverter
- f.) Inching motor: HP AC motor with Vector type inverter

### 3.] Detail specifications: As per No. MS-ST-55D