HEDY



Hedy drive application cases V1.0





About us

Guangzhou HEDY Intelligent Equipment Co., Ltd.(HDIAC) is a professional equipment supplier focusing on the R&D, manufacture and sale of control and drive products. HDIAC has a complete and high-quality supply chain which covers molds, stamping, injection molding, spraying, plug-in, surface mounting, assembling, etc.

Management idea: globally synchronized R&D, independent design and manufacture, international brand operation.

Vision: top supplier of globally synchronized and continuously reliable control and drive products.

Mission: to focus on customer demands, provide competitive control and drive solutions and services, create maximum value for customers continuously, and contribute to China's industrial control business.

Hedy drive's seven firsts of China

- Only China inverter brand who can be successfully into EU market:
- China only one inverter brand with UL certification;
- First company who promises for replacing complete drives for service :
- First company who test drives with 100% full current full load and withstand tests:
- Only one company who adopts automated quality control systems which supervise all process;
- Only one company who makes micro design for IGBT;
- Only one company who provides international IT standard SELV PC accessory for drives



Application industry

Pump	Food processing	Carrying and conveying
Metering pumpCooling pumpVacuum pumpSubmersible pumpMusic fountain pump	 Mixing Chipping Grinding Canned drink	ConveyorLiftGarageWinch

metal processing	Fan	Printing and Packaging
 CNC engraving machine CNC milling machine CNC Lathe/grinding machine Drawing machine 	 Dryer Boiler air blower Air conditioning system Cooling tower	bundling machinelithographyintaglioouter packing machines

ceramic	Textile and Chemistry	Others
Edge grinding machineGlazing machinePackaging machinePalletizing machine	 Dyeing machine Knitting machine texturing machine fiber pulling machine	Treadmill Folding machine Automatic door Industrial washing machine

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Engraving machine spindle motor

Machine Technological requirement :

- Speed stability and small fluctuation
- Speed range from 0 to 30000RPM
- High torque and high precision
- High torque and high precision



- > High range of speed
- High torque and heavy overload capacity
- Adjustable carrier frequency and low noise
- Output frequency stability and high speed accuracy
- Special three-proofing lacquer technique for better protection from oil mist



CNC engraving and milling machine

Machine technological requirement:

- Small fluctuation and speed range from 0-100000rpm
- > Big torque
- Fast Acceleration and deceleration
- Suitable to Engraving machine environment



Solutions and features:

- > High range of speed
- High torque and heavy overload capability
- Output frequency stability and high speed accuracy
- Customized for engraving machines and easy operation And stable reliability



Special material for better protection from corrosion and endurable running

Fabric inspection machine

Machine technological requirement:

- Speed-control flexibility for loosing/inspecting fabric
- High starting torque and Running stability
- Easy operation and stable reliability
- Suitable to high temperature and high humidity environment



- Big torque and compact and tidy feeding
- Special Zero speed torque for fabric inspection machine and keep timing shutdown
- IGBT thermal protection; unique structure design and suitable to hot and humid environment



- Keypad copy function and easy programming
- > UL CE certificated

Terminal crimping machine

Machine technological requirement:

- Fast Acceleration and Deceleration
- Accurate positioning
- Frequent start/stop and high capability for overload
- Stable reliability and good cooling systems



- High performance for fast Acceleration and Deceleration
- Fast Deceleration, good braking system, Accurate Positioning
- Adopt international first-class component for high reliability
- Compact design and saving space for installing



High-speed lathe

Machine technological requirement:

- 0-6000RPM and high torque in whole range
- Stable speed in whole range and little error
- High demand for Acceleration and Deceleration



- Special inverter for high speed lathe and easy programming
- Analog control and stable speed with few error
- Special software as per Lathe characteristic and excellent cutting feature In whole range
- Special Fast Acceleration and Deceleration performance for Lathe and enhancing productivity



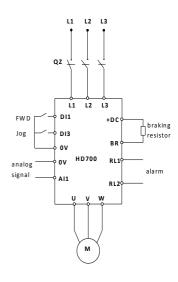
Circular knitting machine

Machine technological requirement:

- High demand for inverters to be suitable for bad environment
- > Frequent Jog and fast response
- Control three phase speed: slow speed for Jog,moderate speed for reinding and fast speed for weaving
- Forbid Motor from Reverse running and rotating



- Suitable to Textile factory harsh environment
- High performance for Acc and Dcc and fast response
- Easy operation and big torque in low frequency
- Adopt international first-class component for high reliability
- > Excellent protections



Stone sawing machine

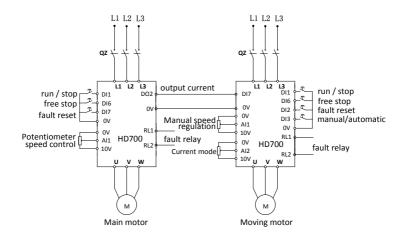
Machine technological requirement:

- > Small starting current to reduce impact to grid
- > Big torque in low frequency and high capacity for overload
- > Suitable to mine harsh environment
- Automatically adjust portable motor speed as per master motor current



Stone sawing machine

- Wide range for Input voltage and better for voltage fluctuation in mine area
- Suitable to South-east Asia voltage and convenient for exporting
- 0.5HZ 150% rated output torque and big starting torque
- Multi-functional I/O and programming Module to meet various special request
- Excellent protections to be suitable to harsh environment
- Manual and auto mode switch off automatically



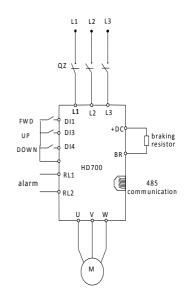
Ceramic Edger machine

Machine technological requirement:

- To be suitable to producing environment of Ceramic industry
- > stable speed
- Fast speed for pushing bricks
- > Easy operation



- IP21 Protection Cover to be better for producing environment of Ceramic industry
- Excellent performance of Acc and Dcc for better pushing Bricks
- Unique EMC design to make system reliable and stable



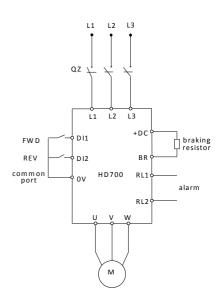
Industrial washing machine

Machine technological requirement:

- Starting with heavy load and big torque in low frequency
- Frequent forward and reverse and strong capacity overload
- Long-time running in humid and hot environment



- To be coated with threeproofing lacquer for harsh environment
- High capacity for IGBT and strong overload capacity
- Inside simple PLC function with multiple speed control and running time
- Big torque in low frequency with 150% rated output torque at 0.5HZ
- Excellent tracking speed function and better for frequent stop and start



Textile dyeing machine

Machine technological requirement:

- High starting torque
- Strong capacity for overload
- Suitable to various complicated humid and hot environment
- > Stable reliability



- Wide input voltage range from 380V -10% to 480V +10%
- Smooth starting and little impact on grid
- High torque in low frequency
- Strong adaptability for harsh environment in Textile industry
- > UL certificated
- > Adopt international first-class component for high reliability



Aluminous shell cleaning machine

Machine technological requirement:

- High request for environment and strong resistance to acid and alkalis
- > Big torque in low speed
- Smooth starting and little impact on grid
- Easy control and easy maintenance
- Powerful overload ability and better protections



- Suitable to harsh environment
- Special three proofing lacquer for better protection and good heat radiation
- Low starting current and little impact on grid
- Build-in advanced Module to achieve various function
- Excellent protections for machinery equipment



Woodworking-circular-saw blade

Machine technological requirement:

- Strong adaptability for wood processing environment
- Easy operation and low-cost electrical equipment
- Adjust feeding moving speed as per master motor current



- ➤ IP21 cover plate design,better protection from dust
- Various I/O terminal and accept multiple signal
- Strong PID function and fast response to adjust feeding speed
- Multiple programming module to help customer lower electrical costs
- Intensive automation design with few man disturbance to lower labor costs



Music fountain

Machine technological requirement:

- Fast response, speed match music pace
- No trip during online Switching on/off
- Excellent ramp slope control and 0-45HZ in 0.3S



Solutions and Features:

- Dual CPU design, more precise control
- Fast Dynamic response ensures wonderful pictures
- High capacity for IGBT, and easy for online Switching on/off
- Compact structure,save more installing space



Multiple protection functions and stable reliability

Stainless steel slitting machine

Machine technological requirement:

- High starting torque
- Powerful overload ability and stable reliability
- Rewinding will automatically come to fast stop when something wrong with winding



- High capacity for IGBT and powerful overload ability
- High torque in low frequency with 150% rated output torque at 0.5HZ
- Excellent software algorithm with small starting current to reduce impact on grid



- Further development platform, add new special functions as per customer's site
- IGBT thermal design and high reliability

Reformation of punching machine

Machine technological requirement:

- Small starting current and power overload ability
- It should not extend working cycle
- Due to high Punch pressure ,it must guarantee product quality
- Easy operation ,safe and reliable



- It has a remarkable result of lowering electricity costs
- Improve power factor and reduce power losse
- Soft start and small current to reduce impact on grid
- Excellent protections ,safe and reliable
- Excellent ramp slope control and keep Punching cycle no changes
- changes

 Better torque performance to guarantee quality



Automatic granule filling and packing machine

Machine technological requirement:

- Fast acceleration and deceleration time and frequent on and off
- > Easy operations, safe, reliable
- > Low quality failure rate
- Small size to save more installing space



- Smooth stating and stop , reduce direct impact on machines to extend service life
- > Stable speed to ensure various precise indicators
- Excellent protections and make producing more safe and reliable
- Compact design and save more installing space
- Adopt international first-class component for high reliability



Entertainment machine

Machine technological requirement:

- Stable running to be safe and reliable
- Big torque in low frequency and power overload ability
- Wide range for input voltage and low quality failure



- Wide input voltage range from 380V(-10%)-480V(+10%)
- ➤ 150% rated output torque at 0.5HZ
- Dual CPU control to be more safe, stable and reliable
- Excellent IGBT thermal design and better protection for IGBT
- Strong further development platform to achieve variable function at site
- Perfect protections to be more safe and stable



Medical filming equipment

Machine technological requirement:

- Fast response and better performance for acceleration and deceleration
- Low noise and big torque in low frequency
- Stable performance and Low failure late
- > Smooth start and stop to more stable



- Excellent ramp slope control ,fast dynamic response and smooth start/stop
- ➤ 150% rated output torque at 0.5HZ
- Inside EMC filter ,low radiation to make system more stable
- Perfect protection to be more reliable and safe



Stone cutting machine

Machine technological requirement:

- Flexibility for Grid
- Small starting current and little impact on grid
- High torque in low frequency and powerful overload capacity
- Equipment can work in harsh environment



- Inverter will not stop when comes to a temporary fluctuation of voltage
- Powerful overload ability and 150% rated current in one minute
- ➤ Big torque in low frequency with 150% output torque at 0.5HZ
- Standard DC choke to improve power factor and reduce harmonics
- Special measures taken to protect from dust and humidity,more stable and reliable



Infrared Bridge Cutter Machine

Machine technological requirement:

- High torque in low frequency and powerful overload ability
- Easy operation and low costs for electrical equipment



Equipment should be running well in dust, humid environment

Solutions and Features:

- Excellent performance for 150% output torque at 0.5HZ
- Multi-functional I/0 terminal, input and output various signals

dust and stone

- Strong programming logic which reduces related electrical accessories to lower costs
- accessories to lower costs

 > Professional IP21 solution for better protection from



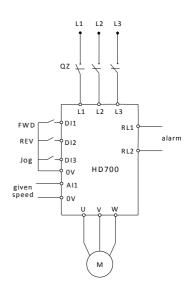
Ceramic polishing machine

Machine technological requirement:

- It can work in dusty and humid environment
- > Frequent start and stop
- Fast acceleration and deceleration with high precision
- High torque in low frequency and powerful overload capacity



- ➤ Excellent performance for 150% output torque at 0.5HZ
- ➤ IP21 cover plate design better suitable for ceramic harsh environment
- > Excellent ramp slope control and fast response
- ➤ Low harmonics to reduce disturbance and make system more stable



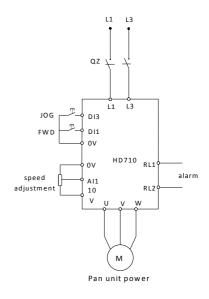
Label printing machine

Machine technological requirement:

- Equipment requires fast speed with maximum 1m/s
- Big torque in low frequency,stable speed with high precision
- Low noise and high efficiency



- Dual CPU control to be more precise
- Soft start and little impact on machines
- Adjust carrier frequency automatically and lower noise of equipment
- No fluctuations during whole speed adjustment



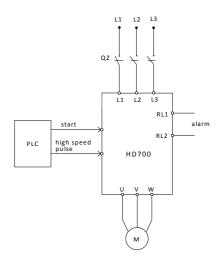
Ceramic packing machine

Machine technological requirement:

- It requires that inverters perform well during fast stop and start
- > PLC control to make system stable and reliable
- It can accommodate to harsh environment such as dust



- Inverter has high speed pulse terminal which accept0-50Khz pulse signal
- Fast acceleration and deceleration ,motor runs with low noise
- Precise current with function of voltage limiting
- Dual CPU control to be more precise
- IP21 cover plate for better protection from dust



Drawing machine

Machine technological requirement:

- Big torque in low frequency and powerful overload ability
- > Stable speed
- Easy for adjustment
- Good adaptability in the new environment



Solutions and Features:

- Excellent performance for 150% output torque at 0.5HZ
- High capacity for IGBT and powerful overload ability
- Stable and precise output frequency
- Adaptable to harsh environment in drawing machine industry



Strong PID function to make system more stable and smooth

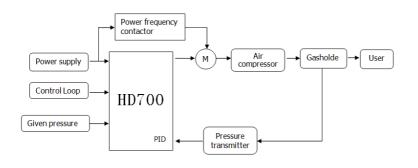
Compressor

Machine technological requirement:

- Small starting current and little impact on grid
- High precision for pressure control
- Easy operation and excellent in energy –saving



- > Easy maintenance ,energy saving to lower costs
- > PID control to make pressure stable
- > Lower compressor noise
- > Extend compressor service life



Leather machine

Machine technological requirement:

- Big torque in low frequency
- Adaptable to harsh environment
- > Stable reliability
- Perfect protections



- Vector control and good torque in low frequency
- Special PCB coating technique, more adaptable to harsh environment
- First-class branded component to make quality reliable
- Perfect protections for motor and equipment



Oilfield oil pumping machine

Machine technological requirement:

- Adaptable to high temperature
- Adjustable stroke times and stable production
- Reduce mechanical wear and enhance motor protection



- Increase power factor and save energy
- > Wide range input voltage
- > Big starting torque
- Reduce mechanical wear and lower maintenance costs
- > Perfect protection for motors



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