COVER MANIPULATORS, RUNNERS & BAR CHANGERS

HYDRAULICS/ELECTRICS

Woodings hydraulic and electrical systems are integrated systems that are completely designed, engineered and manufactured by Woodings to our specifications. To maximize your profits and the need for fine tuning, all Woodings systems are tested and inspected as one unit, prior to shipping.

Designs are available for:
- Continental goods and mills
- Cast house floor equipment
- Tubular equipment

Hydraulic Equipment:
- Hydraulic power units
- Hydraulic control consoles
- Hydraulic loge remote reservoir
- Side folding systems
- Cables
- Hydraulic power units

Electrical Systems:
- PLC control and, if required, automation systems
- All systems fault tested and screen displayed
- Automatic option available
- Electrical control console
- Screen display by touch (jig
- Radio control available

Bringing the most reliable, most innovative hot metal equipment to applications around the globe.

CAST HOUSE EQUIPMENT

Woodings' 100+ years of involvement in all aspects of the hot metal process has provided us with a unique and profound understanding of the industry's mechanical and environmental requirements. The Woodings line of products has consistently met the ever changing needs of the world's line and casthouse.

If you need it, we can make it.
**CAST WOODS HOUSE OVERVIEW**

Woodgrip is the world's largest and most innovative manufacturer of pneumatic drills and chisels. By combining the latest technology with superior engineering, Woodgrip creates the world's most advanced, most reliable gun and drill, each designed to exceed customer specifications and manufactured to perform brilliantly and efficiently under the toughest labor-intensive environments.

**Construction**
- Hydraulic cylinder may be longer than clay barrel diameter
- 90 Newtons on clay pressure
- Large clay shot holes for clay injection
- Cylinder and valve assembly adapted or adapted with clamp
- Face of head is adjustable
- Cylinder rod has protective cover in clay end area
- Hinge prevents any damage
- Replaceable nozzle tip
- Cylinder plate shall be flat

**Operation**
- Operation mounted in place for repair
- Vertical adjustment +/- 45
- Lateral adjustment +/- 15
- No pressure
- Hydraulic pressure
- Hydraulic system designed pressure: 49,400,000 psi
- Hydraulic operating pressure: 49,400,000 psi
- No leaks pressure: 208,000,000 psi (over 48 hours)
- Clay of vertical ±50: 20 psi
- Setting time: 12-15 minutes
- Electric motor
- Nitrogen injection
- Directional control
- Automatic stop

**Hammers/Drifters**

**Operation**
- Automatic pneumatic action
- Efficient pneumatic operation provides excellent performance in all climates
- No leaks pressure
- Clay of vertical ±50: 20 psi
- Setting time: 12-15 minutes
- Electric motor
- Nitrogen injection
- Directional control
- Automatic stop

**Guns/Drills**

**Construction**
- Hydraulic cylinder may be longer than clay barrel diameter
- 90 Newtons on clay pressure
- Large clay shot holes for clay injection
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**DRILLS**

Woodgrip offers a variety of drill designs each perfectly adaptable to your specific labor-intensive environment. All drills may be equipped for water flush drilling. Options include:
- Column utilized
- All hydraulic
- Hydraulics contained with governor
- Conventional, sanding box and/or water line drilling
- Fully automated operation
- Electric motor driving entire length

**HAMMERS/DRIFTERS**

Woodgrip offers a variety of hammer designs, each perfectly adaptable to your specific labor-intensive environment. Woodgrip drills and chisels are considered the "standard" in the U.S. Industry. Woodgrip offers the widest range of drills and chisels including:

- All hydraulic
- All pneumatic
- All electric

**Operation**
- Electric pneumatic action
- Efficient pneumatic operation provides excellent performance in all climates
- No leaks pressure
- Clay of vertical ±50: 20 psi
- Setting time: 12-15 minutes
- Electric motor
- Nitrogen injection
- Directional control
- Automatic stop

**Guns/Drills**

**Construction**
- Hydraulic cylinder may be longer than clay barrel diameter
- 90 Newtons on clay pressure
- Large clay shot holes for clay injection
- Cylinder and valve assembly adapted or adapted with clamp
- Face of head is adjustable
- Cylinder rod has protective cover in clay end area
- Hinge prevents any damage
- Replaceable nozzle tip
- Cylinder plate shall be flat

**Operation**
- Operation mounted in place for repair
- Vertical adjustment +/- 45
- Lateral adjustment +/- 15
- Other hydraulic
- No pressure
- Hydraulic pressure
- Hydraulic system designed pressure: 49,400,000 psi
- Hydraulic operating pressure: 49,400,000 psi
- No leaks pressure: 208,000,000 psi (over 48 hours)
- Clay of vertical ±50: 20 psi
- Setting time: 12-15 minutes
- Electric motor
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- Automatic stop
CAST WOODING

Woodgrip is the world’s largest and most innovative manufacturer of hand and impact tools. By combining the latest technology with superior engineering, Woodgrip creates the world’s most advanced, most reliable hand and impact tools, each designed to meet or exceed the world’s toughest performance standards and manufactured to perform reliably and efficiently even under the harshest labor-intensive environments.

GUNS/DRILLS

Design

Guns and drills are heavy duty weight-loaded roller bearings for durability by proprietary cylindrical design for longer life. The guide has variable stroke and adjustable lead angle for ease of use. Woodgrip offers tools with hand power to drive fasteners through tough materials. Woodgrip’s clamping systems are designed for efficiency and durability. Guns are designed to meet today’s need for greater strength and weight. Design checks, including finite element analysis, ensure lower operating stresses and longer life. Woodgrip’s designs give its guns the highest required noise pressure while maintaining heavy-duty construction.

CONSTRUCTION

Hydraulic cylinder can be larger than clay barrel diameter (4" x 39" x 39" pressure). Large chisel nose for clay handling. Cylinder and motor adjusting assembly for clamp and adjustment. Cylinder solid bore and end protectors coated in clay rotate. Clay only in clay barrel. Reverser for mixing and handling. Reversible gear box. Chisel solid barrel. Operation

Hydraulic mounted lip 
Vertical adjustment ± 4°
Lateral adjustment ± 10°
Clay capacity 4-6 gpm
Hydraulic power 60 hp
Hydraulic system design pressure: 250,000 psi
Hydraulic system pressure: 250,000 psi
Noads pressure: 250,000 psi
Speeds (rev/min): 1-3
Clay sections 50-100 steps
Steer time: 12-15 seconds
Electric motor
Lip location detection
Front end defeating
Automatic operation

Hammers/Drifters

Hammer/Drifts are designed for high and low pressure, low impact energy. final results:

Operation

Cuts, uniform lip
Latter operation thicknesses to lower operating cost
Minimized deflection and machine damage

Woodgrip offers a variety of drill designs perfectly adaptable to your specific material environment. All drills can be upgraded for harder wood drilling. Options include:

- Column-milled
- All hydraulic
- Hydraulic equipped with generator
- Conventional, single-stage gun and/or 2-stage drill
- Fully automatic operation
- Electronic arm restoring feature

Woodgrip offers both drill and drill equipment to suit the needs of any commercial drill operation.
CAST WOODS OVERVIEW

Woodgrips is the world’s largest and most innovative manufacturer of precision drills and chisels. By combining the latest technology with superior engineering, Woodgrips creates the world’s most advanced, most reliable guns and drills, each designed to meet specific specifications and manufactured to perform brilliantly and efficiently even under the harshest battle environment.

**GUNS/DRILLS**

**Design**

Woodgrips heavy-duty and industrial roller bearings for durability by proprietary roller design for larger sizes. The hypoid gears with internal seal and seals shaft hard for reliability in severe battle environments for longer service life. Woodgrips chisels’ designs are designed for today’s need for greater strength and lighter weight. Design checks, including finite element analysis, ensure lower operating stresses and longer life. Woodgrips designs its guns to support the highest required no-fire pressure while maintaining heavy-duty construction. The end result: efficiency.

**Construction**

- **Hydralic cylinder**: May be longer than clay barrel diameter (4 lbs at 4.4 gpm)
- **Large chamfer on slipper for clay handling**
- **Cylindrical and non-cylindrical adapted assembly with clamp**
- **Tapered adjustment and hydraulic cylinder**
- **Cylindrical end has protective cover in case of side and end**
- **Lights in case running rings (removes crane and related tools)**
- **Wide range for easy assembly**
- **Replaceable saddle mouth**
- **Chromed plated clay barrel**

**Operation**

- **Vertical adjustment** = 90°
- **Center adjustment** = 10°
- **Full capacity** = 8.0
- **Clay capacity** = 0.9
- **Hydraulic system design pressure** = 344,400,000 psi
- **Hydraulic operating pressure** = 300,000 psi
- **Heads pressure** = 344,400,000 psi
- **Clay intake 90° = 50 seconds**
- **Climbing time 10-15 minutes**
- **Broadside location**
- **Special accessories**

**HAMMERS/DRIFTERS**

**Operation**

- **Vertical adjustment** = 90°
- **Center adjustment** = 15°
- **Other**
- **Hydraulic system design pressure** = 344,400,000 psi
- **Hydraulic operating pressure** = 300,000 psi
- **Heads pressure** = 344,400,000 psi
- **Clay intake 90° = 60 seconds**
- **Climbing time 12 minutes**
- **One machine can set 45 points**
- **Adjustable hinge, (removable movable) to straight line of path**
- **Inclined plane of ground elevation**
- **Pneumatic clay pull 6600 & (9000 KG)**
- **Manual clay pull 2000 & (4000 KG)**
- **Softened clay 3 lbs (1.5 kilograms)**
- **Wide variety of drills**

**Features**

- **Close, uniform layout**
- **Other features make them to lower operating cost**
- **Maximum durability and minimal damage**

**Operation**

- **Efficient pumping** is made up of clay pipes that realize the economic value of the clay pipes.
- **Efficient bonding**. hydraulic systems that ensure at the end of the year.
- **Other features**
- **Clay pipe**
- **Waste and waste materials**

**DRILLS**

Woodgrips offers a variety of drill designs each perfectly adapted to your specific terrain management. All drills may be equipped for water-in-drill drilling. Options include:

- **Column modelled**
- **Air hydraulic**
- **Hydraulic combined with protection**
- **Dissolution: shooting line and wind and wind drilling**
- **Fully advanced operation**
- **Hydraulic mixing of hypoid height**

**HYPIDRILL**

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COVER MANIPULATORS, RUNNERS & BAR CHANGERS

HYDRAULICS/ELECTRICS

Using the latest technologies and 100 years of technical expertise and know-how, Woodings provides equipment that delivers long-term reliability and efficiency. Often designed to customer specifications, Woodings’ equipment is always designed to allow maximum productivity and economical operation.

**Manipulators**
Compact and able to be efficiently handled through standard center with manual override back-up. Runners include:
- Instand positioning and your choice of operation
- Optional operator is hydraulic and may be ordered
- Portable or fixed type platforms installed

**Runners**
Two types of designs depending on customer specification and suitability for cast houses. Their specifications, both are available in hydraulic, electromechanical or pneumatic operation with manual back-up.

- **Wedge type design:**
  - Requires no relocation
  - May be retracted from above or lowered to below cast house floor
  - Continued

- **Crude type design:**
  - Requires less attention
  - One runner is O/I into the cast house floor
  - Home (edge does not have to be disengaged) when cast is replaced

**Bar Changers**
Hydraulically operated between various sound drill or spacing bars from a rack and place the end or bar into the tap hole or drill. Also removes a sound bar from the drill and places it into the rack.
- **Operator:**
  - Hydraulic operators and hydraulic valve stand
- **Control:**
  - Hydraulic power supplied from the control panel and tap hole drill (hydraulic system)

Woodings hydraulic and electrical systems are integrated systems that are completely designed, engineered and manufactured by Woodings to our specifications. To minimize scrap, setup time and the need for fine tuning, all Woodings systems are tested and inspected at our own cost, prior to shipping.

**Designs are available for:**
- Fireproof gates and grills
- Dust-free floor equipment
- Electrical equipment
- Hydraulic equipment
  - Hydraulic power units
  - Hydraulic control valves
  - Hydraulic leg/leg reservoir
  - Side filling systems
  - Control
  - Hydraulic pumps
  - Hydraulic control valves

**Electrical System**
- PLC control
- Displayed, automation systems
- All systems tested and screen displayed
- Automatic operation available
- Electrical control systems
- Screen display by type (hyd)
- Radio control available

**CAST HOUSE EQUIPMENT**

Bringing the most reliable, most innovative hot metal equipment to applications around the globe.

Woodings 100+ years of involvement in all aspects of the hot metal process has provided us with a unique and profound understanding of the industry’s mechanical and environmental requirements. The result: a new and improved product line that consistently meets the ever-changing needs of the world’s foundry operators.

If you need it, we can make it.

Woodings Industrial
WWW.WOODINGS.COM

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COVER MANIPULATORS, RUNNERS & BAR CHANGERS

HYDRAULICS/ELECTRICS

Using the latest technology and 100 years of technical expertise and know-how, Woodings provides equipment that delivers long-term reliability and efficiency. Often designed to customer specifications, Woodings equipment is always designed to allow maximum productivity and essential operation.

Manipulators

Compact and able to be efficiently operated through remote control with a manual override back-up. Features include:

- Hydraulic positioning and your choice of operating speed
- Optional speed is hydraulic and may be reduced to pedestrian or other lower platform speed

Runners

Two types of designs depending on customer specification and suitability of cast house floor configuration. Both are available in hydraulic, electromechanical or pneumatic operation with manual back-up.

Wedge type design:

- Higher cost innovation
- May be extended from above or lowered to below cast house floor
- Commercial

Crude type design:

- Requires less maintenance
- Actuators fitted to the cast house floor
- Bulk load does not have to be disassembled when ready to replace

Crude type design:

- Requires less maintenance
- Actuators fitted to the cast house floor
- Bulk load does not have to be disassembled when ready to replace

Woodings' hydraulic and electrical systems are integrated systems that are completely designed, engineered and manufactured by Woodings to our specifications. To maximise your profit margins and the need for fine-tuning, all Woodings systems are tested and inspected on an ongoing basis prior to shipping.

Bar Changers

Woodings' mechanical design ensures minimal wear and tear on the bar itself. The bar is disassembled before the bar is cooled and then reassembled when the bar is ready to be husked. The bars are then husked and ready for sale. The main advantage of Woodings' bar changers is that they enable the operator to have a production line of bars ready for sale without having to husk the bars.

Bringing the most reliable, innovative hot metal equipment to applications around the globe.

CAST HOUSE EQUIPMENT

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If you need it, we can make it.