**Xinzhong Group – Dalian & Fushion - Foundry & Machining Shop**

**(China Foundry #1 & 2 – Sand & Investment)**

Quality Certifications

* ISO9001:2008 and TS16949:2009

**Ferrous Metals Cast – Sand & Lost Foam Foundries**

* Dalian Xinzhong Foundry - Sand cast, ductile iron, austempered ductile iron (ADI), vermicular cast iron, grey iron, alloy iron, alloy steel, non-ferrous metal.
* Fushon Foundry – lost foam – steel, stainless steel, low / high alloy steel

**Capacity of castings – Sand Cast**

* Gross weight range from 5 lbs to over 22,000 lbs
* Annual Capacity: over 25,000 tons.

**Capacity of castings – Lost Foam**

* Gross weight range from 1 lb to approximately 660 lbs

**Product Specialties – Sand Casting**

* Diesel engine components
* Vehicle chassis system components
* Agriculture, automotive, heavy equipment parts;
* Pump, valve & impeller components
* Components of metallurgical machinery;
* Manufacturing & installation of electromechanical products.

**Product Specialties – Lost Foam Casting**

* Automotive, machinery, equipment and other industry castings
* Engine mount brackets, container corner castings, ground engagement tips (small to 660 lbs), many other components under from 1 to 660 lbs.

**Main Sand Foundry Facility**

* SAVELLI Fully automatic molding line (green sand) from Italy;
* 15 tons/hour double arm fixed resin sand mixer.

**Supported with**

* Cupolas and electric furnaces;
* Fully automatic sand preparation machine;
* Core making machine;
* Molding machines;
* Shot blasting machine;
* Software system: HUAZHU CAE casting simulation and ERP management

**Foundry Inspection Equipment**

* Physical and chemical testing center and detection labs. With functions of chemical analysis, metallographic test, mechanical property, molding sand test, etc.
* Advanced inspection equipment like German OBLF spectrometer (direct reading);
* ZEISS metallographic microscope;
* Hydraulic universal strength tester;
* Hardness testing machine;
* Ultrasonic testing instrument.

**Casting Technique**

 Full-auto molding line, molding machine, resin sand molding, resin-coated sand for shell molding, lost foam.

**Xinzhong Group - Machining Shop**

* Newly built machining shop，construction area: 8,000 m2;
* Annual capacity for flywheel assembly of diesel engines: over 150,000 sets；
* Annual capacity for flywheel housing of diesel engines: over 100,000 pcs；
* Annual capacity for bracket & bear cap: over 600,000 pcs.

**Main Machining & Inspection Facilities**

* Sets of imported vertical and horizontal machining centers;
* CNC vertical and horizontal lathes;
* Hobbing machine;
* Detection equipments including CMM;
* Gear shape & gear direction measuring instrument;
* Roughness tester;
* Dynamic balancing inspection, etc.

***Dalian Huarui Heavy Industry Steel Casting Co., Ltd.
(DHHISC – Heavy Steel Foundry & Machine Shop)***

Quality Certifications: ISO9001:2008, ISO18000 and ISO14000

Capabilities: Sand Castings and Machining – resin sand – Magma & Procast

Material: Carbon steel, low-alloy & hi-alloy steel - -30,000 tons per year

Max. size: 10m x 10m x 5m

Casting range: 2000 lbs to over 520,000 lbs

Machining: 5.5m CNC miller, 5-axis miller, vertical lathes, faro laser, leco spectrometer, 12MV x-ray accelerator

Markets Served: Hydro, wind, steam & gas turbines, nuclear, shipbuilding, mining, heavy industries

Common Components: Turbines, rudders, crushers, load arms, valves, gears, drive lines

Major Customers: Alstom, Toshiba, Hitachi, Mitsubishi, Voith, Skoda, Krupp, Andritz

Other: Pouring simulation, sand recycling / reclamation