

Ducast Factory LLC

List of equipment and facilities

Infrastructure	
Area (Sq.Ft)	Area of plot 312,284 Built up area 94,299
Electricity	<u>Transformers</u> 1 x 660 kVA (11.5 kV/580 V) Transformer 1 x 865 kVA (11.5 kV/580 V) Transformer 2 x 1500 kVA (11.5 kV/400 V) transformer 1 x 210 kVA (575V/380V) Transformer)
Ferrous Melting - Medium frequency induction melting furnace.	
Make	Inductotherm India Limited Ltd , India
Specification	1500 kW / 2000 kg x 2 Crucibles (Year: 1996) 750 kW/1000 kg x 2 Crucible (Year: 2008) 550 kW x 1000 kg (Year: 2006) 175 kW/300 kg x 1 Crucible (2002)
Accessories	Cooling water pumps, heat exchanger and cooling tower for above.
Non - Ferrous Melting - Induction melting furnace.	
Aluminium melting	50 kW/180 kg/90-120 kg per hour @ 700°C
<u>Chemically Bonded Sand Moulding Moulding</u>	
Make	Omega Foundry Machinery Ltd , England.
Mixer	10 Ton / Hour Articulated Continuous Mixer-1 Unit (1996) 20 Ton / Hour Articulated Continuous Mixer- 1 Unit (2012) 6 Ton/Hour Pivotal Continuous Mixer-1 Unit (2012)
Reclamation Unit	Shakeout deck, Vibratory elevator, Cooler classifier & Pressure vessel
<u>Green sand moulding</u>	
Moulding Machines	Pneumatically Operated Simultaneous Jolt Squeeze Moulding machines Model: ARPA-900 - 2 No, Make: Disa India Ltd, India Box: 980x980 Model: SMFA-900 - 2 No, Make: Sarvamangala Ers.(P) ltd, India Box: 980x980 Model: SMFA-600 - 2 No, Make: Sarvamangala Ers.(P) ltd, India Box: 800x700 Model: SMFA-300 - 2 No, Make: Sarvamangala Ers.(P) ltd, India Box: 485x485
Mechanized Sand Plant	1x 800 kg Intensive Sand Mixer. Make: Belloi, Italy 2 x 450 kg Intensive sand Mixer. Make: VME, India Connected to New Sand/Return Sand Hoppers, Belt Conveyors, Magnetic Separators, Polygonal Sieve, Bucket elevator and on line sand aerator Semi Automatic knock out machines with vibratory grid. Moulding lines comprising pallet cars on rails to convey moulds and moulding boxes
<u>Core making</u>	
Mixer & Core shooters	3 x 150 kg sand mixer 3 x Automatic Cold box core shooter.
<u>Metal & Material handling</u>	
Ladles	1 Ton Self Lock Treatment cum pouring ladle x 2 No Make: A-1 Roper, UK 1 Ton Cap x6 SG Treatment ladles with tundish cover Lip pouring ladles of various capacities.
OH Cranes	3 x 5.0 Ton Cap. Double girder EOT Crane at Main bay 1 x 1.0 Ton Cap Single girder EOT Crane at Pouring bay 1 x 1.0 Ton Cap Mono Rail EOT Crane at Pouring bay 3 x 3.2 Ton Cap. EOT Crane at moulding, blasting, fettling bay bay 2 x 3.2 Ton Cap. EOT Crane at moulding, blasting, fettling bay bay 1 x 5.0 Ton Cap. EOT Crane at Machine Shop 1 x 5.0 Ton Cap. EOT Crane at Fettling Shop

<u>Painting</u>	
	Open yard painting booths - With pallets on rails to convey the items to be coated Airless spray machines. Paint mixing machines.

<u>Pollution control - Dust Collectors (with Polyester needle felt filter bags)</u>	
Shot blast machines (Nesco)	1 X Single Cassette Filter Dust Extraction System Make: Disa Model: GKDD 1.1/2.2/90
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Tumblast machines	1 x Single Cassette Filter Dust Extraction System Make: Disa India Model: GKVD 0.8/1.8/40
Sand reclamation unit (6T Mixer)	1 x Twin Cassette Filter Dust Extraction System Make: Disa Model: GKFD 1.1/2.2/100
Sand reclamation unit (10T Mixer)	1 x Twin Cassette Filter Dust Extraction System Make: Disa Model: FD 520/100
Sand reclamation unit (20T Mixer)	1 x Twin Cassette Filter Dust Extraction System Make: Disa Model: GLDFO 1.2/2.2/90 & GKFD 1.1/2.2/90
2T - Induction furnace	1 x Cassette Filter Type Fume Extraction System Make: Disa model: DS 513/4.00/400
Sand plant	1X Cassette Filter Dust Extraction System Make: Disa India Model: FS 513/450/450

Under erection & commissioning

Dust collection systems	Fettling Booths with Dust Collectors Make: Neoairtech India Pvt. Ltd
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Vehicles for delivery

	5 x 5 Ton Cap 1 x 10 Ton Cap 4 x 20 Tons trucks from Transport Company of own group
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Sand testing	<p>1. Digital Universal Strength Machine For Green Compression Strength and Green Splitting Strength Make: Kelson's Testing Equipment, India S.No.: 0279 Year: 2012</p> <p>2. Digital Wet Tensile Testing Machine Make: Versatile Equipments (Pvt) limited, India Model: VWT S.No.: 080101</p> <p>3. Digital Absolute Permeter (Permeability Test) Make: Simpson Technologies, USA Model: 46367 S.No.: 0511311 (2011)</p> <p>4. Rapid Sand Drier with Digital Weighing Scale (For Moisture test) <u>Sand drier:</u> Make: Versatile Equipments (Pvt) limited, India Model: VRD S.No.: 990702 <u>Digital Weighing Scale</u> Make: SHIMADZU Model: UX 620 H S.No.: D 446418682 Readability: 0.001 Grams</p> <p>4. Digital Moisture Analyzer (110 Gram) Make: Simpson Technologies, USA (Ohaus Corporation) Model: MB25 Year: 2011</p> <p>5. Sand rammer with tube filler accessory Make: Simpson Technologies, USA Model: 42100C Model: 0811001 (2011)</p> <p>6. Rapid Clay Washer Make: Versatile Equipments (Pvt) limited, India Model: VWT S.No.: 060402</p> <p>7. Rapid Sieve Shaker Make: Versatile Equipments (Pvt) limited, India Model: VUD</p> <p>8. Muffle Furnace Size: 175 mm x 175 mm x 280 mm Height Max Temp.: 1050 Deg.Cent</p> <p>9. Facilities to test Methlene Blue Clay (Active Clay) and AFS Clay</p> <p>10. Digital Mould Hardness Tester Make: Versatile Equipments (Pvt) limited, India Model: VMHD .No.: 110803</p> <p>11. Mould hardness Tester B-Scale Make: Versatile Equipments (Pvt) limited, India Model: VMHB S.No.: 111222</p>
Molten metal temperature measurement	<p>6 No x Portable Immersion Pyrometer Model: Tempstick-529 Make: Ajay Syscon (Pvt) limited, India</p>
Coating inspection	<p>Digital Thermometer to measure substrate temperature (Elcometer -212) Digital Dew Point Meter (Air temp./Dew Point/RH) (Elcometer 319) Coating Dry Film thickness Gauge (Elecometer-345FB) Dial Thickness Gauge (Elcometer 124) with Testex Replica Tape Zero Plate and Foil Thickness Gauges for Calibration of above</p>
Dimensional inspection	<p>Verniers Height Gauges Micrometers</p>
Weighing Scale	<p>2 No x Electronic Digital Crane Scale with heat protection shield Make: EHP, Germany, Model: KGW 5, Cap: 5 Ton, S.No.: 13517 & 13518 Year: 2011 Purpose: Liquid metal weighing</p> <p>1 No x 400 kg Digital Paltform Scale Make: Cardinal, USA</p> <p>1 No x 500 kg Analog Weighing Balance</p>