



Specification for Dust Collector of Die Casting Machine

Machin Aluminum Die Cast Part

Site New plant in Mexico

Approval	
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Revised	Mo./Date	Created	

Dust Collector for Casting Machine
General matter

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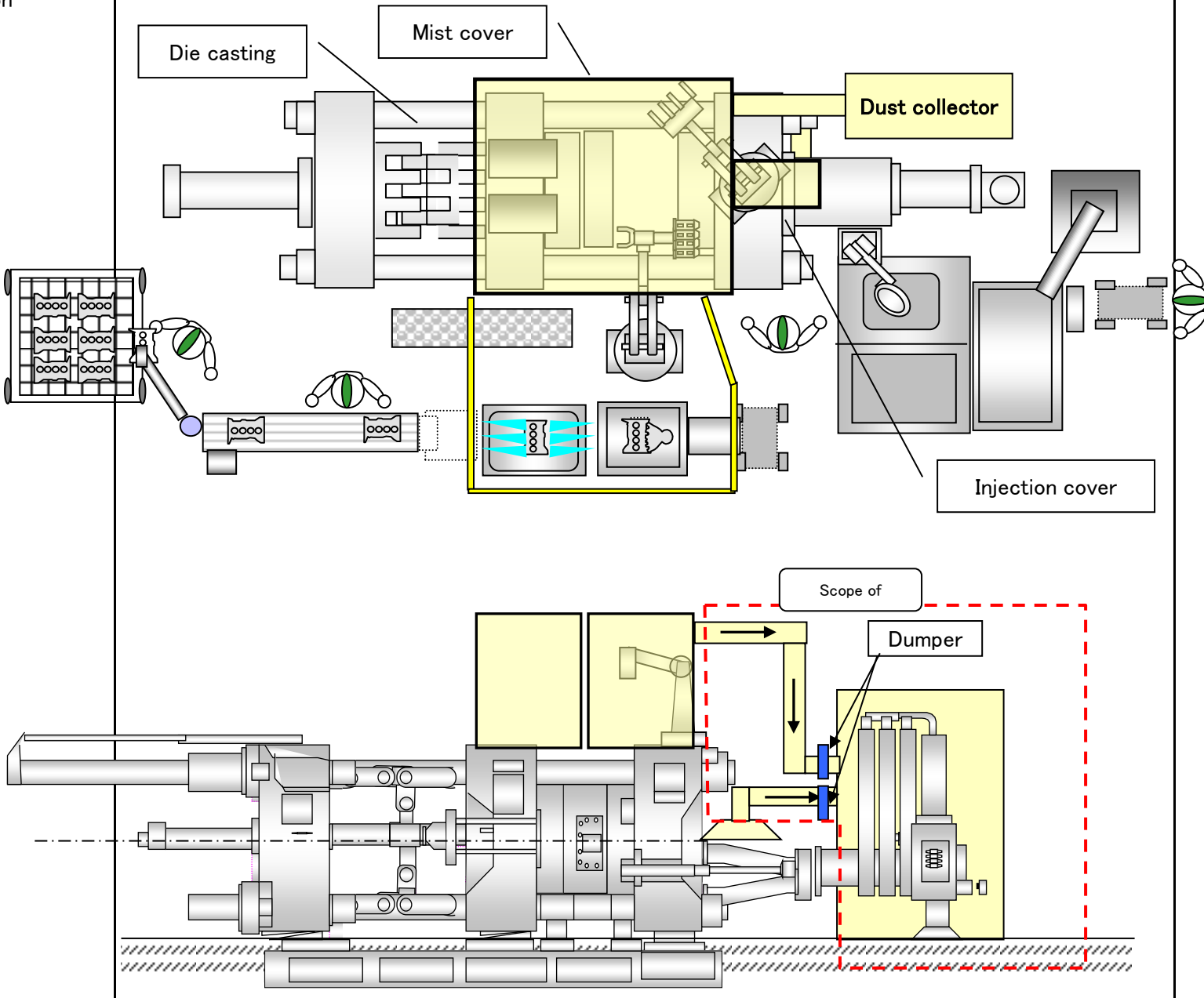
Category	Content of Specification	Remarks
1. Summary	To install a dust collector to catch oil smoke, spray fluid, steam, etc. generated from die cast machine in HP casting plant in the new plant in Mexico.	
2. Delivery time	To complete installation on site in the plant in Mexico in mid June, 2013. (Detailed schedule will be separately arranged) Mass production is scheduled to start in February, 2014.	
3. Installation location	Celaya, State of Guanajuato, MEX On the side of die casting machine inside HP plant	
4. Scope of specification	<p>Complete set of design, fabrication, packaging, transport, insurance, tariff, trial operation adjustment as well as cost of on-site installation of the dust collector and instruction training to operators.</p> <p>1) Installation of one unit of the above-mentioned dust collector for each die casting machine, total of two units.</p> <p>2) Duct construction from duct connecting point of the mist cover of the die casting machine to dust collector. (To be decided upon separate consultation.)</p> <p>3) Installation construction to the designated location of dust collector.</p> <p>4) Complete set of document to be submitted separately</p> <p>5) Delivery of list of recommended replacement parts and spare parts as well as spare parts needed for regular cleaning for half year based on the regular cleaning cycle.</p>	
5. Outside scope of specification	(1) Construction of primary power source Power source: 480V 60Hz 3-phase Supplier will handle transformation if required.	
6. Legal and technical	<p>Domestic laws and regulations concerning safety, environment, etc. in Mexico will take precedence over all other laws and regulations.</p> <p>HM mechanical equipment safety standard, HM equipment maintenance specification as well as specification for equipment reliability and safety provision (electrical specification) must be complied with.</p> <p>•HM mechanical equipment safety standard, HM equipment maintenance specification and electrical specification shall be presented separately. (To be attached to this specification at the time of ordering)</p> <p>•Order of priority of document provided by HM shall be as follows in case the same item is covered.</p> <p>①HM mechanical equipment safety standard ②HM electrical specification ③HM equipment maintenance specification ④This specification</p>	
7. Responsibility of construction	Supplier shall be entirely responsible for the operations related to design fabrication, disassembly, and installation adjustment.	
8. Period of assurance	<p>(1) Warranty period shall be for one (1) year from the date of receiving.</p> <p>(2) During the Warranty Period, any and all accident, failure, and malfunction arising due to the Supplier's design, material, fabrication, etc. shall be corrected as soon as possible and free of charge by the Supplier.</p> <p>(3) Supplier must inspect, investigate, adjust and repair free of charge for any malfunction arising due to the Supplier after Warranty Period.</p>	

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9. Operation and training of maneuvering	Supplier must give necessary explanation for individual equipment and safety related matters such as maneuvering, operation, and maintenance and give practical guidance and training so that concerned parties can master its operation.	
10. Document for submission	<p>(1) Quotation: 3 copies Details of each item must be clarified in accordance with this specification.</p> <p>Details of equipment main unit, installation work expenses, and SV cost must be clarified.</p> <p>(2) Approval drawing: 3 copies Document embodying the entire quotation conceptual drawing must be submitted. HM must confirm content of approval drawing and return to Supplier with inserted comment.</p> <p>Supplier must execute changes from review in approval drawing and obtain HM's approval after resubmitting the approval drawing.</p> <p>(3) Overall drawing, assembly drawing, electrical circuit diagram, control panel related drawing, process sheet (that clarifies details from ordering to installation completion), etc.</p> <p>(4) Drawings to be always kept inside the control panel shall be kept inside a special transparent folder separate from operation manual.</p> <p>(5) Parts list: 2 copies Lists of equipment in use, parts, consumables, etc.</p> <p>(6) Equipment control manual: 3 copies List of control items, inspection sheet, inspection sheet for starting up operation, emergency contact</p> <p>(7) Document to be submitted to governmental agencies: 1 original copy</p> <p>Certificate and permit as required by laws as well as legally stipulated legal document (HM will investigate domestically required documents in Mexico in advance and notify which documents are required.)</p>	
11. Condition for receiving	<p>(1) Equipment must be delivered and installed in designated location and pass in the sessions attended by Supplier and by HM</p> <p>(2) All the content of equipment specification and minutes of preparatory arrangement must be satisfactorily met.</p> <p>(3) All the document for submission must be prepared and submitted.</p> <p>(4) All the content of equipment receiving report must be consulted and completely addressed by countermeasures.</p>	

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<p>1. Basic specification</p>	<p>(1) Type The dust collector is self standing on the floor and is a compact package style and absorb collected dust with bag filter, etc. It must be a type that can be easily washed and cleaned.</p> <p>(2) Standard air volume Over 230 m³/min</p> <p>(3) Dust collection efficiency Over 95%</p> <p>(4) Suction diameter from mist cover Φ500mm</p> <p>(5) One unit of dust collector must be installed for one unit of die casting machine.</p>	
<p>2. Installation location</p>	<p>(1) Installation location of the dust collector will be as follows. Details will be decided by a separate arrangement.</p>  <p>(2) Dust collector collects oil smoke, etc. from the upper mist cover of die casting machine as well as upper cover in the injection part.</p>	

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3. Safety and maintenance specification	<ul style="list-style-type: none"> (1) In case a flame is detected inside duct, dumper will close in front of the main unit of the dust collector and fire spread must not reach dust collector (2) The above-mentioned dumper can be handled either automatically or manually. (3) Dust collector must not be automatically activated unless the dumpers in two locations are open. (4) Mechanism other than the above-mentioned is acceptable if the mechanism is provided inside dust collector to prevent fire spread (fire extinguish mechanism using inert gas) (5) The frequency of washing the filter, etc. must be less than once a month and washing must be easy to conduct. (6) Frequency of filter replacement must be once in 3 to 6 months or more and replacement must not be required as long a period as possible. (7) Filter clogging must be confirmable from outside and alarm, display, etc. must enable workers to confirm it. (8) Noise must be cancelled to less than 85dB in a location 1m away from dust collector. (9) Equipment must be fixed with hole-in-anchor, etc. so that it will not be overturned. (10) The operation of dust collector must stop when lid, etc. is taken off while the inside of dust collector is inspected and investigated. Or, lid etc. must not be removable unless the equipment is stopped. (11) Inside of the duct must be resistant to corrosion and the material must prevent easy adhesion of oil and smoke. (12) Duct must be connected by flange and be easily attachable and removable. 	
4. Use environment	<ul style="list-style-type: none"> (1) In-plant temperature about 15°C~30°C (without A/C equipment and forced air exhaust only) (2) Aluminum die cast plant (Mass production plant with three (3) die casting machines in the future) (3) Production operation of 5 days a week. Shutdown on Saturdays and Sundays basically (about 250 working days annually) (4) Full production for 24 hours from Monday to Friday. Workers take 3-shift structure. 	