TECNOELASTOMERI



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About Huntsman:

Huntsman Corporation is a publicly traded global manufacturer and marketer of differentiated and specialty chemicals with 2016 revenues of more than \$7 billion. Our chemical products number in the thousands and are sold worldwide to manufacturers serving a broad and diverse range of consumer and industrial end markets. We operate more than 75 manufacturing, R&D and operations facilities in over 30 countries and employ approximately 10,000 associates within our four distinct business divisions. For more information about Huntsman, please visit the company's

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CASTECH™ machines, general description

CASTECH™ machines are a low-pressure, equipment solution for the efficient metering, mixing and hot casting of elastomers based on two or more components. Using CASTECH™ machines, it's possible to produce high-grade elastomers with a very high mix quality, based on MDI, TDI and NDI prepolymers, or microcellular foam systems. Customizable in multiple ways, CASTECH™ machines are the flexible elastomer equipment choice - enabling you to specify your perfect processing machine.

- Metering: CASTECH™ machines can be equipped with either mass flow meters or a manual calibration system depending on your preference.
- Mixing: CASTECH™ machines are equipped with a dynamic mixer, designed specifically by our team, to achieve the perfect mix quality.
- Tanks: We've developed a range of main component tanks in separate sizes, which feature a vacuum load system and a highly efficient degassing system to prevent air bubbles in the cast material.
- Pumps: The production needs of each customer can vary, so
 we've designed different sized machine pumps that can deliver a
 wide range of output rates ranging from 150g/min to 60,000g/min.
- Circuits: CASTECH™ machines can be fitted with up to four main component circuits and up to seven auxiliary circuits for additives, colors or catalysts. Injected simultaneously into the mixing head,

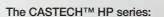
these circuits enable the efficient casting of a wide range of materials. All main component and auxiliary circuits have a full recirculation system plus independent pressure adjustment for both delivery and return loops – reducing the risk of pre-fluxes during batch casting.

- Output: To maintain a constant flow rate and a dosing precision of ±0,3%, the output of our CASTECH™ machines is managed via a programmable logic controller (PLC).
- Casting: CASTECH[™] machines are designed to perform continuous and batch casting with the same degree of precision – minimizing material and solvent waste.
- Software: All CASTECH™ machines are supported by a special software system with a user-friendly interface that provides complete control over every operational element of the casting machine from calibration to maintenance.
- Seals: CASTECH™ machines can be equipped with different seals to accommodate the use of assorted cleaning fluids, including dibasic esters (DBE) and chlorinated solvents.
- Flushing: Flushing of the mixing head is managed by the CASTECH™ TM software system to reduce waste and ensure equipment gets a proper flush.



The CASTECH™ LC series:

The CASTECH™ LC machine series is our standard equipment solution. With the potential to add up to four main component circuits, and up to seven auxiliary circuits, which can be injected concurrently in the mixing head, the LC series is the right choice for elastomers producers looking for a precise, reliable dosing machine with extraordinary performance features. Fully customizable, and with a range of optional extras available, CASTECH™ LC machines have an output range spanning 150g/min to 60,000g/min – making them suitable for use in different production and application scenarios.



The CASTECH™ HP machine series takes casting performance to the next level. Fitted with an innovatively designed casting head and a high-speed mixing head motor, CASTECH™ HP machines can reach up to 10,000 RPM – making them ideal for the processing of next generation polymer systems including microcellular foams. CASTECH™ HP machines are equipped with a highly flexible casting arm, which enables the easy casting of molds of every shape and size. Designed to reach output rates of up to 100,000g/min, CASTECH™ HP machines can also be fitted with a larger mixer for the casting of big size parts.

The CASTECH™ DB9 series:

Our CASTECH™ DB9 machine series is our lab-scale equipment solution. Smaller in size than our standard LC machine series, CASTECH™ DB9 machines provide the same precise, accurate, dosing quality – making them a great choice for laboratory tests and trials. Just like our other CASTECH™ machines, the DB9 series can be tailor- made to suit requirements and fitted with up to four main component circuits and six auxiliary circuits. Depending on the pump installed, the CASTECH™ DB9 series machines can reach an output rate ranging from 150g/min up to 6,000g/min.





