

STAINLESS STEEL CASTINGS NICKEL STEEL ALLOYS CENTRICAST AND MECHANICAL TUBES

INTERNALS FOR CONTROL VALVES

Our Company is active in production of cast and centricast valve parts since more than 50 years now. During this long period we have developed a lot of products and targeted our production towards high corrosion resistant alloys, for application mostly in oil and gas, power, chemical, sea water desalination, flue gas desulfuration, military and dairy industries. Main cast products in our sand foundry are valve and pump in special alloys. With this background we have developed many years ago also production of centricast internals for valves (seats for gate and ball valves, but mostly also cages for control valves). We are supplying at present this type of components to a lot of Leading World Valve Producers.

Alloys for internal cages

They are mostly: martensitic for carbon and low alloyed steel bodies, and in higher alloys for stainless or high corrosion resistant materials, normally in the same material of the body. A complete set of our alloys can be derived from our web <u>www.fondinox.com</u>. Most of them are covered by Trade Name of well-known International special alloy Producers, like Sandvik, Outokumpu, Haynes Intl.. A complete set of Norsok qualifications are available (see Statoil TR2000 List of Approved Manufacturers). We are also present in the approved vendor lists of all major International Oil & Gas Companies or related Engineerings, due to our long cooperation with them in projects.

Sizes of produced cages

We can produce through horizontal centrifugation process pipes with dimensional range: OD 90 up to 1200m, ID from 50 up to 1150mm (control valve cages generally don't present limitations on ratio between diameters, because they are rather thin), lengths up to 4700mm, weights up to 5000 Kgs. Through vertical centrifugation we can produce not only ring type of pieces, but also shaped (flanged parts) with OD from 300 up to 1400mm, ID from 200 up to 1300mm, lengths up to 1250mm, individual raw weights up to 4000 kgs. Pictures of these items are enclosed to present communication.



Basic execution

In premachined condition or (sometimes) also unmachined because each valve Producer exerts on such items complicated, but also completely different machining processes, which normally require special fixtures.

Tests and certifications

Our material is normally provided with a full set of tests and certs in strict accordance to Customer or Project MDS. Full liquid penetrant inspection is a standard control, upon request we can also submit martensitic components to ultrasonic test or XRay. This second NDE is mostly devoted to all other alloy families, which in cast execution make UT test troublesome. All type of destructive tests can also be performed and certified in our lab. Upon request we can also provide material with full 3.2 certification, including Third Party Authority interventions.





A lot of internal cages for control valves are in martensitic alloy A352 CA6NM (13Cr/4Ni) and A747 Cb7Cu (17/4PH). We maintain also for these supplies a relevant stock of pipes, where we can grant a very short lead time (few days). Stock availability can be checked directly from our web www.fondinox.com // Pipes Stock // Alloy Designation.



We would be honored in receiving your inquiries for this type of products, where we guess to be really highly specialized.



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