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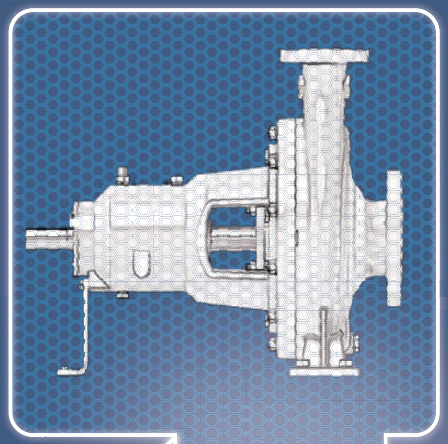
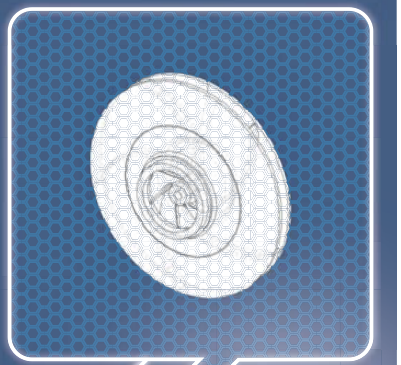
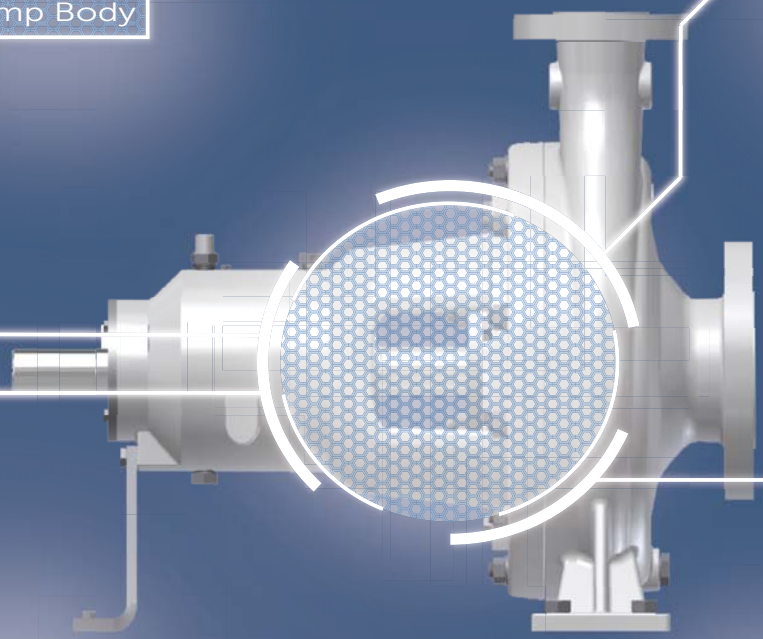

Pump Body

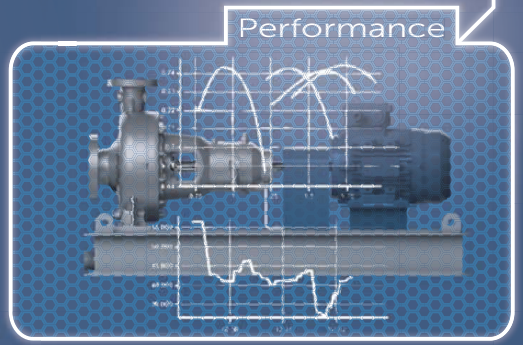

Impeller



API 610 CENTRIFUGAL PUMP

www.ipc-centrifugalpumps.com


Volute


Performance

www.ipc-eng.com

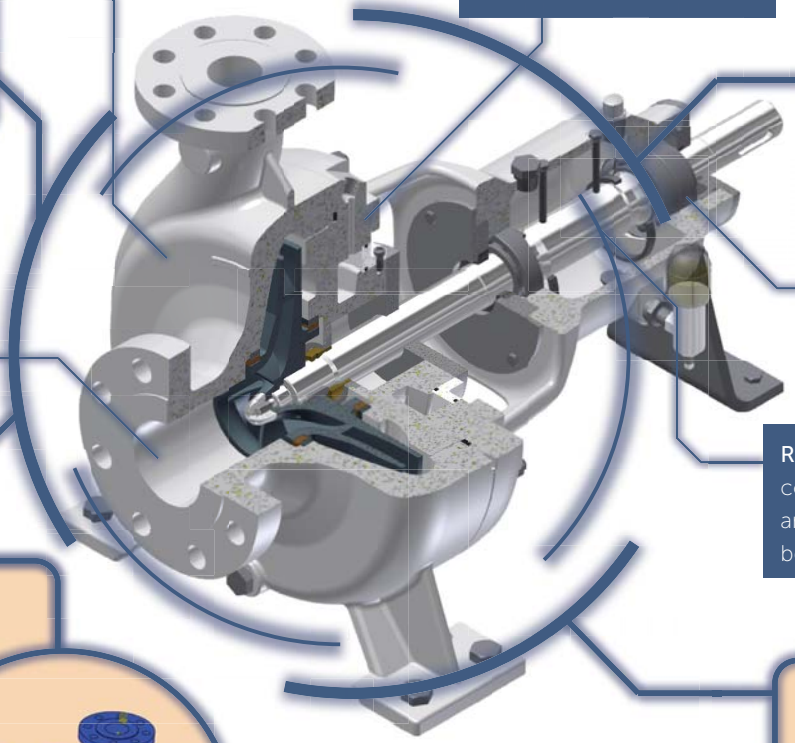
IPC OH1-OH2 type pumps are horizontal single stage, radially split, hoverung, with top-end / top-top execution, in foot-mounted or centerline-supported configuration.
Pumps are manufactured according to **API 610/ISO 13709** specs, and feature an **ISO 21049/API 682** compliant seal chamber and are fully customizable to meet customer performances and service requests.
Each pump is duly engineered following advanced design criteria based on computer simulations and analysis, while manufacturing is executed following state of the art methods and using latest production technologies.
Pumps are designed to withstand the high pressure and temperatures required by API 610 design criteria and are provided with all-metal flexible element, spacer-type coupling.

Pump case is of rigid design with a generous wall thickness, giving good protection against erosion and corrosion.
Pressure containing part structural designed according to ASME sect.VIII Pressure vessel, and verified with computer FEM analysis.

Radially split casing and assembly back pull-out design allows mounting/ dismounting operations without piping and driver disconnection, simplifing maintenance operation.

API Applications
- Process hydrocarbons, Petroleum refining, production and distribution
- Petrochemical and chemical processing
- Gas industry services
- Boiler circulation Water/Condensate extraction
- Foul water
- Biofuels
- Solar
- High-temperature applications
- General industrial

General Purpose Applications
- Municipal water
- Domestic water
- Irrigation

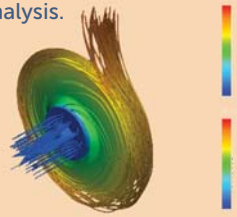


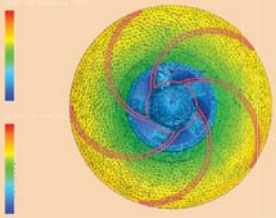
Nozzles casted integrated
Raised Face Flanges are to ASME B16.5 criteria for Class 300.
Surface finish meets ISO 13709/API 610 standard.
Allowable nozzle loading acc. to Table 4 of API 610.
Both top-end and top-top executions are available.

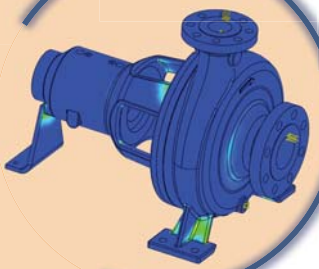
A couple of back to back single-row, angular contact ball bearings for high double-acting axial thrust capability.
Oil bath lubrication assures the bearings long-life.

Rugged Shaft Design to be fully compliant with API 610 shaft deflection and run-out criteria, extending rotor, bearing and seal life.

IPC Centrifugal pumps have been designed for high performances and high efficiency using latest technology engineering tools, following an integrated design process.
IPC pumps hydraulic design is developed using CFD techniques and integrated with advanced structural FEM analysis.







- **High efficiency hydraulic design developed with CFD techniques**
- **Advanced structural analysis (FEM).**
- **Hydraulic-structural integrated design process**

ISO 21049/API 682 Seal Chamber allows a wide variety of seal configurations, including dual pressurized and unpressurized cartridge types for the most severe services. The jacket system allows seal chamber cooling/ heating using with the standard API 682 seal flush plan 02.

IPC Engineering and Quality Process

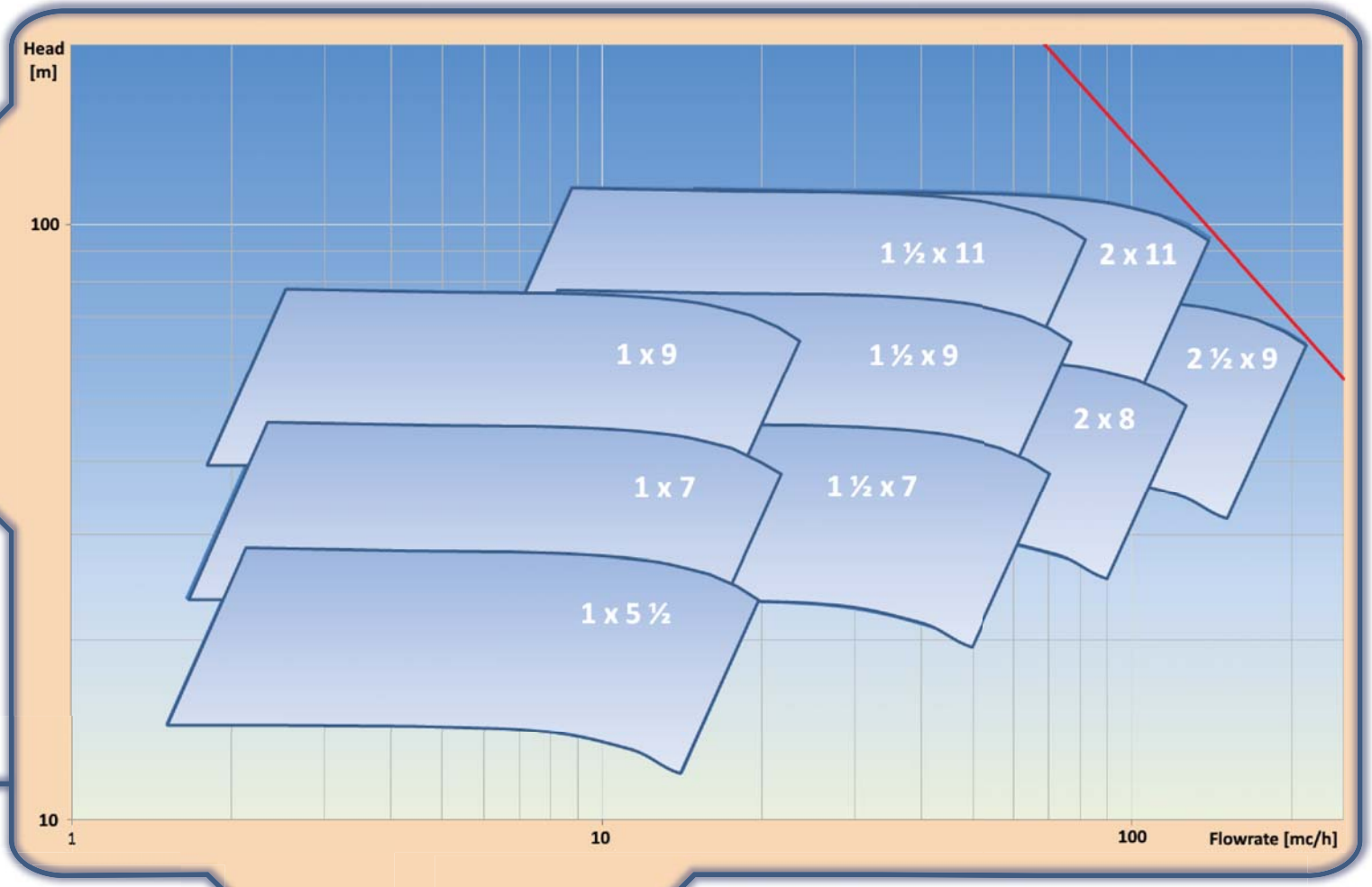
API 610 Pump Design
Customized hydraulic design with full CFD analysis
Integrated Mechanical and Structural design with CFD and FEM methods

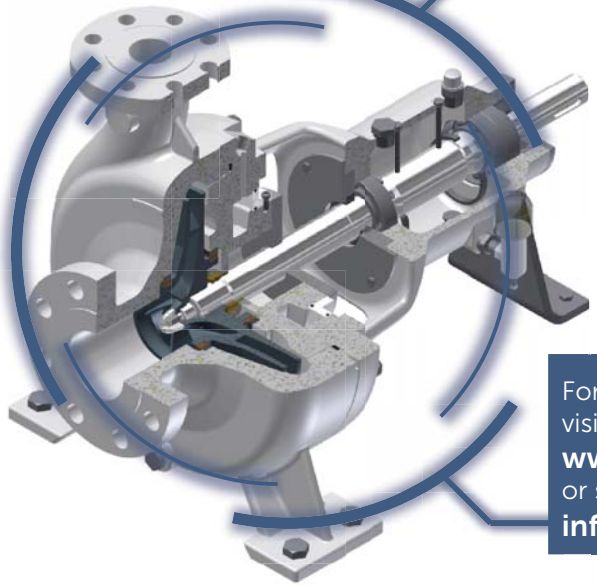
Manufactoring with latest machining Technologies
Quality certifications, materials, controls and final tests according to API 610

- **Dimensional controls**
- **High speed multi-planes Balancing machines**
- **Performance and NPSH test bench**

COMPREHENSIVE PERFORMANCE TESTING

A critical function of any pump manufacturer is the **performance testing** of their product to ensure that it meets design specification.
IPC Pump Test Bench is designed to provide **performance and NPSHr tests**.
The heart of the IPC Test Bench is its custom designed IPC Automated Pump Test Software that allows all system parameters to be monitored and controlled from a central control station.
The automated software provides precise system control to achieve and maintain specific operating conditions so that data from precision electronic sensors can be collected and recorded for use in verifying pump performance.





n = 2950 rpm

Pos.	Pump model	Max Impeller Diameter, in.	Connections NPS		Flow rate Q [mc/h] (@Max Impeller Dia)		Head H [m] (@Max Impeller Dia)	
			Suction	Discharge	Min	Max	@Qmin	@Qmax
1	1 x 5 ½	5 ½"	1 ½"	1"	4	20	28.5	23.5
2	1 x 7	7"	1 ½"	1"	4	21	46	38
3	1 x 9	9"	1 ½"	1"	5	23	77	64
4	1 ½ x 7	7"	2 ½"	1 ½"	15	70	46	38
5	1 ½ x 9	9"	2 ½"	1 ½"	16	76	76	63
6	1 ½ x 11	11"	2 ½"	1 ½"	16	80	115	95
7	2 x 8	8"	3"	2"	25	125	60	50
8	2 x 11	11"	3"	2"	30	140	115	95
9	2 ½ x 9	9"	4"	2 ½"	45	210	76	63

For a customized quote,
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or send an e-mail at:
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