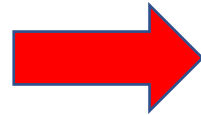


# Solution of Precision Casting Replaces Sand Casting



Ideal if you want the cost effectiveness and high quality of sand casting with the precision of investment casting, which target medium to large components ranging from 50-600KG.



# Solution of Precision Casting Replaces Sand Casting



## Advantages compared with sand castings:

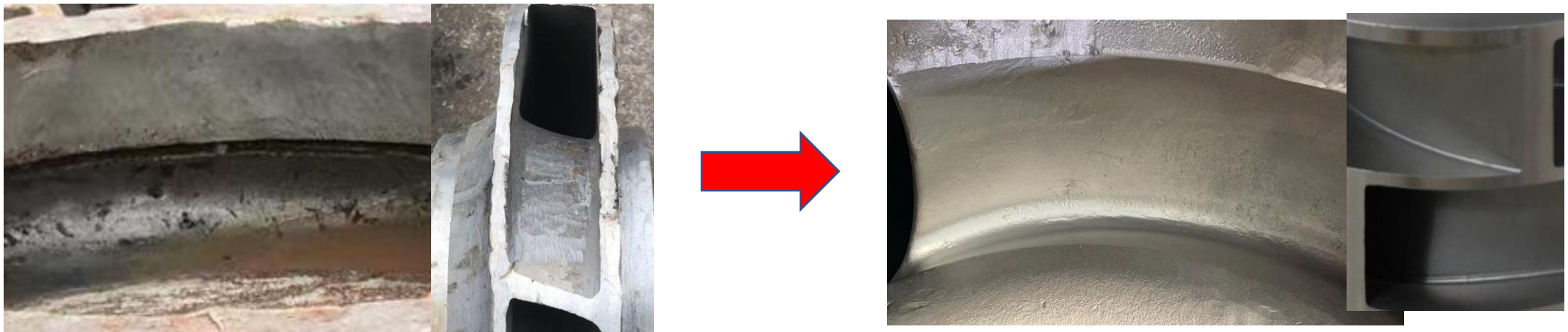
1. Casting weight will be 10%-20% reduced.
2. Machining allowance reduced by 30-50%.
3. Higher surface quality:  
Surface roughness can be to Ra3.2-Ra6.3 compared Ra12.5 with sand castings.
4. Increased dimensional accuracy:  
Dimensional accuracy at Ct7-Ct9 compared to Ct12-Ct14 with sand castings.
5. **Overall cost of casting and machining close to sand castings or even lower.**

# Solution of Precision Casting Replaces Sand Casting



**Why the overall cost of casting and machining close to sand castings or even lower?**

- Although the price per KG is higher than sand castings, the composite-cost is close to sand casting as the casting weight and machining allowance will be reduced.
- Some items the price are even lower than sand castings.  
e.g. the flow pump casing channel and impeller passage are no need to be polished if the roughness Ra6.3 is required.



# Solution of Precision Casting Replaces Sand Casting



## Main materials :

- Aus Stainless Steel (CF3M, CF8C...)
- Martensitic Stainless Steel (CA6NM, CA15...)
- Duplex Stainless Steel (4A, 5A, 6A, 1.4517...)
- Carbon Steel (WCB, WC6...)
- Ni-Based Alloy ( Alloy 20, CW-12MW...)

## Applications :

- Pump Casings
- Pump Covers
- Impellers
- Valve Parts
- Machinery Components



# Solution of Precision Casting Replaces Sand Casting



Our primary aim is to work together with you for mutual benefit ! Currently the milestone of this project are as below:

Size: 1100X900mm ( Could be bigger as need).

Weight: 600Kg ( Could be heavier as need).

Capacity: 160 Tons/month ( Could be double as need).

Currently our customers such like Andritz, PSG, KSB, Sulzer, KETO etc. have taken an action to use investment castings instead of sand castings as massive as possible.

For some projects more heavyweight more benefit.

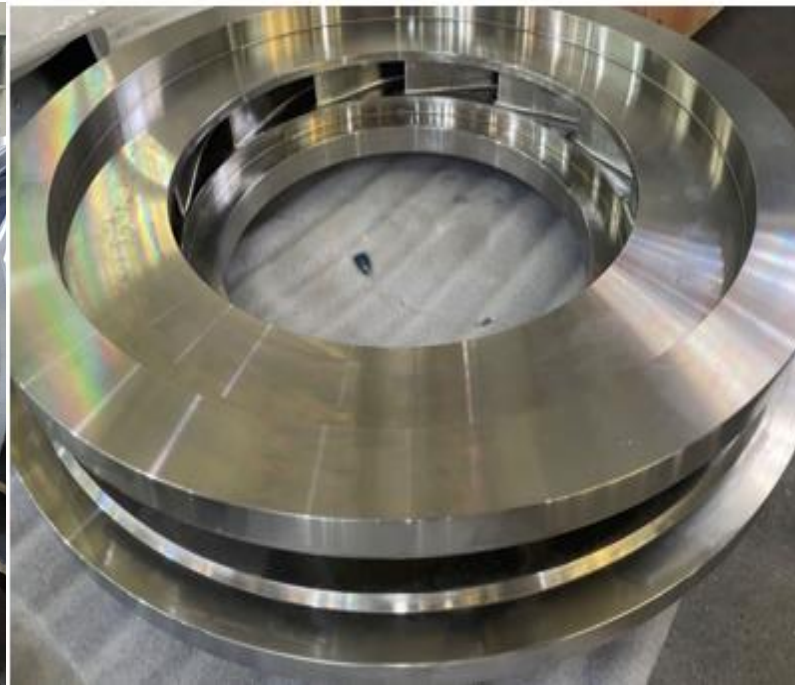
The typic successful projects as below:



# Solution of Precision Casting Replaces Sand Casting



Intermediate Case

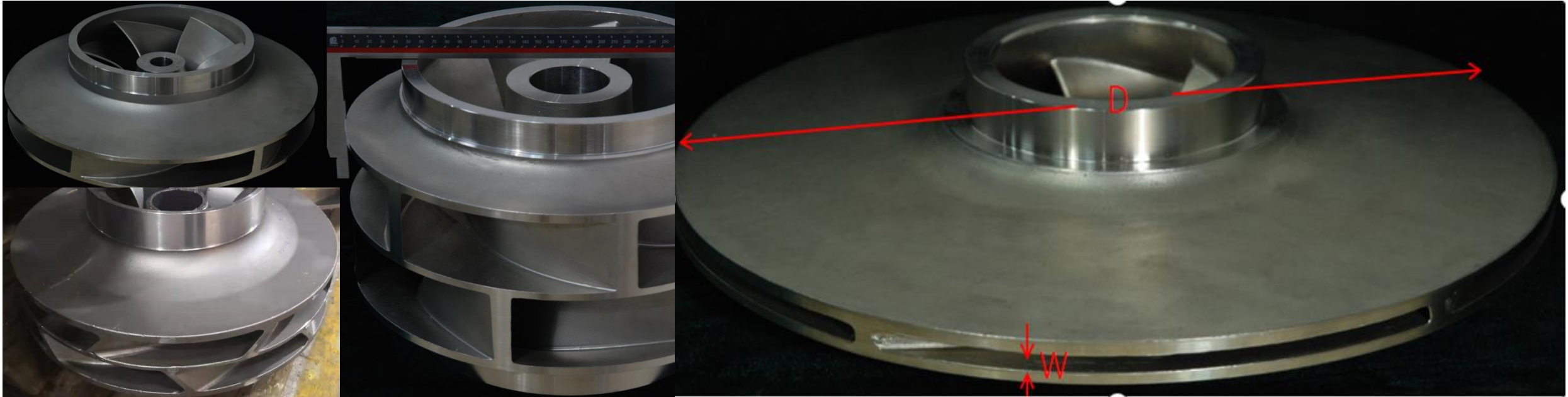


Diffuser



Pump Casing

# Solution of Precision Casting Replaces Sand Casting



Impeller  
Single & double section

Narrow channel impeller  
Max. Diameter:  $\text{Ø}900\text{mm}$ ,  
Max. value:  $D/W=40$

# Solution of Precision Casting Replaces Sand Casting



Stage Casing

Self priming case



# Solution of Precision Casting Replaces Sand Casting



Suction Casing



Suction Bell

# Solution of Precision Casting Replaces Sand Casting



Propeller & Impeller

Spiral propeller & Screws



# Solution of Precision Casting Replaces Sand Casting



Rotor



Bearing Housing