Centrifugal & Axial-Flow Impeller Manufacturing Process
Centrifugal & Axial Flow Impeller

Process 1: Material Supply (up to Ø2,000mm)

<table>
<thead>
<tr>
<th>Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>• 17-4PH (SUS630, 17Cr4Ni, AMS564, etc.)</td>
</tr>
<tr>
<td>• Titanium (Ti-6Al-4V, Ti-6-2-4-2 etc.)</td>
</tr>
<tr>
<td>• SUS304, SUS316, SUS410, SUS420</td>
</tr>
<tr>
<td>• SUS431, SS400, etc.</td>
</tr>
<tr>
<td>• AL7075-T6, AL6061-T6, AL2024-T6 etc.</td>
</tr>
</tbody>
</table>

Process 2: CAD/CAM Programming (HyperMill, CATIA, MasterCAM, Vericut)

- Turning Lathe Simulation Verification
- 5-Axis NC Milling Simulation Verification

Process 3: Turning Lathe before NC Milling

Centrifugal & Axial Flow Impeller

Process 4: 5-Axis NC Milling (Impeller Ø10 mm to Ø1,050mm)

Turbine Blade (Ø350 mm)

Water Jet Impeller (Ø600 mm)

Process 5: Final Turning Lathe after NC Milling

Centrifugal & Axial Flow Impeller

- **Process 6: CMM Inspection**

- **Process 7: Nondestructive Inspection (PT, FPI, MT, UT)**

- **Process 8: Packing**