



## THE SERVICE INCLUDES:

- **Mold machine optimization** (PQ2 Diagram)
- **Filling analysis**
- **Solidification analysis**
- **Thermal cycling simulation** (optional)
- **Feasibility analysis** (thicknesses distribution, machine and plunger size optimization, best gate location and size)
- **Runners design optimization** (runners/gates/overflows design editing, filling analysis with and without shot sleeve)
- **Thermo circuit optimization** (preliminary cooling system sketch, ejectors optimal position etc.)
- **Vacuum and venting system design optimization**
- **Machine parameters datasheet** (injection strokes, plunger speed and pressure)
- **Full report, movies and pics, practical suggestions**



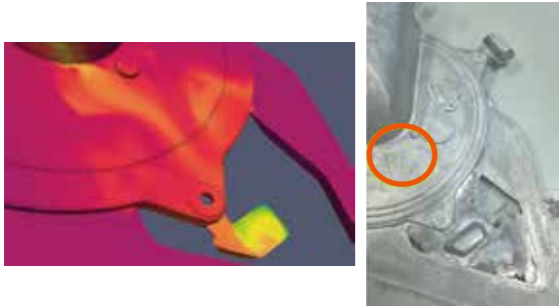
*Detect and fix all the issues, in early development phases as well as in troubleshootings. Get shorter time to market, less costly die trials and better product quality*

**Detect all possible defects when the cost to change is least - at the early design stage**

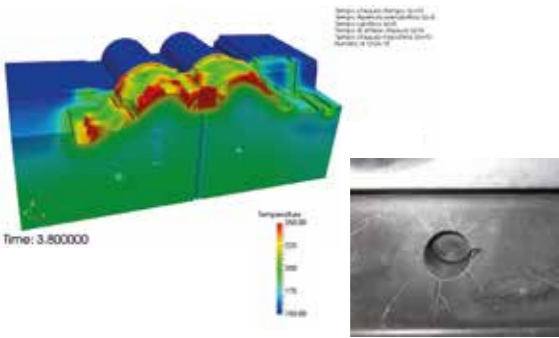
**Pro Simulation** provides expert dual phase flow analysis, die design for HPDC parts and consulting services.

Our capabilities range from simple filling and solidification calculations for industrial applications to complete design optimization, simulation and analysis of die tools to optimize their performance and efficiency.

**DIE EROSION**



**LAMINATIONS**



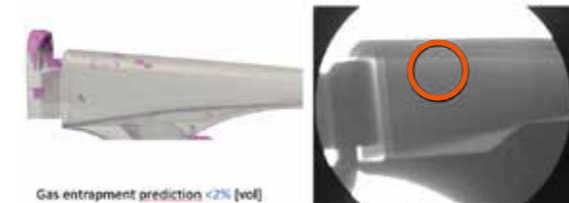
**OXIDES**



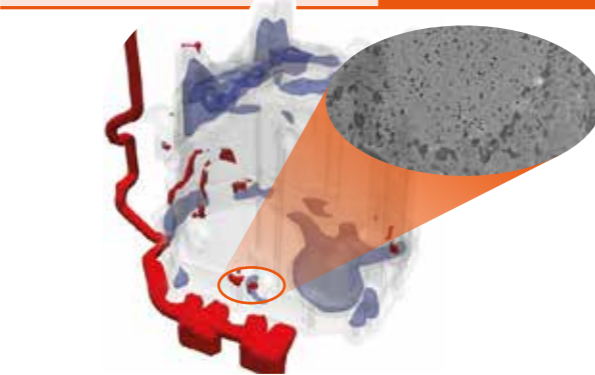
**COLD LAPS**



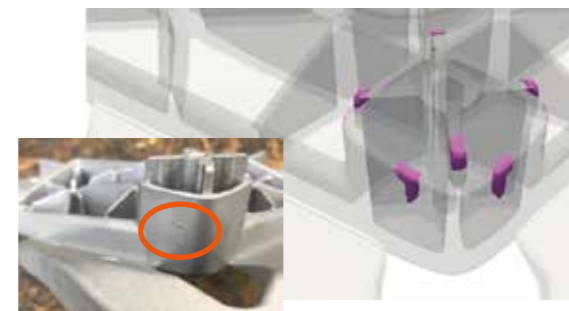
**GAS POROSITY**



**MIXED POROSITY**



**BLISTERS**



**The workflow in detail**

**1 Preliminary analysis (types and causes of probable defects)**



**2 Change die layout and/or process parameters**



**3 Die trial ok after adopting the suggested modifications**

