

FOUNDRY TECH

METHODING SYSTEM FOR
GATING AND FEEDING DESIGN

A NOVACAST SYSTEMS PRODUCT



FOUNDRY TECH

FoundryTech is a software package mainly for design of gating and feeding systems. Daily usage will give foundries structure and distinct routines in designing these systems.

The advantage

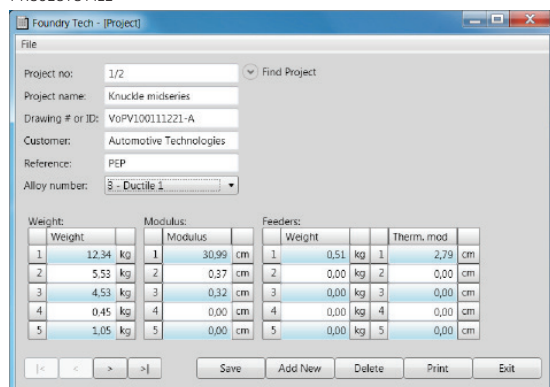
- Reduced number of test pours
- Improved yield
- Reduced scrap
- Increased knowledge level
- Easy to use
- Interactive and menu driven
- Online help available

Ideal also as a preprocessor for mold filling and solidification simulation software. The software allows the foundry to use a scientific, stable and systematic procedure in accordance with ISO 9000 for gating and risering problems.

Projects file

Basic data about each project can be stored and retrieved from the Projects file.

PROJECTS FILE



PROJECTS FILE									
Foundry Tech - [Project]									
File									
Project no:		1/2		Find Project					
Project name:		Knuckle midseries							
Drawing # or ID:		VoPV10011221-A							
Customer:		Automotive Technologies							
Reference:		PEP							
Alloy number:		3 - Ductile 1							
Weight:		Modulus:		Feeders:					
1	2	1	2	1	2	1	2	3	4
12,34	kg	30,99	cm	0,51	kg	2,79	cm		
5,53	kg	0,37	cm	0,00	kg	0,00	cm		
4,53	kg	0,32	cm	0,00	kg	0,00	cm		
0,45	kg	0,00	cm	0,00	kg	0,00	cm		
1,05	kg	0,00	cm	0,00	kg	0,00	cm		

Several modules included

- Horizontal gating
- Velocity based gating
- Feeder
- Feeder neck
- Feeding distance
- Centrifugal slag trap
- Alloy and Methods database

- Filter database
- Weighting
- Modulus
- Mold weighting
- Filter calculation
- Metallurgical calculations

Alloy database

Alloy related factors are stored in a database and used when estimating feeding distance, designing feeders and gating systems. By changing the factors the program can be "tailored" to various needs and specific conditions in the foundry.

Gating calculation

Pressurized and non-pressurized, as well as velocity based gating systems can be calculated. A special gating system for Disamatic is also available, as well as a filter calculation program. The "learn"-function allows the foundryman to adapt the program to various conditions.

Weight estimation

Weight estimation from a drawing is easy and simple. Our methods are based on elementary shapes that can be combined in any order.

Modulus estimation

Modulus estimation is essential for calculating solidification times and feeder design. The system calculates both the geometrical and thermal modulus, as well as neighboring effect.

Feeder size calculation

Feeders are easily calculated. Various types can be used. The program can adapt to specific conditions through the built-in learning facility.

Velocity based gating

This is a gating system based on controlling velocities to reduce surface turbulence.

"Learn"-function

The foundry can enter their best practice by means of a "learn"-function, which updates the database for methods and alloy factors based on actual results. The specific knowledge in a foundry can thereby be accumulated. FoundryTech allows calculations of pressurized, non-pressurized, velocity- and modulus based gating systems.