

# X-Pact® Tech Assist

One central system for managing  
techno-metallurgical parameters





**Practice yesterday:** Parameter settings were stored manually in paper form, person-dependent. Maintaining the parameters in a large number of systems was very time consuming.

### The challenge

The development of new steel grades or the attempt to understand quality changes are always challenges for a metallurgist: The settings of the metallurgical parameters used for certain steel grades are distributed on different systems, in some cases via no-user-friendly interfaces or are not accessible at all.

There are usually many parameter settings for the different systems, some of which have been forgotten or even known.

Some parameter settings were not logged, that means at which time which changes were made to which system. It is thus not possible to understand which parameter settings were changed and when. It is not clear which parameter setup should be used for a new steel grade: the settings with the minor or major change in the target analysis. In particular, when changing staff is the transfer of knowledge of crucial importance. Under certain circumstances, much knowledge is lost, even if the knowledge transfer takes several months.



**X-Pact® Tech Assist today:** Storage of all metallurgical parameters in one centralized system.

### The SMS group solution

With X-Pact® Tech Assist, the SMS group offers a central system for managing techno-metallurgical parameters. All setup parameters for the entire systems are implemented, stored and distributed to a wide variety of automation and planning systems. X-Pact® Tech Assist logs the history to understand changes in quality through changes to the parameters.

The X-Pact® Tech Assist keeps all metallurgical knowledge and thus is the basis for reproducible quality and easy development of new steel grades.

#### Technical advantages

- optimum parameters are immediately available for new grades
- quality reproducible
- no more knowledge loss
- centralized parameter administration

### Modernization

The X-Pact® Tech Assist is part of X-Pact® Process Guidance and can be integrated into any existing plant.



## X-Pact® Tech Assist functions

### Central system

Generation, modification and administration of all process parameters on a central system. Modifications can be transmitted during production.

### Steel grade development support

Start new steel grades directly with the optimum parameters. Enter the analysis and X-Pact® Tech Assist will provide the optimum parameters.

### History

Change log for every parameter modification. A comfortable search makes it easy to find the reason for quality improvements or deterioration.

### Connectivity

In case of parameter changes, all relevant systems and models (such as X-Pact® Level Control, X-Pact® Gap Control, HD Mold or X-Pact® Cast Optimizer) receive automatically a parameter update.

### User Interface

Simplest administration of complete range of steel grades.

### Customizable solution

The system can be adapted to your personal needs.

## Sophistication with simplicity

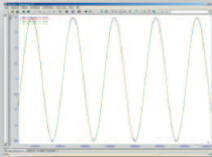

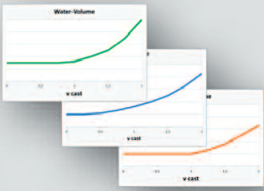
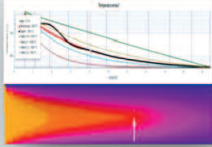
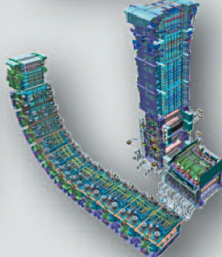
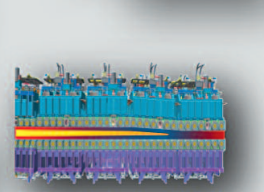
Casting a steel grade with a specific chemistry?  
X-Pact® Tech Assist provides the right settings.

### 1. Input of desired chemical analysis

26 Fe Iron 99.403	6 C Carbon 0.03	14 Si Silicon 0.15	25 Mn Manganese 0.005	16 S Sulfur 0.02	13 Al Aluminium 0.008	24 Cr Chromium 0.1	42 Mo Molybdenum 0.01	28 Ni Nickel 0.1	29 Cu Copper 0.1	7 N Nitrogen 0.004	41 Nb Niobium 0.002	22 Ti Titanium 0.002	23 V Vanadium 0.004
----------------------------	--------------------------	-----------------------------	--------------------------------	---------------------------	--------------------------------	-----------------------------	--------------------------------	---------------------------	---------------------------	-----------------------------	------------------------------	-------------------------------	------------------------------

### 2. Automatic selection of relevant casting parameters

File	Protocol	Grade group	Parameter tables
<b>X-Pact® Tech Assist</b>			Oscillation curves >
			Mold powder >
			Spray plan >
			Temperature curves >
			Segment adjustment >
			Soft reduction >

### 3. In case of parameter modification – automatic update of all connected systems

**SMS group GmbH**  
Electrics / Automation

Ivo-Beucker-Strasse 43  
40237 Düsseldorf, Germany  
Phone: +49 211 881-5895  
Telefax: +49 211 881-775895  
[automation@sms-group.com](mailto:automation@sms-group.com)  
[www.sms-group.com/x-pact](http://www.sms-group.com/x-pact)



"The information provided in this brochure contains a general description of the performance characteristics of the products concerned. The actual products may not always have these characteristics as described and, in particular, these may change as a result of further developments of the products. The provision of this information is not intended to have and will not have legal effect. An obligation to deliver products having particular characteristics shall only exist if expressly agreed in the terms of the contract."