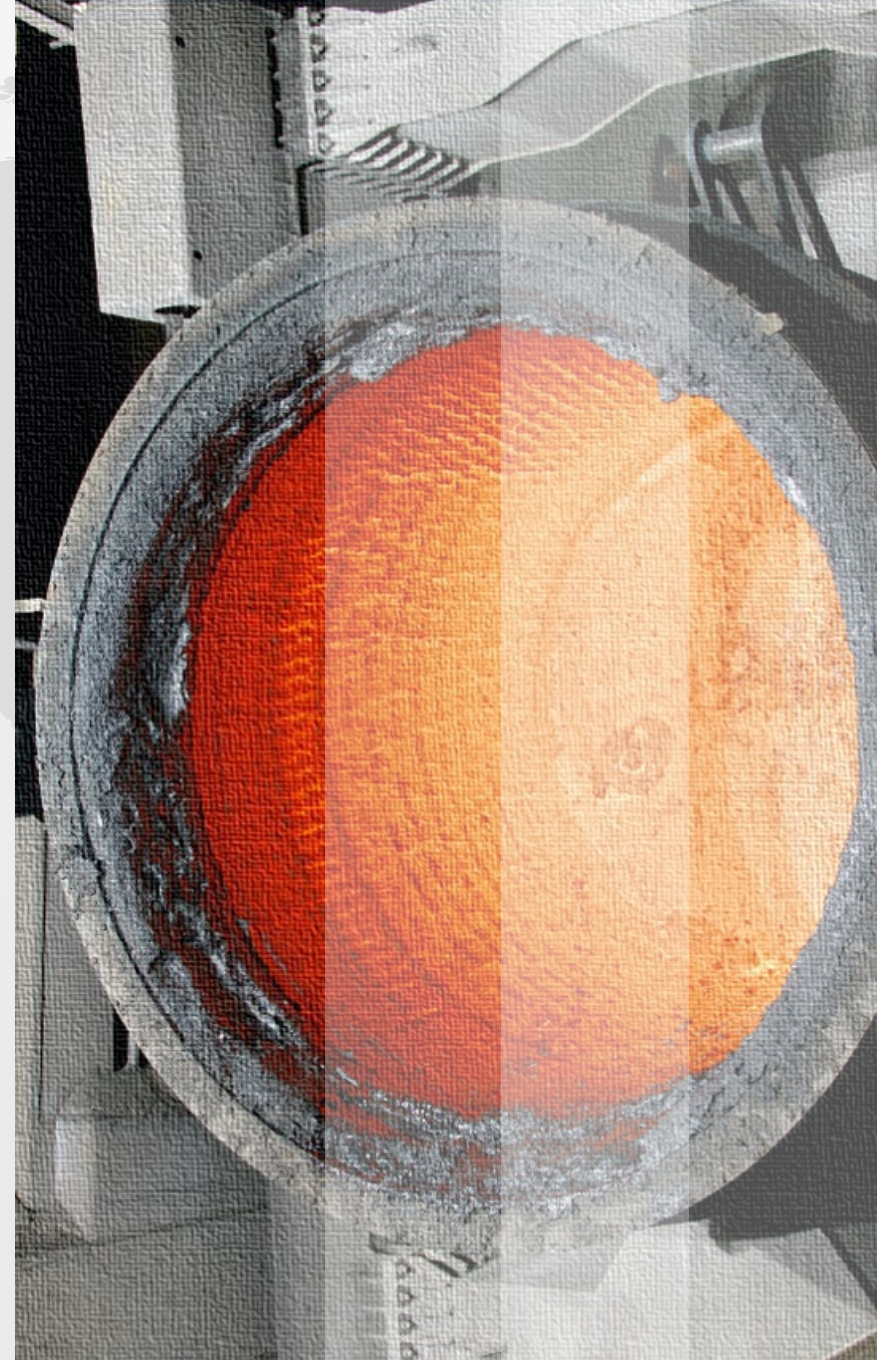




Refractory Exchange Data Standards

28 April 2022 at **Steel meets Refractory**

13:00 to 18:30



ACTIVE TASK FORCE:

PERMANENT

- **ALMATIS (ANDUS BUHR)**
- **HARBISON WALKER (MARTHA COLLINS)**
- **RHIMAGNESITA (ALEXANDER PLATZER)**
- **REFRATECHNIK (BRITTA BISSOT, RALF GÜSGEN)**
- **VESUVIUS (VISCENT BOISDEQUIN, ALFONS LÜFTENEGGER)**
- **WRA (LAURELINE BERNARD)**

SUPPORTING

- **DFFI (ELKE STEINLE)**
- **RHIMAGNESITA (GÜNTER DEUTSCH, MARTIN PISCHLER)**
- **REFRATECHNIK (IRIS BORN, RALF BECHINGER)**
- **THOMAS VERT**
- **TATA STEEL (RINUS SIEBRING)**

Overall Goal

Create data standards that enable an automated exchange around refractory products with customers

Two main work streams:

1. Work stream: **Refractory logistics data**, i.e. Material Master or Static Data (Material properties) and **Transaction or Dynamic Data** (Order, offer, transportation documents)
2. Work stream: **Customer Process data**, i.e. created in the customer production process

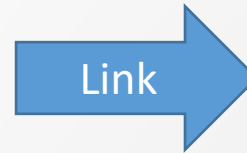


- So far focus only on Workstream 1
- Most of the meetings were remote, which was a certain challenge
- Two “live/hybrid” meetings brought biggest steps
- Result:
 - Change from a pure material description (TDS) to a product description
 - The description has 7 main fields
 - Last field in development is the information on E&HS

STANDARD MAIN STRUCTURE

Application	General description, Industry, main application, ...
Logistic	Shipment description; for shipment only
Manufacturing	shaped and unshaped products have partially different descriptors
Classification	Refractory Classification: e.g. Alumina-Carbon, Magnesita-Doloma
Certification/EHS	REACH, WHMIS, but potentially also handling recommendations (<u>under discussion</u>)
Chemistry & Mineralogy	Material specific descriptions; multiple materials in case of a multi-material product
Physical Properties	

Several lines (total of 250) of information in every field; some are mandatory/must, some are conditional/can.



■ Actual Discussion Points

- General Implementation: 1-on-1 between customer and refractory supplier vs. or a central (WRA) app/platform to exchange
- EH&S points to be included, also potentially a handling recommendation (if going beyond installation method) in a simplified description

■ Next steps

- Concluded EH&S topics
- Review with customers
- Search for pilot customers
- ISO-standardization?
- Second workstream starts after completion of workstream 1

**THANK YOU FOR YOUR
ATTENTION**