

#### **Monolithic Refractories**

Barnsley 15<sup>th</sup> November 2018

**Ian Spicer** 



#### **Monolithic Refractories**

## Ready to use Refractories

Ready to use mortar

**Mouldables** 

Rammings

**Dry vibratebles** 

#### Refractories to be mixed

**Castables (many types)** 

**Sprayed refractories** 

**Dry mortars** 



## Ready to use Refractories

#### Ready to use mortar

Supplied in a bucket a mixture of fine aggregates, clay and a chemical binder.

#### **Mouldables**

Mouldables are a mixture of coarse and fine aggregate with clay and water can have other binders. Supplied a slabs in boxes.

#### Rammings

Rammings are very similar to mouldables except they are supplied as a loose material

#### **Dry vibratables**

Dry vibratables are mixtures of coarse and fine aggregates



# **Ready to use Refractories**





#### Refractories to be mixed

#### **Castables**

**Dense castables** 

**Conventional castables** 

Low cement castable

No cement castables

#### **Dry mortar**



## Refractories to be mixed





#### Refractories to be mixed

#### **Castables**

**Insulation castables** 



Refractories to be mixed Castable Installation techniques

Vibration castables

Free flow castables

**Pumped castables** 







# Refractories to be mixed Sprayed Refractories

**Dry Gunning** 

**Shotcrete** 



















#### **Monolithic Refractories**

**Customisable formulations** 

Many installation techniques

**Anchors through multiple layers** 

Will conform to the shell even if damaged