

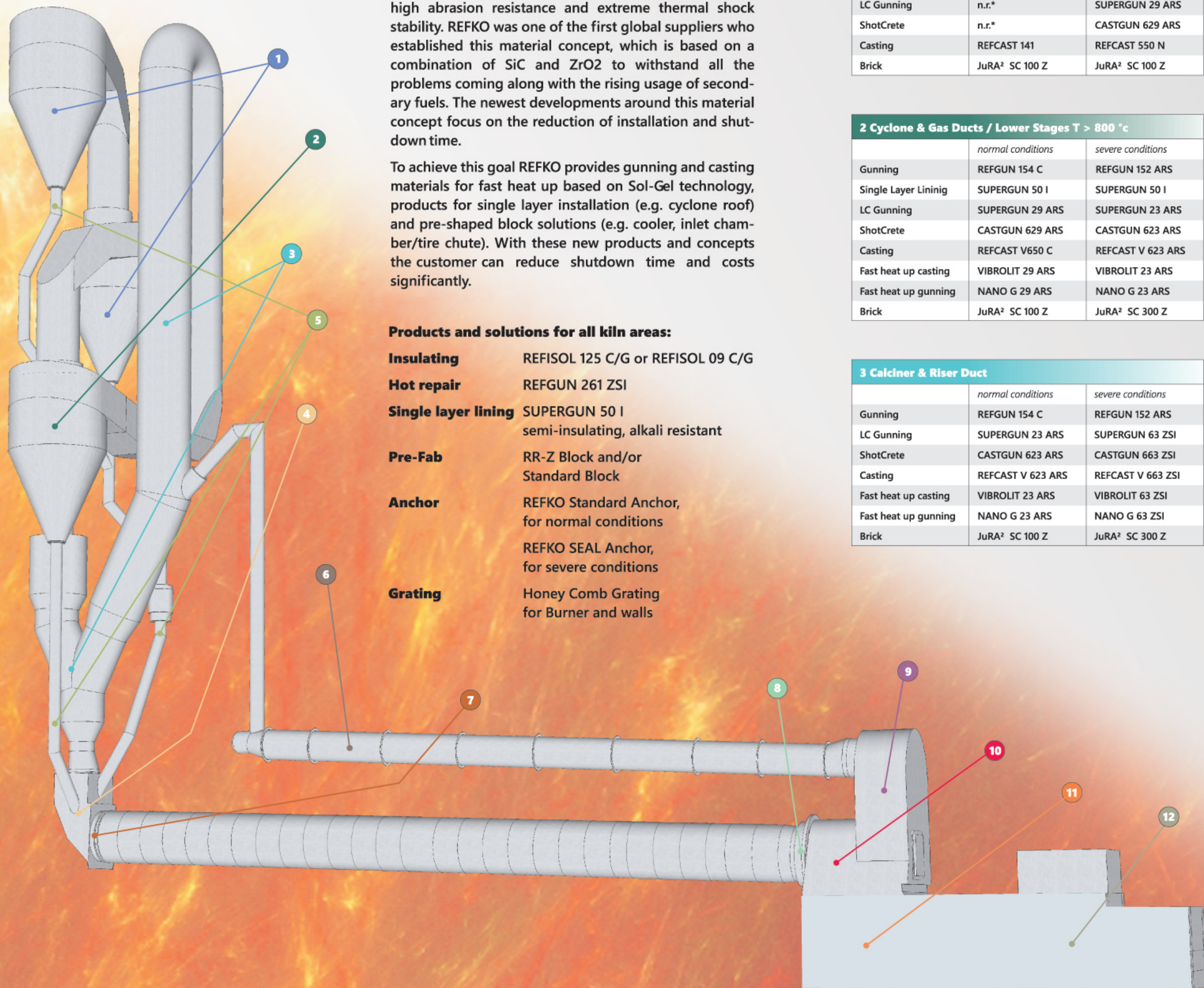
REFKO is an innovative producer ...

... of monolithic refractory products and state-of-the-art refractory solutions for the cement industry. REFKO ZSI material concept offers very high chemical resistance, high abrasion resistance and extreme thermal shock stability. REFKO was one of the first global suppliers who established this material concept, which is based on a combination of SiC and ZrO₂ to withstand all the problems coming along with the rising usage of secondary fuels. The newest developments around this material concept focus on the reduction of installation and shut-down time.

To achieve this goal REFKO provides gunning and casting materials for fast heat up based on Sol-Gel technology, products for single layer installation (e.g. cyclone roof) and pre-shaped block solutions (e.g. cooler, inlet chamber/tire chute). With these new products and concepts the customer can reduce shutdown time and costs significantly.

Products and solutions for all kiln areas:

- Insulating** REFISOL 125 C/G or REFISOL 09 C/G
- Hot repair** REFGUN 261 ZSI
- Single layer lining** SUPERGUN 50 I
semi-insulating, alkali resistant
- Pre-Fab** RR-Z Block and/or
Standard Block
- Anchor** REFKO Standard Anchor,
for normal conditions
REFKO SEAL Anchor,
for severe conditions
- Grating** Honey Comb Grating
for Burner and walls



1 Cyclone & Gas Ducts / Upper Stages		
	normal conditions	severe conditions
Gunning	REFGUN 156 ARS	REFGUN 152 ARS
Single Layer Lining	REFGUN 156 ARS	REFGUN 152 ARS
LC Gunning	n.r.*	SUPERGUN 29 ARS
ShotCrete	n.r.*	CASTGUN 629 ARS
Casting	RECAST 141	RECAST 550 N
Brick	JuRA ² SC 100 Z	JuRA ² SC 100 Z

2 Cyclone & Gas Ducts / Lower Stages T > 800 °c		
	normal conditions	severe conditions
Gunning	REFGUN 154 C	REFGUN 152 ARS
Single Layer Lining	SUPERGUN 50 I	SUPERGUN 50 I
LC Gunning	SUPERGUN 29 ARS	SUPERGUN 23 ARS
ShotCrete	CASTGUN 629 ARS	CASTGUN 623 ARS
Casting	RECAST V650 C	RECAST V 623 ARS
Fast heat up casting	VIBROLIT 29 ARS	VIBROLIT 23 ARS
Fast heat up gunning	NANO G 29 ARS	NANO G 23 ARS
Brick	JuRA ² SC 100 Z	JuRA ² SC 300 Z

3 Calciner & Riser Duct		
	normal conditions	severe conditions
Gunning	REFGUN 154 C	REFGUN 152 ARS
LC Gunning	SUPERGUN 23 ARS	SUPERGUN 63 ZSI
ShotCrete	CASTGUN 623 ARS	CASTGUN 663 ZSI
Casting	RECAST V 623 ARS	RECAST V 663 ZSI
Fast heat up casting	VIBROLIT 23 ARS	VIBROLIT 63 ZSI
Fast heat up gunning	NANO G 23 ARS	NANO G 63 ZSI
Brick	JuRA ² SC 100 Z	JuRA ² SC 300 Z

3 Calciner General		
	normal conditions	severe conditions
Gunning	REFGUN 154 C	REFGUN 152 ARS
LC Gunning	SUPERGUN 29 ARS	SUPERGUN 63 ZSI
ShotCrete	CASTGUN 629 ARS	CASTGUN 663 ZSI
Casting	RECAST V 629 ARS	RECAST V 663 ZSI
Fast heat up casting	VIBROLIT 29 ARS	VIBROLIT 63 ZSI
Fast heat up gunning	NANO G 29 ARS	NANO G 63 ZSI
Brick	JuRA ² SC 100 Z	JuRA ² SC 300 Z

4 Inlet Chamber		
	normal conditions	severe conditions
Gunning	n.r.*	n.r.*
LC Gunning	SUPERGUN 23 ARS	SUPERGUN 63 ZSI
ShotCrete	CASTGUN 23 ARS	CASTGUN 63 ZSI
Casting	RECAST V 623 ARS	RECAST V 663 ZSI
Fast heat up casting	VIBROLIT 23 ARS	VIBROLIT 63 ZSI
Fast heat up gunning	NANO G 23 ARS	NANO G 63 ZSI
Brick	JuRA ² SC 400 Z	JuRA ² TE 200 Z

5 Raw Meal Pipe		
	normal conditions	severe conditions
Gunning	n.r.*	n.r.*
LC Gunning	n.r.*	n.r.*
ShotCrete	n.r.*	n.r.*
Casting	RECAST V 650 C	RECAST V 623 ARS
Fast heat up casting	VIBROLIT 29 ARS	VIBROLIT 23 ARS
Fast heat up gunning	n.r.*	n.r.*
Brick	n.r.*	n.r.*

6 Tertiary Air Duct		
	normal conditions	severe conditions
Gunning	REFGUN 154 C	REFGUN 152 ARS
LC Gunning	SUPERGUN 55	SUPERGUN 29 ARS
ShotCrete	CASTGUN 650	CASTGUN 629 ARS
Casting	RECAST V 650 C	RECAST V 629 ARS
Fast heat up casting	VIBROLIT 55	VIBROLIT 29 ARS
Fast heat up gunning	NANO G 55	NANO G 29 ARS
Brick	JuRA ² SC 100 Z	JuRA ² SC 300 Z

7 Kiln Inlet Cone		
	normal conditions	severe conditions
Gunning	n.r.*	n.r.*
LC Gunning	SUPERGUN 23 ARS	SUPERGUN 63 ZSI
ShotCrete	CASTGUN 623 ARS	CASTGUN 663 ZSI
Casting	RECAST V 623 ARS	RECAST V 663 ZSI
Fast heat up casting	VIBROLIT 23 ARS	VIBROLIT 63 ZSI
Fast heat up gunning	NANO G 23 ARS	NANO G 63 ZSI
Brick	JuRA ² SC 300 Z	JuRA ² TE 200 Z

8 Kiln Outlet / Nose Ring		
	normal conditions	severe conditions
Gunning	n.r.*	n.r.*
LC Gunning	SUPERGUN 80	SUPERGUN 78 KSI
ShotCrete	CASTGUN 690 RT	CASTGUN 678 KSI
Casting	RECAST V 679 P	RECAST V 678 KSI
Fast heat up casting	VIBROLIT 80	VIBROLIT 78 KSI
Fast heat up gunning	NANO G 80	n.r.*

8 Rotary Kiln, Bricks		
	normal conditions	severe conditions
Kiln Outlet	JuRA ² TE 200 Z	JuRA ² TE 200 Z
Safety Zone	JuRA ² SC 400 Z	JuRA ² TE 200 Z
Calcining Zone	JuRA ² SC 300 Z	JuRA ² SC 400 Z

9 Kiln Hood Upper Section		
	normal conditions	severe conditions
Gunning	REFGUN 154 C	n.r.*
LC Gunning	SUPERGUN 23 ARS	SUPERGUN 63 ZSI
ShotCrete	CASTGUN 23 ARS	CASTGUN 663 ZSI
Casting	RECAST V 623 ARS	RECAST V 663 ZSI
Fast heat up casting	VIBROLIT 23 ARS	VIBROLIT 63 ZSI
Fast heat up gunning	NANO G 23 ARS	NANO G 63 ZSI
Brick	JuRA ² SC 400 Z	JuRA ² TE 200 Z

9 Kiln Hood Lower Section		
	normal conditions	severe conditions
Gunning	REFGUN 154 C	n.r.*
LC Gunning	SUPERGUN 23 ARS	SUPERGUN 63 ZSI
ShotCrete	CASTGUN 623 ARS	CASTGUN 663 ZSI
Casting	RECAST V 623 ARS	RECAST V 663 ZSI
Fast heat up casting	VIBROLIT 23 ARS	VIBROLIT 63 ZSI
Fast heat up gunning	NANO G 23 ARS	NANO G 63 ZSI
Brick	JuRA ² SC 400 Z	JuRA ² TE 200 Z

10 Burner Lance		
	normal conditions	severe conditions
Grating		Honey Comb Grating
Casting	RECAST V 679 P	RECAST V 678 KSI
Fast heat up casting	VIBROLIT 92 K	VIBROLIT 78 KSI
Self Flowing	IPSOCAST 90	IPSOCAST 78 KSI
Gunning & Patching	SUPERGUN 80	SUPERGUN 78 KSI

11 Grate Cooler Hot Section Bull Nose & Clinker Bed		
	normal conditions	severe conditions
Gunning	n.r.*	n.r.*
LC Gunning	SUPERGUN 80	SUPERGUN 63 ZSI
ShotCrete	CASTGUN 690 RT	CASTGUN 663 ZSI
Casting	RECAST V 679 P	RECAST V 663 ZSI
Fast heat up casting	VIBROLIT 80	VIBROLIT 63 ZSI
Fast heat up gunning	NANO G 80	NANO G 63 ZSI
Brick	JuRA ² SC 400 Z	JuRA ² TE 200 Z

11 Grate Cooler Hot Section Straight Walls and Roof		
	normal conditions	severe conditions
Gunning	REFGUN 154 C	n.r.*
LC Gunning	SUPERGUN 55	SUPERGUN 23 ARS
ShotCrete	CASTGUN 650	CASTGUN 623 ARS
Casting	RECAST V 650 C	RECAST V 623 ARS
Fast heat up casting	VIBROLIT 55	VIBROLIT 23 ARS
Fast heat up gunning	NANO G 55	NANO G 23 ARS
Brick	JuRA ² SC 400 Z	JuRA ² TE 200 Z

12 Grate Cooler Cold Section Clinker Bed		
	normal conditions	severe conditions
Gunning	n.r.*	n.r.*
LC Gunning	SUPERGUN 80	SUPERGUN 29 ARS
ShotCrete	CASTGUN 690 RT	CASTGUN 629 ARS
Casting	RECAST V 679 P	RECAST V 629 ARS
Fast heat up casting	VIBROLIT 80	VIBROLIT 29 ARS
Fast heat up gunning	NANO G 80	NANO G 29 ARS
Brick	JuRA ² SC 300 Z	JuRA ² SC 400 Z

12 Grate Cooler Cold Section Straight Walls and Roof		
	normal conditions	severe conditions
Gunning	REFGUN 140	REFGUN 152 ARS
LC Gunning	SUPERGUN 29 ARS	SUPERGUN 29 ARS
ShotCrete	CASTGUN 650	CASTGUN 629 ARS
Casting	RECAST V 550 N	RECAST V 629 ARS
Fast heat up casting	VIBROLIT 55	VIBROLIT 29 ARS
Fast heat up gunning	NANO G 55	NANO G 29 ARS
Brick	JuRA ² SC 100 Z	JuRA ² SC 400 Z

Wear Resistant Material for low & medium temperatures		
Gas Ducts, Cooler Gas Ducts, Cooler Dedusting Cyclones, TAD Dampers, Separators, Mill Ducts		
	normal conditions	severe conditions
	THE ROCK	

*n.r. = not recommended for this area