

Hot and Cold Kiln Alignment



Optimizing and enhancing the reliability
of your production tool

- An OEM expertise for a reliable and accurate diagnosis of your equipment
- Detailed recommendations to plan efficiently your maintenance operations
- Immediate implementation of the priority corrective actions
- Recognized know-how and skills based on 40 years of experience



A practical “decision making” tool for your maintenance teams

Thanks to its recognized expertise in process and mechanical equipment, Fives offers a comprehensive audit to achieve your industrial and economical performance targets.

APPLICATIONS

- All types of kilns and other rotating tubes (dryers, calciners, coolers...), whatever the number of supports is
- Either minerals or cement industry
- Fives original-design equipment or others

MEANS

- An experienced OEM team with complementary expertise (a surveyor and a mechanical expert)
- Support from the in-house design department
- Well proven dedicated tools for on field measurement and data collection (Tachymeter, targets, wheel measurement device, supports...)
- Meeting the highest safety standards with qualified operators and dedicated processes

OPERATING MODE

- Audits are carried out either during production or equipment shut-down (hot or cold kiln alignment)
- On-site intervention for measurement and diagnosis (2 to 4 days)
- Equipment adjustment and alignment (according to the diagnosis)



Audit

- Civil measurements (civil piers supports, mapping of the environment, slope...)
- Mechanical measurements (frames, supports...)
- Thermal measurements
- Rotating parts audit (theoretical axis of the tyres, real shell axis...)
- First diagnosis and on-site debriefing

Recommendations

- Detailed audit report with 3D presentation of the measures (geometrical, mechanical and thermal analyses)
- Detailed recommendations with prioritized action plan for maintenance operations

Intervention and follow-up

- Kiln adjustment performed by a mechanical expert, according to the audit results (adjustment of the rollers...)

Optional audit: shell deformation

For an even comprehensive audit, Fives carries out, as an option or a stand-alone service, the shell deformation expertise:

- Measurement of the shell deformations
- Shell ovalities determination
- 3D video modeling kiln behavior
- Bricks fall risks prediction according to FCB model
- Conclusion and recommendations

