



STEEL PROCESS

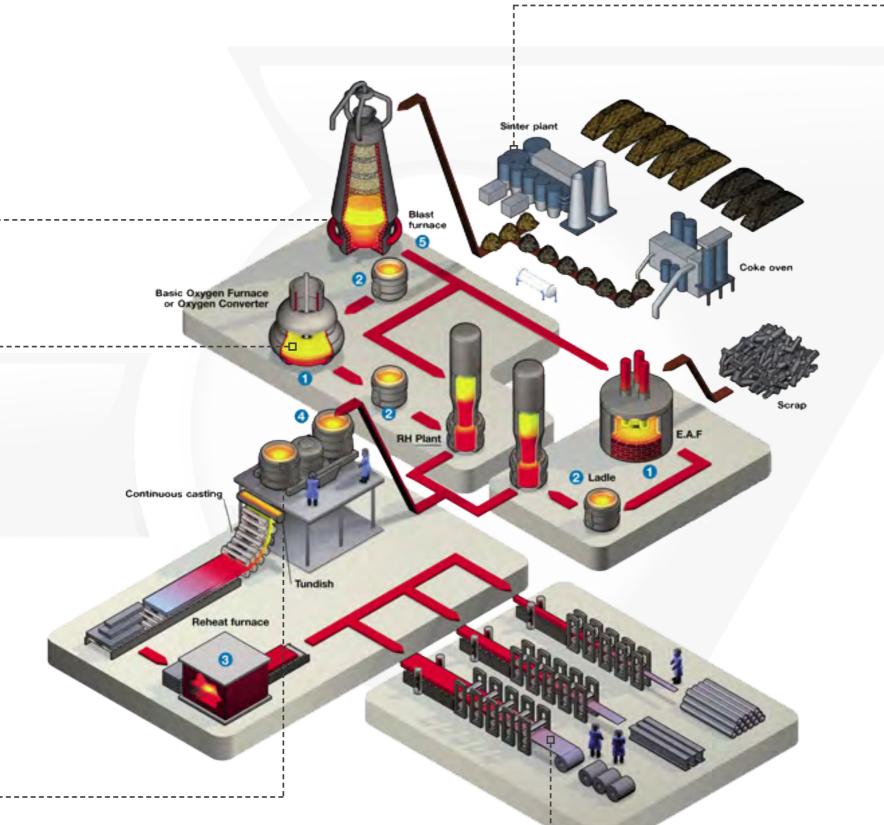
IRON MAKING



STEEL MAKING







ORE RECOVERING



CONTINUOUS CASTING



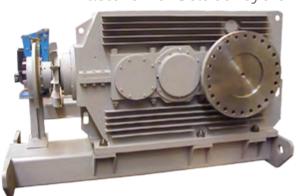
HOT ROLLING

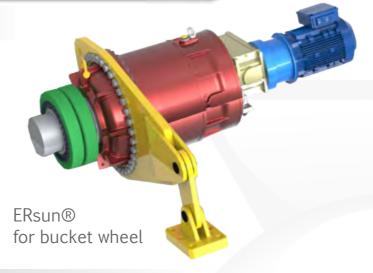


ORE RECOVERING

MATERIAL HANDLING

ERmaster® for belt coneyors





SINTERING/PELLETIZING PLANT

Bogiflex®







Pellet cars

Sprocket wheel



Haflex®





MILLS, DRYERS, MIXERS, ROTARY KILNS FOR DIRECT REDUCTION IRON PROCESS

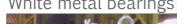
Complete drive systems



ERmaster® parallel-shaft reducers

Mill Heads

White metal bearings Pinions







Riding ring fitted on kiln shell



STEEL MAKING & CONTINUOUS CASTING

TUNDISH CAR AND MOULD ADJUSTMENT







Continous casting: Bearings refurbishment

Roller screw mechanical jacks





Gear couplings for rollers

CONVERTER TILTING AND TAPPING





Ladle crane



Bogiflex®

Special gearboxes

IRON MAKING

Furnace Bell Hardfacing



Bogiflex® Gearbox for Torpedo Cars

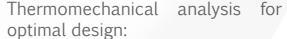


HOT ROLLING

STECKEL MILLS

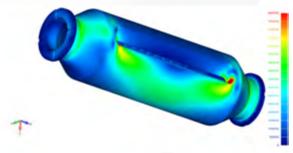
Coiler drums

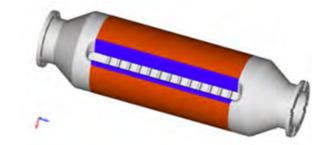






Special coating for oxyde pick ups or surface damage issues:





Creep Properties				
FC Reference	Temperature (C°)	Stress Rupture (Mpa)		Creep Rate 1%
FerryNox 25		100h	1000h	10 000h
	700	100	80	65
	800	75	50	36
	900	47	28	17
	1000	28	16	7

ROUGHING STAND

Groupe CIF, though the synergy and complementarity of the machine tools of six companies, is capable of handling complex projects, from engineering to manufacturing.

Our policy of continuous investment, our extensive experience and the multiple capabilities of our various sites enable us to fully meet the quality and delivery requirements of our customers.



Fabricated gear wheel on VBM



Gear wheel on CNC center



Welding of casing parts



Casing assembly



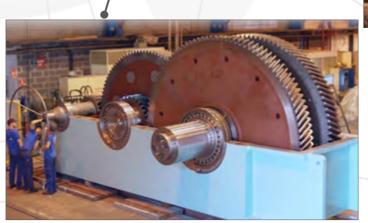
Pinion on gear grinder



Assembly



Machining of casing on CNC boring machine



Testing

SPECIAL GEARBOXES & GEARS SETS FOR HOT & COLD PROCESSING

Gear wheel



Pinion stand



Pinion stand casing



Reducers for tubes mills



Worm gears and gearboxes for mechanical jacks, screw down and cooling bed







Bar mill combined 2Hi reducer



Crop shear reducer



Coiler drive

REFURBISHING OF ROLL CHOCKS

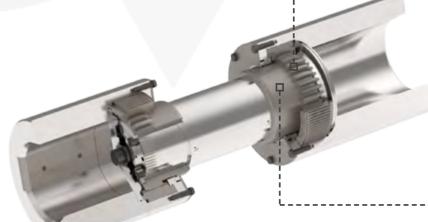




SPINDLES AND GEAR COUPLINGS









OUR ADDED VALUE



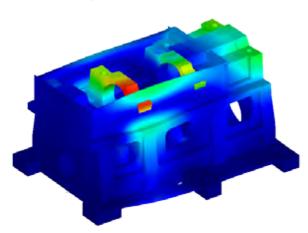
R&D - ENGINEERING

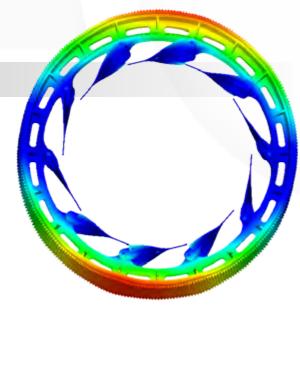


- Finite Element Analysis (FEA)
- Solidification and Flow Simulation Modeling
- Mechanical drive train design (open and enclosed gearing)
- Development of custom mechanical couplings
- Re-design of fabrications to castings (SG Iron or cast steel)
- Technical staff of approx. 100 engineers/techni-
- Multiple patents each year

MATERIAL DEVELOPMENT

- Proprietary metal casting grades (FerryNod®, Ferrynox)
- Full metallurgical test lab





SERVICE



Over thirty qualified engineers and technicians within Groupe CIF are capable of travelling over the world for operations ranging from installation and commissioning of supplied products, to preventive maintenance and technical assessments.

- Reverse Engineering
- Supervision Commissioning
- Monitoring
- Assessments/Recommendations
- Refurbishment of all types/brands of gearboxes















Compagnie Industrielle et Financière de Bussy

Vecqueville - BP 33 F-52301 JOINVILLE CEDEX Tél. : +33 (0)3 25 94 04 24

www.legroupecif.com





FERRY CAPITAIN Usines de Bussy Vecqueville - BP 33 F-52301 JOINVILLE CEDEX

Tél.: +33 (0)3 25 94 04 24 www.ferrycapitain.fr



CMD 36, Avenue de l'Europe Immeuble Étendard BP43 F-78142 VELIZY-VILLACOUBLAY Tél.: +33 (0)1 34 63 12 24 www.cmdgears.com



FCMD

Schmiedestrasse 5 D - 45527 HATTINGEN Tel.: +49 (0) 2324 686 520 www.fcmd-gmbh.de



FAD 17, Rue Pierre Bériot BP 329 F-59723 DENAIN CEDEX Tél.: +33 (0)3 27 21 44 00 www.fad-denain.com



ATELIERS ROCHE

15, Boulevard Marcelin Berthelot - BP50 F-51052 REIMS CEDEX Tél.: +33 (0)3 26 07 17 65 www.ateliersroche.fr www.roche-meshmaker.com



AHD

11, Avenue du Général Sarrail F - 52100 SAINT DIZIER Tel.: +33(0)3 25 56 75 00 www.ahd.fr