Patented **New** Direct Drive Technology



Feed Roll Motor for Grinding Technology



Direct Drive, No Gearbox

Energy saving up to 30% No Gearbox, No Maintenance and Lubrication Servo Performancee with simple v/f Driver

EMF Motor[®]

Direct Drive Feed Roll Motor for Grinding Industry

The feeder motors adjust the amount of grain from the raw material coming to the mill rollers. It is important to transfer the desired amount of raw material to the roller mill. This stability improves the grinding quality and performance of the processed material.

EMF Motor is an international company to give support to of the machine builders and end users at every point in the world. SQM is permanent magnet brushless motor, working after <u>a patented motor principle</u>, suitable for low speed and high torque gearless applications.

Advantages of the EMF Motor

- High performance even at low speeds
 1 to 200 rpm high performance working
- Energy saving up to %30
- Direct drive (No gearbox, no need maintenance and lubrication)
- Servo performance with simple V/f driver
- No cooling (No fan)
- · Minimum failure risk due to not contain mechanical parts
- Minimize the wearing of the machine in long term.
- Not allow the probability of accumulation and clogging of the raw material in the nozzle with high performance response.
- Constant Torque from standstill to full speed.

Sample calculation for Feeder Motor

Asynchronous motors and gearbox are used as a feeder motor of the classical roller machine systems.

Comparison of energy cost saving

Asyn Motor + Gearbox		EMF Motor
AC Motor	0,75 kW	SQM Torque Motor
Motor efficiency	75 %	Motor efficiency
Gearbox efficiency	80 %	NO GEARBOX
Total efficiency	60 %	Total efficiency
Input power	1,00 kW	Input power
Output power	0,60 kW	Output power
According to the same syste	m power ;	
Energy consumption difference	0,29 kW	Saving Ratio
per machine		

610 EUR

0,59 kW/h

1,69 EUR

Energy cost ** Two motor for every milling machine *** 360 days, 24 hours working



www.emfmotor.com

Yearly Energy Saving

Energy Saving **

Daily Energy Saving ***