

Patented New Direct Drive Technology



Feed Roll Motor

for Grinding Industry



Direct Drive, No gearbox

Energy saving up to %30

Direct drive

(No gearbox, no need maintenance and lubrication)

Servo performance 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 a patented motor principle, 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	0,60 kW
Motor efficiency	75 %	Motor efficiency	85 %
Gearbox efficiency	80 %	NO GEARBOX	100 %
Total efficiency	60 %	Total efficiency	85 %
Input power	1,00 kW	Input power	0,71 kW
Output power	0,60 kW	Output power	0,60 kW

According to the same system power ;

Energy consumption difference 0,29 kW

Saving Ratio 29 %

per machine

Energy Saving ** 0,59 kW/h

Daily Energy Saving *** 1,69 EUR

Yearly Energy Saving 610 EUR

Energy cost

*** Two motor for every milling machine*

**** 360 days, 24 hours working*