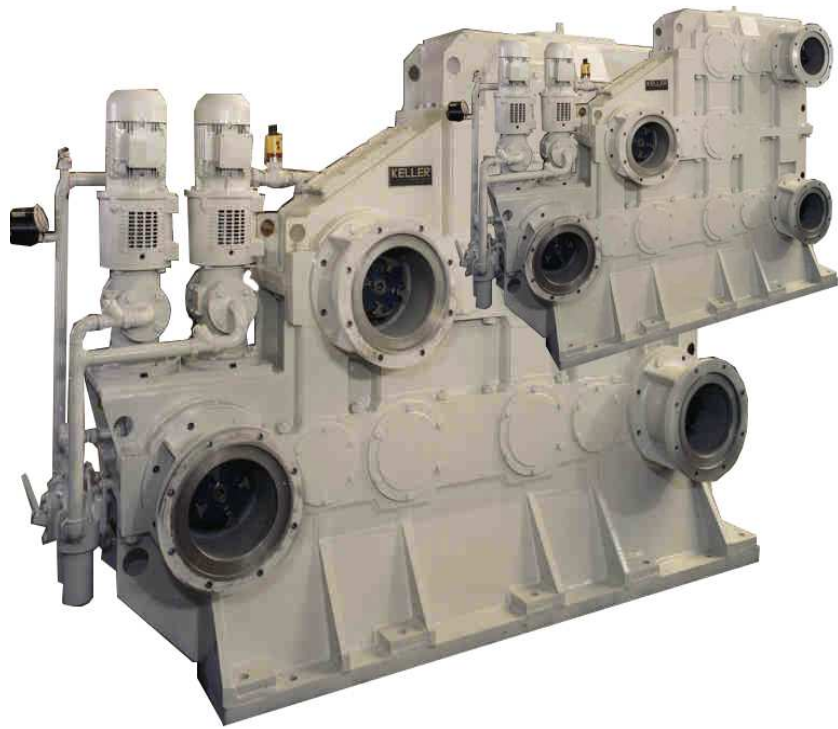


HIGH-PERFORMANCE GEARBOXES FROM KELLER FOR RUBBER & PLASTIC POWER WITH A SYSTEM



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HISTORY

- In 1901 the Keller metalworking shop began manufacturing gear wheels in a shed with an area of 50 square meters in Troisdorf
- In 1921, the procurement of gear wheels was nearly impossible. Consequently, the brothers Carl & Wilhelm Keller decided to start manufacturing gears themselves.
- In 1936, production was expanded to include gearboxes for the steel industry.
- In 1968, gears for mining
- In 1971, gears for the sugar industry
- In 1983, mixer gears
- In 1985, the company began manufacturing gears for the cement, chemical and aluminium industries
- In 2000, the production of gears for dredging began.

COMPETENCE

On the one hand, we benefit from our wealth of experience gathered over the years, and on the other hand from the production and calculation methods implemented at our company.

In view of this, we invest significantly and continuously in production and design, with the goal of always keeping up with the state of the art.

Our competence in the area of research and development is greatly enhanced by our membership in the FVA Research Association for Power Transmission Engineering, in addition to active contacts with institutes of higher learning.

HOW DO WE OPERATE?

Customer-oriented:	We offer solutions at reasonable prices.
Quality-conscious:	Certified according to DIN EN ISO 9001:2000
Experienced:	It is not the first time for us
Fast:	Cross-sector project teams

WHAT ARE WE PROUD OF :

- We are among the most competitive German manufacturers of special gears with a weight of up to 160 tons.
- We are fast and flexible, while maintaining high standards of quality.
- We equally challenge and support our employees. Continued and advanced training programs are not out of the ordinary for us.
- Our processes and structures allow us to keep learning and to share our experience with our colleagues.

CALENDER DRIVE

Nominal Power
P = 4 x 100 kW

Speed
n1 = 150 - 1500 rpm ; n2 = 3,43 – 34,3 rpm

Weight
5680 kg



4 ROLL – CALENDER IN THE USA

Nominal Power

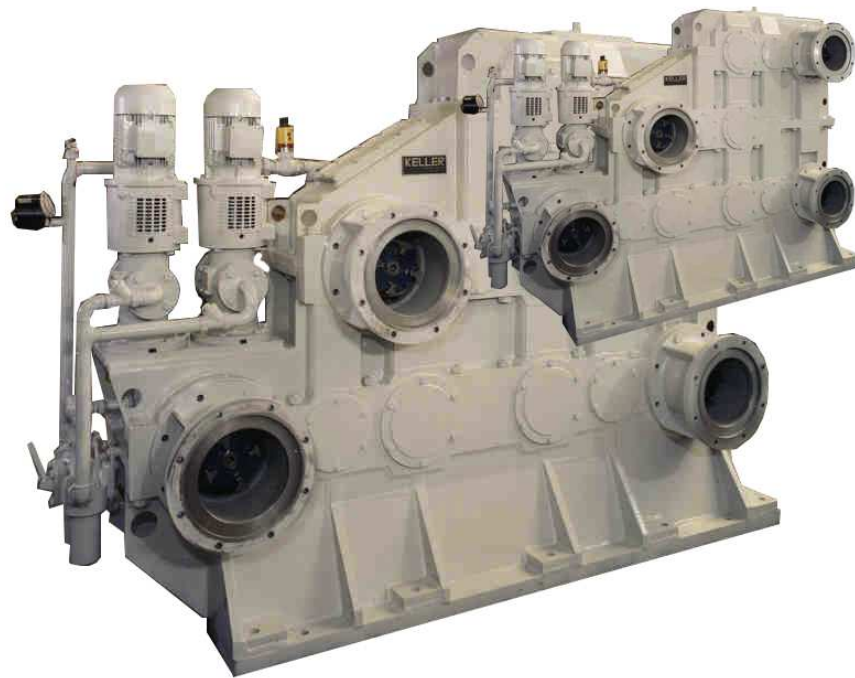
P = 4 x85 kW

Adjustable at constant torque

n1 = 150 - 1500 min⁻¹ ; n2 = 3,4 – 34,3 min⁻¹

Weight

6500 kg



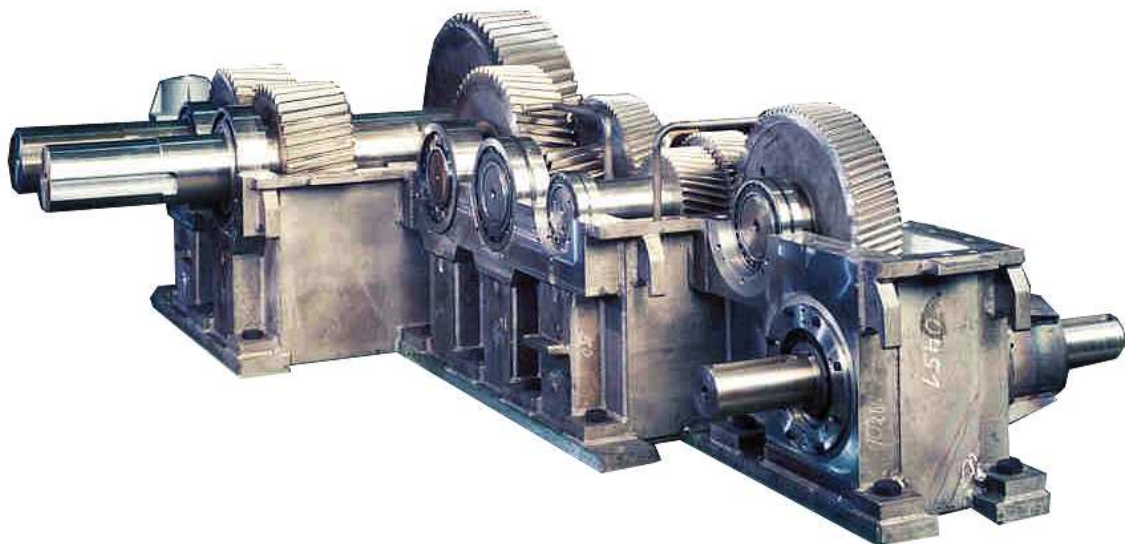
The unit is driven in this case by 4 DC – motors via flexible couplings. On the output shafts universal joints are fitted to transmit the torque to the machine.

MODERNISED SPECIAL GEAR UNIT IN FRAME FOR AN EXISTING EXTERNAL PRODUCT

Nominal Power
P = 920 kW

Speed
 $n_1 / n_2 = 1000 / 42,15 - 37,82 \text{ rpm} - n_1 / n_2 = 1500 / 63,22 - 56,73 \text{ rpm}$

Weight
19500 kg



MIXER GEARBOX ON TEST RUN ON OUR TEST BENCH

Nominal Power

P = 68 kW ; 110 kW ; 50 kW

Speed

n1 = 1000 rpm ; 1000 rpm ; 0-1000 rpm ; n2 = 10,2 rpm ; 15,9 rpm ; 0-7 min⁻¹

Ratio

i = 97,8:1 ; i = 62,9 : 1 ; i = 142,7



DOUBLE WORM-EXTRUDER GEAR UNIT

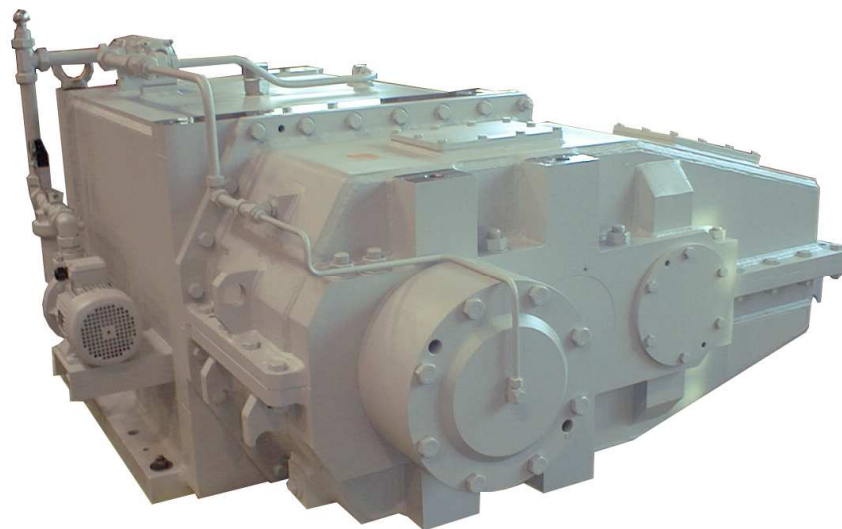
Nominal Power
P = 200 kW

Speed
n1 = 1500 rpm ; n2 = 48,88 rpm

Ratio
i = 30,685

Torque
T2 = 2 x 19100 Nm

Weight
14200 kg



BEVEL HELICAL GEAR UNIT TO DRIVE A MILL

Nominal Power

P = 2 x 125 kW

Speed

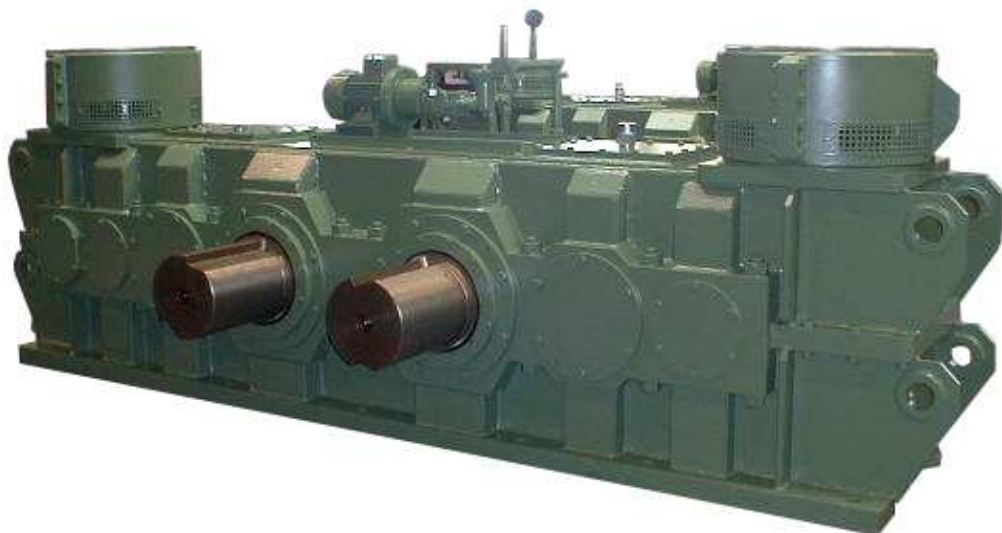
n1 = 1500 rpm ; n2 = 14,915 rpm

Ratio

i = 100,566

Torque

T2 = 6000 Nm/shaft



STANDARD MIXER GEARBOX

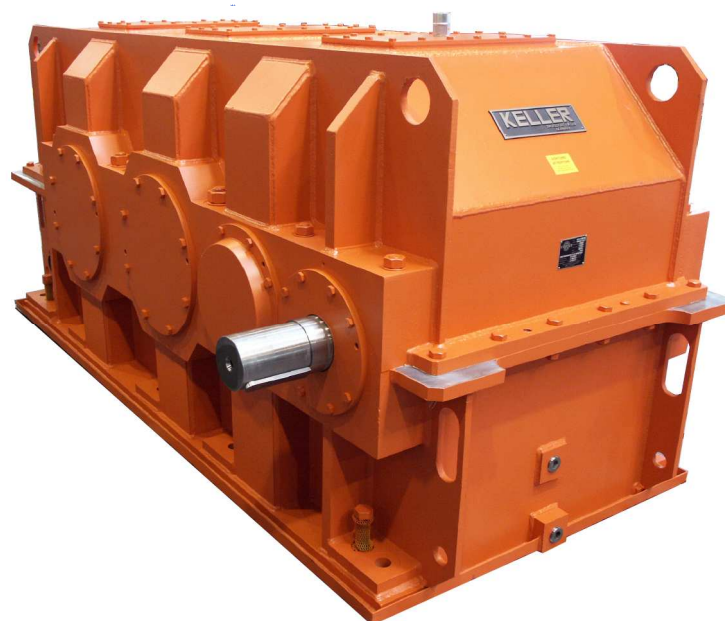
Nominal Power
P = 1500 kW

Speed
n1 = 1500 rpm ; n2 = 60 rpm

Ratio
i = 25

Torque
T2 = 120000 Nm/shaft

Weight
14800 kg



MIXER GEAR UNIT

Nominal Power

P = 2 x 850 kW

Speed

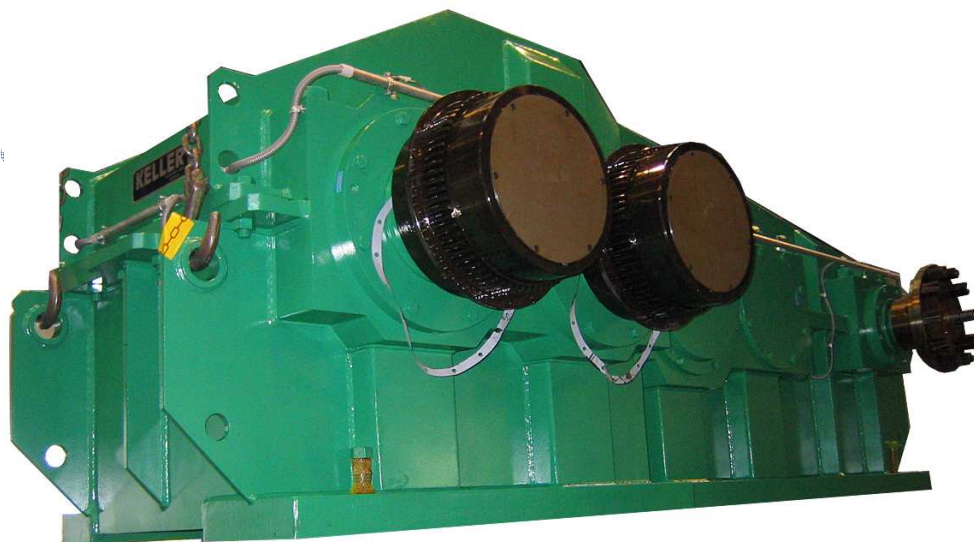
n1 = 1000 rpm ; n2 = 60,4 / 60,4 rpm

Ratio

i = 16,558:1

Weight

16150 kg



RUBBER MIXER GEAR UNIT

Nominal Power

P = 2 x 1150 kW

Speed

n1 = 115-1150 rpm ; n2 = 6,3 / 5,7-63 / 57 rpm

Ratio

i = 18,244 / 20,199

Torque

T2 = 183180 Nm/shaft

Weight

21500 kg

