

Spare part packages for large gear units



## Spare part packages if you want to...



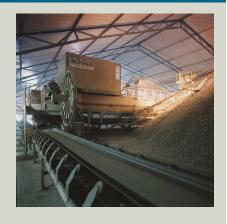
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Page 2 Industry Services

## Improve your plant availability

#### **Challenges for plant operators**

Whether in the extraction or in the processing and subsequent treatment of materials – production facilities must operate reliably and with as little downtime as possible



#### Solution

Tailored spare parts
packages for gear units
for tube and vertical
roller mills for operators
of cement plants,
mining installations and
coal mills



#### **Targets**

- Shortening plant downtimes
- Ensure short-term availability of all necessary
  - components for maintenance and repair
- Fast spare parts delivery
- Standardized ordering process



### **Business Impact**

- Reduced duration of repair work due spare parts availability on site
- High spare parts availability on site → shorter plant downtimes → increased productivity
- Standardized quotation and ordering processes → faster response to enquiries from customers
- Improved cost efficiency compared with single components



## Increased reliability with Siemens Spare part packages for large gear units

#### Siemens offering - Spare part packages for large gear units

- Spare part packages for large gear units DMGH and DMG2 for tube mills as well as KMP, KMPS and KMPP for vertical roller mills in the cement and minerals industries
- Packages are predefined and individually tailored to the customer's plant
- Packages contain all necessary components for the respective type of breakdown





#### Overview of the packages

Spare part packages and their components can be identified externally via Siemens offices or internally through specific online tools (PMD and MD-GIT) for the following gear unit types:

- DMGH and DMG2 → sizes 18, 22 and 25,4 → 9 package types per size
- KMP  $\rightarrow$  11 sizes between 225 and 450  $\rightarrow$  5 package types per size
- KMPS → 9 sizes between 376 and 576 → 5 package types per size
- KMPP  $\rightarrow$  9 sizes between 501 and 901  $\rightarrow$  6 package types per size

In addition to the spare parts packages themselves, the individual parts are also available at any time





## Process description

## Spare part packages for large gear units

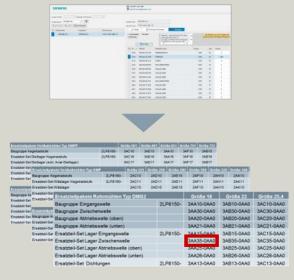
#### **Analyse**

### Select the package

#### Order



Condition analysis of the respective gear unit on site and identification of the necessary spare parts and required quantity



Selection of the tailored spare part package at the Siemens regional company



Ordering of the selected spare part package by the customer at the Siemens regional company

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Page 5 Industry Services



## Siemens offering - Variety of packages Spare part packages for DMGH / DMG2 gear units

#### Easy-to-order with MLFB ordering numbers

Spare part packages for tube mill drives type DMGH		Size 18	Size 22	Size 25,4
Assembly group input shaft	2LP8150-	1AA10-0AA0	1AB10-0AA0	1AC10-0AA0
Assembly group intermediate shaft		1AA30-0AA0	1AB30-0AA0	1AC30-0AA0
Assembly group upper output shaft		1AA20-0AA0	1AB20-0AA0	1AC20-0AA0
Assembly group lower output shaft		1AA21-0AA0	1AB21-0AA0	1AC21-0AA0
Bearings for input shaft, version 1*	2LP8150-	1AA15-0AA0	1AB15-0AA0	1AC15-0AA0
Bearings for input shaft, version 2*		1AA16-0AA0	1AB16-0AA0	1AC16-0AA0
Bearings for intermediate shaft		1AA35-0AA0	1AB35-0AA0	1AC35-0AA0
Bearings for upper output shaft		1AA25-0AA0	1AB25-0AA0	1AC25-0AA0
Bearings for lower output shaft		1AA26-0AA0	1AB26-0AA0	1AC26-0AA0
Gasket seal set	2LP8150-	1AA13-0AA0	1AB13-0AA0	1AC13-0AA0

For ordering, MLFB of the respective package has to be indicated. MLFB is made up of the number "2LP8150-" and a number corresponding to a particular size of gear unit

<sup>\*</sup> Depending on the design of the input shaft bearings

Spare part packages for tube mill drives type DMG2		Size 18	Size 22	Size 25,4
Assembly group input shaft	2LP8150-	3AA10-0AA0	3AB10-0AA0	3AC10-0AA0
Assembly group intermediate shaft		3AA30-0AA0	3AB30-0AA0	3AC30-0AA0
Assembly group upper output shaft		3AA20-0AA0	3AB20-0AA0	3AC20-0AA0
Assembly group lower output shaft		3AA21-0AA0	3AB21-0AA0	3AC21-0AA0
Bearings for input shaft	2LP8150-	3AA15-0AA0	3AB15-0AA0	3AC15-0AA0
Bearings for intermediate shaft		3AA35-0AA0	3AB35-0AA0	3AC35-0AA0
Bearings for upper output shaft		3AA25-0AA0	3AB25-0AA0	3AC25-0AA0
Bearings for lower output shaft		3AA26-0AA0	3AB26-0AA0	3AC26-0AA0
Gasket seal set	2LP8150-	3AA13-0AA0	3AB13-0AA0	3AC13-0AA0

For example:

MLFB for the spare part package "Assembly group intermediate shaft" for DMGH gear unit size 22 is: 2LP8150-1AB30-0AA0

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Page 6 Industry Services



# Siemens offering - Variety of packages Spare part packages for KMP gear units

#### **Easy-to-order with MLFB ordering numbers**

Spare part packages for vertical mill drives	s type KMP	Size 225	Size 250	Size 280	Size 300	Size 320	Size 340
Assembly group for bevel gear set	2LP8160-	2AC10	2AD10	2AE10	2AF10	2AH10	2AK10
Roller bearings for bevel gear set	2LP8160-	2AC11	2AD11	2AE11	2AF11	2AH11	2AK11
Roller bearings spare part set		2AC15	2AD15	2AE15	2AF15	2AH15	2AK15
Thrust slide bearings spare part set		2AC13	2AD13	2AE13	2AF13	2AH13	2AK13
Gasket seal set	2LP8160-	2AC12	2AD12	2AE12	2AF12	2AH12	2AK12

Spare part packages for vertical mill drives	s type KMP	Size 360	Size 380	Size 400	Size 425	Size 450
Assembly group for bevel gear set	2LP8160-	2AM10	2AP10	2AR10	2AS10	2AU10
Roller bearings for bevel gear set	2LP8160-	2AM11	2AP11	2AR11	2AS11	2AU11
Roller bearings spare part set		2AM15	2AP15	2AR15	2AS15	2AU15
Thrust slide bearings spare part set		2AM13	2AP13	2AR13	2AS13	2AU13
Gasket seal set	2LP8160-	2AM12	2AP12	2AR12	2AS12	2AU12

For ordering, MLFB of the respective package has to be indicated. MLFB is made up of the number "2LP8160-" and a number corresponding to a particular size of gear unit

For example: MLFB for the spare part package "Roller bearings spare part set" for KMP gear unit size 380 is: 2LP8160-2AP15



## Siemens offering - Variety of packages Spare part packages for KMPS gear units

#### **Easy-to-order with MLFB ordering numbers**

Spare part packages for vertical mill drives type KMPS		Size 376	Size 396	Size 426	Size 446	Size 476
Assembly group for bevel gear set	2LP8160-	5AA10	5AB10	5AC10	5AD10	5AE10
Roller bearings for bevel gear set	2LP8160-	5AA11	5AB11	5AC11	5AD11	5AE11
Roller bearings spare part set		5AA15	5AB15	5AC15	5AD15	5AE15
Thrust slide bearings spare part set		5AA13	5AB13	5AC13	5AD13	5AE13
Gasket seal set	2LP8160-	5AA12	5AB12	5AC12	5AD12	5AE12

Spare part packages for vertical mill drives type KMPS		Size 496	Size 526	Size 546	Size 576
Assembly group for bevel gear set	2LP8160-	5AF10	5AG10	5AH10	5AJ10
Roller bearings for bevel gear set	2LP8160-	5AF11	5AG11	5AH11	5AJ11
Roller bearings spare part set		5AF15	5AG15	5AH15	5AJ15
Thrust slide bearings spare part set		5AF13	5AG13	5AH13	5AJ13
Gasket seal set	2LP8160-	5AF12	5AG12	5AH12	5AJ12

For ordering, MLFB of the respective package has to be indicated. MLFB is made up of the number "2LP8160-" and a number corresponding to a particular size of gear unit

For example: MLFB for the spare part package "Gasket seal set" for KMPS gear unit size 426 is: 2LP8160-5AC12

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Page 8 Industry Services



## Siemens offering - Variety of packages Spare part packages for KMPP gear units

#### Easy-to-order with MLFB ordering numbers

Spare part packages for vertical mill drives type KMPP		Size 501	Size 601	Size 651	Size 701	Size 751
Assembly group bevel gear set	2LP8160-	3AC10	3AE10	3AA10	3AF10	3AB10
Slide bearings for bevel gear set	2LP8160-	3AC16	3AE16	3AA16	3AF16	3AB16
Slide bearings spare part set (excl. thrust slide bearings)		3AC17	3AE17	3AA17	3AF17	3AB17
Thrust slide bearings spare part set (first planetary stage)		3AC14	3AE14	3AA14	3AF14	3AB14
Thrust slide bearings spare part set (output shaft)		3AC13	3AE13	3AA13	3AF13	3AB13
Gasket seal set	2LP8160-	3AC12	3AE12	3AA12	3AF12	3AB12

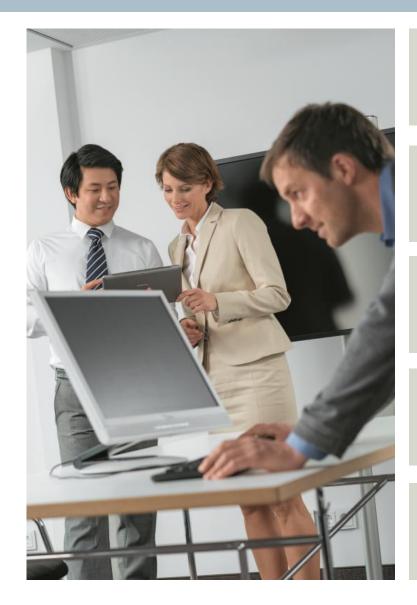
Spare part packages for vertical mill drives type KMPP		Size 751M	Size 801	Size 851	Size 901
Assembly group bevel gear set	2LP8160-	3AK10	3AJ10	3AG10	3AH10
Slide bearings for bevel gear set	2LP8160-	3AK16	3AJ16	3AG16	3AH16
Slide bearings spare part set (excl. thrust slide bearings)		3AK17	3AJ17	3AG17	3AH17
Thrust slide bearings spare part set (first planetary stage)		3AK14	3AJ14	3AG14	3AH14
Thrust slide bearings spare part set (output shaft)		3AK13	3AJ13	3AG13	3AH13
Gasket seal set	2LP8160-	3AK12	3AJ12	3AG12	3AH12

For ordering, MLFB of the respective package has to be indicated. MLFB is made up of the number "2LP8160-" and a number corresponding to a particular size of gear unit

For example: MLFB for the spare part package "Gasket Seal Set" for KMPP gear unit size 751M is: 2LP8160-3AK12



## Siemens is your reliable partner



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Extensive industry experience and comprehensive technology and product knowledge

Strong technical and technological expertise

Fully integrated solutions from a sole supplier

Our worldwide network of service centers means we are close by and provide direct and personal support – whenever you wish

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Page 10 Industry Services



## The choice is yours Which topics have priority for you?



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Page 11 Industry Services