INDUSTRIAL LUBRICANT TECHNICAL DOCUMENT

GREASE SERIES

Industrial y Electric-Motor grasas

OPERATION AND HANDLING INSTRUCTIONS

N.º de documento	Revisión	Fecha de emisión	Release status
MOTTA-GREASE-OHI-ES	REV.05	2026-09-13	Emitido para use

Read Antes del uso: Este documento must be used together con the grado-specific TDS, SDS y fabricante del equipo's instructions. Emitido by MOTTA Lubricants. The current Revisión de Este documento is published at motta-lube.com/documentos/ — if your copy differs, that list governs.

1 Alcance y aplicación

This guide covers MOTTA EP, GT, SG, CL201 y E-series grasas para industrial y electric-motor lubrication. It does not cover FG2 or aplicaciones que requiere incidental-food-contact compliance. Seleccionar the exact producto para the bearing, mechanism y lubrication sistema; these producto families are not automatically interchangeable.

MOTTA productos covered by this handbook

Producto	grados	Standards y nivel de desempeños	Formatos de envase
MOTTA CL201	NLGI 1	DIN 51502 · ISO 2176 · ISO 6743-9 · NLGI 1	15kg / 170kg
MOTTA E2	NLGI 2	DIN 51825 (KP2K)	15kg / 170kg
MOTTA E3	NLGI 3	DIN 51825 (KP3K)	15kg / 170kg
MOTTA EP	NLGI 000, NLGI 00, NLGI 0, NLGI 1, NLGI 2, NLGI 3	DIN 51825 (KP) · ISO 6743-9	15kg / 170kg
MOTTA EP NLGI 2	NLGI 2	DIN 51825 (KP2K)	15kg / 170kg
MOTTA GT Series	NLGI 1, NLGI 2	DIN 51825 (KP)	15kg / 170kg
MOTTA GT15	DIN 51502, ISO 6743-9, NLGI 1	DIN 51825 (KP)	15kg / 170kg
MOTTA GT20	NLGI 2	DIN 51825 (KP)	15kg / 170kg
MOTTA GT100S	NLGI 1	DIN 51825 (KP)	15kg / 170kg
MOTTA SG Series	NLGI 1, NLGI 2, NLGI 3	DIN 51825 (KP)	15kg / 170kg
MOTTA SG100	NLGI 2	DIN 51825 (KP)	15kg / 170kg
MOTTA SG220	NLGI 2	DIN 51825 (KP)	15kg / 170kg
MOTTA SG221	NLGI 1	DIN 51825 (KP)	15kg / 170kg
MOTTA SG460	DIN 51502, ISO 6743-9, NLGI 1	DIN 51825 (KP)	15kg / 170kg
MOTTA SG460S	NLGI 00	DIN 51825 (KP)	15kg / 170kg

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Producto	grados	Standards y nivel de desempeños	Formatos de envase
MOTTA SG1000	NLGI 2	DIN 51825 (KP)	15kg / 170kg
MOTTA SG1500	DIN 51502, ISO 6743-9, NLGI 1	DIN 51825 (KP)	15kg / 170kg

grados, standards y Formatos de envase as published on each producto's Ficha técnica at motta-lube.com/productos/. Where a data sheet y this table differ, the data sheet governs.

2 Selección y previa al uso Inspección

- Seleccionar NLGI consistency, base-oil viscosity, temperatura capability y load performance para the bearing speed, load, sealing y lubrication system. Do not use dropping point as the continuous operating-temperatura limit.
- Check compatibilidad de the specific existing y replacement grasas, including base aceite, thickener y additives; matching thickener names alone No prove compatibilidad.
- For electric motors, use the especificado grasa, quantity, interval y purge arrangement. Prevent grasa entering windings, Evite overfilling, y No force grasa through a blocked path.
- Before work que requiere access to moving parts or a danger zone, stop y isolate hazardous energy. Relubrication during operation is permitted only by the equipo procedure using designed lubrication points con effective guards y safe access.

3 Initial Aplicación

- For new equipo or después de overhaul, fill to the initial grasa quantity especificado by the fabricante del equipo; No estimate.
- Use limpieza, dedicated Aplicación equipo to Evite introducing dust, moisture or a different grasa.
- The bearing cavity should normally not be completely packed unless the manufacturer specifies otherwise; over-packing causes churning heat y raises seal pressure.
- After Aplicación, run the equipo y observe temperatura, noise y leakage.

4 Relubrication y In-Service Monitoring

- Apply the equipo-specific relubrication quantity y interval, adjusted para the actual duty y monitoring results. No keep pumping solely to obtain visible grasa discharge.
- Where a purge arrangement exists, follow its opening, clearing y closing procedure. If delivery pressure rises abnormally or the prescribed flow is absent, stop pumping y investigate under safe isolation.
- No add grasa to sealed-for-life bearings unless the equipo instructions explicitly provide para it. Check automatic lubricator delivery, lines y alarms; a filled Depósito alone does not prove lubricante reaches the point.
- Trend temperatura, noise, vibration, leakage y grasa condition antes de y después de relubrication. aceite release can be part de normal grasa lubrication; assess unusual separation together con consistency, contamination y operating trends.

5 Replacement Judgement

- Investigate persistent abnormal temperatura, vibration, noise or leakage promptly, y follow the equipo alarm y shutdown criteria. No treat added grasa as a universal remedy.
- For suspected water, solids or incompatible-grasa contamination, assess whether the bearing y lubrication paths require limpiezaing y whether damage has occurred antes de refill.

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- Compare grasa condition con the fresh producto y service history. Apariencia alone is not a universal discard or continued-operation criterion; crítico equipo may require representative sampling y

appropriate laboratory assessment.

6 Changing Between Types

- Before substitution or Mezcla, confirm equipo performance, material compatibilidad y the specific productos involved. An electric-motor designation alone neither proves nor rules out suitability para another Aplicación.
- Agree el producto-specific limpiezaing or purge procedure. Where compatibilidad is unknown, remove old grasa using the equipo-approved Método; No introduce an unespecificado intermediate grasa.
- Identify dedicated tools y transfer containers by producto. After changeover, monitor temperatura, noise, leakage y grasa condition.

7 Abnormal-Condition Manejo

Situation	Primary Action
Abnormal bearing temperatura rise	Shut down y verificar whether the grasa quantity is excessive, the grasa has failed or the bearing is faulty
Elevated noise / vibration	Reduce load or shut down to verificar lubrication condition y bearing state
aceite separation / grasa leakage	Check seal condition; assess whether seals or the grasa type need changing
Mezcla de different types suspected	Stop relubricating, assess compatibilidad y limpieza out y replace if necessary

8 Almacenamiento

- Keep in the original sealed container, stored in a cool, dry, ventilated area away from moisture y strong oxidisers.
- Transfer containers must be limpieza y clearly labelled; different grasa types must be stored y labelled separately to prevent misuse.
- Once opened, use the grasa promptly to Evite la contaminación or oxidation from prolonged exposure.

9 Valores de referencia — indicativos, no una especificación de MOTTA

The figures below are published industry references, given so that a reading can be judged on site when the máquina documentación is not to hand. They are screening prompts, not scrap limits. Where the fabricante del equipo, the component manufacturer or your aceite analysis laboratory states a figure, that figure governs y this table does not apply.

NLGI consistency y donde each grade is normally used

NLGI grade	Worked penetration at 25 °C (0.1 mm)	Normally used para
000 – 0	445 – 385	Centralised sistemas, gearboxes taking semi-fluid grasa
1	355 – 325	Centralised sistemas in cold conditions
2	295 – 265	General bearing lubrication — the most common grado
3	265 – 235	Vertical shafts, high speed, donde grado 2 migrates

Dropping point is not a service temperatura. A grasa is normally used well below it — a common working rule is at least 40 °C below the dropping point para continuous service. Use the equipo maker's limit donde one is given.

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When a reading is worth investigating

What is measured	Prompt to investigate	Why this figure
Consistency change in service	Two NLGI grades softer or harder than new	Softening suggests mechanical shear or contamination; hardening suggests aceite separation or oxidation
Bearing temperatura después de regreasing	Rises y does not settle within a few hours	Over-greasing raises churning loss; a persistent rise is a fault, not a filling effect
Purged grasa appearance	Metallic sheen, grit, water or a change de colour	The purged grasa is the cheapest condition sample available on a bearing

A single result is a reason to look, not a reason to drain. Establish the new-aceite reference para el producto actually in use, trend against it, y find the cause antes de changing the aceite — changing the aceite does not remove a contamination source or a mechanical fault.

10 Eliminación

- Residuos grasa y grasa-contaminated materials must be collected separately y handed to a compliant Eliminación organisation per local regulations.
- Residuos grasa must Nunca be discharged into drains or onto saceite.

Use y documento information

Use this guide con the current producto TDS, SDS y equipo instructions. Resolve conflicting requisitos con the equipo y lubricante technical contacts antes de proceeding. Follow site energy-isolation, spill-response y residuos-Manejo procedures. producto-specific limits y equipo requisitos govern selection y intervalo de servicios.

Revisión 02: Limited Alcance to industrial y electric-motor grasas; clarified safe relubrication, aceite release y changeover assessment. Revisión 03: added a reference-Valores section — published industry figures para on-site screening. Revisión 04: corrected the reference Valores para slideways, spindles, sintético aceites de engranajes y ready-to-use refrigerante; added the table de MOTTA productos covered; added the copyright y trademark notice. Revisión 05: removed a leftover review-copy notice that contradicted the Emitido status. No technical content changed.

Recommended Records to Retain

Record Category	Minimum Recommended Content
equipo	equipo number, manufacturer, model, location y críticoity
Producto	Full producto name, NLGI grade, thickener type y batch number
Operation	Relubrication date, quantity, lubrication point y responsible person
condición de operación	Temperature, noise/vibration y abnormalities
Maintenance	limpiezaing/replacement, contamination or Mezcla events

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