Product	Key Benefits	Key Applications	Fluid Technology	Viscosity Grade	FZG Stages Passed	Pour Point	Performance Levels
Industrial enclosed spur / helical / bevel / planetary gears							
PETRONAS Gear Syn FG		Industrial Spur / Bevel / Helical / Planetary gears. Industrial Worm gears optional	Synthetic PAG	150 to 680	>12	-45°C	David Brown Type G lubricant; DIN 51517 Part III; Flender BA T 7300 A+B; FDA 21 CFR 178.3570 (lubricants suitable for incidental food contact).
PETRONAS Gear Syn PAG	Excellent micropitting, extreme pressure and anti-wear protection     Up to 5x longer oil life**     Excellent performance incl. energy saving	Industrial Spur / Bevel / Helical / Planetary gears. Industrial Worm gears optional	Synthetic PAG	150 to 680	>12	-45°C	David Brown Type G lubricant; DIN 51517 Part III; Flender BA T 7300 A+B.
PETRONAS Gear Syn PAO	Excellent extreme pressure and anti-wear protection Up to 3x longer oil life** Excellent performance incl. energy saving	Industrial Spur / Bevel / Helical / Planetary gears	Synthetic PAO	150 to 680	>12	-42°C	AGMA 9005-E02; DIN 51517 Part III; US Steel 224.
PETRONAS Gear FL	Excellent micropitting, extreme pressure and anti-wear protection Up to 1.6x longer oil life* Excellent performance	Industrial Spur / Bevel / Helical / Planetary gears	Mineral	150 to 320	>12	-27°C	AGMA 9005-E02; David Brown S1.53.101; DIN S1517 Part III; Fives Cincinnati Machine Gear; GM LS 2 EP Gear Oil; ISO 12925-1 CKC/CKD; Siemens MD Approval for Flender Gear drives - Revision 15; US Steel 224.
PETRONAS Gear MEP		Industrial Spur / Bevel / Helical / Planetary gears	Mineral	68 to 1000	>12	-27°C	AGMA 9005-E02; David Brown S1.53.101; DIN 51517 Part III; Fives Cincinnati Machine Gear; GM LS 2 EP Gear Oil; ISO 12925-1 CKC/CKD; US Steel 224.
Industrial worm gears							
PETRONAS Gear Syn WI		Industrial Worm gears	Synthetic PAG	150 to 460	>12	-30°C	David Brown Type G lubricant; Defense standard 05-50.1 No. 29 for grades 150,220 and 460; DIN 51517 Part III.



# PROVEN EXPERTS, ALWAYS READY TO HELP!

At the heart of our services, our experts strive to give you the peace-of-mind you're looking for.

Partner with us and take your business to the next level.





## **PETRONAS**

Fluid Technology Soluti⊳ns™

#### YOUR PARTNER FOR PROGRESS

PETRONAS Lubricants International (PLI) is the global lubricant division of PETRONAS, one of the most successful petrochemical companies in the world.

Our mission is to deliver proven product technology and related services benefitting from our 100 years of experience. We believe in maximising your productivity with value-added products and services that are global, yet personal - our presence in 128 countries ensures our technical expertise reaches you wherever you are.

PLI's differentiator is product excellence, developed by world-class Technology Centres and brought to your market with local expertise. Our passion for performance improvement makes us an obvious choice for key OEMs and delivers success in Formula One Motorsport. Now, it has translated into a comprehensive industrial product range and tailor-made services for you.



#### YOUR CHALLENGES, OUR EXPERTISE

Today is the age of smaller, faster, and stronger. OEMs are offering increasingly compact and higher output geared drives. These have to perform at increased speeds, under higher loads as well as being constructed from new materials in order to significantly improve output and performance. Additionally the competitive market forces equipment owners to pursue more reliable and durable solutions to maintain profitability of their business.

These improvements in gearbox design along with end-user expectations demand more robust innovations in gear oils. Reduced oil reservoir capacities and higher power output generate much greater oil stress, causing low-quality lubricants to fail

prematurely thus compromising system impact on the continuity of a production

At PLI, we understand that maximising uptime is your key challenge. That's why we have developed Fluid Technology Solutions™, an intelligent approach to your fluid requirements that maximises your business performance through tailor-made product offerings and expert services. Our superior solutions for industrial gearbox lubrication meet the most severe industry and OEM specifications in order to deliver you products you can rely on.

## YOUR KEY TO MAXIMISING PERFORMANCE

Focusing our expertise, we've developed a comprehensive portfolio of industrial gear oils that serves every type of industrial gearbox application. Choose the right product for your application need and take the effectiveness of your industrial gears

#### Industrial enclosed spur / helical / bevel / planetary gears

#### Industrial worm gears

#### **PETRONAS Gear Syn FG**

- ♦ Food industry appro
- ♦ Up to 5x longer oil life\*\*

#### **PETRONAS Gear Syn PAG**

- ♦ Up to 5x longer oil life\*\*

- **PETRONAS Gear Syn PAO**
- ♠ Excellent extreme press
   ♠ Up to 3x longer oil life\*
- ♠ Excellent performance incl. energy saving

#### PETRONAS Gear FL

Increasing performance and protection improving uptime and lowering maintenance

- ♦ Up to 1.6x longer oil life\*

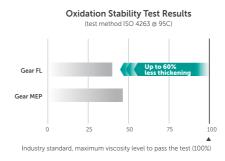
#### **PETRONAS Gear MEP**

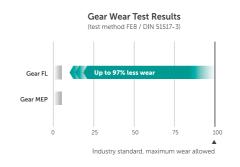
- ♠ Excellent extreme pressure
   ♠ Up to 1.5x longer oil life\*

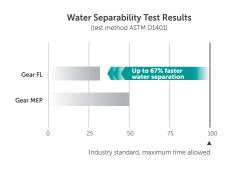
- ♦ Excellent extreme pressure and anti-wear protection ♦ Extremely long oil life possible "fill for life" applications
- Excellent performance incl. outstanding load carrying capabilities

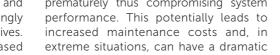
# First price gear oils

- \*\* vs. conventional mineral gear oils











### FTS SERVICE PROGRAM - TAILOR-MADE FOR YOU

At PETRONAS, we believe success is made by close partnerships. It is that very belief that drives us to work together with you in overcoming the challenges you face from demands of higher productivity to operating under intense, severe conditions.

That's why we present to you our **Fluid Technology Solutions™** Service Program - a tailor-made range of services designed to maximise your business performance. From specialised on-site analysis to emergency support for operational recovery, we are committed to assisting you in every possible situation.

Partner with us and take your business to the next level.