

RAMUDO Metal Forging Lubricant Product Guide 2017

High Performance Graphite Lubricants From GERMANY
Products



ISO 9000:2008

Hot&Warm Forging Lubricant Products 2017

Products	Parts	Application
RAMUDO W100	Simple part	Hot&Warm Forging
RAMUDO W100PT	Complex part	Hot&Warm Forging
RAMUDO W144	Complex part extrusion	Hot& Warm forging
RAMUDO W149BC	Part pre coating	Billet Coating
RAMUDO W150	Forging part > 5 kg	Hot&Warm Forging
RAMUDO L110	Ready for use product/Oil	Ferrous/Non-Ferrous Metal Forming
RAMUDO L120	Dilutable product/Oil	Ferrous/Non-Ferrous Metal Forming
RAMUDO L135	Dilutable product/Oil	Ferrous/Non-Ferrous Metal Forming
RAMUDO E120	Water/Oil dilutable	Ferrous/Non-Ferrous Metal Forming



Sample of Automotive part



Simple part



Complex extrusion part

Sample of Automotive part



Complex part



Heavy part

Warm Forging Lubricant Products 2017

Products	Properties	Dilution/ Temp
RAMUDO W 100	Excellent wetting, Excellent coating	1:20, die temp. >120°C
RAMUDO W 100 PT	High lubricity	1:20, die temp. >120°C
RAMUDO W 144	High lubricity, Optimized wetting	1:6, die temp. > 100°C
RAMUDO W 149 BC	Excellent coating	1:4 billet temp. 150 °C
RAMUDO W 150	Optimized coating	1:6, die temp. > 250 °C

Hot Forging Lubricant Products 2017

Products	Parts	Application
RAMUDO W 100	Simple part	Hot forging
RAMUDO W 100 PT	Complex part	Hot forging
RAMUDO W 144	Low die temperature	Hot forging
RAMUDO W 149 BC	Medium solid	Hot forging
RAMUDO W 150	High solid	Hot forging

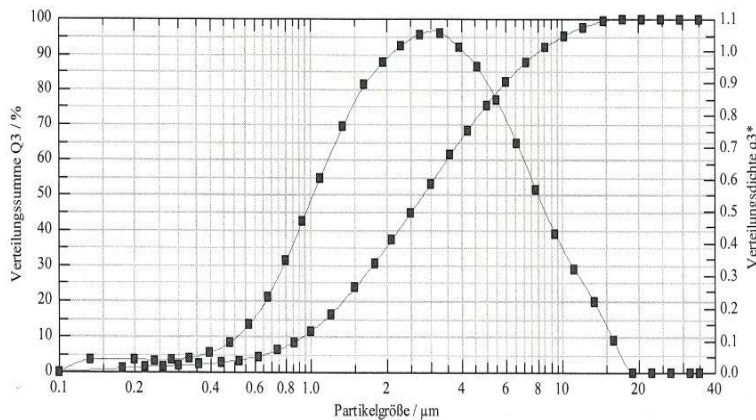
Hot Forging Lubricant Products 2017

Products	Properties	Application
RAMUDO W 100	Excellent coating	1:20, die temp. 150°C
RAMUDO W 100 PT	Excellent tool life	1:20, die temp. 150 °C
RAMUDO W 144	Excellent tool life	1:6 die temp. > 100 °C
RAMUDO W 149 BC	Optimized lubricity	1:20, tool temp. 250 °C
RAMUDO W 150	Highly dilutable	1:25, die temp. 250 °C

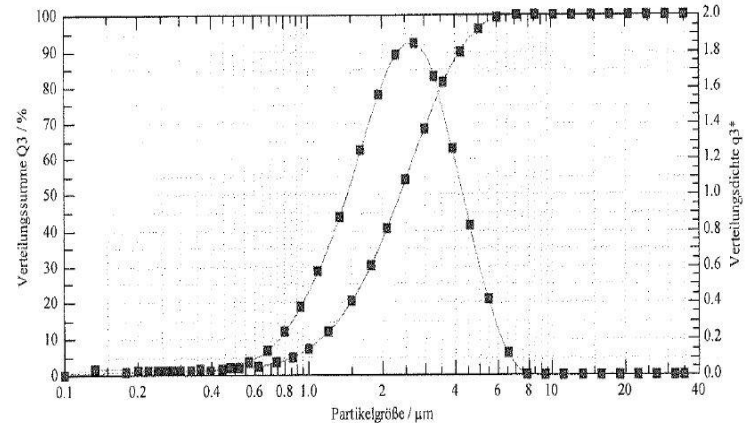
Differentiation of RAMUDO products

“Stability“

- Stability :
Products are based on special grinded natural graphite.
Special grinding is generating a narrow and precise
Particle size distribution(PSD)



Standard Graphite PSD



Premforge Graphite

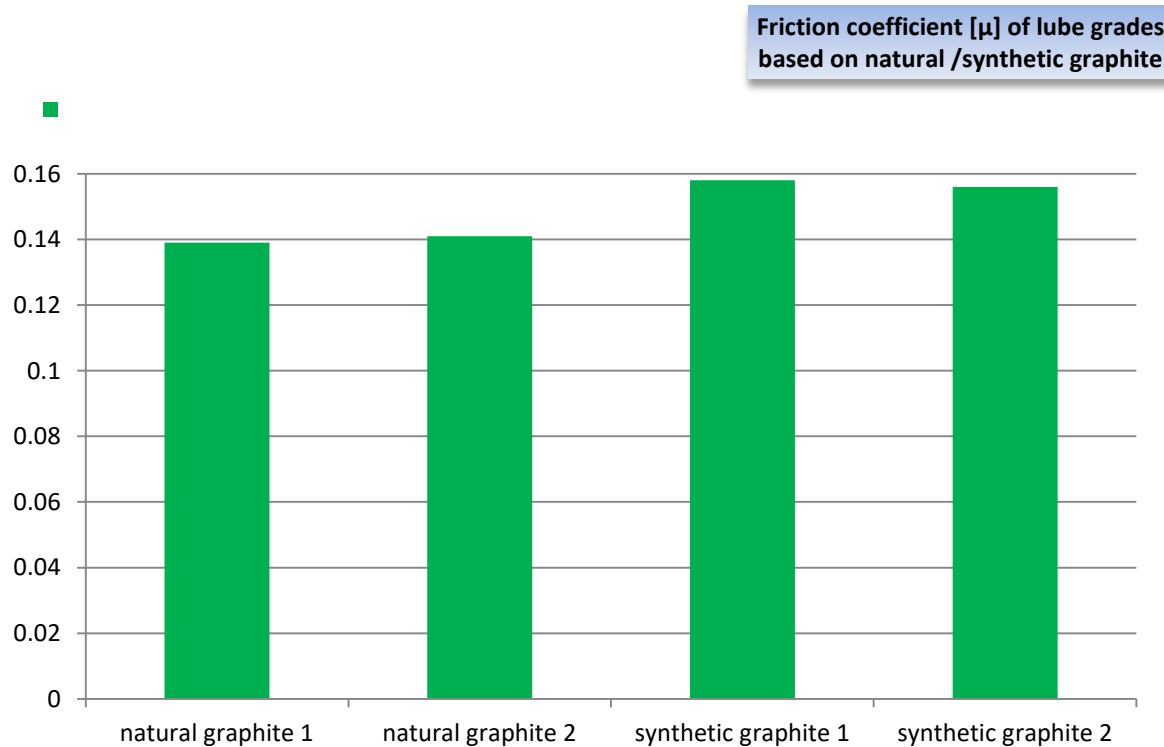
→ Excellent Stability of Concentrated and Diluted Product

Differentiation of RAMUDO products

“Lubricity“

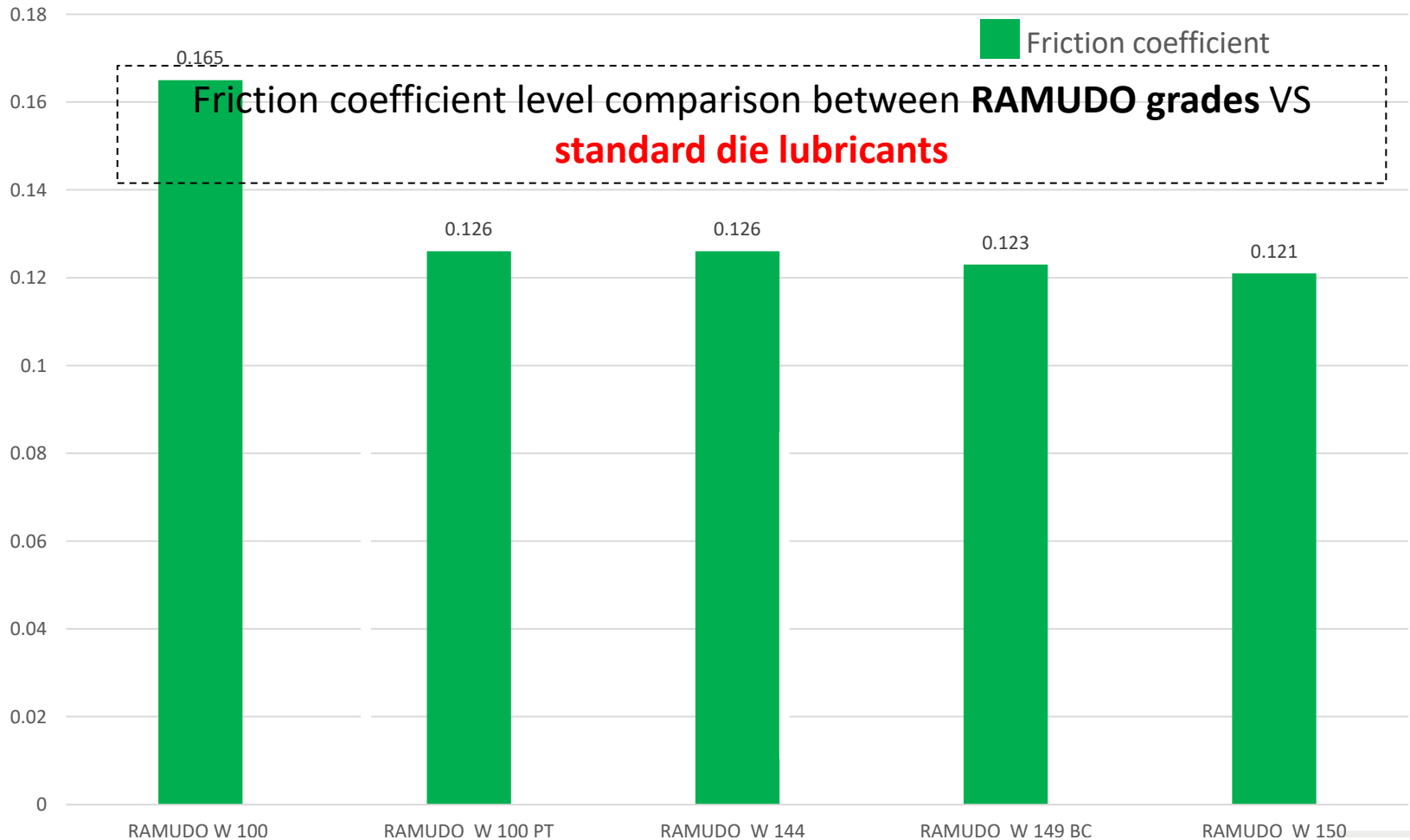
✦ Lubricity :

Products are based on special natural graphite. This graphite has the lowest friction coefficient and will reduce wear and friction to a minimum.



→ Low friction coefficient → Lxcellent lubricity → High tool life

Comparison of RAMUDO products vs standard die lubricants according “Lubricity“

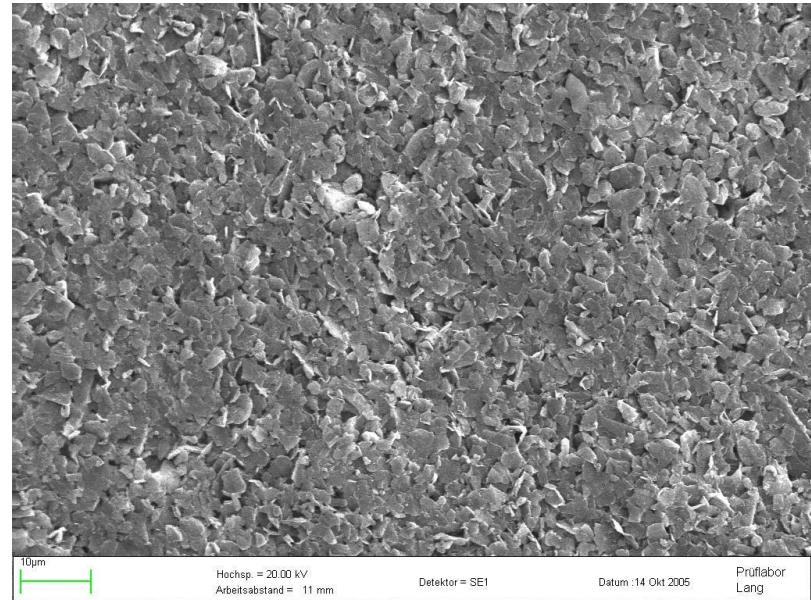
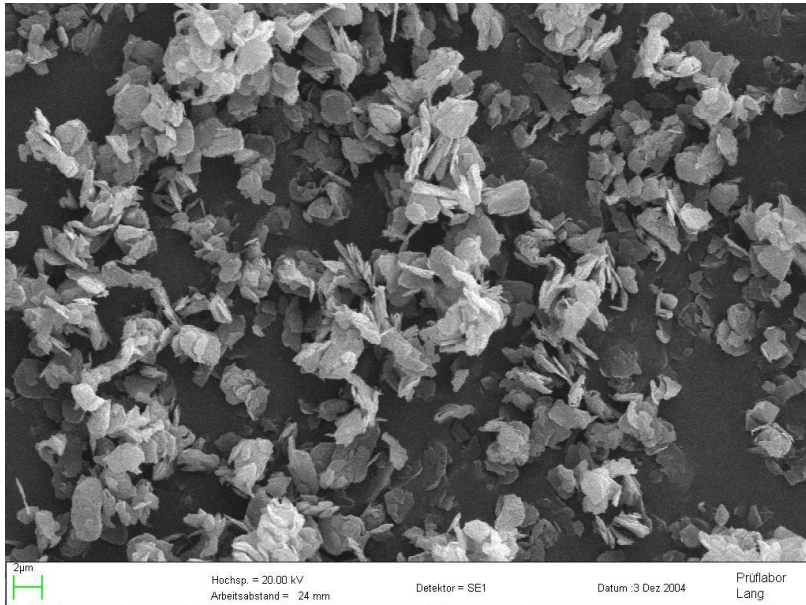


Differentiation of RAMUDO products

“Wetting/Coating“

Wetting/Coating

Products are based on a very fine and special shaped natural graphite. This special graphite particles are wetting a metal surface very well. Different coating layers are possible.



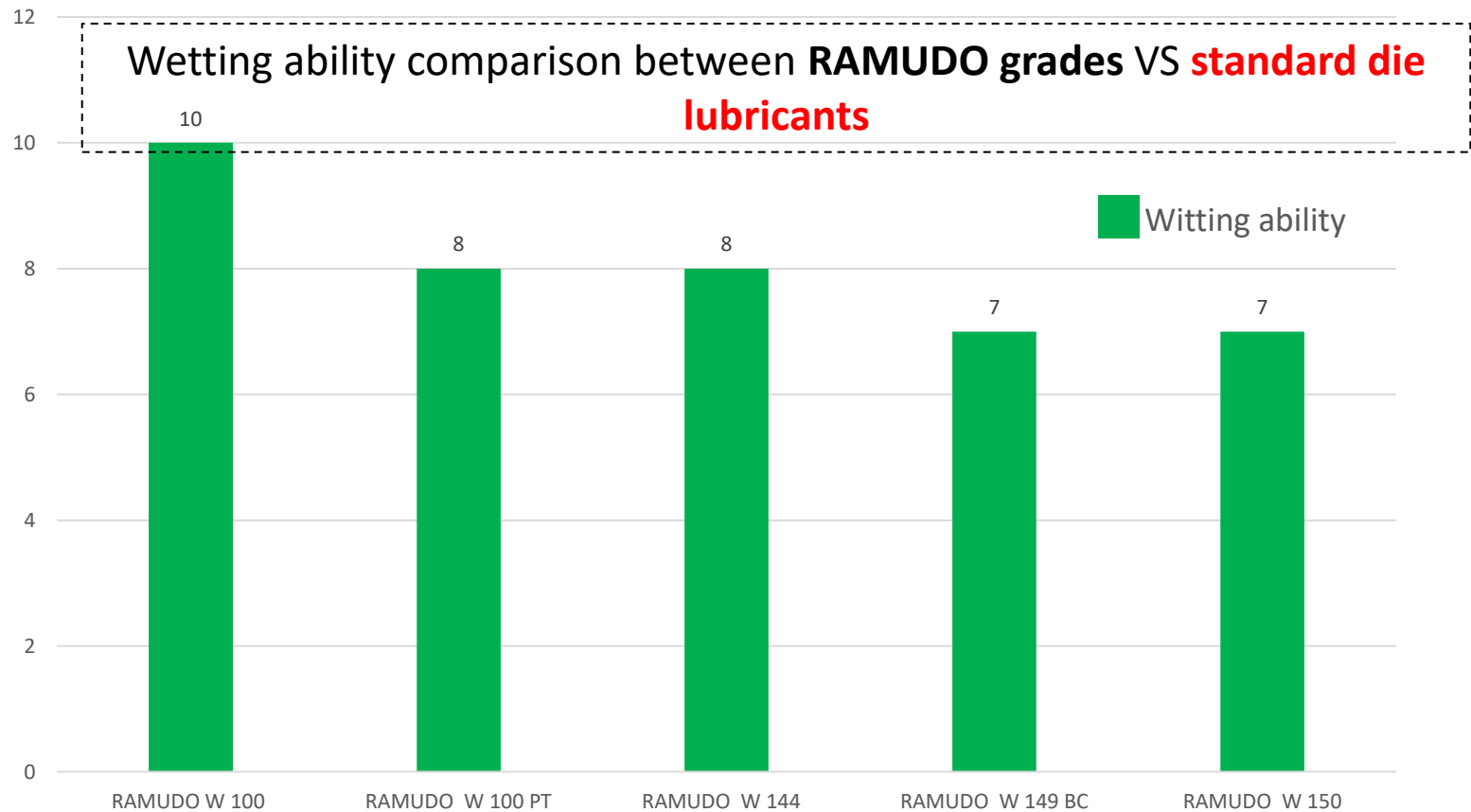
Special shaped fine graphite particle



Excellent wetting and coating

→ Excellent performance

Comparison of RAMUDO products vs standard die lubricants according “Wetting/Coating“ ability





**Thank you for your
attention**