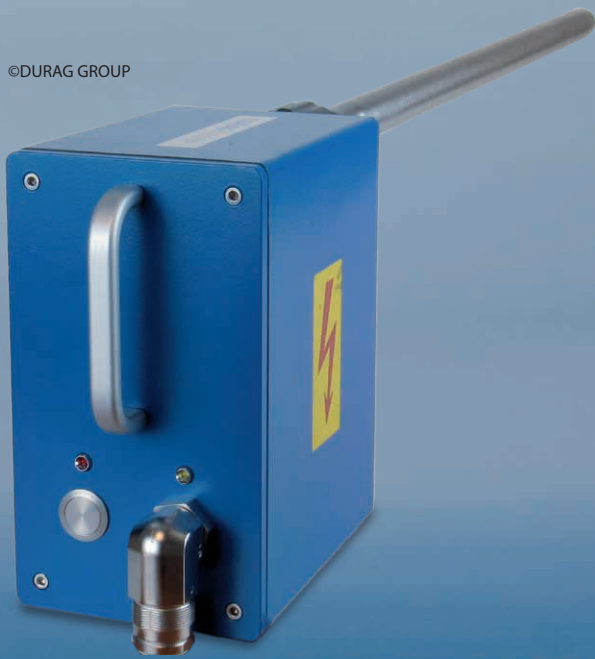


## D-HG 500

# High Energy Igniter

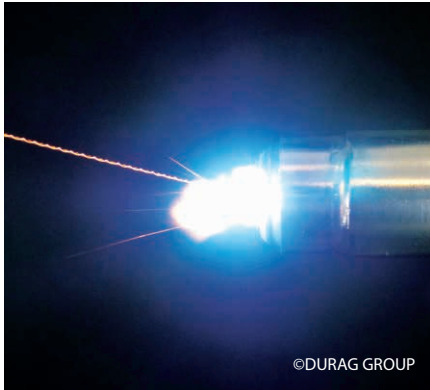
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- Integrated protection and control functionalities
- Operation at  $-40\text{ }^{\circ}\text{C}$  up to  $+80\text{ }^{\circ}\text{C}$
- Non-wearing electronic design
- Microprocessor controlled
- Parametrisation

## New Generation of High Energy Igniters

### Reliable ignition of gaseous and liquid fuels



Separate set-up: High energy igniter for wall mounting



Explosion proof version: Type Ex de



#### Features

- Reliable ignition of gaseous fuels
- Ignition of liquid fuels, up to heavy oil grade 6
- Suitable "Ignitor Class 3 Special" in accordance with NFPA 85
- Thyristor controlled and therefore non-wearing electronic
- Integrated temperature control
- Protective function at under and over voltage
- Discharge control and short circuit test
- LED indication for ignition feedback and ready for operation signal

#### Functionality - reliable as usual

By discharging a high-voltage capacitor at the ignition lance's tip a spark is created. The spark discharge is triggered by a non-wearing switch (thyristor). Every spark produces energy of 5.6 J at a maximum ignition frequency of 20 sparks per second.

#### Compatibility of existing installations

100 % downward compatibility of the electronics allows up-grading existing D-HG 400 installations to the new D-HG 500. Housings, ignition lances and retraction units can continue to be used without limitations.

#### New:

#### Version D-HG 550 allows software-assisted customer specific parametrisation

- Adaptation of timing for different ignition phases
- Reduction of ignition frequency for highly flammable fuels
- Optional indication of ignition tip wearing for forward planning of maintenance and spare part procurement (condition-based maintenance)
- On-site adjustment of settings as well as error analyses by DURAG Service technicians for high availability
- Optional utilization of D-ESI 100 software by user

#### Applications

Reliable ignition of industrial burners of any capacity in

- Chemical industry
- Refineries
- Cement plants
- Waste incinerators
- Power plants
- Steam generators
- Claus plants



Cement plant



Waste incinerators



Power plant

## Beneficial control functionalities

The microprocessor based design of the electronics allows the use of newly implemented control functionalities in order to protect the device against damages due to overheating or overload.

Faulty connected or defective ignition lances are detected before the start of ignition. Recognized errors are directly displayed at the device.

## Complementary components for complete ignition solutions

- ATEX-approved ignition lances for explosive gas and dust areas
- Flexible ignition lances for tilting burners
- Retraction units D-VE 500 series available for safe zones and hazardous areas

## Most easy integration

Different versions of the D-HG 500 series allow the installation in various industrial surroundings:

- Compact or separated set-up of ignition device and ignition lance
- Lengths of ignition lances according to customer specific requirements
- Most simple integration in superordinated guide systems and controls
- Ignition feed-back by potential-free relay output

## Certifications

- ATEX / IECEx
- Eurasian Customs Union



## Technical Data

<b>Ignition device</b>	
Mains voltage	115/ 230 VAC, 50/60 Hz
Power consumption	200 VA
Ignition voltage	1500 V
Ignition energy	5,6 Joule/spark Max. 112 Joule/s
Ignition frequency	Max. 20 sparks/s
Permitted ambient temperature	-40 °C up to +80 °C (-40 °F up to +176 °F)
Protection	IP65/ IP66
Ex-Protection (optionally available)	II 2G Ex de II C T5/ T6 II 2G Ex d IIC T6 II 2D Ex tD A21 T85 °C IP66
<b>Ignition lances</b>	
Max. temperature ignition tip NT	600 °C (for short period: 800 °C) (1112 °F/ 1472 °F)
Ignition tip HT	1000 °C (1832 °F)
Operational life time ignition tip	max. 1 Mil. sparks
Lance length	0,7 up to 15 m
Lance diameter	22 mm
Protection D-ZL 441Ex	II 2G Ex d IIC T6, T5, T4 Gb II 2D Ex tb IIIC T80°C Db IP65
Protection D-ZL 430Ex/ 431Ex	Cl. I, Div. 1, Gr. A. B. C & D Cl. I, Div. 2, Gr. A. B. C & D

## Components for ignition solutions

Ignition lance D-ZL 521



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Ignition lance D-ZL 441Ex



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## Optional components

Retraction unit D-VE 500



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Refineries



Steel industry



Marine

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