reine Produktivität

Herding FILTERTECHNIK

pure productivity

durable. effective. filter.

LASERPROCESSING OF METALS

Source: TRUMPF Group

THE ORIGINAL
BY HERDING
made in germany

BENEFITS

SAFE EXTRACTION OF **FINE METAL DUST AND FUMES**

The laser processing of metals by cutting, welding, marking or structuring generates fumes that consist of a large number of toxic aerosols and gases as well as fine dusts of the respirable fraction. These cause significant health hazards for the operating personnel and, last but not least, damage and contaminate the laser optics, aggregates and the product to be processed. This results in high standard for the filter technology in this area.

The Herding® filter systems work on the principle of pure surface filtration. They have been proven to reliably separate even the finest dust fractions. Combined with an effective fume capturing, this sustainably protects man, machine and the environment from harmful emissions.

Herding® filter media generate absolutely constant operating conditions, show extreme durability and, depending on the process, very long service life exceeding more than 15 years. Thus, using the Herding® sinter-plate filter makes a valuable contribution to occupational safety and environmental protection.

DURABLE
LONG SERVICE LIFE

CONSTANT
OPERATING CONDITIONS

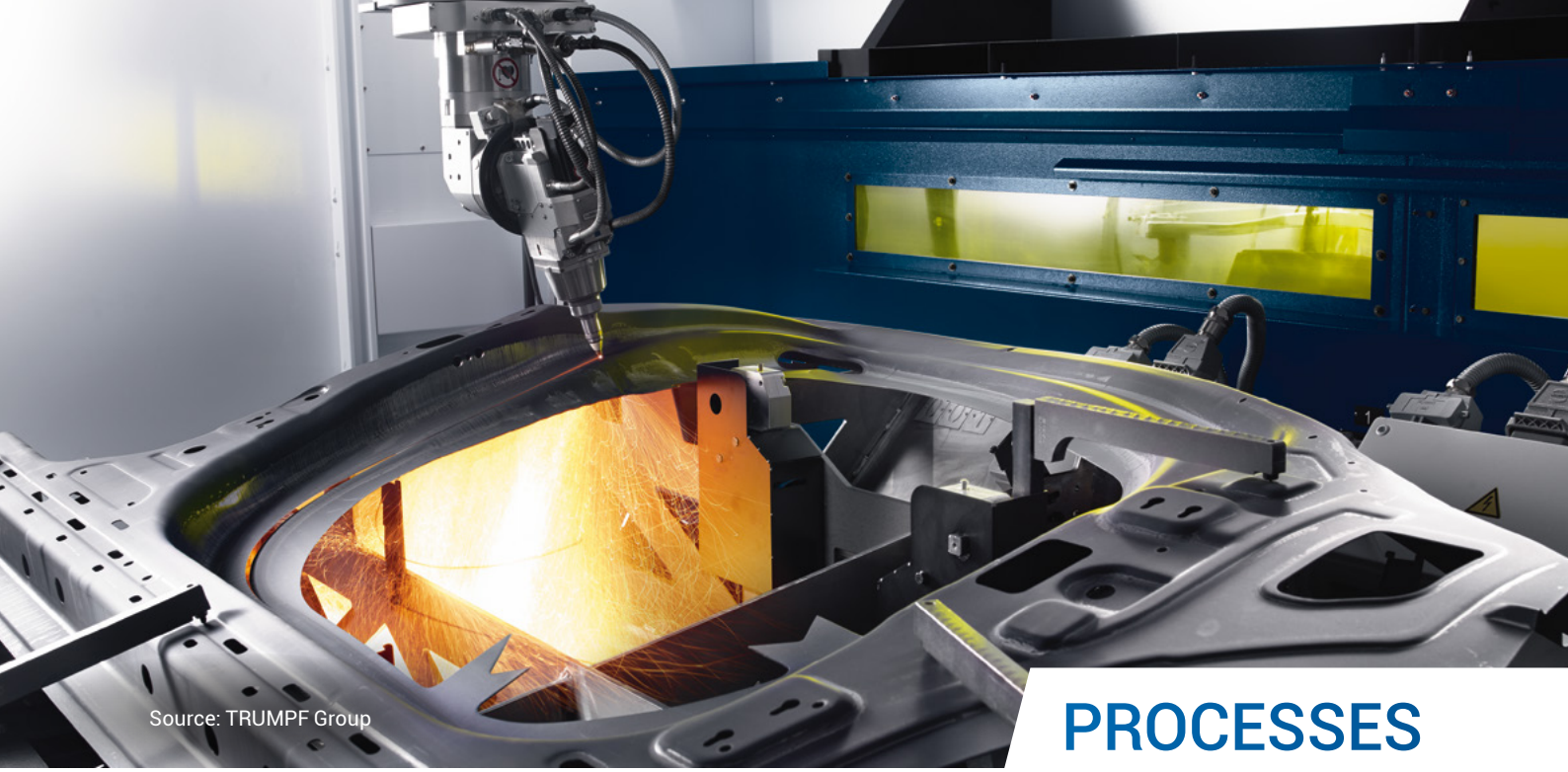
COMPACT
DESIGN

ENERGY EFFICIENCY DUE TO
LOW CLEANING PRESSURE

ACTIVE HEALTH PROTECTION
BY SAFE SEPARATION

PURE AIR AND CLEAN GAS
DUE TO LOWEST CLEAN GAS VALUES

SUSTAINABLE PROVEN
TECHNOLOGY



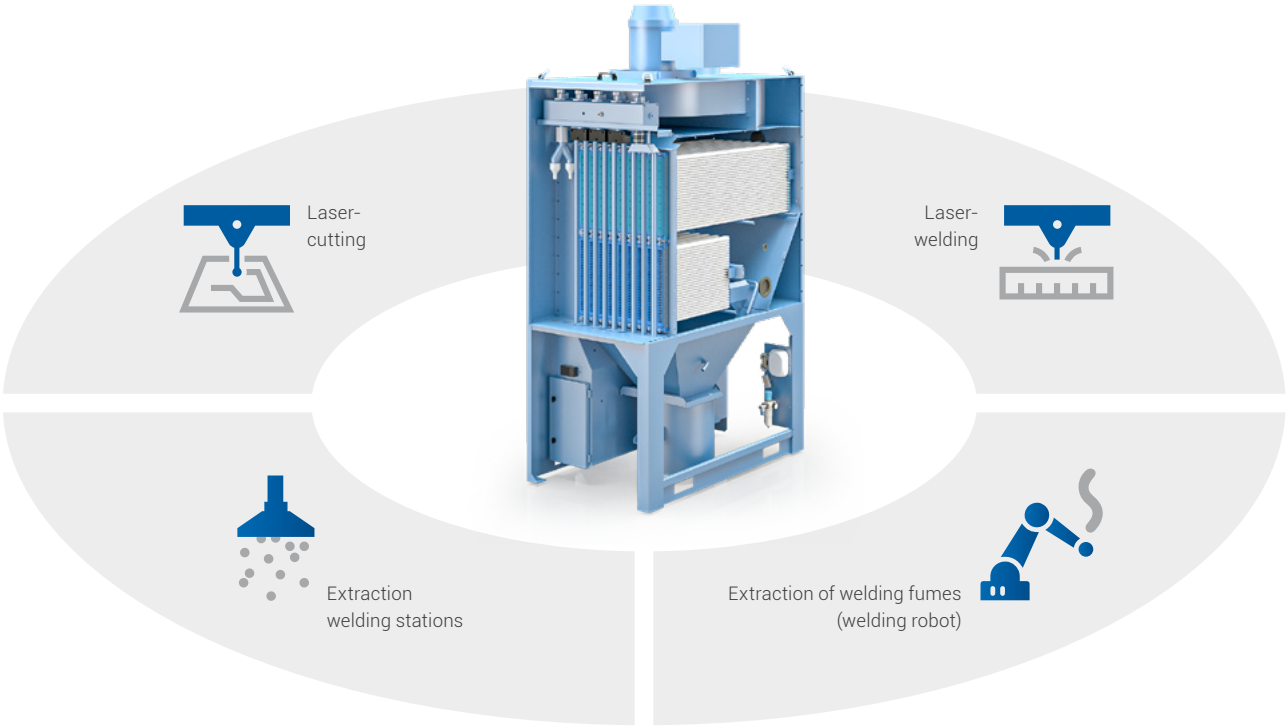
Source: TRUMPF Group

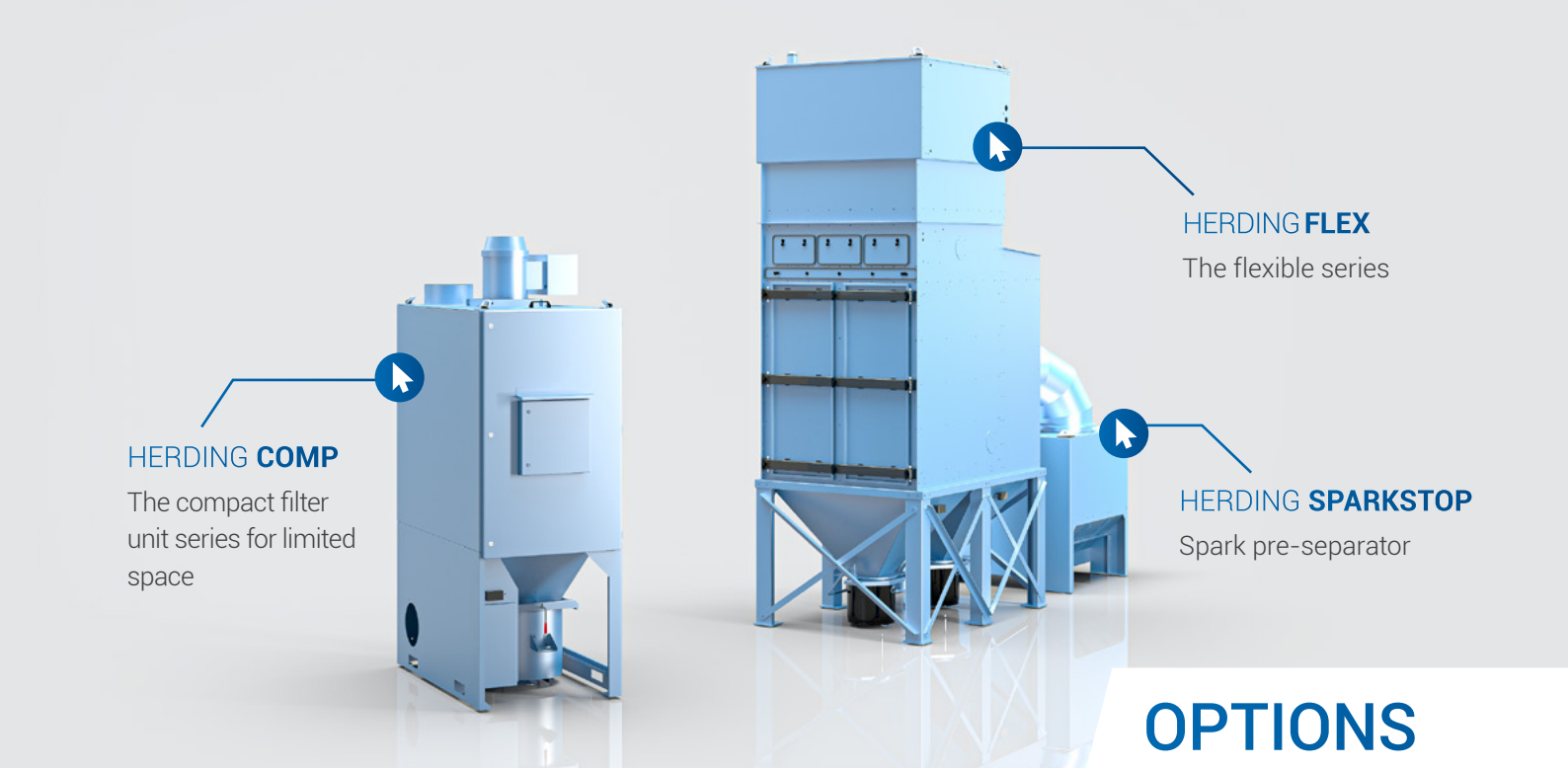
PROCESSES

SAFE FILTRATION FOR ALL PROCESSES

Laser-based processing and machining of metals require various cutting, welding and/or marking processes as well as diverse laser technologies. The characteristics of the emissions to be removed depend essentially on the laser technology and laser power. Furthermore, the processed sheets or metal structures may be contaminated by oil or residues of deep-drawing greases for example. The resulting emissions have fine particle size distributions and often show sticky and combustible characteristics.

The option packages of the Herding® filter systems enable to set up the optimum system configuration for the reliable separation under constant operating conditions and are used for all types of laser metal processing. Highly effective spark pre-separators specifically scalable to the air volume can be integrated into the systems. This warrants the safe removal of the existing sparks as well as the fine dust without any restrictions.





OPTIONS

OBJECT PROTECTION

Herding FLAMEBREAK is an object protection for Herding® filter systems in accordance with the VdS-Bulletin 3445 „Fire Protection in De-Dusting Systems".

Fire in the filter system is detected and signaled by Herding FLAMEDETECT. Subsequently the fire fighting equipment is triggered. The **SAFETY CONCEPT** shall minimize damage in the event of fire incident.

HERDING FLAMEBREAK
SAFETY CONCEPT

FIRE DETECTION
A detection cable detects the fire during both operation and stand still periods of the filter system.

FIRE ALARM
The control system of the fire protection system processes the signals from the fire detection, triggers the fire fighting equipment and forwards the alarm to the higher-level external system (as potential-free contact).

The visual and acoustic alarm is located directly on the filter system. In case of need, its automated shutdown takes place as well as the release of the extinguishing agent to fight the fire.

FIRE FIGHTING
The automatic fire detection, fire alarm and fire fighting enable the successful extinguishing for a wide variety of dusts.

HERDING **MULTICOATER**

Sticky and combustible dusts increase the demands on a filter system for safe dust extraction. The dosed addition of suitable additives to the filtration process can both reduce the risk of sticking of the filter media and reduce the combustibility of dusts.

Herding MULTICOATERS are pneumatically operated dosing devices for the quantity-controlled addition of additives into the filtration process.

PRECOATING creates a protective layer on the filter media. This prevents the direct contact of sticky, moist and oily dusts and vapors with the filter surface and thereby the clogging of it.

During PASSIVATION the addition of an inert powder reduces the combustibility of dusts. Dispersive and adsorptive substances support the removal of liquid and gaseous components from the exhaust air.

ADVANTAGES

- Increased process reliability
- Dust-free filling
- Easy installation
- Reduction of fire hazard

TYPES

- **MCI 55/1**
  Loading capacity 55 l
- **MCI / MCD 250 1-4**
  Loading cpacity 250 l
  for the supply of up to
  4 filter systems

CONTACT

Please feel free to contact us! You can fill in the form and send it by e-mail.

Company

Forename

Surname

Phone

E-mail

Branch

Application

Comments

send by e-mail

Herding GmbH Filtertechnik
August-Borsig-Str. 3
92224 Amberg / Germany

Phone: +49 9621 630-0
Mail: info@herding.de
www.herding.com

FOLLOW US ON