

Intensiv-Filter Himenviro GmbH



WE CARE FOR AIR

Intensiv-Filter Himenviro at a glance

Intensiv-Filter Himenviro Facts and Figures



- Tailor-made dust removal solutions for industrial customers from different industries
- Services for energy cost saving concepts
- Active climate protection by efficient filter concepts

Intensiv-Filter Himenviro Facts and Figures



Founding year 1922

- Owner-operated
- 85 Employees
- 6 subsidiaries
- 7 agencies
- 7 regional offices



Business areas

- Cement, lime, gypsum
- Steel, iron, non-ferrous metal processes
- Food
- Chemicals
- Energy
- Waste Disposal
- Glass



Service profile

- Complete system solutions
- Turn-key projects
- Technical support
- Spare parts service



Product portfolio

- Bag filters
- Auxiliary filters
- Round filters
- CIP-filters
- Cyclones
- Coolers
- Plant components
- Filter media

Intensiv-Filter Himenviro Daten und Fakten



Intensiv-Filter Himenviro Gruppe

Himenviro Environmental Technologies (P) Ltd.

Intensiv-Filter Himenviro GmbH

**Intensiv-Filter
do Brasil**

Filtres Intensiv S.a.r.l.

Intensiv-Filter (UK) Ltd.

**Intensiv-Filter India Pvt.
Ltd.**

**Intensiv-Filter Korea
Ltd.**

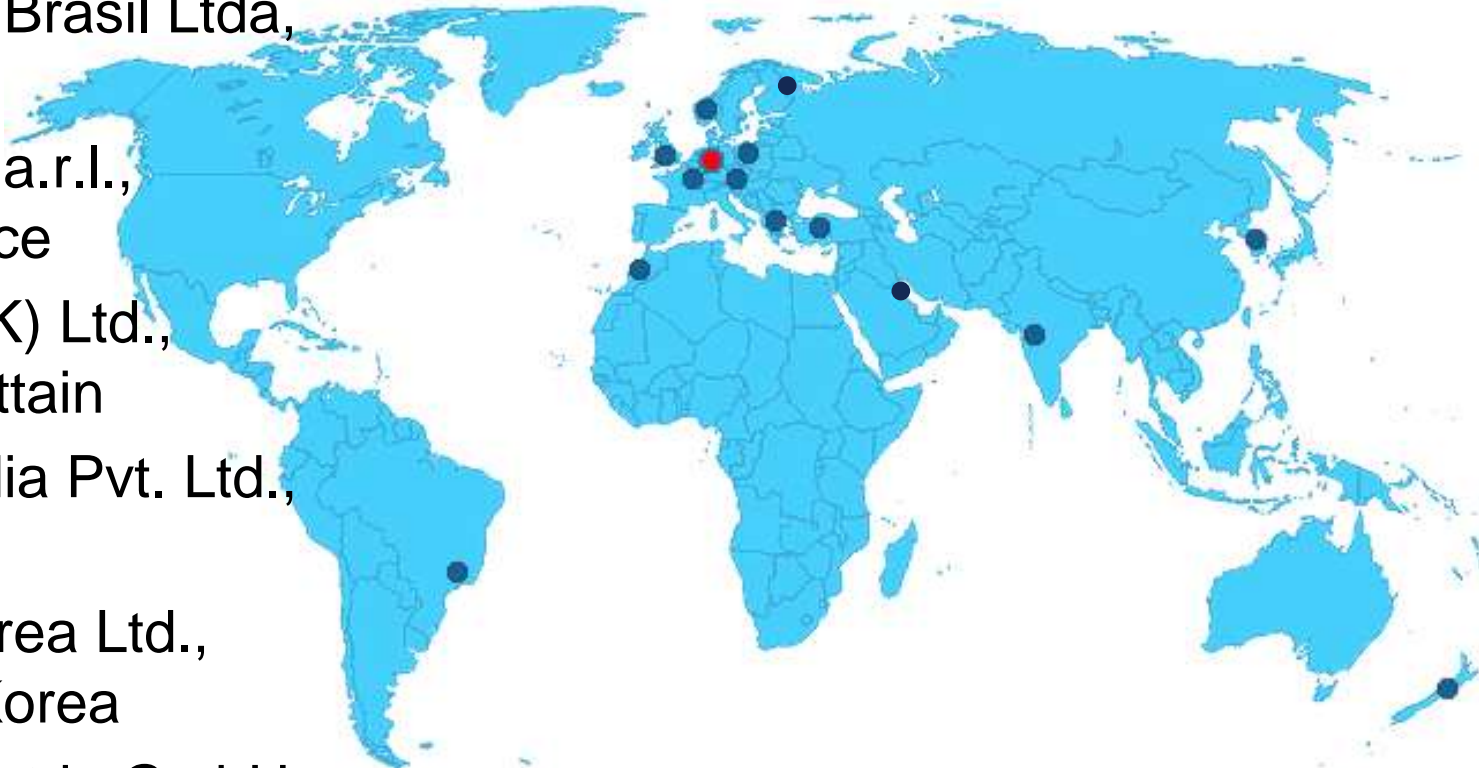
**Intensiv-Filter Austria
GmbH**

Intensiv-Filter Facts and Figures



Network

-  Intensiv-Filter do Brasil Ltda,
São Paulo Brasil
-  Filtres Intensiv S.a.r.l.,
Bouzonville France
-  Intensiv-Filter (UK) Ltd.,
Walsall Great Brittain
-  Intensiv-Filter India Pvt. Ltd.,
Pune India
-  Intensiv-Filter Korea Ltd.,
Hwaseong City Korea
-  Intensiv-Filter Austria GmbH,
Grieskirchen Austria



Intensiv-Filter Facts and Figures

Customers (references)



Intensiv-Filter Facts and Figures

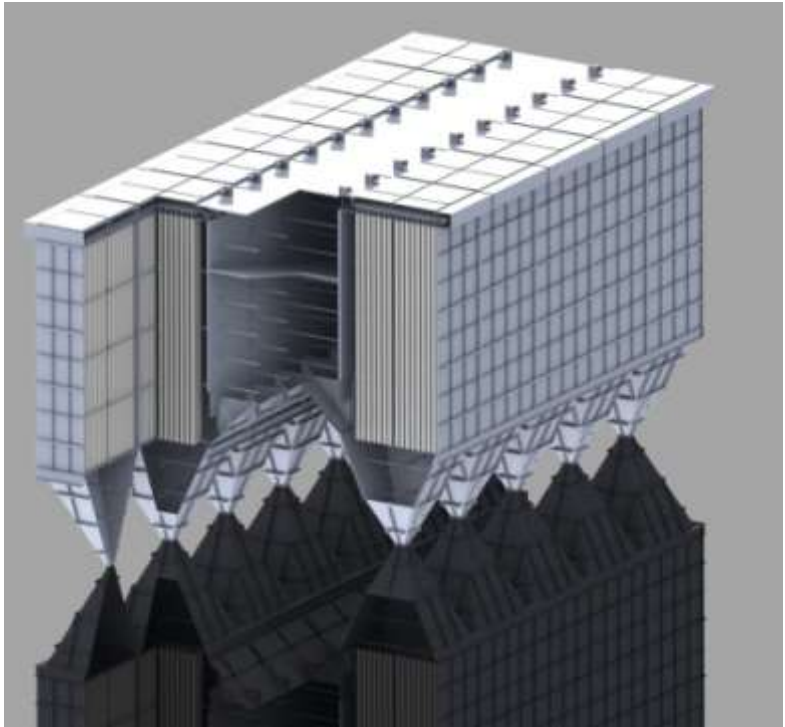
1922

2012

Deutsches Museum



SCHLAUCHFILTER
INTENSIV-FILTER GmbH, LANGENBERG, 1952



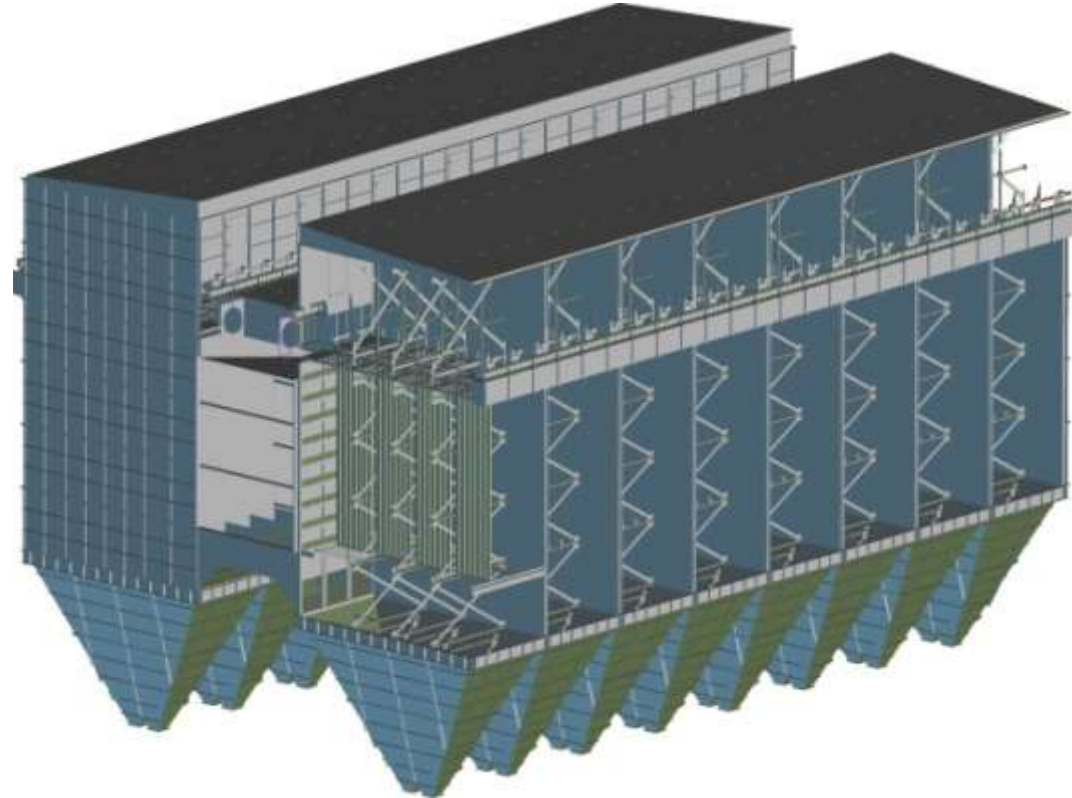
Industrial Dedusting Plants more than 90 Years

Intensiv-Filter Product Portfolio



CombiJet

- Modular system with welded and screwed construction for diverse applications
- Fast and low-priced assembly
- Variable filter sizes from 25 to over 10,000 m² filter surface area
- Depending on the application, cleaning takes place in online, offline or semi-offline mode

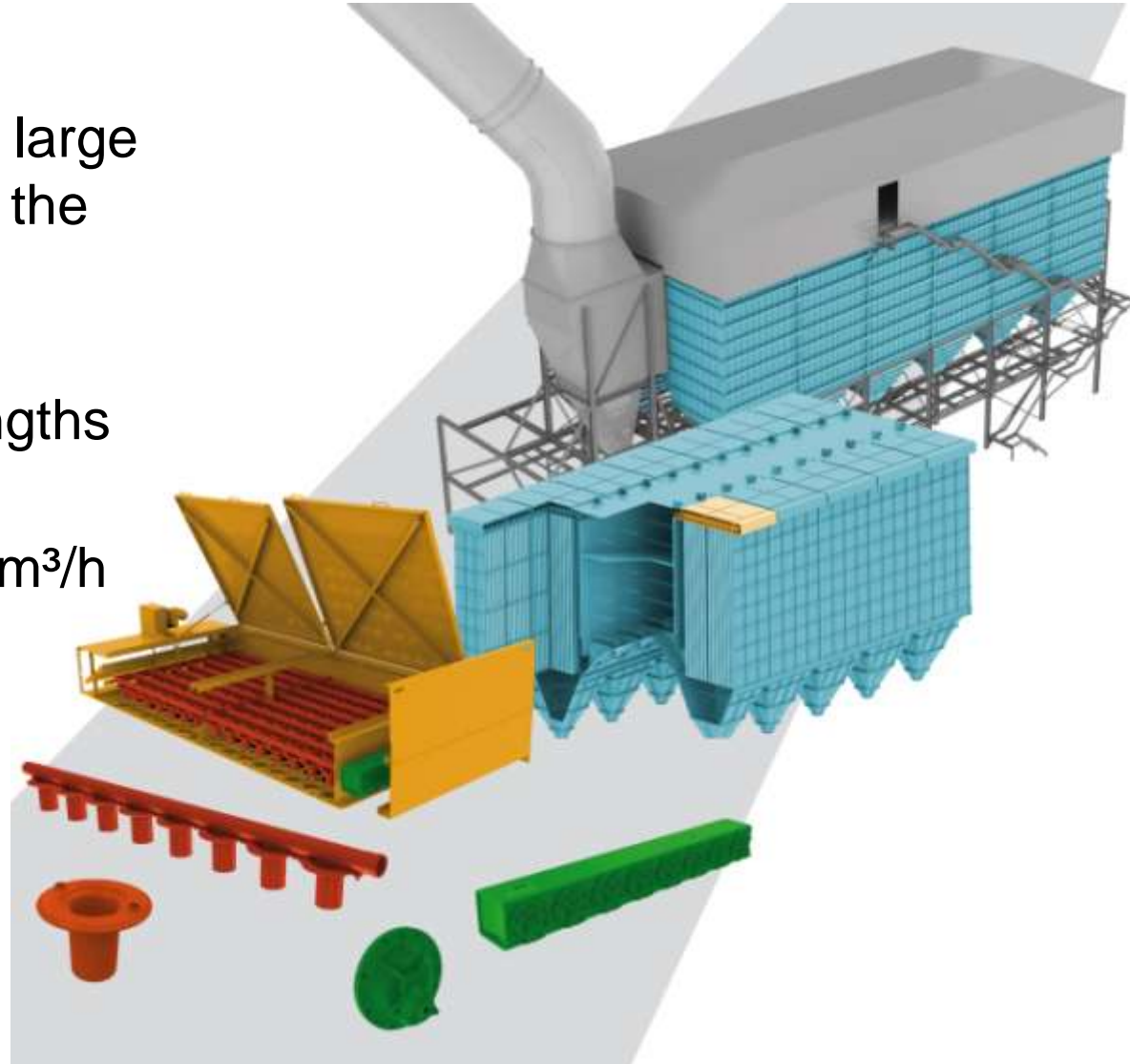


Intensiv-Filter Product Portfolio



ProJet mega®

- Process filter specifically for large filtering installations, e. g. in the cement industry for kiln and clinker cooler de-dusting
- Modular design with bag lengths up to 12 m
- For volume flows of 20,000 m³/h to over 2,000,000 m³/h



Intensiv-Filter Product Portfolio



ProJet smart®







- Filtering solutions with dust collection hopper or as silo / bunker filter
- Electrical and pneumatical ready-for-connection series filter, including fan, silencer and JetBus filter control
- Modular system with four filter head sizes and four different filter bag lengths
- Extensive all-inclusive equipment and further options



Intensiv-Filter Product Portfolio



ProJet CIP®

-  New generation Cleaning-in-Place filter with bag lengths up to 8 m
-  Reduced amount of installation parts
-  Low compressed air consumption and CIP rinsing fluid
-  New design clean gas chamber
-  Reduced maintenance interval
-  Perfect washing, short drying time and an excellent cleaning due to ProTex® CIP filter media



Intensiv-Filter Product Portfolio






ProJet CIP®

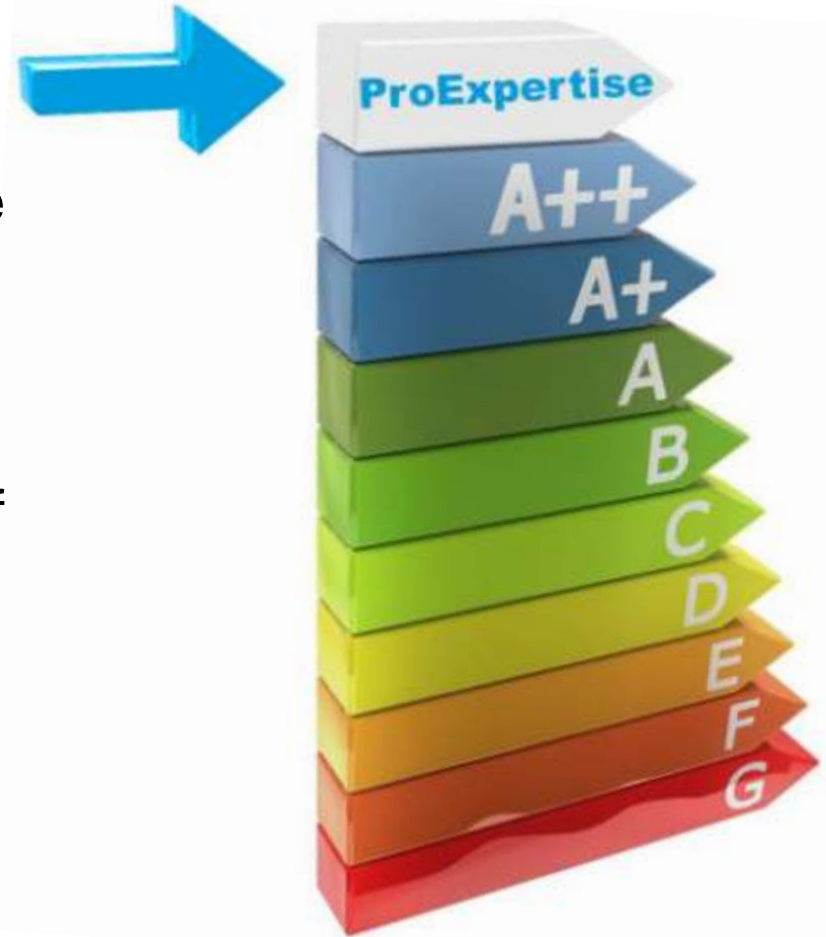


Intensiv-Filter Product Portfolio



ProExpertise

-  Calculation program for estimating differential pressure losses of a jet-pulse bag filter
-  Determination of the optimum operating point of a filtering installation
-  Evaluation is carried out through input of operating and design parameters (volume flow, cycle time of cleaning, filter surface area, raw gas concentration, etc.)

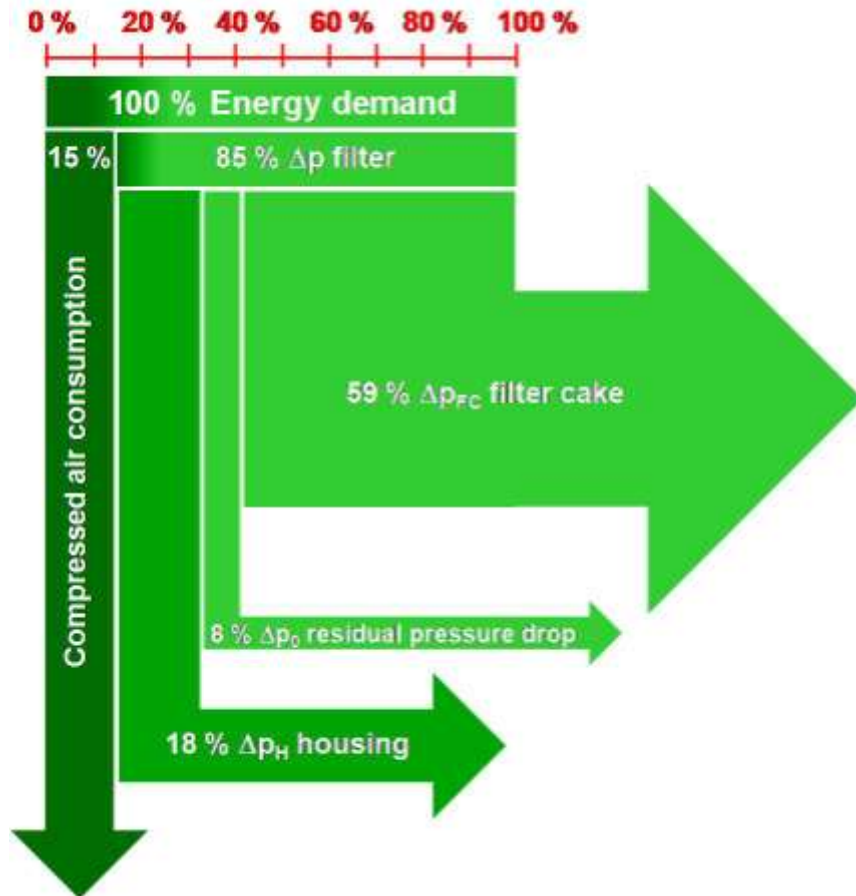


Reducing operating costs in the cement industry using a filter expert system

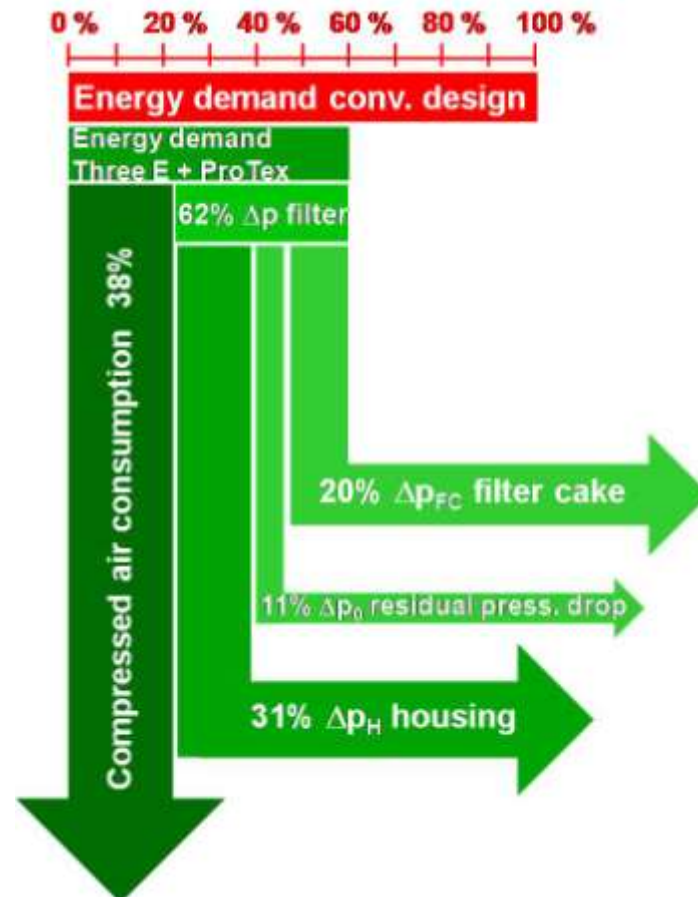


ProExpertise

Three E[®] technology with ProTex[®] filter media – Energy flow diagrams
 Standard conditions



Three E[®] / ProTex[®]



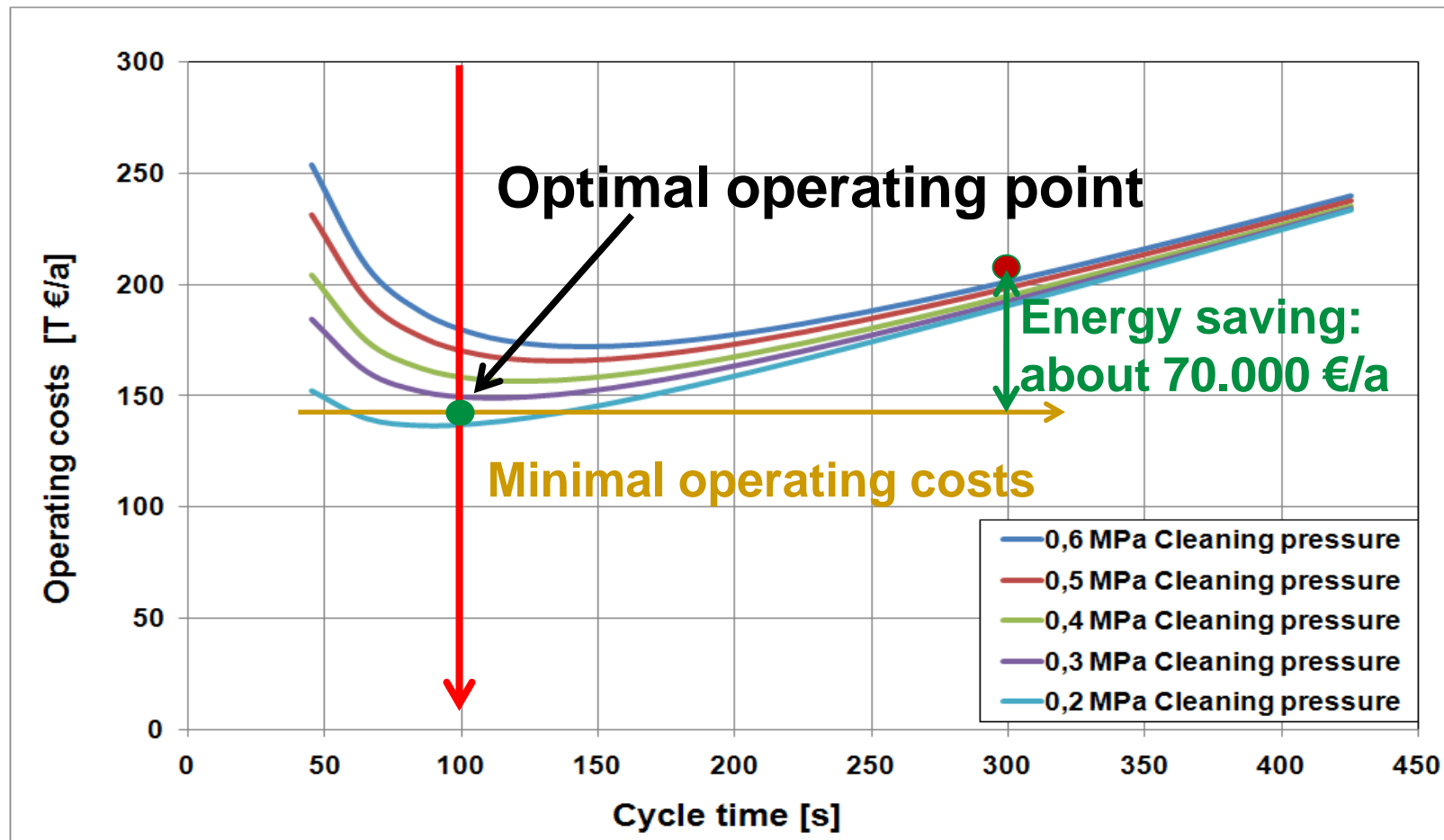
Reducing operating costs in the cement industry using a filter expert system



ProExpertise

Optimum cycle time as function of the air tank pressure.

Example: high dust kiln / raw meal mill filter, PJM 136/36-8000 D



Intensiv-Filter Product Portfolio



ProTex® energy saving filter media






- Economical and more effective alternative to filter bags with laminated membrane surface
- Reduced energy consumption
- Optimised surface filtration
- Improved regeneration properties
- Minimised pressure drop
- Reduced CO₂ emissions
- Extended lifetime
- Considerably more robust



Intensiv-Filter Product Portfolio



Injector System Coanda-Injector

-  Maximum cleaning effectiveness
-  Large amounts of reverse air can be entrained
-  Optimum and economic cleaning
-  Adjustment of the cycle time and cleaning pressure
-  Reduction of compressed air consumption



Intensiv-Filter Capabilities



Engineering



Capabilities

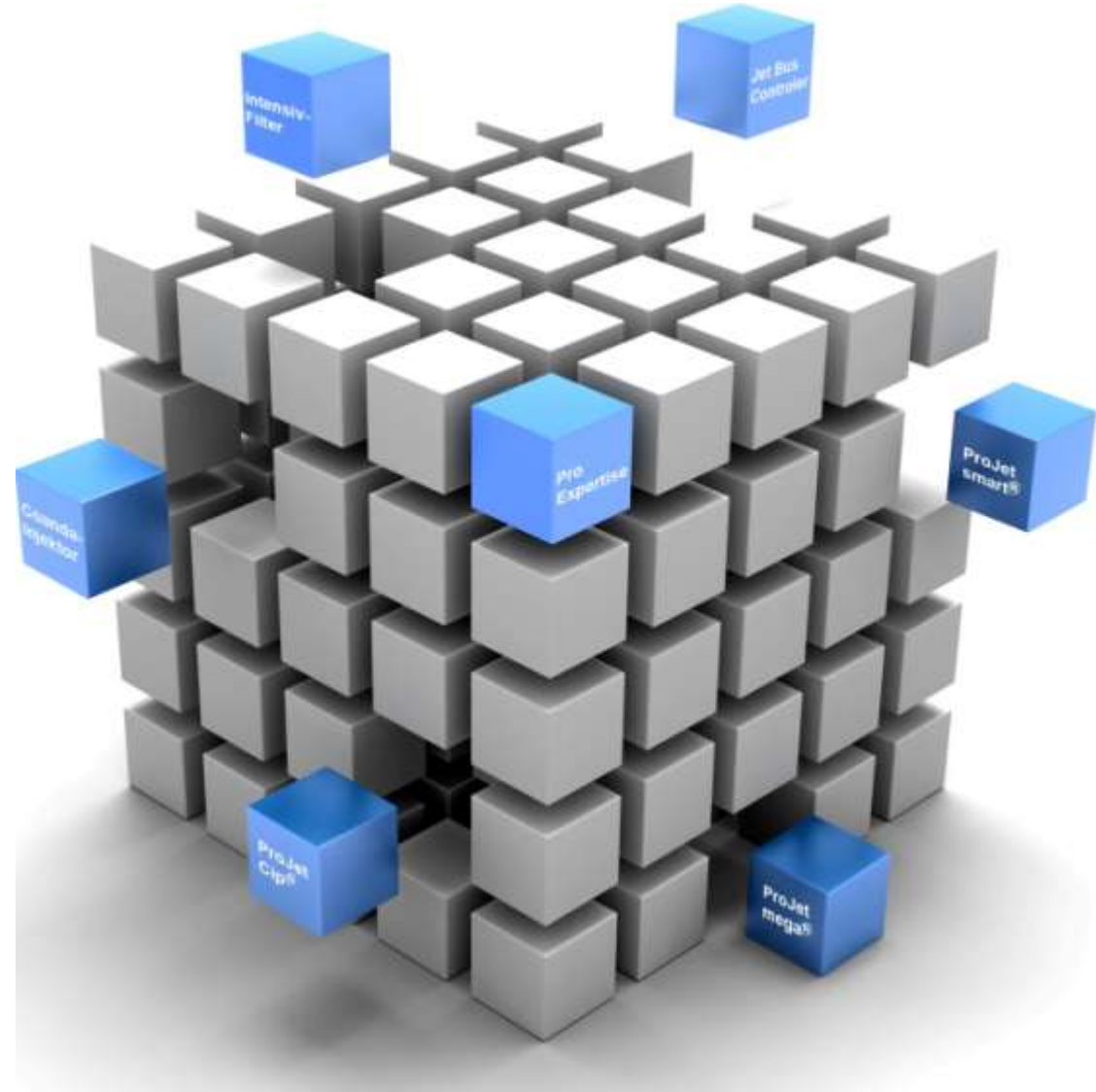
- CFD simulations
- FEM calculation
- CAD-Data for further CNC-machining
- Model making (prototype parts, master models, functional models etc.)



Turnkey Projects








Administrative Services

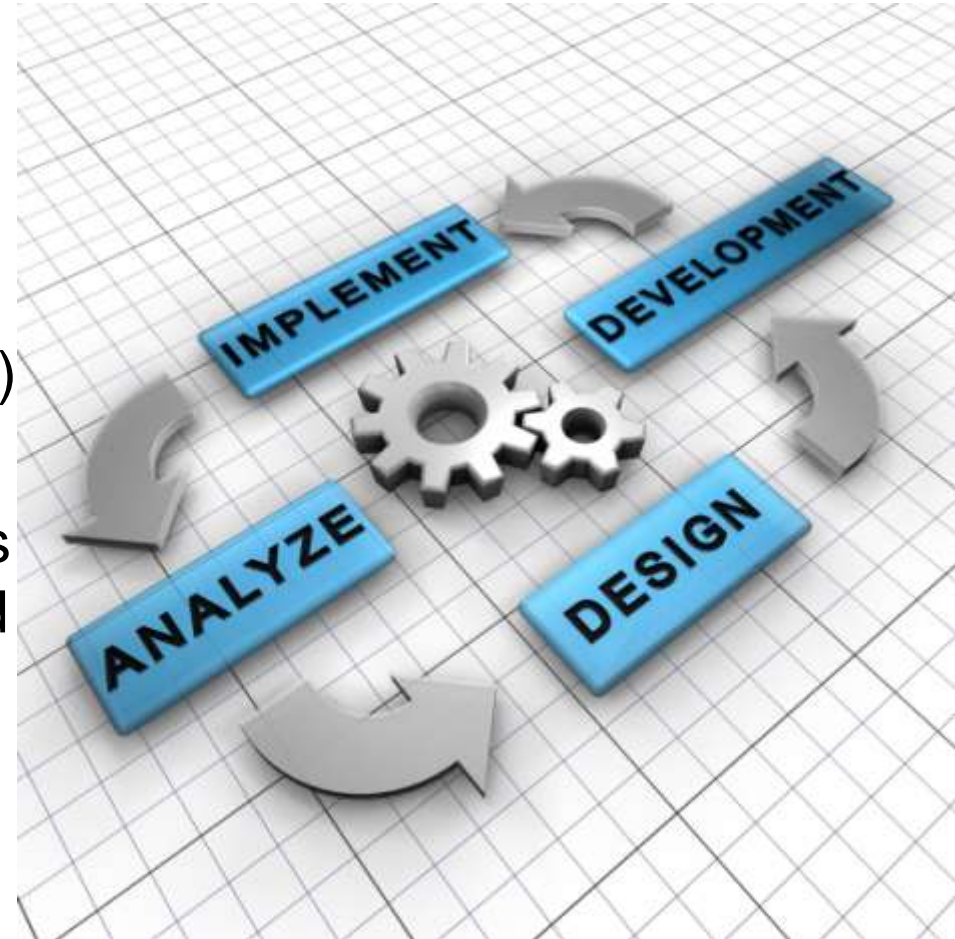


Intensiv-Filter Capabilities



Engineering






-  Laboratories for measurement and process engineering
-  Product development with in-house CFD (Computerised Fluid Dynamics)
-  Filter test plants
-  Test stations for inspection and trials of filter media, cleaning systems and core components
-  Participation in many research projects with the „Bergischen Universität Wuppertal“, „Universität Essen-Duisburg“, „Fraunhofer Gesellschaft“, „Dekra“, „VDI“

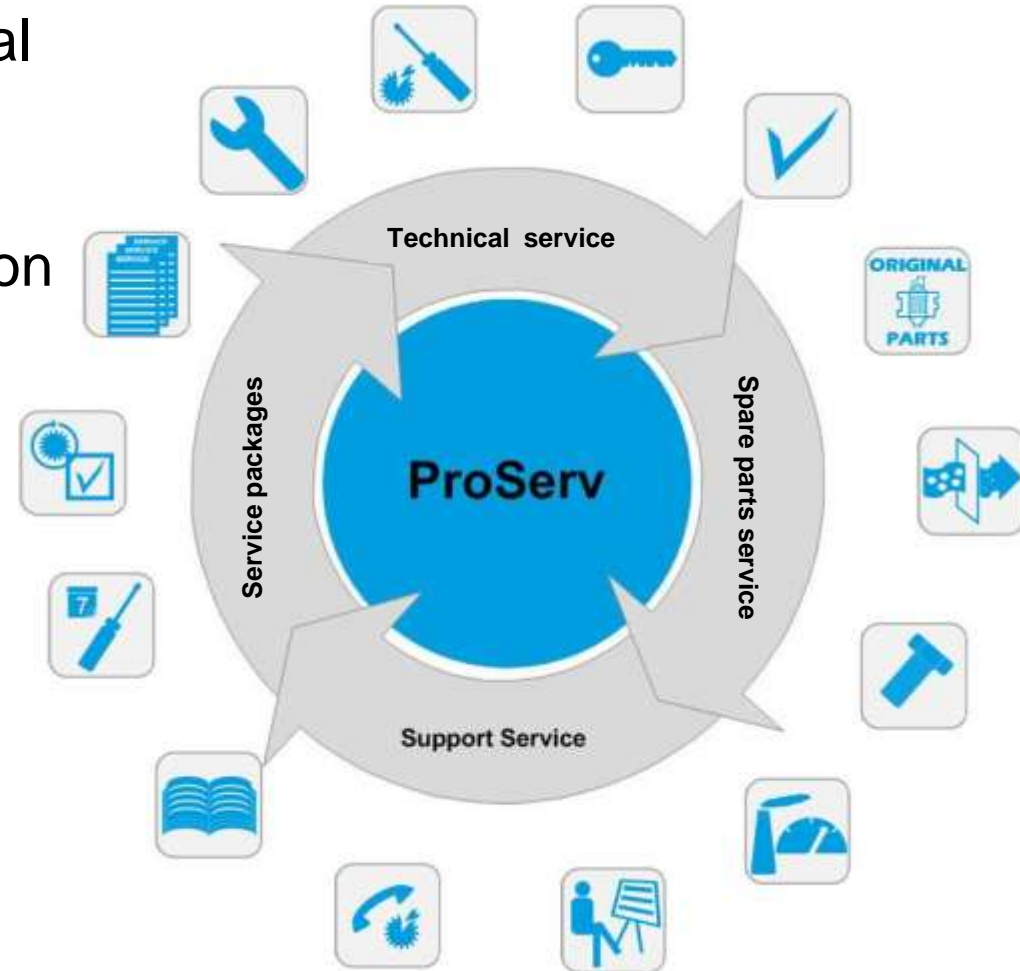


Intensiv-Filter Capabilities



After-Sales Service Plus

-  Partner for spare parts and original parts
-  All round service for long lasting and extensive customer satisfaction
-  Individual and tailor-made maintenance contracts
-  Worldwide service capabilities
-  Modernisation of filtering installations

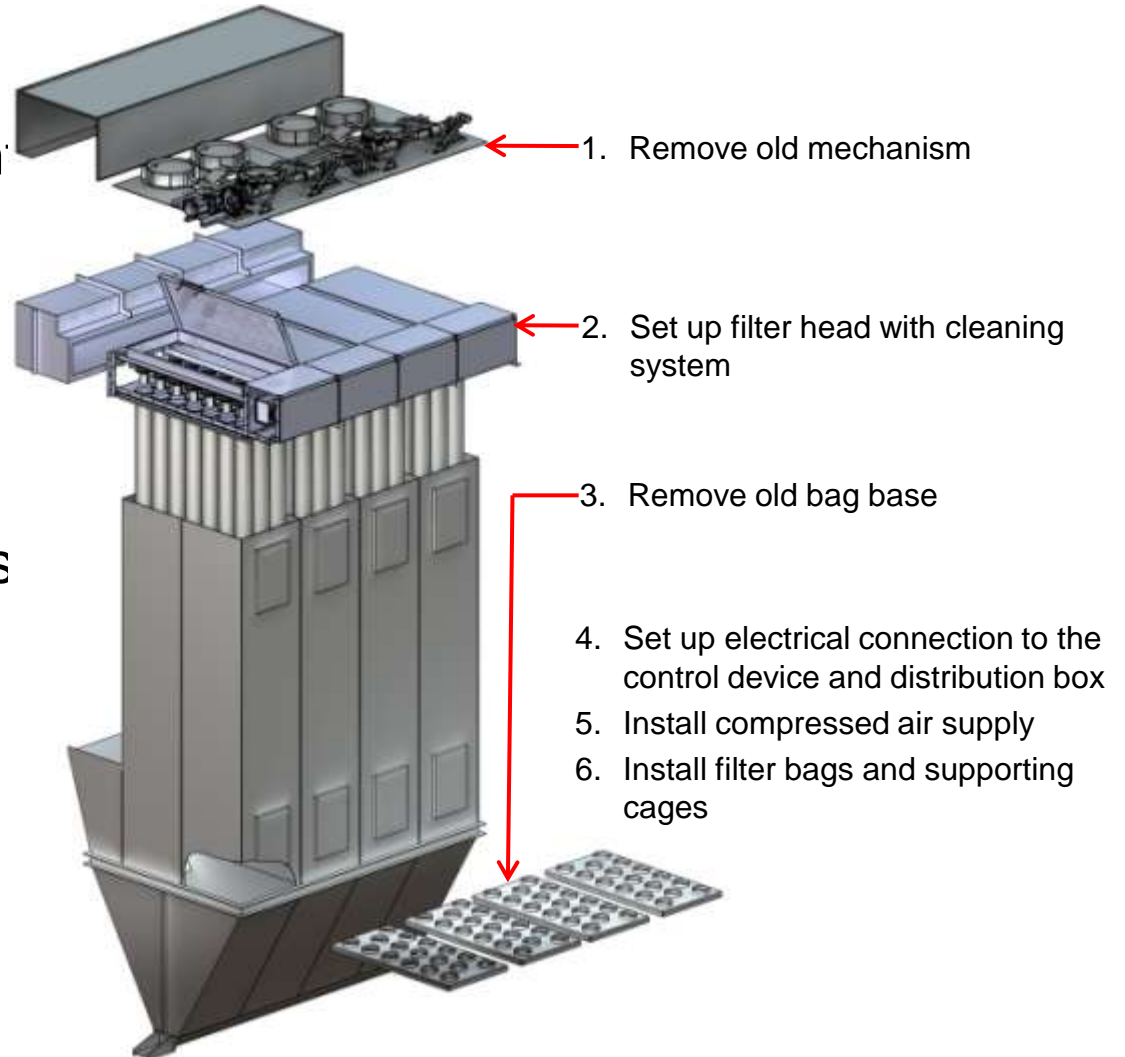


Intensiv-Filter Capabilities



Filter Modernisation

- Reduced residual dust content
- Less maintenance work
- Reduced servicing costs
- Cleaning of filter bags without mechanically moved parts
- Extended lifetime of filter bags
- Increased airflow



Intensiv-Filter References



Food



De-Dusting Spray Dryer, Germany

Volume flow	125,700	m ³ /h a.c..
Raw gas dust content	31	g/m ³
Residual dust content	10	mg/m ³ n.c. dry
Filter surface area	850	m ²

De-Dusting Spray Dryer, Brazil

Volume flow	106,000	m ³ /h a. c.
Raw gas dust content	14	g/m ³
Residual dust content	10	mg/m ³ n. c. dry
Filter surface area	735	m ²



Intensiv-Filter References



Steel, Iron, NF Metals



Secondary de-dusting, filter 5, HKM Germany

Volume flow	600,000	m ³ /h a. c.
Purging gas	26,000	m ³ /h a. c.
Temperature	20 – 80	° C
Filter surface area brutto	8,922	m ²
Filter media	Polyester needle felt	
Residual dust content		
– demanded	< 10	mg/m ³ n. c. dry
– Realised	< 1	mg/m ³ n. c. dry
Raw gas dust content	60 – 80	g/m ³
Pressure loss	< 8	hPa
Cleaning pressure	0,25 – 0,6	MPa
Cleaning	offline	

Intensiv-Filter References



Filter Rock, Stone, and Related Mineral Products



De-dusting rotary kiln / raw mill line 8 Cementa AB, Schweden

Volume flow	≤ 1,223,500	m ³ /h a. c.
Temperature	Max. 150	° C
Raw gas dust content	Max. 900	g/m ³
Residual dust content	< 10	mg/m ³ n. c. dry
Compressed air consumption	< 310	m ³ /h n. c.
Cleaning	offline	
Cleaning pressure	0,3 – 0,6	MPa
Pressure loss	< 8	hPa
Filtermaterial	Glasfibre with PTFE membrane	
Bag length	8,000	mm

Intensiv-Filter References



Filter Rock, Stone, and Related Mineral Products



**ESP-retrofit
Rotary kiln/Raw mill de-dusting
incl. pre-separated Alkali bypass exhaust air
Deuna Zement, Germany**

Volume flow	550,000	m ³ /h
Max. gas temperature	240	°C
Raw gas dust content	60 – 80	g/m ³
Residual dust content	< 8	mg/m ³ i.N. dry
Filter media	GL/PTFE 750	
Filter surface area	~ 9,300	m ²
Cleaning pressure	1,5 – 3,5	MPa
Pressure loss	1.200	Pa
Cleaning	semi-offline	

INTENSIV
 **FILTER**



HIMENVIROTM
Environmental Technologies

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www.intensiv-filter.com