



Schaffner – MORE POWER TO YOU

Capital Markets Day 2022

Lutrbach, June 9, 2022

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schaffner
MORE POWER TO YOU

Presenters

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Chairman

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Head R&D Industrial

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Head Filter Development Automotive

Agenda

Schaffner Transformation

Schaffner Positioning

Schaffner Markets

Schaffner Strategy

Schaffner for Investors

Schaffner Innovations

Schaffner's transformation to a focused and more profitable growing company

Schaffner transformation (1/2)

2016

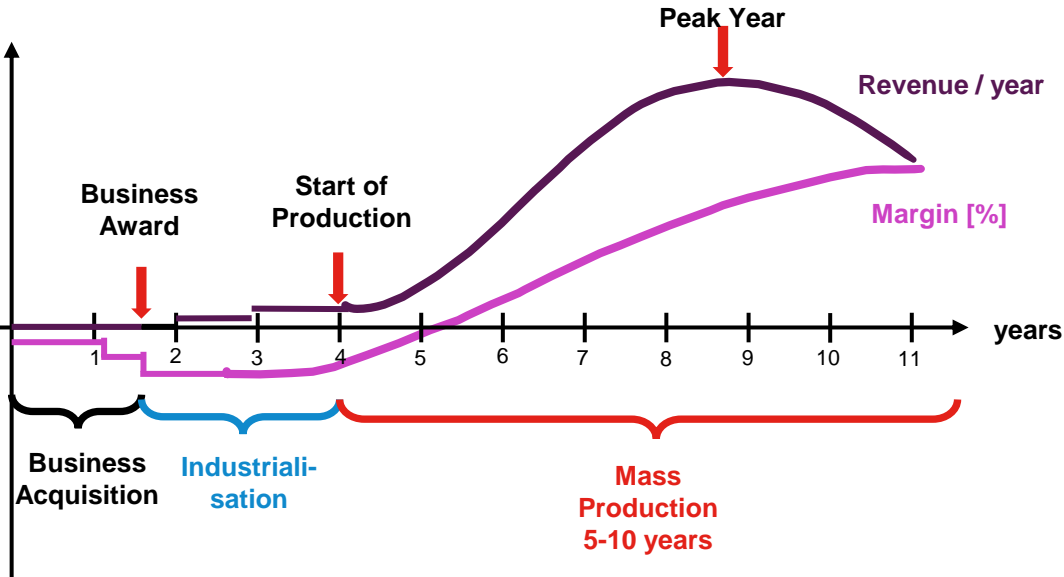
- **Fuzzy strategy**
 - 3 Divisions and 1 Business Unit with partially no synergies and perspective
- **Complex organization with heavy overhead structure and many factories**
 - **Power Magnetics:** Growth initiative, heavy losses, terrible delivery situation
 - *turn around and divestment implemented*
 - **EMC:** Cash cow, nicely profitable
 - *new growth initiatives launched*
 - **Power Quality:** Growth initiative, heavy losses
 - *More focused and market oriented*
 - **Automotive:** Non-strategic, nice profitability due to cut back investments
 - *Build back pipeline and develop growth opportunity “e-mobility”*

2022

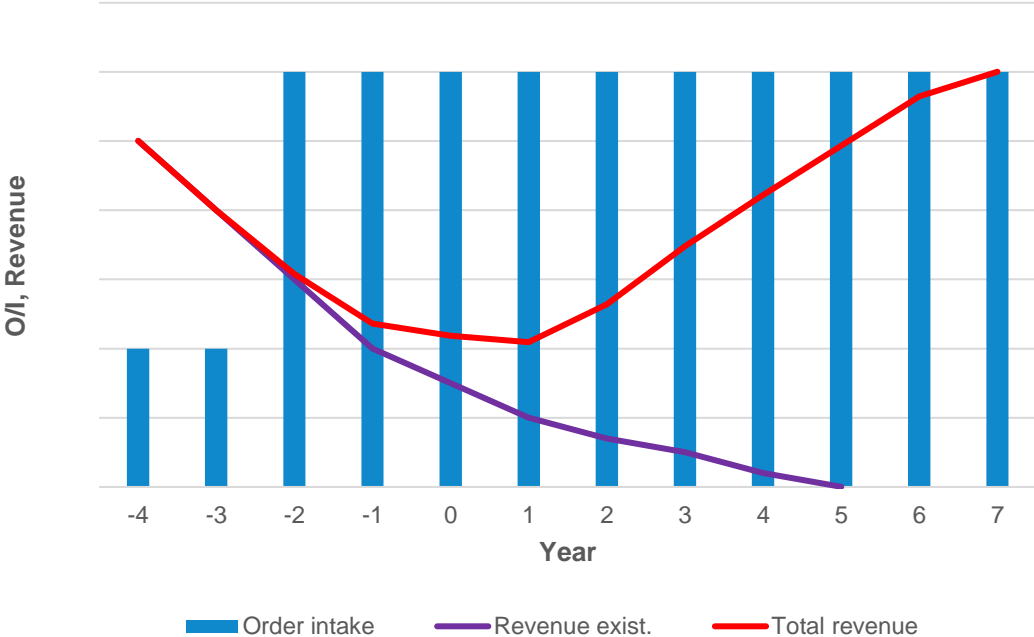
- **Clear and consistent strategy**
 - Focus on EMC solutions for a sustainable and electrified society
- **One business for several attractive markets with a lean structure**
 - **Industrial**
 - Growth initiatives: Robotics, EV Charging, Lighting, Distribution, Key Accounts
 - Innovation: Active EMI filters
 - **Automotive**
 - Build back pipeline
 - Grow with solutions for e-mobility
 - Innovation: Active EMI filters

Automotive business – long life cycles!

Project Life Cycle



Order Pipeline Model



Schaffner transformation (2/2)

2016

- **Limited leadership and potential**
 - CEO ad interim
 - Several non-fitting senior managers on first two levels
 - No talent pipeline
- **Weak financials**
 - Very bumpy history
 - Low profitability overall
 - Relatively low equity
 - Net debt

2022

- **Strong management and leadership culture**
 - Key positions with clear leaders
 - New company culture being developed
 - Talent management being established
- **Good financial basis**
 - Double digit EBIT margin in 2021
 - Equity ratio > 50%
 - Net cash

Solid basis for a stronger future established...but success with growth initiatives still to be confirmed

Our way forward

■ Industrial

- A strong and stable back bone with a leading market position
- Succeed with and accelerate new growth initiatives

■ Automotive

- Weak “old” order pipeline but successful new orders won over the last couple of years
- Redevelop the order pipeline and establish Automotive as a strong second pillar
- Grow with solutions for e-mobility

■ Evaluate add-on M&A opportunities

■ Clear profile vis-à-vis our stakeholders: MORE POWER TO YOU

Bring Schaffner on a sustainable growth path with consistent double-digit EBIT margins!

Schaffner positioning

We provide our customers with electromagnetic solutions to operate their electronic systems reliably and efficiently - empowering them to focus on their great inventions.

Schaffner's added value and brand promise

**We empower our stakeholders to play an active role
in building a sustainable and electrified society.**

By adding value to each of our stakeholders

- Our customers get their electromagnetic challenges solved and enabled to focus on their great inventions.
- Our employees work together with passionate and inspiring colleagues on solutions alongside mega trends.
- Our investors benefit from a future-oriented business in attractive growth markets.

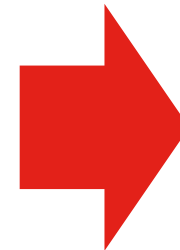
MORE POWER TO YOU

Active in future-oriented markets with broad product portfolio

Schaffner is active alongside mega-trends...

Our modern society is becoming increasingly electrified and connected – sustainability, electrification and e-mobility are mega-trends. That means:

- Technological progress requires electrical networks
- Digitization multiplies electronic systems
- E-mobility will play a dominant role
- Efficient use of electrical energy fundamental for sustainability



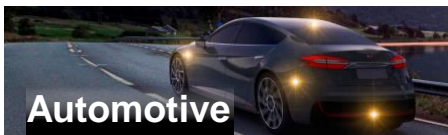
**Increasing demand
for EMC solutions**

...those are reflected in our six growth industries



Main industries linked to most attractive markets

Industries



Markets

Motor Drive – Factory Automation – Machinery – Robotics

HVAC – Elevators – Lighting

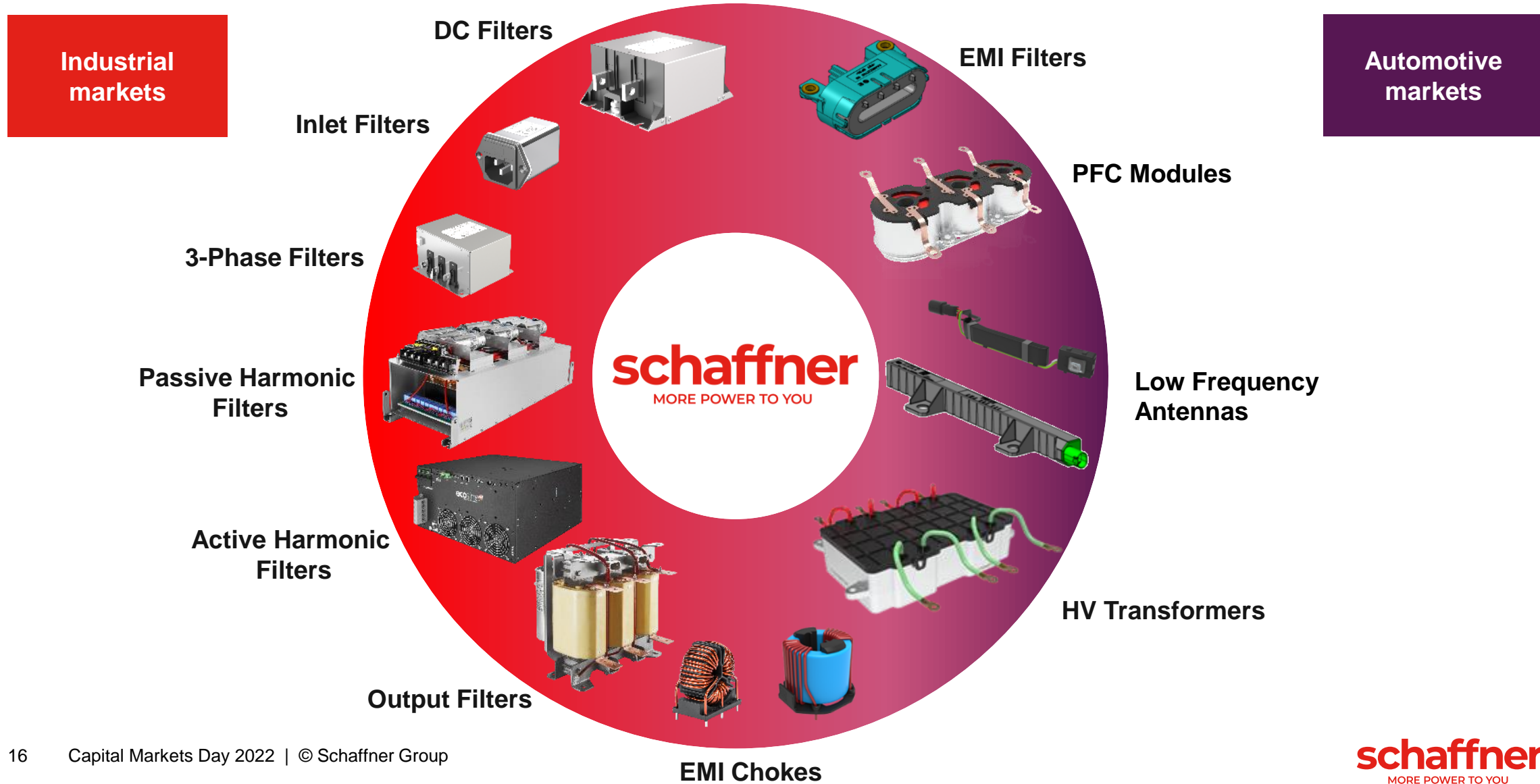
Renewable Energy – EV Charging – Energy Storage – Power Supply – UPS

E-Mobility – Authentication Systems

Medical Equipment – Laboratory and Analyzer Equipment

Datacenter – Networks

Broad product portfolio for attractive markets



Schaffner strategy for profitable growth

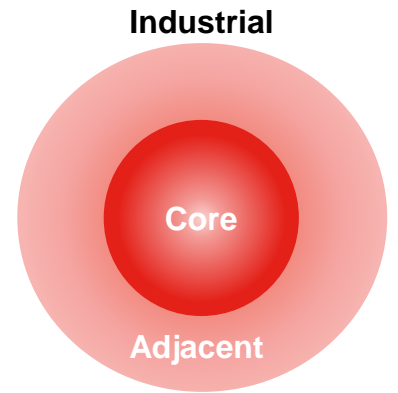
Our strategy to accelerate profitable growth

We fully focus on our core competence EMC solutions and gain further momentum through the continued execution of our growth initiatives!

- To strengthen our position in selected markets and regions
- To build up new legs to further expand our business
- To generate sustainable organic growth of >5% per annum
- To evaluate potential acquisitions in our target markets
- To achieve EBIT margin in the range of 10-12%

Strategies to further strengthen Industrial business

- We strengthen our strategic industrial markets with EMI filter solutions and magnetic components through penetration and expansion of our product portfolio (Core)
- We expand into additional growth markets around our core business with new technologies and solutions (Adjacent)



Selected growth markets:



Robotics



EV Charging



LED Lighting

Focused approaches to accelerate growth

Approaches to grow selected strategic markets (Robotics, EV Charging, Lighting)

- Global and regional set up to coordinate and drive initiatives
- Systematic approach to the main players in the market
- Expansion of product portfolio to best meet market requirements
- Winning design-ins in strategic projects
- Today market size CHF 10-30m (each)
- Schaffner growth potential >20% p.a.



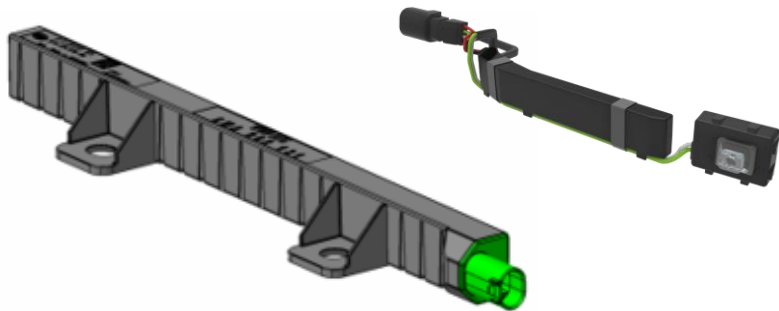
Strategies to build up strong Automotive business

- We strengthen our antenna business with new designs for electrical and non-electrical car platforms (high volumes, automated lines).
- We build a strong pillar in e-mobility with EMI filter solutions and magnetic components based on existing and new customer relations.

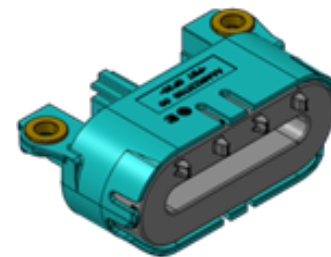
Automotive



Main Automotive products:



Antennas for keyless authentication systems



EMI Filters and magnetic components for e-mobility

Strengthening two pillars in Automotive

Approaches to build two strong Automotive pillars

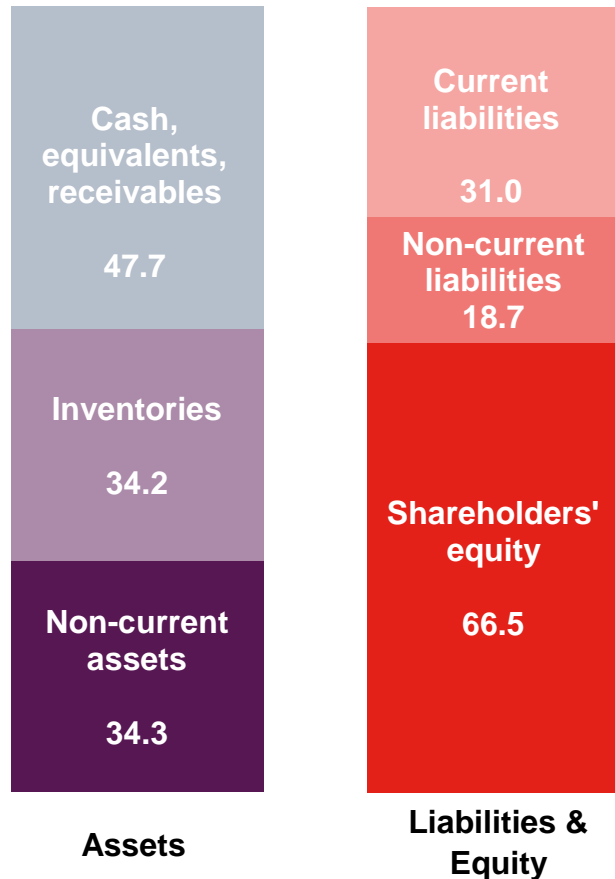
- Broadening global customer base (platforms)
- Design-ins for EMI filters and magnetic components mainly for on-board-charges for different platforms (CHF 30-100m over lifetime per product per platform)
- Building up Automotive manufacturing in China to better cover local market
- Antenna designs for higher quantity platforms with automated assembly lines (CHF 20-50m over lifetime per platform)



Attractiveness for investors

Solid balance sheet

Total assets CHF 116.2 Mio.
(March 31, 2022)



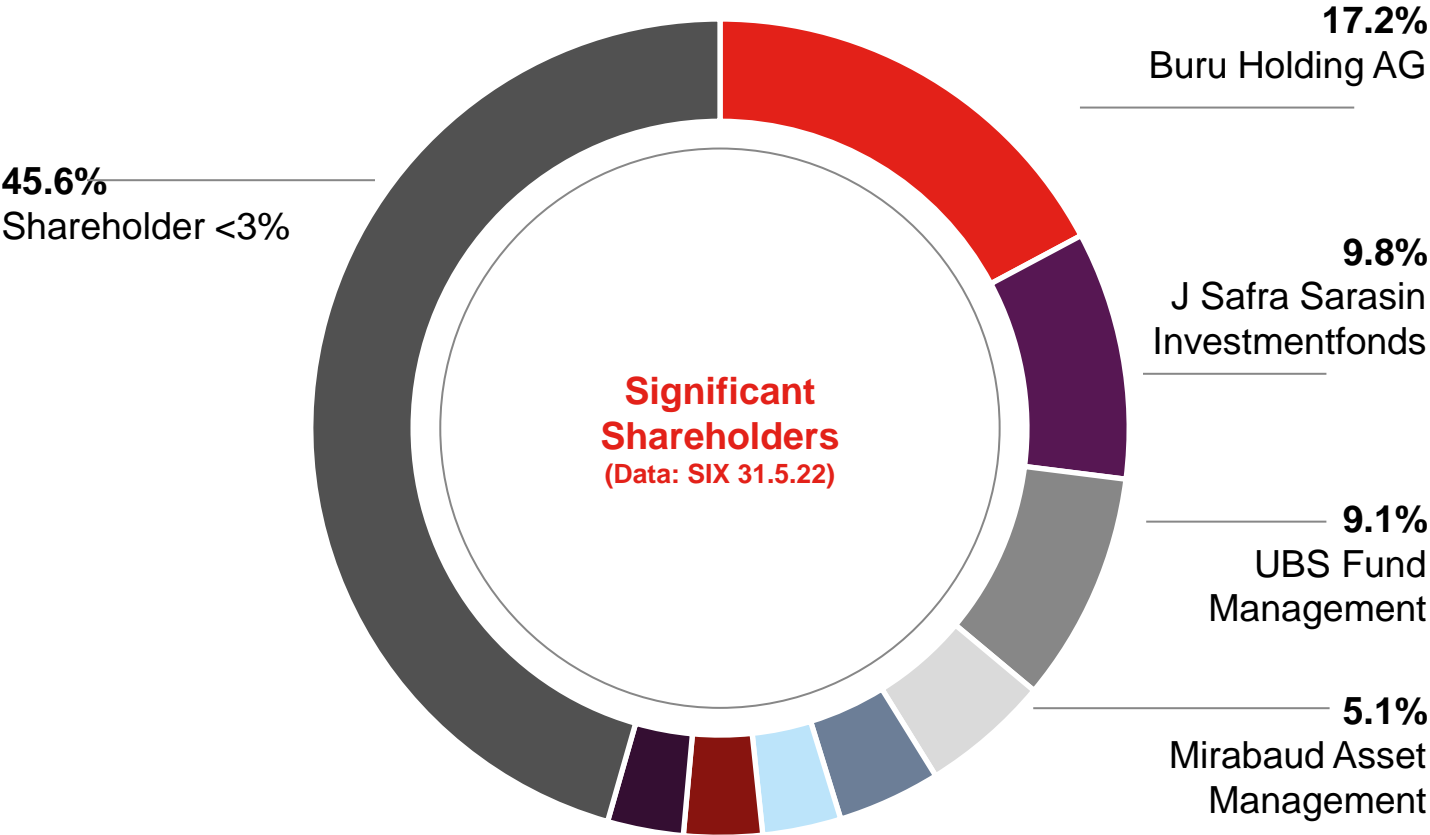
- Equity ratio: 57%
- Solid NWC management
- No goodwill
- Net cash position

Attractive dividend policy

- Income-oriented dividend distribution
- Target range for payout 40-50% of net result
- FY20/21 highest ordinary dividend since going public of CHF 9.00



Strong and committed anchor shareholder



Schaffner Group – key success factors

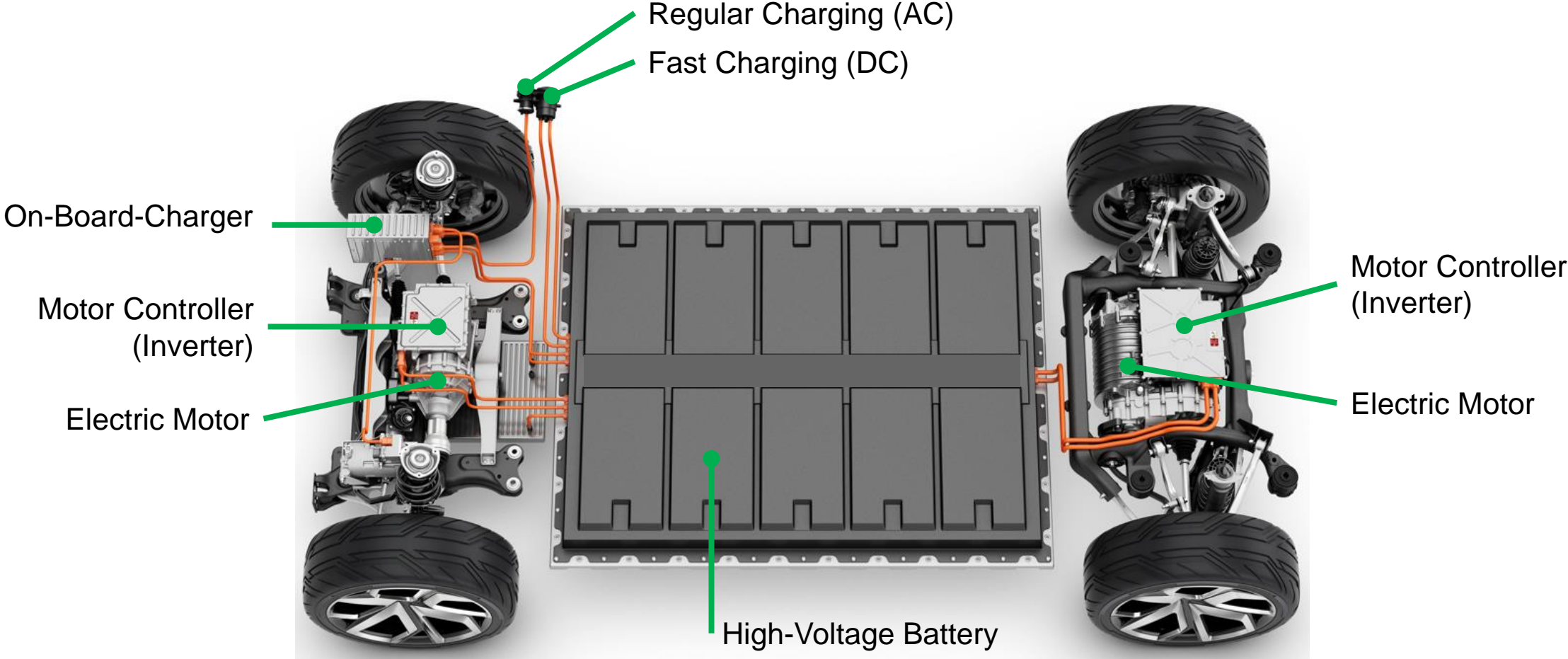


- 1) Core competence EMC solutions of high importance for mega trends sustainability and electrification
- 2) Market leadership with broadest product portfolio for Industrial markets
- 3) Schaffner's electro-magnetic competence being leveraged into e-mobility
- 4) Potential to move into adjacent growth markets through innovation and/or bolt-on acquisitions
- 5) Mid-term topline growth potential to boost margin expansion
- 6) Committed anchor shareholder with long-term perspective

Selected innovations in Industrial and Automotive

Innovation for e-mobility

The electric powertrain



Why is EMC an issue in an electrical car?

The “Noise Maker”

- Power transformation DC \leftarrow \rightarrow AC
- Inverters and transformers
- Electric motors



The “Noise Transporter”

- Cables
- they act like antennas and collect / send radiated emission



The “Victim of the Noise”

- Battery
- Sensors



How to eliminate the noise or make it harmless?

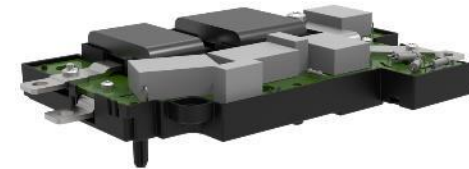
Use shielded cables & high system integration

- High costs – up to CHF 1'000 per car
- High integration on system level required



Use EMI filters

- Filter performance depends on filter size
- Smart design is key – high customisation required as every case is totally different



A combination of both

- Low performance filters
- Some cables shielded only

Schaffner's products in electrical cars

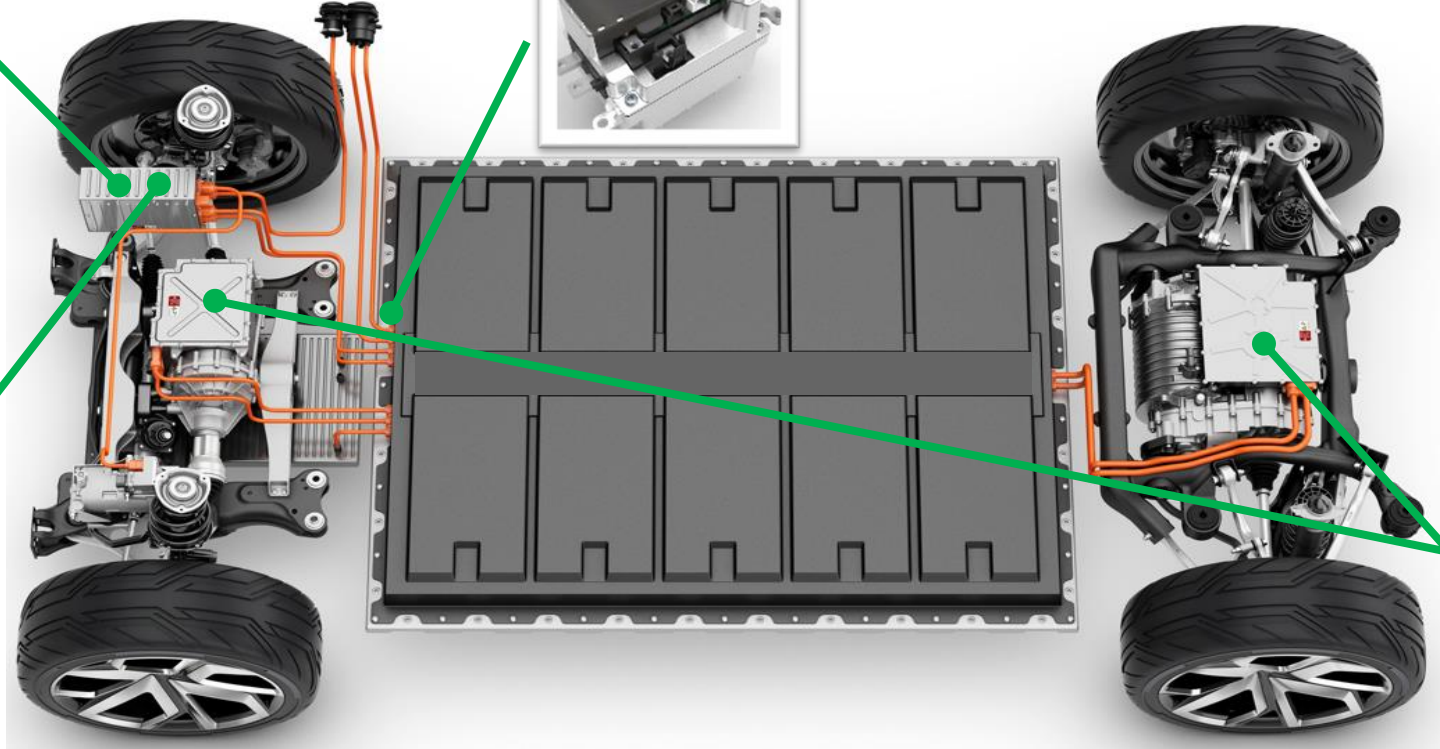
PFC-Module for OBC



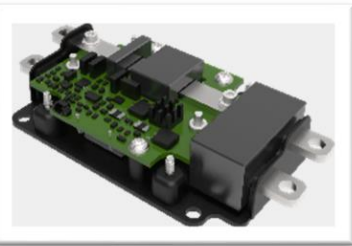
Battery Protection Filters



Transformers for OBC



Inverter Filters



Schaffner's value proposition in EMI filtering

For inverter filters and battery protection filters

- Portable Schaffner noise-measurements to accurately measure the real noise at customer's place
- Model based simulation for system understanding
- Scientific design approach using sophisticated calculation tools
- «Right at first shoot» filter designs for fast solutions

For on-board-chargers

- Designed for highest efficiency in smallest space
- Aluminium based solution for better heat evacuation
- 25-30% space and weight saving



Active filters as next-to-come technology

What is-it?

- Noise-measurements integrated in the filter
- Filter produces the opposite signal in real time
- In the aggregate, the 2 signals cancel each other

What's the benefit of it?

- Much higher noise attenuation and at lower frequency
- Much smaller size and weight

What's the current status?

- 400V active filter successfully tested on a customer powertrain
- 800V active filter under development



Innovation for Industrial

Machinery major market for EMC solutions

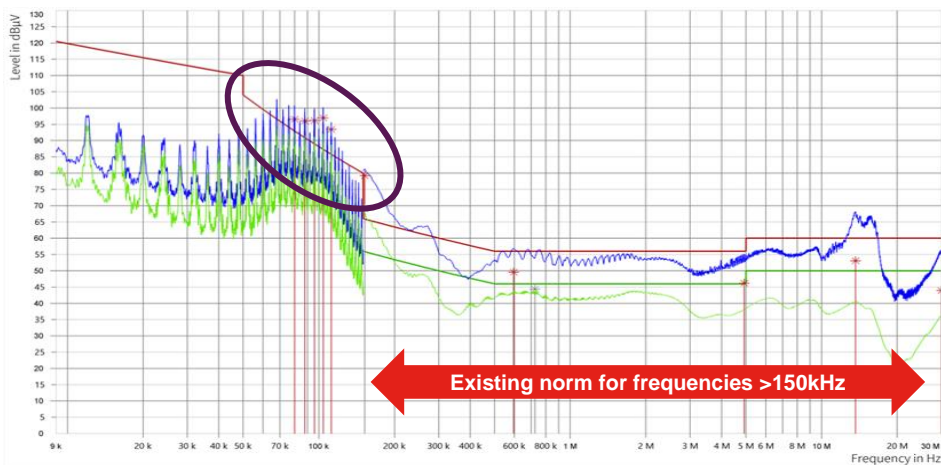
- Machinery market globally most relevant for EMC filter-solutions (est. Market size CHF 50m)
- Schaffner with big market share of CHF 20m
- The machinery market covers broad area of machines (food& beverage, manufacturing, semiconductor, textile etc.) whereas machine tools are one of the most important
- Industry norms in regard of EMC are changing and requirements increase
- New filter solutions are needed in the future to secure market and increase market share
- The solution will be hybrid filters for higher currents



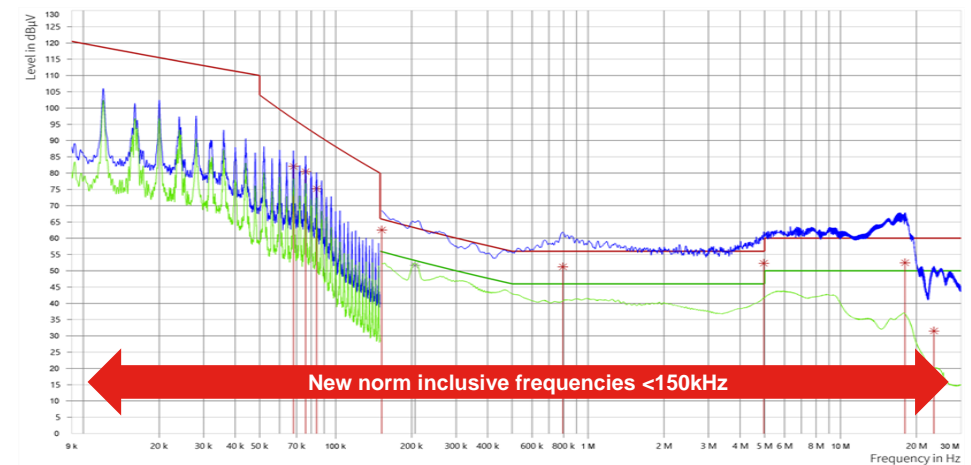
Hybrid filters can fulfill new requirements and provide additional benefits

- New norm requires filter performance at lower frequencies (<150kHz)
 - Expensive to implement with passive filters
- Smaller size and footprint huge advantage
- Energy efficient designs preferred

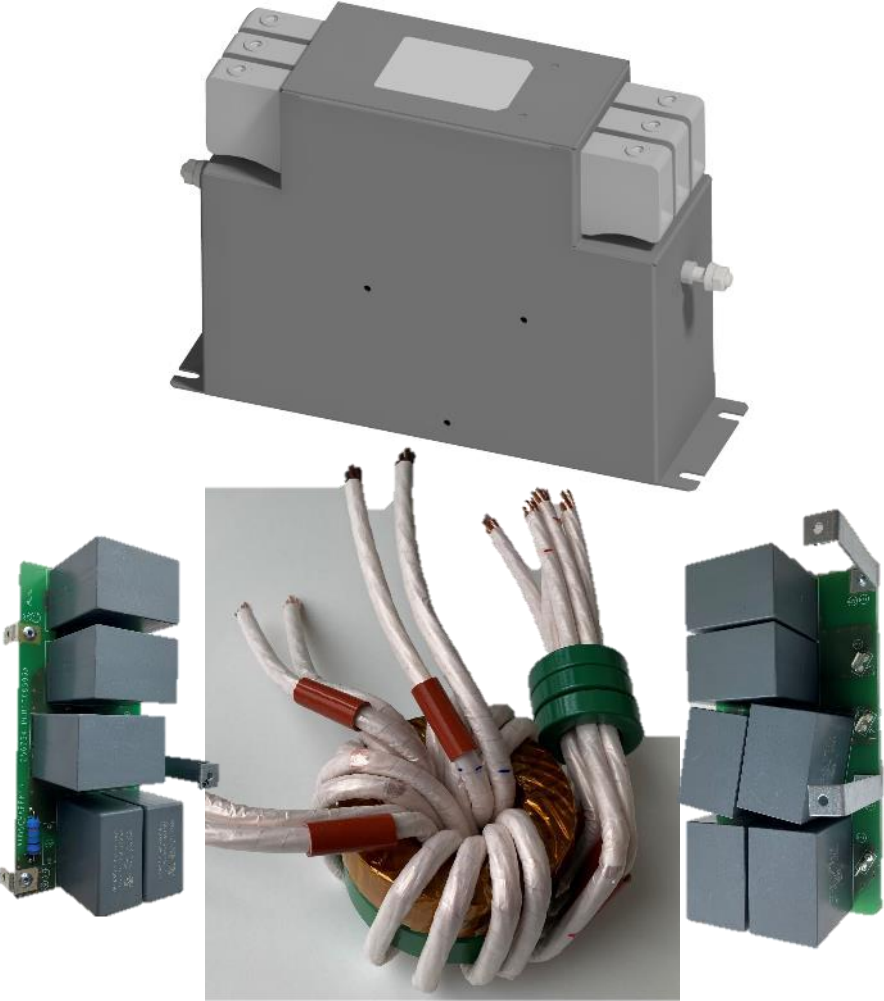
Today: Passive EMI filter



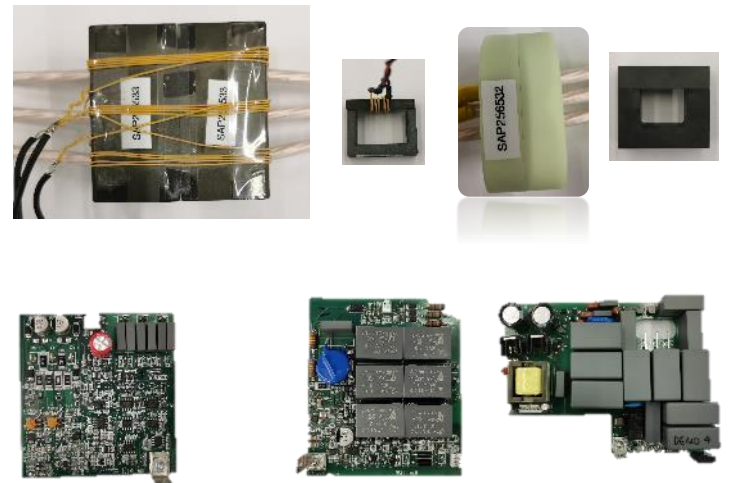
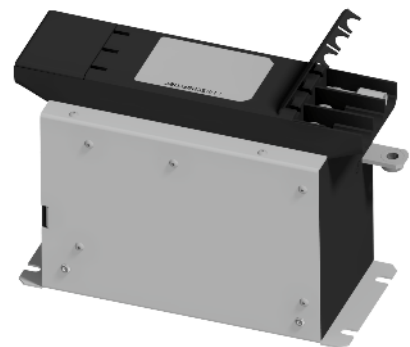
Tomorrow: Hybrid EMI filter



Smaller design and easier to manufacture



- ✓ *Size reduction by 40%*
- ✓ *Design & material standardization*
- ✓ *No winding*



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