

IT'S NOT JUST IRON, **IT'S KNOWLEDGE**



**DANIA**

*A Member of MAT Foundry Group*

# YOUR VISION, OUR MISSION

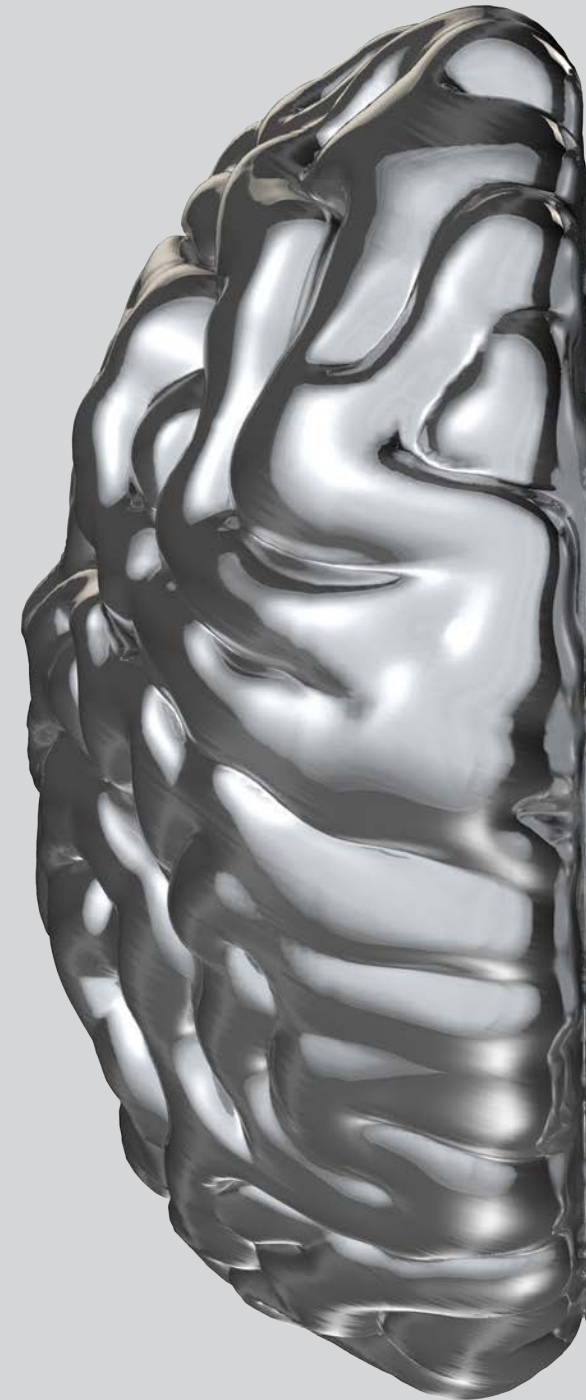


## MACHINE POWER IS NOTHING WITHOUT **BRAIN POWER**

Optimal and flexible production facilities is one thing. But add to that highly skilled people with decades of experience and a flexible service concept that can be tailored to your exact needs, and you have our masterplan for best in class cast iron solutions.

### WHAT WE DO:

Simple and complex core-intensive iron castings, primarily in medium-sized batches along with optional surface treatment and machining. We offer tailor made parts, ready for your assembly line.



THE **DIFFERENCE** BETWEEN A GOOD  
AND A GREAT OUTCOME

# THE OVERVIEW OF OUR COMPANY



## CONTACT

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## LOCATIONS

**DENMARK**  
**Established:** 1947  
**Employees:** 200+  
**Location:** Aars  
**Production area:** 21.200 m<sup>2</sup>  
Foundry, sales and technical support (Europe)

**POLAND**  
**Established:** 2013  
**Employees:** 95+  
**Location:** Słupno (close to Warsaw)  
**Production area:** 2,600 m<sup>2</sup>  
Machine shop

## COMPANY OVERVIEW – DANIA GROUP



**MAIN GEOGRAPHIC COVERAGE** Europe  
**NUMBER OF PRODUCTION SITES** 2 (Denmark and Poland)  
**NUMBER OF SALES AND TECHNICAL SUPPORT OFFICES** 2 (Denmark and Poland)  
**CAPACITY** 26,000 tons/year  
**OWNERSHIP** MAT Holdings, Inc.: 100 %

## COMPANY OVERVIEW – MAT HOLDINGS

**FOUNDED** 1984 in USA  
**EMPLOYEES** 15,000 globally  
**PRODUCTION** USA, Europe and Asia

MAT Holdings, Inc. is a privately held, globally diversified manufacturing, marketing, and distribution company, providing quality products and trusted brands to two business categories – Automotive and Consumer. The Automotive segment is further broken down into the MAT Foundry Group, which manufactures castings for automotive and industrial applications.

# COMPANY PROFILE

## OUR HISTORY



- 2013** Machine shop founded in Poland by Dania
- 2012** Dania A/S sold to MAT Holdings, Inc.
- 2000** Dania acquires Vest Dansk Maskinfabrik A/S
- 1970** Dania moves from Aarhus to Aars
- 1947** Jernstøberiet Dania A/S founded in Aarhus



# OUR ROADMAP TO YOUR SUCCES

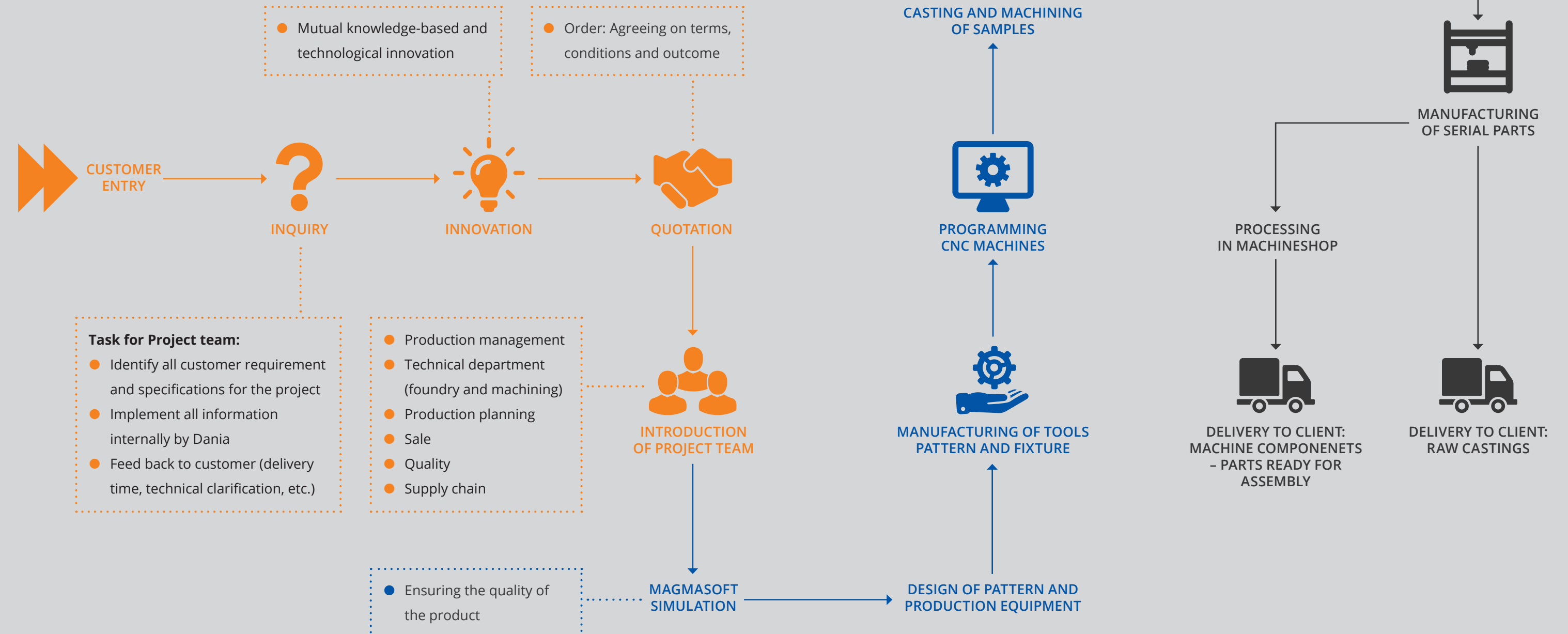
Each customer and project is a unique journey. However, our point of departure is always the needs and requirements of your business. Honed through decades of experience, our tool to deliver you a customized quality long-term

solution is a focused process model that offers you total transparency in all aspects from start to implementation. It is a powerful framework to securing you a solution you can count on, every time.

INTRODUCTION

PRE-PRODUCTION

PRODUCTION







# A FOCUSED PROCESS CENTRED AROUND YOUR BUSINESS

- 1 CREATING THE PERFECT COMPONENT TOGETHER
- 2 QUALITY ASSURANCE FROM CONCEPT TO IMPLEMENTATION
- 3 COMPLEX SOLUTIONS TAILORED TO YOUR NEEDS
- 4 MAXIMIZING YOUR LONG TERM VALUE





## 2 QUALITY ASSURANCE FROM CONCEPT TO IMPLEMENTATION

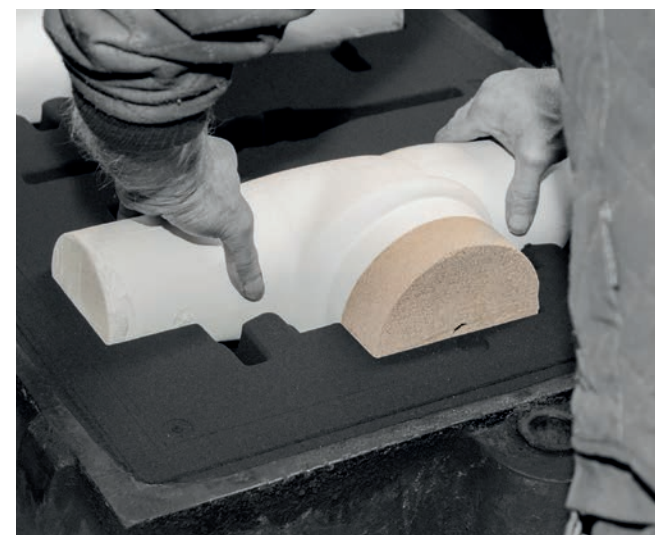
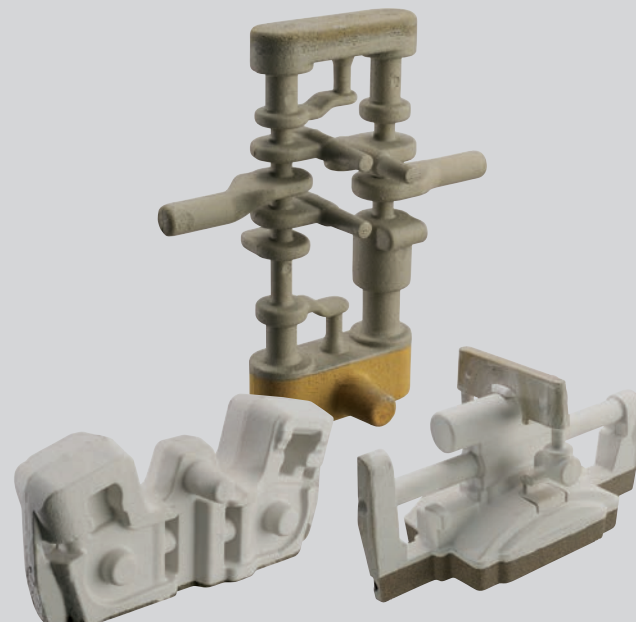
# MASTERING IRON CASTING IS A QUESTION OF TRUST

Your value chain is only as strong as its weakest link. That is why trust is everything in our business. At Dania, we are certified within quality assurance, energy and environmental management and regularly invest in new technology to increase precision and quality. Our organization is staffed with motivated, dedicated and skilled employees, who secure a safe work environment. Everything is set up to deliver you consistently high quality now and in the future.

## 1 CREATING THE PERFECT COMPONENT TOGETHER

# YOU CANNOT BE RIGHT **WITHOUT LEFT**

Both innovative skills and analytical talent are needed to engineer the perfect casting solution. But before things get really technical we need intimate knowledge of your business and the challenge at hand. Thorough groundwork and optimization of the component's shape are essential for getting it right the first time. This means sitting down together, boiling the project down to the bare facts. What, how and when. Once we fully agree on the best solution, all we have to do then is make advanced processing power available to highly skilled specialists.



## TESTING

Our in-house laboratories conducts regular analyses of the chemical and physical properties. Our inspection department takes measurements in 3D measuring machines and 3D scanners ensure you the best quality standard possible.



### 3 COMPLEX SOLUTIONS TAILORED TO YOUR NEEDS

## THIS IS NOT A NO-BRAINER

Complex, core-intensive components are just that, complex. Our flexible organizational setup makes the process from initial concept to final implementation run as smooth as possible for you. We offer you the experience, the machine power, and the brain power to handle virtually any casting challenge, and tailor it to your business. Our specialties are machine-moulded components in

nodular and grey iron, with a casting weight of 0.5 kg - 65 kg, and complex hydraulic castings, all delivered with superior and pressure-proof quality, and on time, every time.

#### DELIVERED STRAIGHT TO YOUR VALUE CHAIN

Our logistics capabilities ensure delivery of castings to mesh perfectly with your supply chain.



## TECHNICAL SPECIFICATIONS

#### MOULDING PLANTS:

- DISAMATIC 2013 MK5 600 x 480 x (300)
- HWS 750 x 550 x (300/300)

#### CORES:

- Cold box, hot box and croning up to 20 kg

#### PATTERNS:

- Modern pattern shop with machining facilities for manufacture of CNC-patterns on the basis of 3D-files
- Simulation of solidification and mould-filling with Magmasoft

#### MELTING:

- 3 6-ton medium frequency furnaces
- 2 holding furnaces

#### HEAT TREATMENT:

- Ferritizing annealing
- Stress relief annealing

#### SURFACE TREATMENT:

- Dip or spray painting with waterbased primer
- Anti-corrosive treatment in oil bath

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### MAXIMIZING YOUR LONG TERM VALUE

## COMMON SENSE ALWAYS PAYS OFF IN THE END

At Dania, our core business model is based on creating maximum value for our customers, big or small, without shortcuts. We believe in doing things right the first time. At the end of the day, it is all about understanding your business and maximizing your return of investment.

#### REALLY LONG TERM VALUE

It is our belief that future generations should have the same privileges we have. That is why, today, 70% of our energy consumption come from renewable sources, and we're constantly increasing energy efficiency in every step of our value chain. Things that last longer, create more value and less waste.

#### THE PERFECT FINISHING TOUCH?

Iron castings require finishing processing and surface treatment. We offer you access to our highly specialized machine shop. This ensures you problem-free order execution, without any shift in responsibility.

Our machine shop is equipped with state of the art production machinery for processing your products or components ready for assembly. This way, we can save you time, resources and cost.

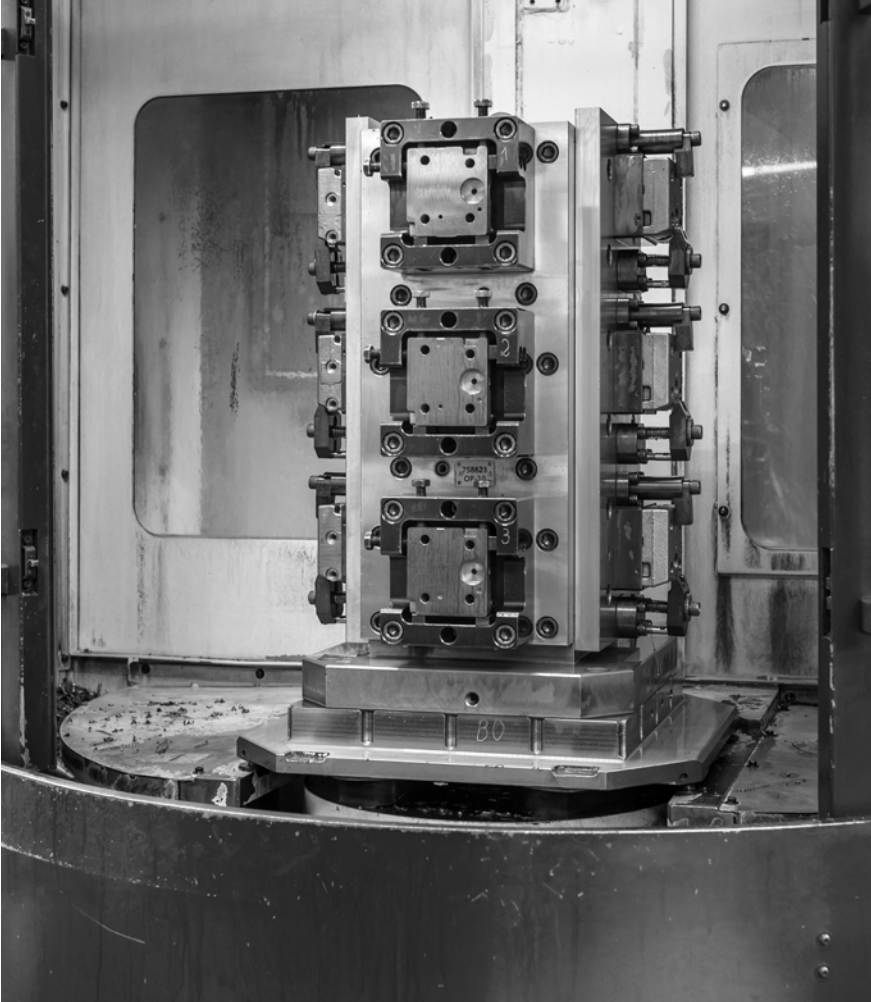
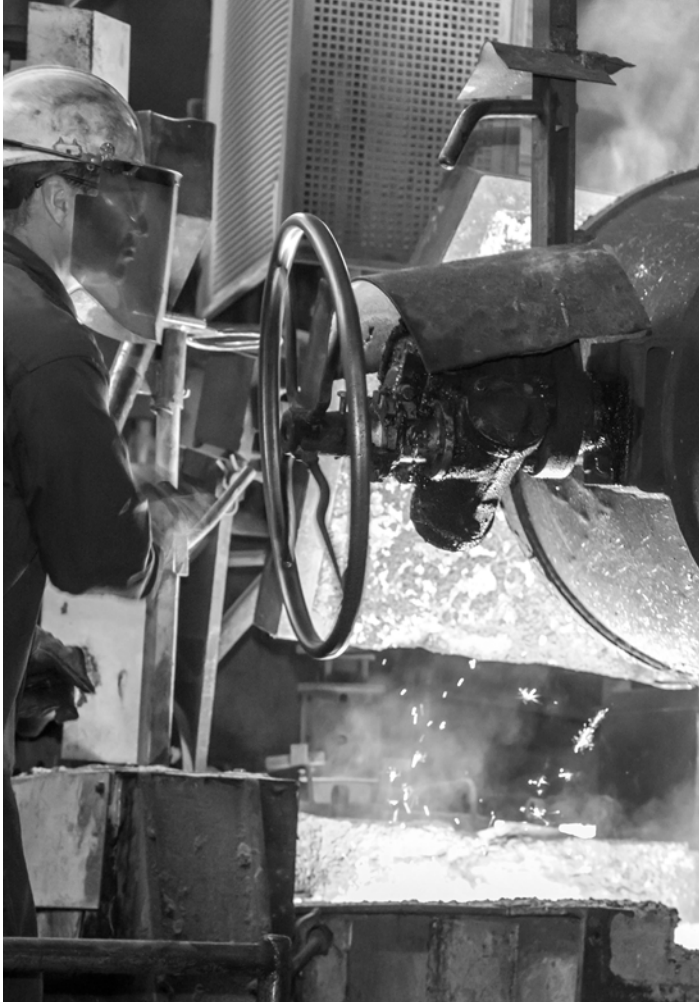




# VALUE CREATION

Our aim is to add maximum value to your product. Each step in our process is designed to create long-term value by employing the full force of our facilities, skills and experienced employees. The added bonus is twofold. Not only does this result in a better and more valuable product, it also reduces costs and increases your competitive power on the market.

# INCREASING COMPETITIVENESS



# ADDED VALUE FROM DAY 1



**INVESTMENT**  
Customized pattern, tooling and fixtures shall be manufactured before Dania can produce samples and serial production.

**COST EFFECTIVE PROTOTYPE**  
Cost reduced pattern, tooling and fixtures for temporary can be used to reduce cost for prototype and additionally 3D printed cores can be used as an option.

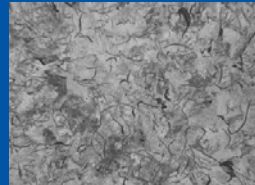
**MATALLURGY**  
Dania can produce a wide range of different material qualities of cast iron.

**3D TECHNOLOGY**  
Measurement and scanning based on 3D technology is supplied to verify samples.

**TIME TO MARKET**  
The implementation of projects is efficient driven by the Dania's project organization by using the (APQP) process.



## IRON GRADES – GREY & NODULAR IRON



EN 1561 (GREY IRON)

### EN-GJL-150

The lower grade of gray iron mainly used for applications where strength is not essential, such as counterweights etc..

### EN-GJL-200

Electric motor housings, gear housings, bearing cover/shield, consoles, manifolds etc.

### EN-GJL-250

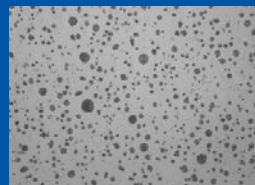
Machine tool castings, transmissions housings, pump housings, hydraulic parts, small toothed wheels, valves etc.

### EN-GJL-300

Cheeks for machine tools, large pump and turbine housings, castings for diesel engines, large gearwheels and flywheels, hydraulic castings, valves etc.

### EN-GJL-250PH AND EN-GJL-300PH

Phosphorus alloyed gray cast iron with good wear resistance due to the presence of steadite, a very hard structure formation.



EN 1563 (NODULAR IRON)

### EN-GJS-400-15

Wheel hubs, hydraulic castings, differential housings, bearing housings, brake calibres, rocker arms and with financial benefit this grade often replaces welded and forged constructions.

### EN-GJS-400-18

Castings for wind power, forest- and contractors' machines, valves, brakes, clutch, consoles, pressure tanks, housings for high pressure hydraulic equipment, cooling components and in general for use at temperatures down to -20°C where guaranteed impact strength is important.

### EN-GJS-500-7

High pressure hydraulic valve, components for trucks, forest-, agricultural and contractors' machines, large diesel engines, rocker arm bearings, bearing housings and covers.

### EN-GJS-500-14

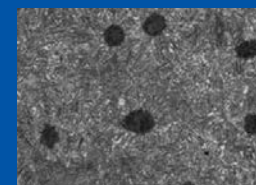
Solution Strengthened Ferritic (SSF) spheroidal graphite iron. Moderate strength nodular iron with high ductility. Due to its small variation in mechanical properties it is used where improved machinability and productivity is wanted.

### EN-GJS-600-3

High pressure pump housings, clutch housings, universal joints, housings for hydraulic engines, gear wheels and hydraulic cylinders.

### EN-GJS-700-2

Cranks, machine components and tools, that are exposed to large dynamic and static loads.



EN 1564 (ADI IRON)

### EN-GJS-800-8 AND EN-GJS-1000-5

ADI (Austempered Ductile Iron), high strength nodular iron with high ductility and wear resistance. The high strength makes it possible to save weight due to the possibility of lighter structures. The material is used in Agriculture, Industrial and Construction applications.

## GROUPS OF SEGMENTS



FLUID POWER



COMMERCIAL VEHICLES

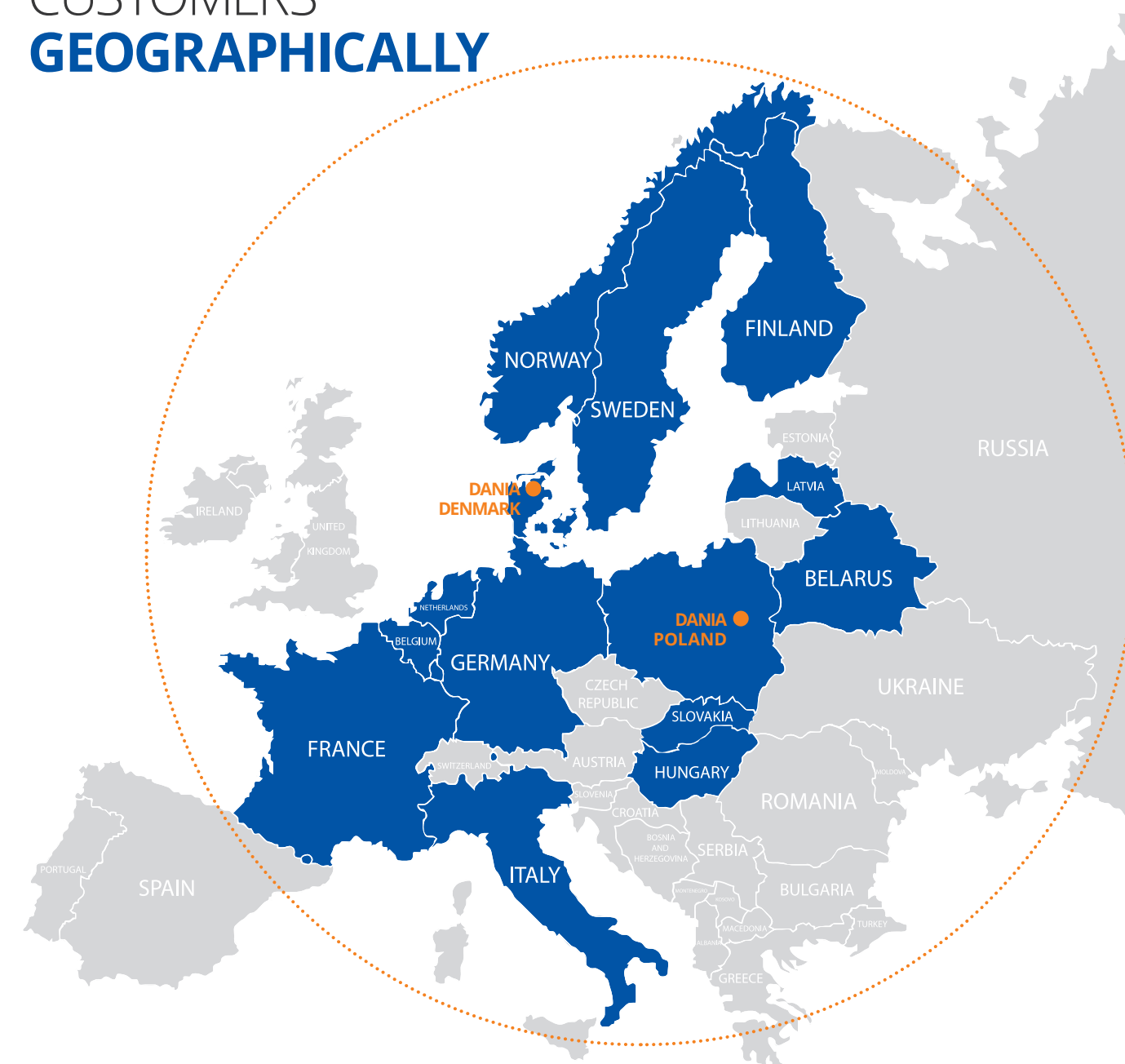


MACHINE COMPONENTS



WIND ENERGY

## CUSTOMERS GEOGRAPHICALLY





PRODUCTION RANGE



Bearing housing 4.6 kg



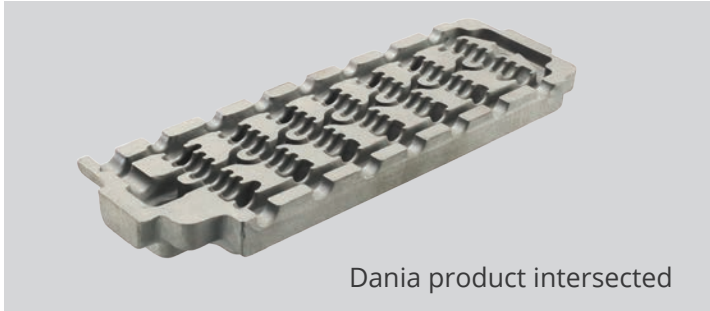
Control housing 1.4 kg



End cap 18.5 kg



Hydraulic body 7.0 kg



Dania product intersected



Top Cover 7.5 kg



Gear housing 18.5 kg



Valve housing 1.1 kg

Order production of machine moulded  
nodular iron and grey iron castings with  
item weights from 0.5 to 65 kg.  
Our speciality is core-complicated parts.

FROM 0.5  
TO 65 KG



Cylindertop 2.8 kg



Stator part 16.6 kg



Filter Housing 24 kg



Bearing support 4.6 kg



Valve housing 4.4 kg



Bearing part 4.7 kg



Bracket 3.1 kg



Dania process



Brake flange 21.1 kg



Gear housing 14.7 kg



Housing 5.0 kg



Housing 2.50 kg



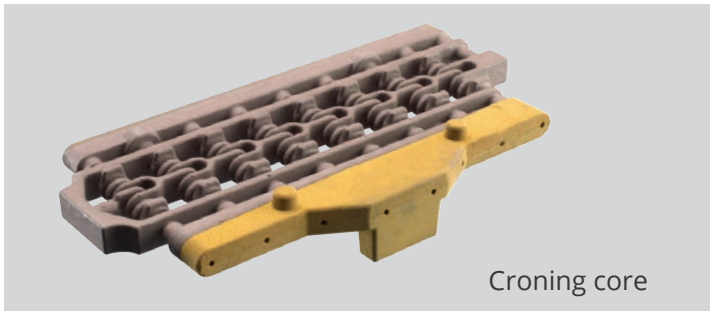
Valve Housing 15.9 kg



Cylinder housing 7.9 kg



Dania product intersected



Croning core



Adapter 9.5 kg

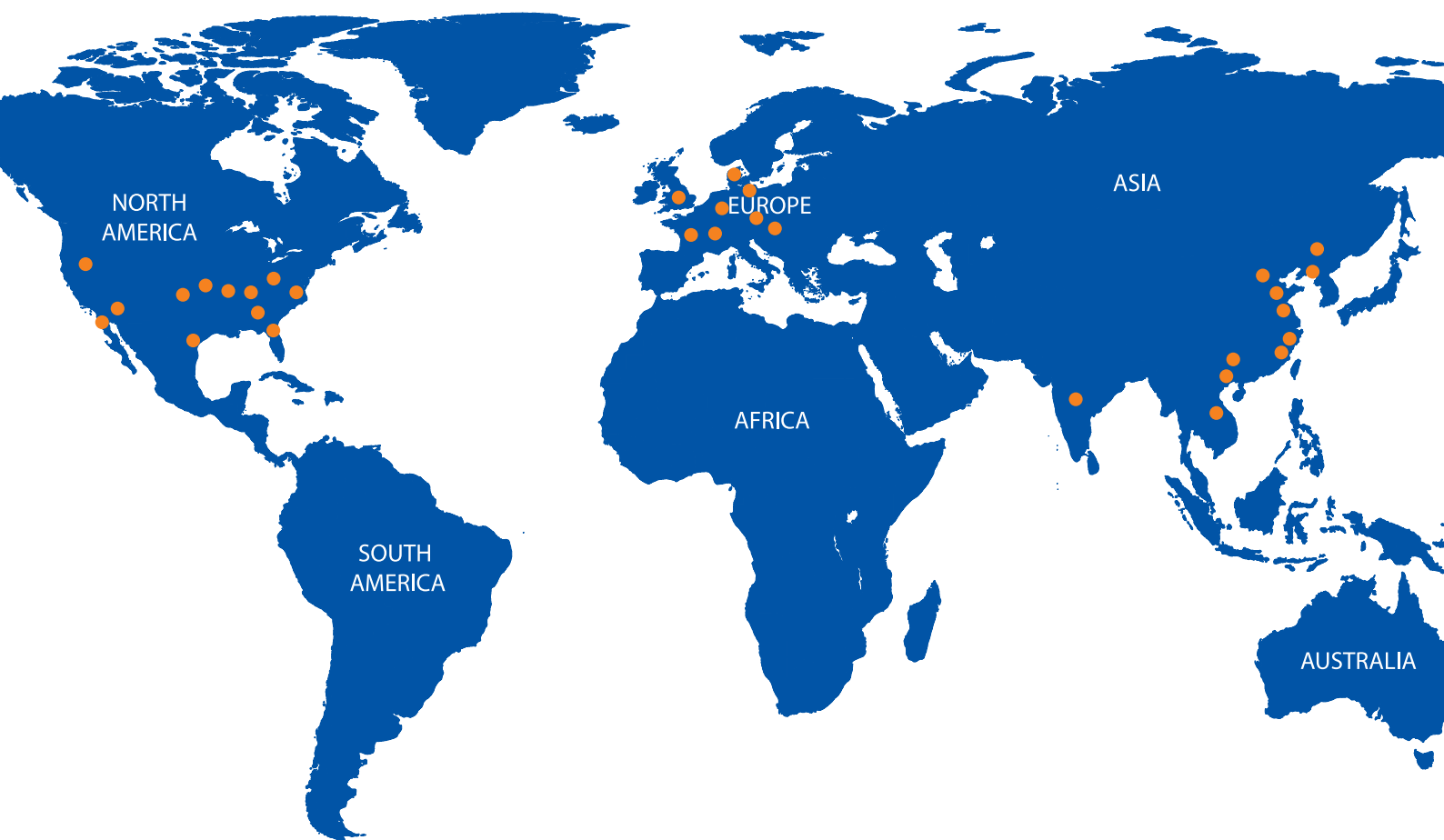


Wheel hub 34.6 kg

DANIA CERTIFICATES

QUALITY ASSURANCE SYSTEM - DS/EN ISO 9001:2000  
ENVIRONMENTAL MANAGEMENT SYSTEM - DS/EN ISO 14001:2004  
ENERGY MANAGEMENT SYSTEM - DS 2403:2001  
THOSE SYSTEMS ARE EXTERNALLY CERTIFIED BY DNV AND GL





## STANDING ON THE **SHOULDERS OF GIANTS**

Dania is a member of the MAT Foundry Group, one of the largest foundry groups in the world. This allows us to exploit synergies in purchase, R&D, and logistics across the board, which translates directly into better solutions now and in the future.

The MAT Foundry Group spans 3 continents and consists of 8 companies, which engineer and manufacture castings, primarily aimed at the passenger, commercial, and heavy duty vehicle

markets as well as industrial and racing applications.

The foundry group produces more than 350,000 tons of iron per year in 7 foundries with 2000 employees. It also maintains 11 machining facilities across Europe, Asia, and Central America. The Foundry Group supports both OEM and aftermarket customers with R&D including 80 process and development engineers.



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