

Danfoss Drives

Application Development Center – Singapore Marine & Offshore - Hybridization

Creating and proving solutions to customer challenges



**ONE STEP
CLOSER**

to serve our
Customer



One Step Closer to Customer One Step Ahead of Competitors

Application Development Center

Answering tomorrow's challenges

ADC offers you expert support for ensuring the best possible solutions that answer tomorrow's challenges. We provide drives expertise and test facility locally to accelerate business and minimize risk. The aim is to explore and develop new system approaches with existing drives and conversion product; to provide infrastructure to support testing of new equipment & applications; and to build professional experts on the industry-leading application system technology. Our team is committed to working closely with you and helping you engineer tomorrow.

Application Development Center in the region – we understand your language better; your stronger partner in drives solutions.

Achieving success together with ADC

Agile: Awareness and fast to market, we respond quickly to customer demand. Our engineers work with you to conceptualize and design solutions to overcome your application unique challenges. ADC team continuously explore and incubate innovative solutions to keep up with and be ahead of market trends.

Development: Our ADC is also used to develop solutions independent of a specific customer; to accelerate development of new products & system solutions. The ADC enables us to develop, test and prove real solution that you can experience first-hand. Integrated system and component HW or SW performance are demonstrated and validated. The result is proven technology immediately available for you.



DEVELOP



TEST



PROVE



DEMONSTRATE & REFINE



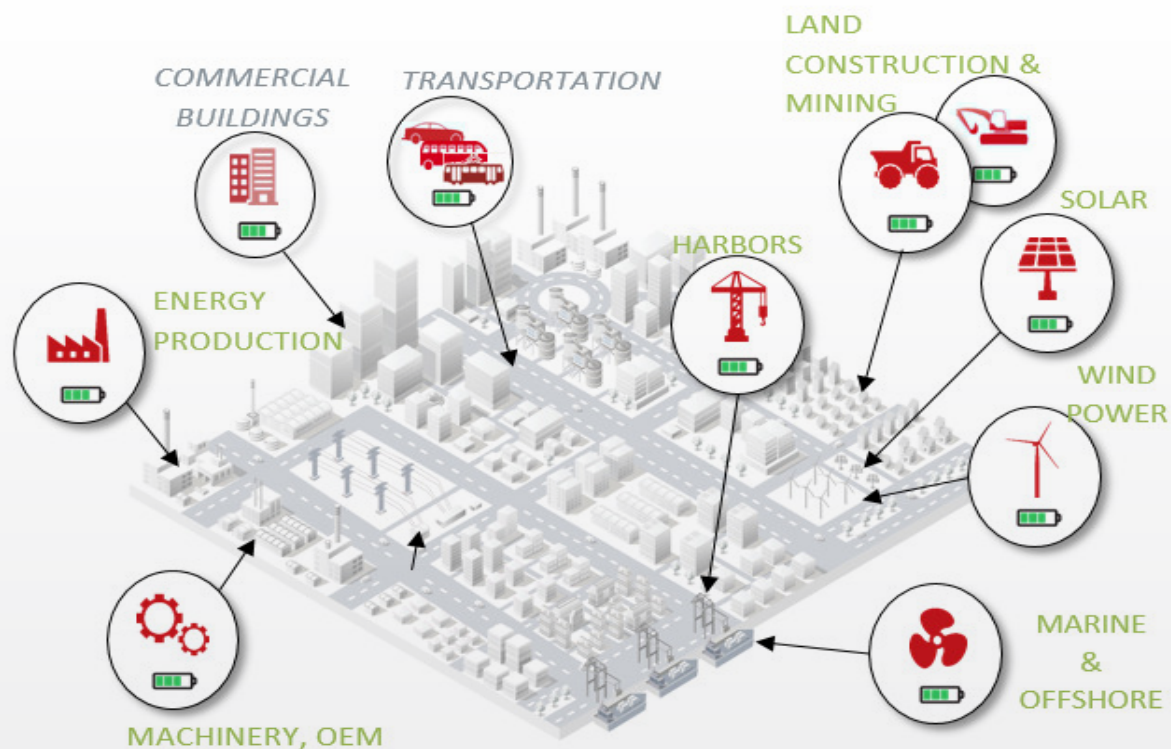
Collaboration: No guesswork between our team and you, as there is face to face communication and continuous inputs. Regardless of your challenges, we maintain our commitment of working with you to efficiently develop better-performing solutions that help separate you from your competition while achieving your customer value proposition. ADC is an investment in long term partnerships we work to build with you.



Inside ADC

We offer system solutions and applications, not limited to below listed. In ADC, equipment set-ups as well as applications are ever-changing depending on customer's enquiry or projects and/or internal testing requirements.

- Drive motor applications
- Common DC bus solutions
- Power conversion technology – Active Front End (AFE), Grid Converter, MicroGrid, DCDC converter
- Hybrid solutions via Energy Storage (ESS) – Solar, Battery, Ultra Capacitor etc.
- Digitalization & Connectivity



Schedule your visit:

Let us get to work with you to find the solutions you need if you have any engineering challenges you'd like to talk about; or **if you want to find out and learn more about our Application Development Center, contact our ADC manager** (Tan Huan Ping @ huanping_tan@danfoss.com) or your Danfoss Sales Representative to make a booking today.



Vessel wide solutions from Danfoss drives

Compressors:

- Refrigeration compressors
- Air compressors

Separators:

- Fuel centrifuges
- Lube oil centrifuges
- Bilge water centrifuges

Azimuth thruster drives:

- Variable speed fixed pitch propeller drive
- Safe and accurate electrical steering

Electric crane:

- No risk of hydraulic oil leakages
- High efficiency

Pumps:

- Water pumps
- Fuel and oil pumps
- Cargo pumps

Steering gear:

- Safe and accurate rudder positioning
- Low stand-by losses

Fans and ventilation:

- Accommodation area HVAC
- Engine room ventilation

Shaft generator drive

- with PTO (Power Take Out) and PTI (Power Take In)

Electric deck machinery:

- No risk of hydraulic oil leakages
- Excellent speed and tension control
- Dynamic heave compensation

Tunnel thruster drive:

- Precise maneuverability
- No starting current peaks
- Low maintenance

Battery energy storage system:

- Power peak shaving
- Allowing smaller engines
- Reducing fuel consumption

DC/DC converter:

- Secures optimum battery charging
- Boosting battery DC voltage

Micro grid converters:

- Producing clean power for the ship's grid



For further information please visit www.marine.danfoss.com

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