NATIONAL FOUNDRY TECHNOLOGY NETWORK

National Foundry Technology Network

The National Foundry Technology Network (NFTN) is an industrial support programme aimed at equipping the South African metal casting industry, delivered by the Council for Scientific Industrial Research (CSIR). The NFTN is funded by the Department of Trade, Industry and Competition (**the dtic**) to achieve national objectives in this very important sub-sector.

What is a foundry?

A foundry is a facility that produces metal castings – where metal shapes are formed by pouring molten metal into a mould cavity, where it cools, solidifies, and is later extracted for machining and polishing to final specifications. There are approximately 120 foundries across South Africa, most of whom undertake high/low-pressure die casting, sand casting or gravity casting.

Why does the NFTN exist?

Foundries have a vital role to play in the South African manufacturing value chain, particularly in achieving targets of local content. But their infrastructure and limited capacity often renders them unable to compete with the high volumes and low cost of imported parts.

The mandate of the NFTN is to manage, coordinate and facilitate growth and transformation in the casting industry through focused interventions designed to support improved foundry competitiveness and the industrialisation of new technologies and products.

The NFTN technical advice and support is implemented at individual firm and industry (sector) level.

Sector level interventions

At sector level, the NFTN, **the dtic** and the CSIR work to address challenges affecting all foundries to allow the sector to thrive. These include critical skills development, sector research and development planning, competitive improvement as well as engagements around waste, environmental impact, and energy management.

The NFTN can also partner with original equipment manufacturers (OEMs) to enhance their supplier development planning with targeted interventions linking them with appropriate foundries and supporting those foundries to meet manufacturer needs.

Firm level interventions

We help industry to address the following:

- Support with achieving environmental compliance (e.g., Air Emissions Licences),
- Assist with achievement of quality management systems accreditation (e.g., ISO 9001:2015, AITF 169) and international technical standards, such as AITF 1696 automotive standards.
- Assist with improved product and tooling in the foundries to improve quality and reduce input costs.
- Advise on process optimisations and improvements to address productivity, efficiencies and quality controls.
- Assistance in identifying and implementing energy efficiency improvements.

These interventions will allow a foundry to meet the specifications and requirements of an assembler or manufacturer (OEM).

Why make use of a local foundry?

- Reduce the need for imports
- Increase local production and investment
- Create local employment

Supporting the metals value chain

Together with the CSIR, the NFTN has the expertise to bring a host of specialist skills and advice that will support foundries to be more competitive and sustainable to serve the manufacturing sector better.

Ultimately, our objective is to support the implementation of quality management systems to allow local foundries to compete internationally and to align their processes and end quality with international benchmarks.

Contact us

For manufacturers who would be interested to be linked up with a local foundry, kindly contact us at nftn@csir.co.za for more information.

www.nftn.co.za

the dtic
Department:
Trade, Industry and Competition
REPUBLIC OF SOUTH AFRICA

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The NFTN is a programme of the dtic hosted by the CSIR.