Profile: Advanced Manufacturing & Engineering

Alignment to strategic priorities:

59,669	-14.7%	5,748	£43.5k
Jobs (2019) 21% above National average	% Change (2019 - 2022) Nation: -5.5%	businesses (2021) 78% have 1-4 employees	Average wages per job: LSIP = £31.0k South East = £30.5k Nation = £30.4k

TOP ONLINE POSTED OCCUPATIONS:

- 1. Civil engineers
- 2. Engineering technicians
- 3. Mechanical engineers
- 4. Engineering professionals n.e.c.
- 5. Electrical engineers

TOP SOFT SKILLS:

- 1. Communications
- 2. Management
- 3. Customer service
- 4. Planning
- 5. Detail oriented

TOP SPECIALISED SKILLS:

- 1. Mechanical engineering
- 2. Machinery
- 3. Auditing
- 4. Engineering design process
- 5. Electrical engineering

JOB POSTINGS REGIONAL BREAKDOWN:

- 1. Basingstoke and Deane
- 2. Guildford
- 3. Rushmoor
- 4. Test Valley
- 5. Woking

Data are for January 2019 – December 2022 | Source: Lightcast

Additional insights and intelligence

With a high concentration of businesses in for example the Precision Technology cluster¹, this sector makes a strong contribution to the area's productivity through large numbers of high value jobs such as *Production managers and directors in manufacturing* and *Design and development engineers*. Although average wages are high, there is evidence of a decline in the number of jobs in a sector with predominantly (78%) micro businesses with less than five employees.

The Government's Industrial Decarbonisation Strategy² highlights Manufacturing as a key industry in working towards net zero. This activity will require skills and innovation – both of which the LSIP area can support. In 2022, Manufacturing accounted for about 46,000 jobs – roughly 5% of employment in the LSIP area. Most of these jobs were in Test Valley, Basingstoke & Deane, and East Hampshire.

There is strong alignment between this sector and the green growth sectors of Industrial Decarbonisation and Power identified in the Green Skills demand report³. Manufacturing

² "Industrial Decarbonisation Strategy, March 2021", UK Government, <<u>https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/970229/</u> Industrial_Decarbonisation_Strategy_March_2021.pdf>

¹ "Skills and Labour Market Analysis", (2020), <<u>https://enterprisem3.org.uk/sites/default/files/2020-02/EM3%20Skills%20and%20Labour%20Market%20Analysis%20%28FINAL%29_0.pdf</u>>, p. 13

³ "Annex A.2: Green skills demand report", p. 4

and engineering roles occupy eight of the top 50 green occupations, both currently and projecting forward to 2030, with the top jobs being civil engineers, production managers/directors manufacturing, electrical and mechanical engineers⁴. It is critical to ensure there is sufficient green content in engineering courses run by local providers, or for new courses or modules to be found.

In the LSIP employer survey⁵, respondents cited gaps in particular engineering job roles including: *Aviation, Electrical, Mechanical, Service* and *Software Engineers; Fitters* and *Welders. Machine skills* were also cited as a particular skill in demand. Other feedback includes challenges of finding candidates with the right technical skills and / or basic understanding of key engineering skills and machinery at a time when the workforce is getting older, retiring and therefore, there is a 'brain drain' concern.

In terms of local provision, in 2021-22, there were 1,357 achievements (7.2% of all achievements) in *Engineering and manufacturing technologies* sector subject area – mostly at level 3. Apprenticeship starts in this subject area accounted for less than 10%; a lot lower than the national proportion⁶.

CASE STUDY: An engineering business, shaped around solving problems for energy, defence and science, **Sonardyne⁷**, based in Yateley in Hampshire have been working closely with **HSDC** since 2011 as part of their talent strategy. The business funded the high-spec Sonardyne Engineering Centre at the Alton campus and each year, students compete for work placement and apprenticeship opportunities to kick off their careers in offshore energy, maritime defence and ocean science.