

### 3.4. Identification of scarce and critical skills

#### 3.4.1. Scarce Skills

Scarce skills refer to occupations in which there is a shortage of qualified and experienced people due to unavailability of such people or because these people do not meet given employment criteria. Scarcity can be absolute or relative. Scarcity may arise due to absolute scarcity in which few people hold the necessary skills or qualifications (such as those required in a new or emerging occupation). These skills are either impossible to replace or extremely difficult to replace should they exit the sector. Absolute scarcity results in low growth and productivity of companies in the sector and the sector itself. Relative scarcity of skills pertains to skills that are difficult to attain due to geographic location, equity requirements or the lead-time on attaining the necessary skills. Table 12 outlines the scarce skills occupations across the sector.

The methodology used to derive at the top 10 scarce and critical skills outlined in Table 12 and Table 13 below was mixed methods using both quantitative and qualitative data collections methods. Data was first sourced from last year's SSP and through the online employer survey. This data was then verified and updated during stakeholder interviews and focus groups.

**Table 12: Top 10 scarce skills in the FP&M sector**

OFO CODE	SCARCE SKILL
715302	Machinist
214908	Materials engineering technologist
653301	Machine mechanic
214101	Process engineer
683401	Upholsterer
131102	Production/Operations manager
821501	Forester (forestry worker)
652204	Pattern maker
312201	Production/Operator supervisor
216603	Multi-media designer

Critical skills refer to "top-up" skills within an occupation. These can include cognitive skills, such as problem solving, language and literacy skills. These "top-up" skills can be specific to a particular occupation resulting in skills gaps, which might arise because of phenomena

such as improved technologies or new forms of work organisation. All FP&MSETA sub-sectors report investments in new technology, and training new staff to use such technology is therefore a key critical skills driver for the sector. Similarly, managers are required to lead the sub-sector in new business directions, to achieve the industrial restructuring required. Managers are therefore also an important focus for critical skills development. Many sub-sectors are competing in a global arena currently, and improved labour productivity is becoming an increasing priority. This too is a major critical skills driver. Table 12 lists the 10 most critical skills in the FP&M sector.

**Table 13: Top 10 critical skills in the FP&M sector**

CRITICAL SKILL
Operations Management
Technology-related expertise
Design & Innovation
Supervisory/Team Leadership
Information Technology expertise
Project Management
Production Planning
Problem Solving (Estimating)
Coaching/Mentoring
Sales and marketing

### 3.4.2. Impact of skills shortages on firms

The skills shortages in the FP&M sector, both low-level and high-level skills, that together have had a cumulative effect on industry over the past five years.

Many manufacturers are failing to attract younger entrants into the industry and are left with an aging workforce threatening the sustainability of their business. Once the existing employees retire, the skills gaps will widen substantially. There are not enough machinists and pattern makers, for example, in the clothing industry to sustain the growing demands of clothing retailers and this together with the rising cost of local production has resulted in large imports.

Rapid technological advancements have increased the need for high-level technical skills and machine mechanics. However, a shortage of overall technological expertise (e.g. mechanics