PROVINCIAL DEVELOPMENT UNIT
New Zealand Government

2.24 UNITED MACHINISTS ACCELERATE SCALABILITY PROJECT

PGF Express Application		For: Approval	
Applicant:	United Machinists Limited	**Pipedrive ID #**	Commercia
Entity Type:	Company	**PGF Funding Sought:**	$Commercial Inform
Region	**Otago**	**Total Project Value:**	$Commercial Information
Tier:	**2 - Sectors**	**Co-contribution:**	$Commercial Information
Sector:	Southland and Otago Regional Engineering Collective	**Funding Structure:**	Grant

We recommend that SROs:

a) **Approve** up to $520,000 from the PGF toward the purchase of one of the three requested specific pieces of engineering equipment (Mazak Integrex fully automated machining) to build the capability and capacity of Southland and Otago manufacturing and engineering firms, subject to:
- The applicant maintaining alignment to the Southland and Otago Regional Engineering Collective (SOREC) objectives evidenced by the continued reporting to the Ministry on its outcomes.

b) **Note** that the applicant has sought $Commercial Inform from the PGF and that the PDU is recommending funding for only one key piece of equipment.

c) **Note** that unlike other SOREC applicants, the PDU is recommending Commer% funding for the Mazak Integrex equipment due to the applicant withdrawing its recent PGF application and obtaining a bank loan for other equipment costing $Commercial Inform.

d) **Note** this project strongly aligns with PGF and SOREC objectives**.**

e) **Note** this funding request is part of the agreed PGF allocation for the Southland and Otago Regional Engineering Collective.

Proposal:

The applicant is a CNC (Computer Numerical Control) milling and turning machine shop specialising in high precision machining for New Zealand's high tech export market. It currently contract manufactures components for many of New Zealand's most high-tech exporters, from prototype to full production – its clients include Commercial Information It is one of the sector's fastest growing companies, with this growth causing challenges to meet its clients ever increasing demands.

The applicant seeks financial support towards its capital expansion project to invest in the automated and high

precision machinery capabilities we need to grow our productivity and capacity. The three pieces of equipment the applicant requires include:

Equipment	Total cost
Mazak Integrex fully automated machining centre	Commercial Information
Coordinated Measuring Machine (CMM)	
ZeroPoint Pallet system and Robot Arm	
Total	

PGF funding will enable the applicant to meet the rapidly growing demand from its high-tech clients, Commercial Information, as well as three new business opportunities currently under discussion. Detail of the equipment and the benefits to the company are as follows:

1. **Mazak Integrex fully automated machining centre**
   The Mazak Integrex machine is a highly versatile lathe and mill in one. The Applicant's existing Mazak and Takisawa lathes are over 20 years old and at high risk of breakdown. To retain exclusive supply to Commercial Inf the Applicant needs to increase its capacity and ensure it won't put its supply at risk

2. **Coordinated Measuring Machine (CMM)**
   In 2018 the Applicant invested in the only Vision CMM machine in the South Island. This investment enabled it to manufacture to the high precision required for the Commercial Information hand – the Applicant notes it is the only machine shop in NZ that has been able to meet Commercial Inform quality requirements. The new CMM will remove the 'bottleneck' it is currently experiencing in quality by doubling capacity.

3. **ZeroPoint pallet system and Robot Arm**
   The Zero point pallet system and robotic arm can be retrofitted onto the existing machines to lift cycle times, extend production to 24hrs, as well as reduce job changeover time from up to 3 hours, to only a few minutes. This equipment will help improve profitability of existing production through extending productive hours of existing machines from a maximum of 16 hours per day, to 24 hours.

(Please note that this coversheet should be read alongside the SOREC cover briefing and the other 7 related SOREC projects).

Assessment against the PGF criteria:

Eligibility Criteria

This application is eligible for PGF funding.

Productivity Potential

This new technology is more efficient and productive; it will allow the applicant to hire more people to the ratio of plant and also to focus on developing its existing and new apprentice staff.

Machines like the Mazak Integrex do not require a constant operator yet will be creating quadruple the output of any other machine on the floor.

This requires a senior machinist to 'prove' the jobs, logistics and process minded people to manage the pallet system, the oversight of a professional production manager for scheduling, additional tooling to order and replenish, a dedicated person to setup job carts, more people on deburring, additional quality control officers and

dispatch.

Policy objectives and regional priorities

The Engineering and Manufacturing sector has been identified by the RED Ministers as a key sector for PGF investment. Linked to this is the identification that Otago and Southland are two regions which possess a high number of firms in this sector.

Through previous funding provided by the PGF, an analysis was undertaken by Commercial Inform to identify the 'pain points' currently being faced by engineering and manufacturing firms in Otago and Southland. From this, a document outlining the steps to addressing the perceived issues was developed titled the 'Southland and Otago Regional Engineering Collective'. The applicant was approached as part of the analysis, and now has the opportunity with the support of the PGF to address its current challenges, specifically around its ability to meet demand, and provide good employment options for low-skilled employees and apprentices.

PGF Criteria	Assessment Commentary	Rating (0✓ to 5✓)
Link with fund and government outcomes		
Creates permanent jobs	• The applicant currently employs Comm staff. PGF support will enable the applicant to hire Com more permanent staff, as well as Com contractors required to install and commission the new equipment.	✓✓✓✓
Delivers benefit to the community	• Indirectly, the creation of Com new, sustainable roles will have flow on effects to the local economy.	✓✓
Increased utilisation and returns of Maori asset base	• Not evident	
Enhanced sustainability of natural assets	• Not evident	
Mitigation of climate change effects	• Not evident	
Additionality		
Adding value by building on what is already there	• Engineering and Manufacturing is a strong sector in Dunedin which has been constrained due to the inability for companies to meet the demands through the lack of efficient equipment.	✓✓✓
Acts as a catalyst for productivity potential in the region	• With the purchase of the new equipment, the applicant will be able to increase productivity as it will have the equipment it needs to accelerate the production and output required to meet the demands of its customers.	✓✓✓✓
Connected to regional stakeholders and frameworks		

Alignment with regional priorities	• While not yet public, the applicant's project aligns well to the objectives of the ORED Framework, specifically the objective to increase productivity of the region.	✓✓
Support from local governance groups (inc. Councils, Iwi/Hapu)	• The Dunedin City Council is aware of the applicant's application to the PGF. The Dunedin City Council is heavily involved in Engineering Dunedin Inc.	✓✓✓
Governance, risk management and project execution		
Robust project management and governance systems	• The applicant is co-owned by two Directors who will oversee the installation of the equipment and procurement of the relevant staff to join the company. The Director's have overseen the procurement of several new pieces of equipment.	✓✓✓✓
Risk management approach	• Risks are identified with mitigations.	✓✓✓
Future ownership / operational management	• Existing arrangements.	

Analysis of the benefits and costs

The key benefit of this project is the number of jobs created for the PGF investment being sought. In addition, the jobs being created provide a good platform for a person coming into the company with a low-skill base, being able to progress through the company to a high-skilled role on a variety of automated equipment.

Financial Analysis

Yes – 3 year balance sheets and the last 6-month Profit and Loss have been provided.

Funding Arrangements

A grant of $[redacted] is requested by the applicant. To ensure funding for this project is in line with other SOREC proposals the PDU is recommending one piece of equipment be funded at $520,000.
The PDU is recommending the applicant's recent $[redacted] commitment (via bank loan) for another item of equipment (i300 Mazak axis robotic palletised machining centre and i300 tooling) be considered when reviewing this application.
The total value of both Mazak items is $[redacted], with $[redacted] funded by the applicant and $520,000 recommended by the PDU to be funded by the PGF.
This results in more than [redacted]% funding by the applicant and does not penalise the applicant for withdrawing its original application and funding the i300 machine via a bank loan.

Due Diligence and Ownership

Commercial Information

Risk Assessment

The key risks to the PDU and proposed mitigations of this investment are as follows:

Type of risk	Risk description	Mitigations	Risk Rating L/M/H
Duplication	Commercial Information	While still in its infancy, SOREC will aim to undertake a cataloguing of equipment across the engineering firms that are part of SOREC to ensure that duplication of equipment is minimised.	Medium
Resource	The ability for the company to find employees to fill the roles may delay the productivity potential of the applicant.	While still in its infancy, SOREC will aim to work with engineering firms to understand the current employee shortages, and then work with tertiary educators, employment agencies, and social development agencies to fill the employment gaps.	Medium

Consultation undertaken or implications:

MFAT has been consulted on any subsidies that could be provided through a grant to the applicant. This project was considered low risk.

Commercial Information

Supporting proposal:	Yes
Appendices:	Yes – application has been provided
Author of paper:	HW, Investment Team